

Titel: **CUT-OFF WHEEL** COMPRISING A DOUBLE CORE CLAMPING DEVICE

Patentnummer: [WO2006042352A1](#)

Anmeldung: WO2005AT00413
EP20050794457
DE200550014360T
US20050576660
JP20070535945T
CA20052580972
CN200580035876
KR20077011560
AT20040001749
BR2005PI17078
EG20070000384
MX20070004322
RU20070118639
UA20070004583
ZA20070003143

Priorität: AT20040001749 20041019
EP20050794457 20051018
WO2005AT00413 20051018
WO2005AT00413 20070521

Patentfamilie: **WO2006042352A1**
EP1812206B1
EP1812206A1
DE502005014360D1
US8113920B2
US2007232212A1
JP4571192B2
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CN101043978B
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AT502285A1
BRPI0517078A
EG25574A
MX2007004322A1
RU2366563C2
RU2007118639A
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Anmelder: GISSING GERHARD
GISSING GERKHARD

Erfinder: GISSING GERHARD
GISSING GERKHARD

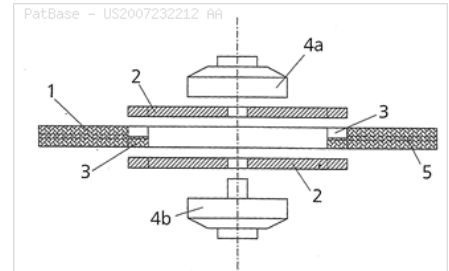


IPC-Notationen: A01N0043-00
B24B0005-00
B24B0041-04
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B24D0018-00
C07D0409-14
C07D0413-14
C07D0417-14

CPC-Notationen: B24D0005-12
B24D0005-16

Zusammenfassung:

Source: US2007232212 AA [EN] The invention relates to a composite system for a **cut-off wheel** (1), in particular with a diameter greater than 400 mm, consisting of an **abrasive** external **cutting** ring with depressions (3) on both sides in the vicinity of the bore, two flush-fitting tensioning plates (2) being placed in said depressions to act as a core clamping device. Said clamping plates are reusable **elements**, retained by the user, and transfer forces to the clamping flanges (4 a +4 b) of the machine. The plates also increase stability and reduce waste



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 1

Titel: APPARATUS AND METHOD FOR MANUFACTURING **ABRASIVE TOOLS**

Patentnummer: [EP1745891B1](#)

Anmeldung: EP20060014884
DE200660003481T
US20110333111
US20100910310
US20070754739
US20060489324
JP20110089477
JP20060197165
KR20070129071
KR20060067596
AT20060014884T

Priorität: US20050700625P 20050719
JP20060197165 20060719
US20060489324 20060719
US20070754739 20070529
US20100910310 20101022
US20110333111 20111221

Patentfamilie: [EP1745891B1](#)
[EP1745891A1](#)
[DE602006003481D1](#)
[US8366520B2](#)
[US8357030B2](#)
[US7819722B2](#)
[US7393370B2](#)
[US2012119406A1](#)
[US2011039484A1](#)
[US2007216071A1](#)
[US2007017161A1](#)
[JP2011136417A2](#)
[JP2007021718A2](#)
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[KR20080003279A](#)
[KR20070011174A](#)
[KR100849590B1](#)
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Anmelder: ABRASIVE TECH INC
PETERMAN JR LOYAL M
VERNIK YEFIM

Erfinder: PETERMAN LOYAL M JR
VERNIK YEFIM

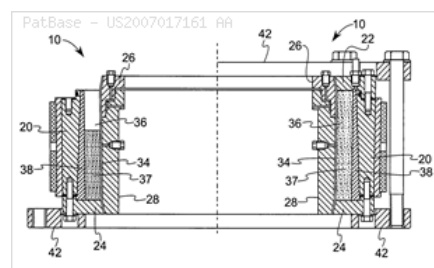


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 B29C0043-02
 B29C0043-52
 B29C0043-56
 C09K0003-14

CPC-Notationen: B24D0018-0009

Zusammenfassung:

Source: US2007017161 AA [EN] A compression molding apparatus and method for the manufacture of **abrasive** layers for **abrasive tooling** which provides a compression mold space defined between an inflexible wall surface and a flexible wall surface. The apparatus and method of the present invention is particularly well suited to making annular or hollow cylindrical shaped **abrasive** layers of novel configurations during a single mold cycle useful for **grinding wheel** and the like, as well as other shapes such as laps, wherein the flexible wall expanded with fluid pressure provides a highly uniform distribution of pressure against the surface of the mold composition being formed. In an annular configuration, the flexible wall is used to radially direct pressure against a molding composition disposed in an annular configuration wherein the axial length of the annular mold shape formed may be many times greater than priorly obtained by the prior art means



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 2

Titel: CHEWING GUM CONTAINING ENCAPSULATED **ABRASIVE FILLER** SUBSTANCE

Patentnummer: [WO200180661A1](#)

Anmeldung: WO2001EP01762

EP20010909769
DE20016011626T
US20010019592
JP20010577770T
CA20012377185
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HK20030101387
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IN2002CN00095
IT2000TO00394
PL20010351400
PT20010909769T
RU20020101923
VN20020000095

Priorität: IT2000TO00394 20000426
WO2001EP01762 20010216

Patentfamilie: **WO200180661A1**

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EP1276386A1
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HU0202859AC
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PT1276386T



RU2265359C2
RU2002101923A
VN5096A1

Anmelder: COLLE ROBERTO
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PERFETTI SPA
PERFETTI VAN MELE S P A
PERFETTI VAN MELLE S P A

Erfinder: FUGANTI CLAUDIO
FUGANTI KLAUDIO
KOLLE ROBERTO
ROBERTO COLLE

IPC-Notationen: A23G
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A61K0008-02
A61K0008-11
A61K0008-19
A61K0009-68
A61Q0011-00

CPC-Notationen: A23G0004-064
A23G0004-20

Zusammenfassung:

Source: US2003099740 AA [EN] A chewing gum composition including an **abrasive filler** substance, the said **abrasive filler** substance being encapsulated in cross-linked alginate microspheres

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 3

Titel: ADHESIVE BONDED FLEXIBLE **ABRASIVE** FINISHING **TOOL**

Patentnummer: [DE4413466B4](#)

Anmeldung: DE19961051626
DE19944417209
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US19970850210
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IT1996TO01099

Priorität: US19880228438 19880805
US19900508060 19900411
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US19970850210 19970502

Patentfamilie: [DE4413466B4](#)
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[US5129191A](#)
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Anmelder: JASON INC UNA SOCIETA DE L WIS
JASON INC UNA SOCIETA DEL DELA
JASON INC UNA SOCIETA DEL WISCONSIN

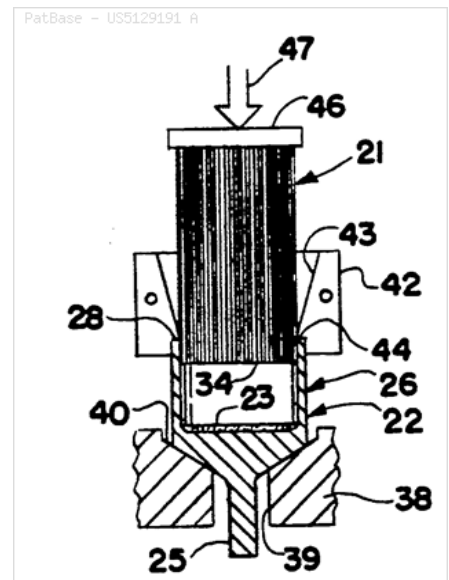
Erfinder: CASER JOSEPH PETER
GASER JOSEPH PETER
SCHEIDER ALFRED A
SCHEIDER ALFRED F
TYLER JAMES BRIAN
WARNER R BROWN
WARNER REUBEN BROWN
WARNER RUEBEN BROWN

IPC-Notationen: A46B0003-00
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CPC-Notationen: A46B0003-10
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B29C0066-69
B29C0070-025
B29C2793-009
B29L2031-736
Y10T0428-2924

Zusammenfassung:

Source: US5129191 A [EN] An adhesive bonded flexible **abrasive** finishing **tool** and method of making the same includes a cup-shape shank of plastic or metal. Flexible nylon **abrasive** loaded monofilaments of uniform length are formed into a cylindrical bundle. A measured amount of liquid instant cyanoacrylate adhesive is placed into the bottom of the cup portion of the shank and the bundle of monofilaments is driven as a group endwise by a pressure plate through a split funnel mounted on the lip of the cup so that one end of the bundle and thus each monofilament is driven uniformly into the adhesive which then cures rapidly. The monofilaments may preferably be straight or somewhat crimped or wavy and may vary in sectional configuration and **abrasive** loading. The resulting brush or finishing **tool** is a low cost light weight **tool** having improved distribution and density of filaments and a flat even face without a final trimming **operation**. The **tool** is ideally suited for automated or robotics finishing **operations**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 4

Titel: DENTAL **ABRASIVE** ASSEMBLIES AND RELATED METHODS

Patentnummer: [WO2012067951A1](#)

Anmeldung: WO2011US60283
EP20110785557
DE201160059362T
US20110876856
RU20130125087

Priorität: US20100415130P 20101118
EP20110785557 20111111
US20110876856 20111111
WO2011US60283 20111111

Patentfamilie: **WO2012067951A1**
EP2640305B1
EP2640305A1
DE602011059362D1
US2013302751A1
RU2555132C2
RU2013125087A

Anmelder: 3M INNOVATIVE PROPERTIES CO
JACOBS DWIGHT W
MAXA STEVEN J

Erfinder: JACOBS DWIGHT W
MAXA STEVEN J

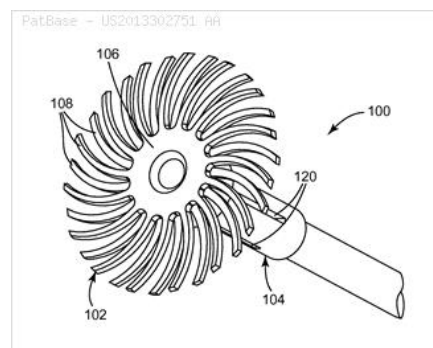
IPC-Notationen: A46B0013-00
A61C0003-06
A61C0017-00

CPC-Notationen: A46B0013-008
A61C0003-06
A61C0017-005
Y10T0029-49567



Zusammenfassung:

Source: US2013302751 AA [EN] Provided are **abrasive** assemblies and related methods that combine a head portion including an integral **abrasive** member and a drive portion including a resilient cylindrical mandrel. The **abrasive** member has a receptacle that is complementary to a working end of the mandrel when both members are relaxed. As the **abrasive** member engages to, or disengages from, the mandrel, the receptacle resiliently expands and the working end of the mandrel resiliently compresses, each in cooperation with the other. Optionally, the **abrasive** member is maintained in compression in both directions parallel and perpendicular to the longitudinal axis of the mandrel. Advantageously, these assemblies provide for superior retention and slip resistance, ease-of-use, and high manufacturing tolerances



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 5

Titel: DUAL TAPERED SHAPED **ABRASIVE** PARTICLES

Patentnummer: [WO2011068714A3](#)

Anmeldung: WO2010US57713
EP20100834962
DE201060062551T
US20100498636
JP20120542088T
CN201080052633
KR20127016682
BR20121113346

Priorität: US20090266000P 20091202
EP20100834962 20101123
US20100498636 20101123
WO2010US57713 20101123

Patentfamilie: **WO2011068714A3**
WO2011068714A2
EP2507013B1
EP2507013A4
EP2507013A2
DE602010062551D1
US9447311B2
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Anmelder: 3M INNOVATIVE PROPERTIES CO
ADEFRIIS NEGUS B
BRAUNSCHWEIG EHRICH J
KEIPERT STEVEN J

Erfinder: EHRICH J BRAUNSCHWEIG
NEGUS B ADEFRIIS
STEVEN J KEIPERT

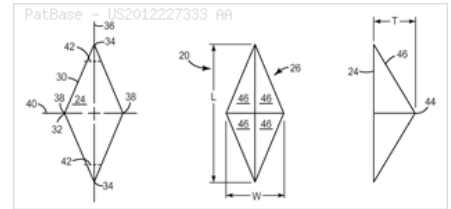


IPC-Notationen: A46B0015-00
B24D0003-00
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C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-00**
B24D0003-34
B24D0011-00
C09C0001-625
C09K0003-14
C09K0003-1409

Zusammenfassung:

Source: US2012227333 AA [EN] Shaped **abrasive** particles comprising alpha alumina and having a first side, a second side, a maximum length along a longitudinal axis and a maximum width transverse to the longitudinal axis. The first side comprising a quadrilateral having four edges and four vertices with the quadrilateral selected from the group consisting of a rhombus, a rhomboid, a kite, or a superellipse. The shaped **abrasive** particles having an aspect ratio of the maximum length divided by the maximum width of 1.3 or greater



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 6

Titel: NONWOVEN SURFACE TREATING ARTICLES, SYSTEM INCLUDING SAME, AND METHOD OF TREATING CALCIUM CARBONATE-CONTAINING SURFACES WITH SAID SYSTEM

Patentnummer: [EP0562919B1](#)

Anmeldung: EP19930400695
DE19936002736T
US19920853919
ES19930400695T

Priorität: US19920853919 19920319

Patentfamilie: [EP0562919B1](#)
[EP0562919A1](#)
[DE69302736T2](#)
[DE69302736D1](#)
[US5282900A](#)
[ES2089744T3](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: KYLE ROBERT C
MCDONELL JAMES A



IPC-Notationen:	A47L0013-16 A47L0013-17 B24D0003-00 B24D0003-20 B24D0003-28 B24D0003-34	CPC-Notationen:	A47L0013-17 B24D0003-002 B24D0003-28 B24D0003-346 Y10T0428-23921 Y10T0428-23986 Y10T0428-23993 Y10T0428-2907 Y10T0428-2909 Y10T0428-8305 Y10T0442-2008 Y10T0442-2861 Y10T0442-2902
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Zusammenfassung:

Source: US5282900 A [EN] A nonwoven surface treating article suitable for treating surfaces which include calcium carbonate, such as marble floors, includes an open, lofty, three-dimensional nonwoven web of a plurality of thermoplastic organic fibers, a binder, and **abrasive** particles having an average particle diameter ranging from about 0.1 micrometer to about 30 micrometers. The **abrasive** articles of the invention do not rust, as do steel wool pads, and produce a high gloss, durable surface. A system for treating calcium carbonate-containing surfaces is also presented, the system including the articles and an acidic crystallization agent. Methods of treating calcium carbonate-containing surfaces with the system are also presented

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 7

Titel: NONWOVEN **ABRASIVE** ARTICLE INCLUDING **ABRASIVE** PARTICLES

Patentnummer: [WO2018006012A1](#)

Anmeldung: WO2017US40364
WO2017US37654
EP20170821390
US20170311850
JP20180568726T
CN201780041100
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Priorität: US20160357540P 20160701
US20170311850 20170630
WO2017US40364 20170630

Patentfamilie: **WO2018006012A1**
WO2018005111A1
EP3478448A1
EP3478448A4
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Anmelder: 3M INNOVATIVE PROPERTIES CO

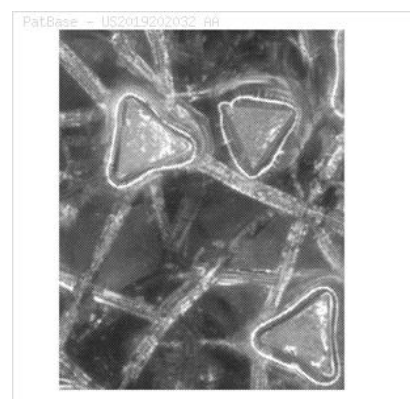
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IPC-Notationen: A47L0013-16
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C09K0003-14
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D04H0001-58

CPC-Notationen: A47L0013-16
B24D0003-002
B24D0003-28
B24D0003-32
B24D0011-00
B24D0011-005
B24D0011-02
C09K0003-14

Zusammenfassung:

Source: US2019202032 AA [EN] Various embodiments **disclosed** relate to nonwoven **abrasive** article including **abrasive** particles. In various embodiments, the present invention provides a nonwoven **abrasive** article including a nonwoven web including fibers and pores between the fibers. The nonwoven **abrasive** article includes **abrasive** particles, wherein each of the pores between the fibers independently includes one or more of the **abrasive** particles. Each pore is independently about the same size as the one or more **abrasive** particles therein



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 8

Titel: COATED **ABRASIVE TOOL**, METHOD FOR PRODUCING SAME, AND **ABRASIVE** DENTAL PRODUCT

Patentnummer: [WO2020212595A1](#)

Anmeldung: WO2020EP60901
DE201910205745

Priorität: DE201910205745 20190418

Patentfamilie: [WO2020212595A1](#)
[DE102019205745A1](#)

Anmelder: ECOCOAT GMBH

Erfinder: FLADE ENRICO
RIEMENSPERGER REINHOLD

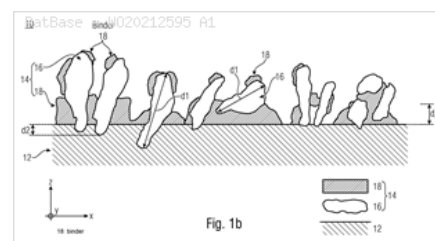


IPC-Notationen: A61C0003-025
A61C0003-06
A61C0015-04
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C23C0004-134
C23C0024-08

CPC-Notationen: A46B0009-005
A46B2200-3093
A61C0003-025
A61C0003-06
A61C0017-222
C23C0004-04
C23C0004-134
C23C0024-08

Zusammenfassung:

Source: WO20212595 A1 [EN] The invention relates to a coated **abrasive tool** (10) comprising a carrier (12) which has a carrier material and comprising an **abrasive** surface coating (14) on a surface region (12-A) of the carrier (12) . The **abrasive** surface coating (14) has **abrasive** functional particles (16) and a thermoplastic binder (18) for an adhesive connection between at least some of the **abrasive** functional particles (16) and the carrier material. At least some of the **abrasive** functional particles (16) on the surface region (12-A) of the carrier (12) are partly integrated into the carrier material and are connected to the carrier material, and at least some of the **abrasive** functional particles (16) on the surface region (12-A) of the carrier (12) are additionally partly integrated into the thermoplastic binder (18) , said thermoplastic binder (18) being connected to the **abrasive** functional particles (16) and the carrier material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 9

Titel: **Abrasive** dental articles

Patentnummer: [EP0530646A1](#)

Anmeldung: EP19920114463
US19920992014
JP19920228823
CA19922075406
AU19920020898
KR19920015624
TW19920106184

Priorität: US19910753204 19910830
CA19922075406 19920806
KR19920015624 19920829
US19920992014 19921217

Patentfamilie: [EP0530646A1](#)
[US5273559A](#)
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Anmelder: 3M CO
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MINNESOTA MINING AND MFG

Erfinder: DABURIYU JIEEMUSU HAMAA
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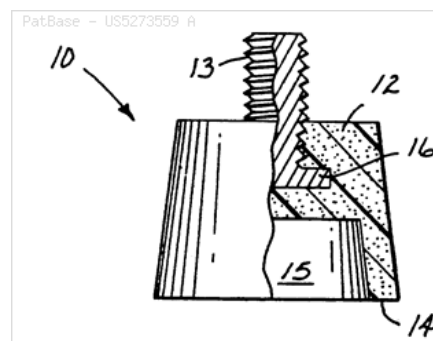


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G06F0012-16

CPC-Notationen: A61C0003-06
A61C0017-005
B24D0003-32

Zusammenfassung:

Source: US5273559 A [EN] An **abrasive** composition and dental articles made from same, the composition including **abrasive** particles dispersed throughout and entrapped within a polyurea or polyurethane urea matrix which contains soft and hard segments wherein the matrix is made from the polymerization reaction of a polyfunctional amine and a polyfunctional isocyanate. The **abrasive** dental articles include prophylactic cups and polishing **wheels**, points and **discs**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 10

Titel: DENTAL POLISHING ARTICLE WHICH CONTAINS SPHERICAL RESIN PARTICLES

Patentnummer: [WO2006121080A1](#)

Anmeldung: WO2006JP309404
DE200611001202T
US20060920133
JP20070528302T
CN200680016016

Priorität: JP20050138131 20050511
JP20050182739 20050623
JP20070528302 20060510
WO2006JP309404 20060510

Patentfamilie: [WO2006121080A1](#)
[DE112006001202B4](#)
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[US8070842B2](#)
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[CN101170962A](#)
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Anmelder: ASAO OSAMU
SHOFU KK
SONOI SYUJI

Erfinder: OSAMU ASAO
SYUJI SONOI

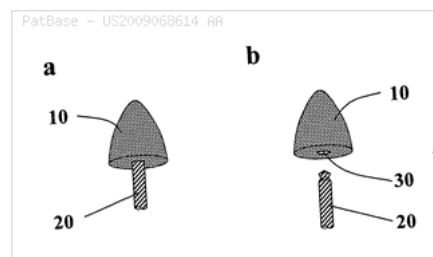
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B24D0003-22
B24D0003-32
B24D0011-00
C09K0003-14

CPC-Notationen: A61C0003-06
B24D0003-32



Zusammenfassung:

Source: US2009068614 AA [EN] The present invention provides a dental polishing article having excellent polishability, which can polish dental composite resin, porcelain, dental restorative and prosthetic materials and teeth at a low cost, conveniently in a short time. More specifically, the present invention provides a dental polishing article which comprises a polishing portion formed by compounding polishing grains in an elastomer binder, and the polishing portion further comprising spherical resin particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 11

Titel: DENTAL COMPOSITIONS INCLUDING THERMALLY RESPONSIVE **ADDITIVES**, AND THE USE THEREOF

Patentnummer: [WO2007075666A1](#)

Anmeldung: WO2006US48400
EP20060839425
US20050275240
JP20080547435T

Priorität: US20050275240 20051220
WO2006US48400 20061218

Patentfamilie: **WO2007075666A1**
EP1962773A1
US2007142498A1
JP2009520569T2

Anmelder: 3M INNOVATIVE PROPERTIES CO
BRENNAN JOAN V
EVERAERTS ALBERT I
JAMES DARRELL S
KALGUTKAR RAJDEEP S
MAHONEY WAYNE S
MYER AJAY
NGUYEN LANG N
OXMAN JOEL D

Erfinder: BRENNAN JOAN V
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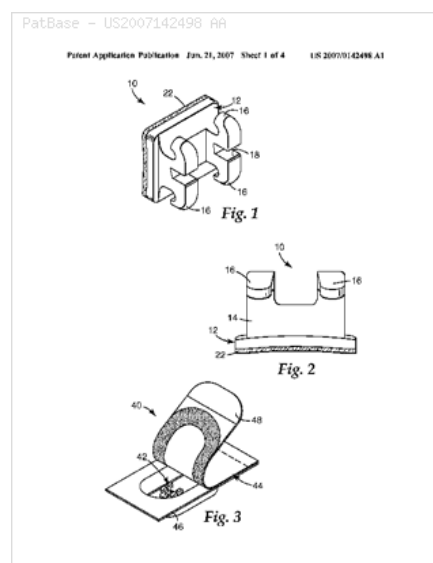
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A61K0006-884
C09K0003-00

CPC-Notationen: A61K0006-30



Zusammenfassung:

Source: US2007142498 AA [EN] Hardenable and hardened dental compositions that include thermally responsive **additives**, and articles including such hardenable and hardened compositions, are provided. Upon heating, the hardened compositions are useful for reducing the bond strengths of orthodontic appliances adhered to tooth structures with the hardened compositions



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 12

Titel: ENCAPSULATED WEAR PARTICLES

Patentnummer: [WO2015106148A1](#)

Anmeldung: WO2015US10886
EP20150734939
US20150593900
JP20160544674T
CA20152936231
AU20150204556
CN201580009348
KR20167021465
AP20160009325
AR2015P100044
BR20161115562
CL20160001755
EA20160091411
ID2016P0005199
IN201617024700
MX20160008769
PE20160001097
ZA20160004827

Priorität: US20140926080P 20140110
US20150593900 20150109
WO2015US10886 20150109

Patentfamilie: [WO2015106148A1](#)
[EP3092109A1](#)
[US2015196991A1](#)
[JP2017504482T2](#)
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Anmelder: ESCO CORP

Erfinder: MONTROSS CHARLES S

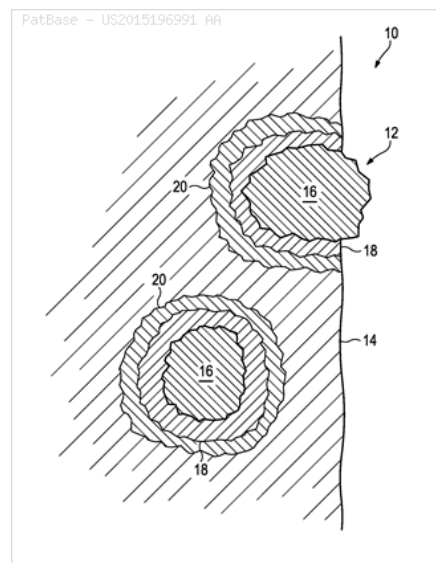


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CPC-Notationen: A61K0009-00
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E02F0009-2883
E21B0003-00
E21B0010-006
F04B0001-00
F16C0033-043
F41H0005-0492

Zusammenfassung:

Source: US2015196991 AA [EN] Incorporating hard particles in a matrix forming the surface of a member can significantly increase wear resistance. Practical use of diamond in industrial applications is limited as the carbon structure breaks down to graphite in air at temperatures over 700 degrees centigrade. When exposed to molten iron the diamond surface can also chemically react and dissolve into the iron. Metal compounds that coat the diamond can provide one or more protective layers that limit contact of the diamond surface with **elements** that will degrade its structure. Coating can also provide a wettable surface for the molten matrix during processing to improve retention of the particle in the matrix.



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 13

Titel: SURFACE TREATING ARTICLES AND METHODS OF MAKING SAME

Patentnummer: [WO9426468A1](#)

Anmeldung: WO1994US03038
EP19940912822
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JP19940525402T
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RU19950122823
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Priorität: US19930060116 19930512
US19930060616 19930512
US19940184507 19940119
WO1994US03038 19940322

Patentfamilie: [WO9426468A1](#)
[EP0697937B1](#)
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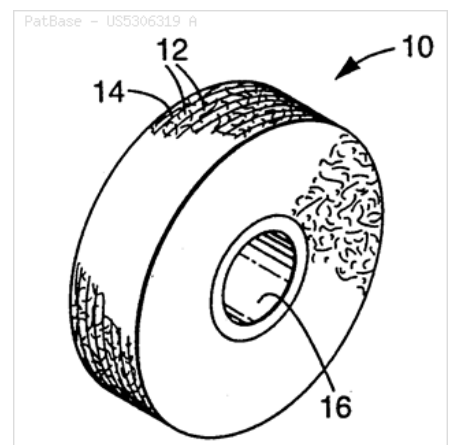
Anmelder: MINNESOTA MINING AND MFG
Erfinder: COULEVARD CAROLINE ANNETTE
COUVELARD CAROLINE ANNETTE
DONOVAN MARY BETH
JANOCHOSKI RAMONA MARIE
KRISHNAN SUBRAMANIAN
MILLER EUGENE JOSEPH
MILLER J

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CPC-Notationen: B24D0003-28
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C08G0059-5026
Y10T0428-2962
Y10T0428-2969

Zusammenfassung:

Source: US5306319 A [EN] Surface treating articles having varying degree of smear-resistance and their methods of manufacture are presented. One preferred article is characterized by an organic matrix substantially engulfed by a novel, tough, adherent elastomeric resinous binder system comprising the reaction product of either (1) a polyurethane prepolymer, or (2) a polyurethane polymer emulsion with an epoxy-functional material and an amine-functional material in an aqueous system



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 14

Titel: **ABRASIVE** COMPACT WITH IMPROVED MACHINABILITY

Patentnummer: [WO2008074010B1](#)

Anmeldung: WO2007US87442
EP20070855135
DE200760021375T
US20130748934
US20070518745
JP20150102776
JP20130107985
JP20090541595T
AU20070333027
CN201510217177
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KR20097011963
AT20070855135T
BR2007PI20462
IN2009KN02466
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ZA20090003695
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Priorität: US20060869804P 20061213
CN200780046099 20071213
EP20070855135 20071213
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JP20090541595T 20071213
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WO2007US87442 20071213
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US20130748934 20130124
JP20150102776 20150520

Patentfamilie: **WO2008074010B1**
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US2010043303A1
JP2015180522A2
JP2013209753A2
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AU2007333027B2
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KR20090097867A
KR101441153B1
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BRPI0720462A2
IN266476B
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Anmelder: DIAMOND INNOVATIONS INC
WEBB STEVEN W

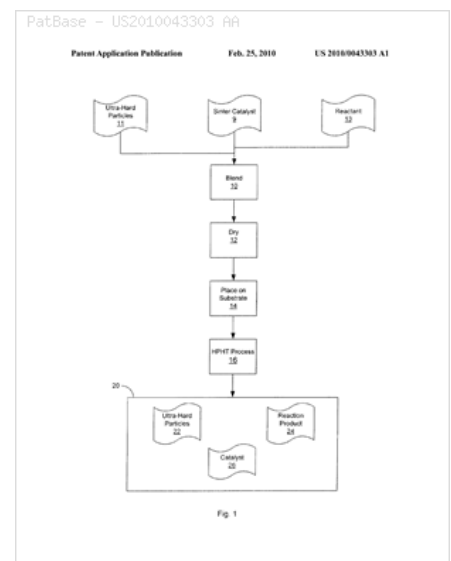
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CPC-Notationen: B01J0003-062
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B01J2203-0685
B24D0003-342
C09K0003-1436
C22C0026-00
C22C2026-007
C22C2026-008

Zusammenfassung:

Source: US2010043303 AA [EN] An **abrasive** compact may include an ultra-hard phase that may include ultra-hard particles having a Knoop hardness of 5000 KHN or greater, a sinter catalyst, and a reaction phase that may include a catalyst-ceramic compound having a Knoop hardness lower than that of the ultra-hard phase



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 15

Titel: DIAMOND FOR A **TOOL** AND A PROCESS FOR THE PRODUCTION OF THE SAME

Patentnummer: [DE3232869C2](#)

Anmeldung: DE19823232869
US19820414821
JP19870225171
JP19820124512
JP19820095104
JP19810192772
JP19810138644
GB19820025302
FR19820015073
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ZA19820006340

Priorität: JP19810138644 19810904
JP19810192772 19811202
JP19820095104 19820602
JP19820124512 19820719
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Patentfamilie: [DE3232869C2](#)
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Anmelder: SUMITOMO ELECTRIC INDUSTRIES LTD

Erfinder: TETSUO NAKAI
YATSU SHIYUUJI
YATSU SHUJI
YAZU SHUJI

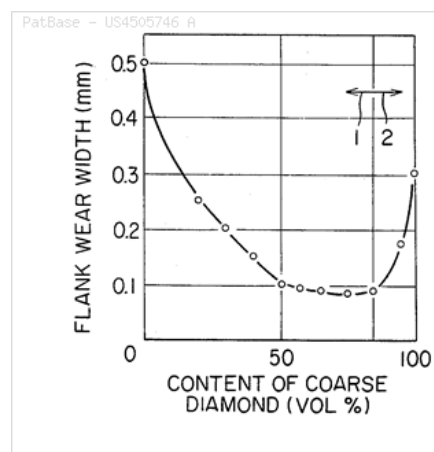


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CPC-Notationen: B01J0003-062
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 B01J2203-0655
 B01J2203-066
 B01J2203-0685
 B24D0003-06
 C22C0026-00
 C22C2026-005
 Y10S0076-12

Zusammenfassung:

Source: US4505746 A [EN] An improved diamond compact of the present invention comprises 20 to 85 percent by volume of diamond grains with a grain size of at least 3 μm and the balance of a binder consisting of 20 to 95 percent by volume of ultra-fine diamond grains with a grain size of at most 1 μm , at least one member with a grain size of at most 1 μm , selected from the group consisting of carbides, carbonitrides, nitrides, borides of Group 4a, 5a and 6a elements of Periodic Table, solid solutions thereof and mixed crystals thereof and at least one member selected from the group consisting of iron group metals



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 16

Titel: SHAPED **ABRASIVE** PARTICLES WITH AN OPENING

Patentnummer: [WO2010077518A1](#)

Anmeldung: WO2009US66199
EP20090836639
US20120398295
US20080337112
JP20110542206T
CN200980154705
KR20117016297
BR2009PI18330

Priorität: US20080337112 20081217
WO2009US66199 20091201
US20120398295 20120216

Patentfamilie: **WO2010077518A1**
[EP2385889B1](#)
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[US8845773B2](#)
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[US2012144755A1](#)
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Anmelder: 3M INNOVATIVE PROPERTIES CO
ADEFRIS NEGUS B
BODEN JOHN T
CULLER SCOTT R
ERICKSON DWIGHT D
HAAS JOHN D

Erfinder: ERICKSON DWIGHT D
HAAS JOHN D
JOHN T BODEN
JONH D HAAS
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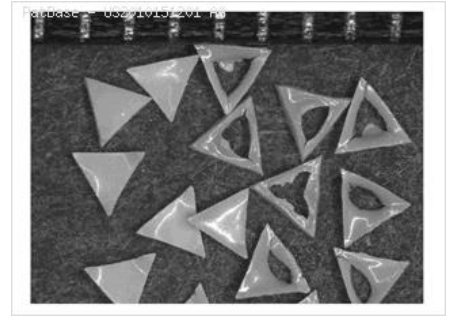
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CPC-Notationen: B01J0002-22
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C09G0001-02
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Y10T0428-24364
Y10T0428-24413
Y10T0428-257
Y10T0428-2982



Zusammenfassung:

Source: US2010151201 AA [EN] An **abrasive** comprising shaped **abrasive** particles each with an opening. The shaped **abrasive** particles are formed from alpha alumina and have a first face and a second face separated by a thickness t . The opening in each of the shaped **abrasive** particles can improve **grinding** performance by reducing the size of a resulting wear flat, can provide a reservoir for **grinding aid**, and can improve adhesion to a backing in a coated **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 17

Titel: COATED **ABRASIVE** ARTICLE AND METHOD OF MAKING THE SAME

Patentnummer: [WO2016160357A1](#)

Anmeldung: WO2016US22884
EP20160773731
DE201660025635T
US20190385781
US20160549281
JP20170550668T
CN201680019277
KR20177030746
BR20171120767

Priorität: US20150140262P 20150330
US20150160429P 20150512
US20150181612P 20150618
EP20160773731 20160317
US20160549281 20160317
WO2016US22884 20160317
US20170549281 20170807
US20190385781 20190416

Patentfamilie: **WO2016160357A1**
EP3277463B1
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US10836015B2
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Anmelder: 3M INNOVATIVE PROPERTIES CO

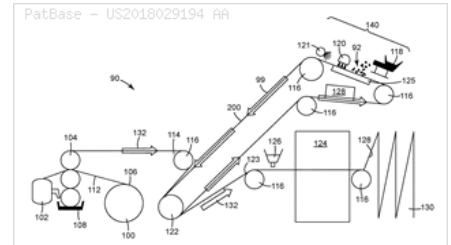
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IPC-Notationen: B01J0002-22 B24D0003-00 B24D0003-02 B24D0003-06 B24D0003-28 B24D0011-00 B24D0018-00 C09K0003-14	CPC-Notationen: B01J0002-22 B24D0003-02 B24D0003-06 B24D0003-28 B24D0011-00 B24D0011-001 B24D0018-0072 C09K0003-1409
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Zusammenfassung:

Source: US2018029194 AA [EN] A coated **abrasive** article includes a backing, a make layer, crushed **abrasive** particles, and a size layer. The crushed **abrasive** particles include: 35 to 100 weight percent of initial crushed **abrasive** particles having a first composition and first size grade, wherein a majority of the initial crushed **abrasive** particles are platey crushed **abrasive** particles, and wherein each platey crushed **abrasive** particle has a respective length, width, and thickness; and 0 to 65 weight percent of crushed **filler** particles having a second composition and a second size grade. The first and second compositions and/or size grades are different. The coated **abrasive** article has a direction of intended use, a majority of the platey crushed **abrasive** particles of the coated **abrasive** article are positioned with their thickness oriented substantially parallel to the direction of intended use. A method of making the coated **abrasive** article is also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 18

Titel: METHOD OF PREPARING POLYCRYSTALLINE DIAMOND FROM DERIVATIZED NANODIAMOND

Patentnummer: [WO2011130517A3](#)

Anmeldung: WO2011US32504
 WO2011US32502
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Priorität: US20100324142P 20100414
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Patentfamilie: WO2011130517A3
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Anmelder: AGRAWAL GAURAV
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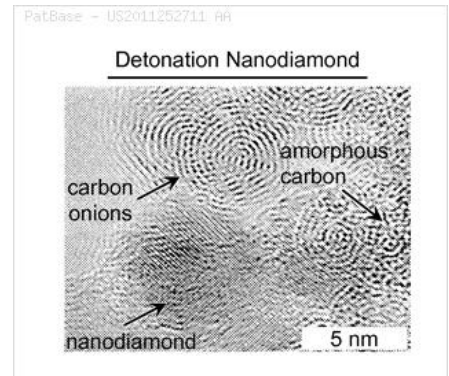
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RICHARD BENNETT
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CPC-Notationen: B01J0003-062
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C22C0026-00
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E21B0010-567
Y10T0428-2982

Zusammenfassung:

Source: US2011252711 AA [EN] A method of forming a polycrystalline diamond comprises derivatizing a nanodiamond to form functional groups, and combining the derivatized nanodiamond with a microdiamond having an average particle size greater than that of the derivatized nanodiamond, and a metal solvent-catalyst. A polycrystalline diamond compact is prepared by adhering the polycrystalline diamond to a support, and an article such as a **cutting tool** may be prepared from the polycrystalline diamond compact



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 19

Titel: EXPLOSIVE POWDER CHARGE **OPERATED** SETTING **TOOL**

Patentnummer: [EP0782902B1](#)

Anmeldung: EP19960810713
EP19960810524
EP19960308923
DE19966026759T
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KR19960042174
TW19960113473
TW19960109861
ES19960308923T

Priorität: US19950571312 19951212
JP19950347603 19951215
DE19951047859 19951221
JP19950339450 19951226
DE19951048870 19951227
DE19965006761T 19960808
US19980087776 19980529

Patentfamilie: [EP0782902B1](#)
[EP0780195B1](#)
[EP0779129B1](#)
[EP0782902A1](#)
[EP0780195A1](#)
[EP0779129A3](#)
[EP0779129A2](#)
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[DE69626759T2](#)
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ES2194963T3

Anmelder: GEN ELECTRIC
GEN EREKUTORITSUKU CO
HILTI AG

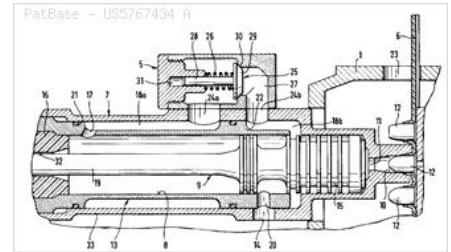
Erfinder: ANTON HIRUTOURU
CORRIGAN FRANCIS RAYMOND
FROMMELT MARKUS
FURANSHISU REIMONDO KORIGAN
HEEB NORBERT
HENRII SAMIYUERU MARUKU
HERUMAN KUERU
HIRTL ANTON
KUEL HERMANN
MAREK HENRY SAMUEL
MARUKUSU FUROMUMERUTO
MARUKUSU SHIYUPURENGAA
NORUBERUTO HEEBU
SCHIRTER ANDONE
SPRENGER MARKUS
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IPC-Notationen: B01J0003-06
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CPC-Notationen: B01J0003-062
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C04B2237-401
C04B2237-61
Y10T0428-24942
Y10T0428-25
Y10T0428-30

Zusammenfassung:

Source: US5767434 A [EN] An explosive powder charge **operated** setting **tool** includes a housing (1) , a piston guide (13) for a driving piston (9) located in the housing. The driving piston (9) can be propelled from an initial rearward position through a bore (18) in the piston guide (13) into a forward driving position by gases generated from an ignited cartridge charge (12) in a cartridge chamber (10) located rearwardly of the initial rearward position of the driving piston. A channel (18a, 18b) is located in the housing in flow communication with the cartridge chamber and communicating with the guide bore (8) in the piston guide (13) . A check valve (5) is positioned in the channel (18a, 18b) and forms a storage space closed to the ambient atmosphere and made up of a section (18a) of the channel (18a, 18b) closer to the forward driving position of the driving piston and of the guide bore (8) . The check valve (5) can be closed by the gas in the storage space



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 20

Titel: THERMOSTABLE **ABRASIVE** DIAMOND-CONTAINING PRODUCT

Patentnummer: [EP0246118B1](#)

Anmeldung: EP19870400292
DE19873770520T
US19870050027
FR19860007069
AT19870400292T
ES19870400292T

Priorität: FR19860007069 19860516
EP19870400292 19870209

Patentfamilie: [EP0246118B1](#)
[EP0246118A1](#)
[DE3770520D1](#)
[US4798026A](#)
[FR2598644B1](#)
[FR2598644A1](#)
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Anmelder: COMBUSTIBLE NUCLEAIRE STE INDLE
IND DE COMBUSTIBLE NUCLEAIRE SOC

Erfinder: CERCEAU JEAN MICHEL

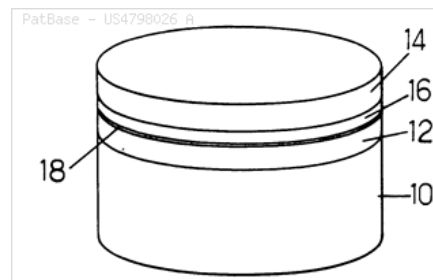


IPC-Notationen: B01J0003-06
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CPC-Notationen: B01J0003-062
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B01J2203-0685
B22F0007-06
[B24D0003-007](#)
[B24D0003-06](#)
B24D0003-10
C22C0026-00

Zusammenfassung:

Source: US4798026 A [EN] A thermostable **abrasive** diamond product includes a compact formed of diamond grains representing more than 80 percent by volume of the compact, each grain being bonded directly to its neighbors so as to form a polycrystalline structure. The empty spaces between diamond grains are occupied by a binder face containing silicon and/or titanium and nickel silicon (or titanium) and nickel being alloyed. The compact may be bonded by a metallurgical interface to a substrate of a refractory metal such as tungsten



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 21

Titel: BRAZED DIAMOND **TOOLS** BY INFILTRATION

Patentnummer: [WO9845091A3](#)

Anmeldung: WO2005US35132

WO2005US06739

WO2003US31463

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Anmelder:

ALBERTA SCIENCE AND RES AUTHOR
KINIK
SONG JIAN MIN
SUNG CHIEN MIN
SUNG JIAN MIN

Erfinder: GOOD WILLIAM KEITH
KISMAN KENNETH E
LIN FRANK
LUHNING RICHARD W
LUHNING RICK W
SONG JIAN MIN
SUNG CHIEN MIN

IPC-Notationen: B01J0003-06
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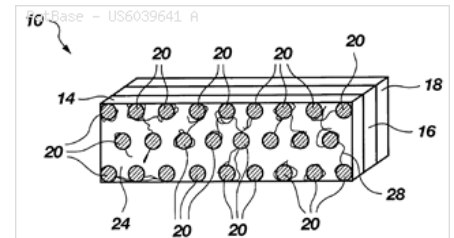
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E21B0043-2406
E21B0043-305
Y10T0428-24893
Y10T0428-2991

Zusammenfassung:

Source: US6039641 A [EN] The present invention describes a diamond **tool** with diamond bonded chemically by a braze that contains either Cr, Mn, Si, or Al or mixtures or alloys thereof. The diamond **tool** is made by infiltrating the braze into a matrix metal that contains diamond in either form of grits or polycrystalline bodies



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 22

Titel: Carbon bonded **abrasive tools** and method for producing

Patentnummer: [US5925154A](#)

Anmeldung: US19970907821

Priorität: US19970907821 19970814

Patentfamilie: [US5925154A](#)

Anmelder: MATERIALS SPECIALTIES SCANDINA

Erfinder: SEMENOV SEMEN S
SHKOLA ANDREY A
WHITE JOHN L

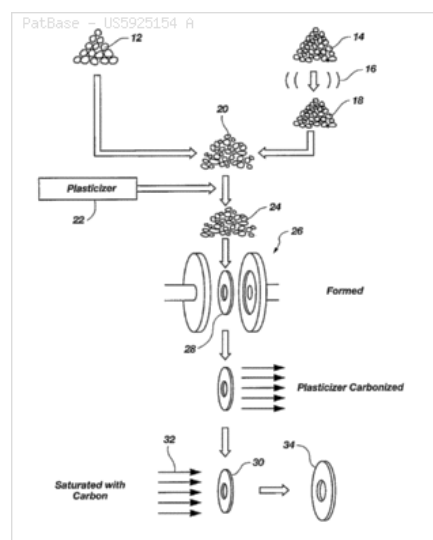


IPC-Notationen: B01J0003-06
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C04B0035-5831

CPC-Notationen: B01J0003-062
B01J2203-0615
B01J2203-0655
B01J2203-0685
[B24D0003-16](#)
[B24D0003-342](#)
C04B0035-52
C04B0035-5831

Zusammenfassung:

Source: US5925154 A [EN] A method of producing a carbon bonded **abrasive tool** by chemical vapor deposition of carbon, such as pyrolytic carbon, diamond, or a polymorphous form of diamond through a preshaped **tool**, the preshaped **tool** containing a mixture of **abrasive** particles, and also the carbon bonded **abrasive tool** produced by the method. The mixture of **abrasive** particles may include a mixture of a superabrasive powder and an **abrasive** powder **filler**. All or a portion of the **filler** has been impact processing by subjecting the **filler** to an uniform super-pressure exceeding one gigapascal to break up the **filler** into random size particles, some at the original mesh size interspersed with a continuum of smaller particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 23

Titel: POLYCRYSTALLINE **ABRASIVE** GRAINS, AND **GRINDING WHEEL** PROVIDED WITH SAME

Patentnummer: [WO2019208640A1](#)

Anmeldung: WO2019JP17451
EP20190791764
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IN202017050214

Priorität: JP20180086323 20180427
WO2019JP17451 20190424

Patentfamilie: [WO2019208640A1](#)
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Anmelder: ALLIED MATERIAL CORP
ALMT CORP
SUMITOMO ELECTRIC HARDMETAL CORP
SUMITOMO ELECTRIC INDUSTRIES

Erfinder: HARADA TAKASHI
ISHII AKITO
KUKINO SATORU
NAKAMURA NOBUHIDE
NAKAMURA TOMOKAZU
OKAMURA KATSUMI

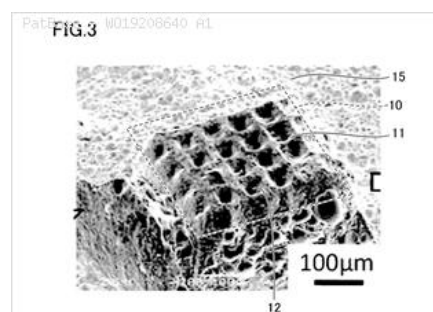
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H01M0010-056

CPC-Notationen: [B24D0003-00](#)
[B24D0003-06](#)
B24D0005-00



Zusammenfassung:

Source: WO19208640 A1 [EN] Polycrystalline **abrasive** grains comprising multiple cBN particles and a binder capable of binding the multiple cBN particles to each other, wherein the binder comprises at least one component selected from a nitride, a carbide and a carbonitride of a metal selected from the group consisting of a metal belonging to Group 4a, a metal belonging to Group 5a and a metal belonging to Group 6a on the periodic table, and the content of the binder in the polycrystalline **abrasive** grain is 5 to 50 vol percent inclusive



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 24

Titel: THERMALLY STABLE ULTRA-HARD MATERIAL COMPACT CONSTRUCTIONS

Patentnummer: [WO2010009430A3](#)

Anmeldung: WO2009US51047
US20120671019
US20090505316
US20070745726
GB20070008915
CA20072588331

Priorität: US20060799104P 20060509
US20070745726 20070508
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US20080081626P 20080717
US20090505316 20090717
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Patentfamilie: [WO2010009430A3](#)
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[US8328891B2](#)
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Anmelder: GRIFFO ANTHONY
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KESHAVAN MADAPUSI K
SHEN YUELIN
SMITH INTERNATIONAL
ZHANG YOUHE

Erfinder: GRIFFO ANTHONY
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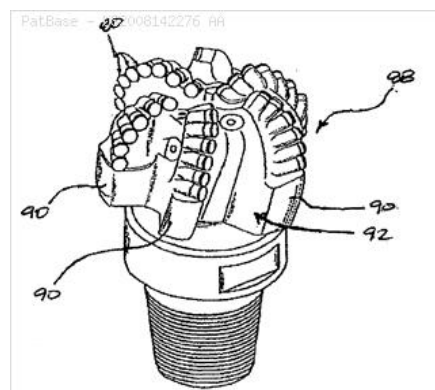


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CPC-Notationen: B22F2003-244
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C23F0001-02
E21B0010-46
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E21B0010-573
E21B0010-5735

Zusammenfassung:

Source: US2008142276 AA [EN] Thermally stable ultra-hard compact constructions comprise a polycrystalline diamond body substantially free of a catalyst material, and a substrate that is joined thereto. The substrate can be ceramic, metallic, cermet and combinations thereof, and can be joined to the body by a braze material or other material that forms an attachment bond at high pressure/high temperature conditions. The body and substrate are specially formed having complementary interfacing surface features to facilitate providing an improved degree of attachment therebetween. The complementary surface features can in the form of openings and projections, e.g., one of the body or substrate can comprise one or more openings, and the other of the body or substrate can comprise one or more projections, disposed within or extending from respective interfacing surfaces. The complementary surface features **operate** to resist unwanted delamination between the body and substrate, thereby extending effective **service life** of the construction



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 25

Titel: **ABRASIVE** ARTICLE WITH IMPROVED STRUCTURE AND **GRINDING** METHOD

Patentnummer: [DE10392508B4](#)

Anmeldung: DE20031092508T
RO20040000886

Priorität: US20020120969 20020411
US20020328802 20021224
WO2003US08936 20030321

Patentfamilie: [DE10392508B4](#)
[RO123271B1](#)

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

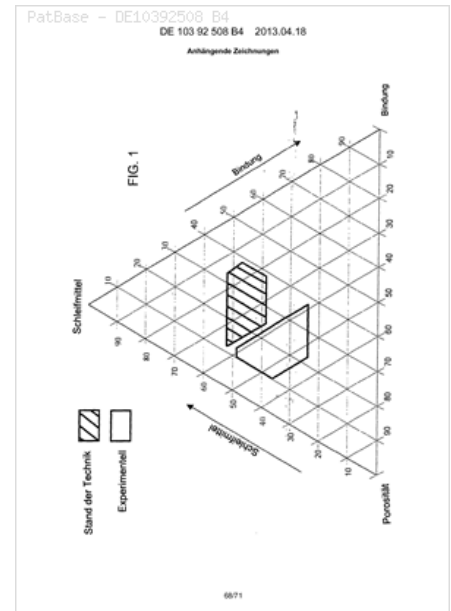
Erfinder: BONNER ANNE M
BRIGHT ERIC
LAMBERT EDWARD L
MATSUMOTO DEAN S
ORLHAC XAVIER
SHELDON DAVID A



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Zusammenfassung:

Source: RO123271 B1 [EN] The invention relates to **abrasive** articles or **tools** of agglomerated powders, such as **grinding wheels**, segments, **discs** or bars, having novel compositional structures, so that said novel **tool** structures are obtained, as well as to methods for **grinding**, polishing and finishing the surface by using said **tools**. According to the invention, the **tool** comprises a three-dimensional composite consisting, in a first phase of 24...48 percent by volume agglomerated **abrasive** grains with 10...38 percent by volume organic bond material and less than 10 percent by volume porosity, and a second phase consisting of 38...54 percent by volume porosity, where the second phase is a continuous phase within the composite. The claimed method comprises the following steps: a first step consisting in providing an **abrasive tool** of agglomerated powders which contains a three-dimensional composite, a second step consisting in mounting the **abrasive tool** of agglomerated powders on a surface **grinding** machine, a third step consisting in rotating the wheel and the final step consisting in bringing the grinding surface of the wheel into contact with a workpiece for a sufficient period of time as to grind the workpiece, this way the wheel removing the workpiece material at an effective material removal rate while the grinding surface of the wheel remains substantially free of grinding debris and, after grinding has been completed, the workpiece being substantially free of thermal damage



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 26

Titel: POROUS **ABRASIVE** ARTICLES WITH AGGLOMERATED **ABRASIVES** AND METHOD FOR MAKING THE AGGLOMERATED **ABRASIVES**



Patentnummer: [US2008293345A1](#)

Anmeldung: US20080221074

Priorität: US20020120969 20020411
US20030668531 20030923
US20060330673 20060112
US20080221074 20080731

Patentfamilie: **US2008293345A1**

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

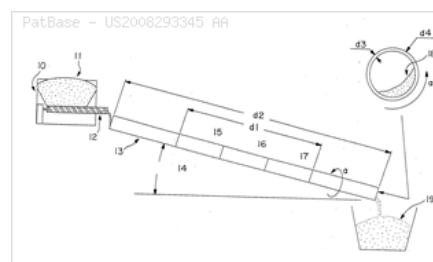
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WU MIANXUE

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C09K0003-14

CPC-Notationen: B24B0005-363
B24D0003-18
B24D0003-26
B24D0003-32
B24D0003-348
B24D0018-00
C09K0003-1436

Zusammenfassung:

Source: US2008293345 AA [EN] A bonded **abrasive tool**, having a structure permeable to fluid flow, comprises sintered agglomerates of a plurality of **abrasive** grains and a binding material, the binding material being characterized by a melting temperature between 500 and 1400 degrees centigrade, and the sintered agglomerates having a loose packing density of less than or equal to 1.6 g/cc and three-dimensional shape; a bond material; and about 35-80 volume percent total porosity, including at least 30 volume percent interconnected porosity. Methods for making the sintered agglomerates and **abrasive tools** containing the sintered agglomerates are described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 27

Titel: SANDPAPER WITH NON-SLIP LAYER

Patentnummer: [WO2012125335A3](#)

Anmeldung: WO2012US27843
WO2012US27839
EP20120758232
EP20120757364
US20120412955
US20120412924
CA20122829624
CA20122829195
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BR20131123250
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MX20130010357
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Priorität: US20110451678P 20110311
US20110451680P 20110311
US20110498685P 20110620
US20120412924 20120306
US20120412955 20120306
WO2012US27839 20120306
WO2012US27843 20120306

Patentfamilie: [WO2012125335A3](#)
[WO2012125335A2](#)
[WO2012125334A1](#)
[EP2683526A1](#)
[EP2683527A4](#)
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[MX2013010416A1](#)

Anmelder: 3M INNOVANTIVE PROPERTIES CO
3M INNOVATIVE PROPERTIES CO
PAHL THOMAS E
PETERSEN JOHN G
WALD MICHAEL P

Erfinder: PETERSEN JOHN G
THOMAS E PAHL
WALD MICHAEL P

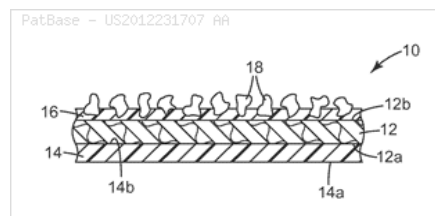


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C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-346**
B24D0011-02

Zusammenfassung:

Source: US2012231707 AA [EN] The present invention provides an **abrasive** article, e.g. a sheet of sandpaper, comprising a backing layer having opposed first and second major surfaces, an adhesive make coat on the second major surface, **abrasive** particles at least partially embedded in the make coat, thereby defining an **abrasive** surface, and an exposed non-slip coating layer on the first major surface, the non-slip coating layer comprising at least a base resin and a tackifying resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 28

Titel: COATED **ABRASIVE** BINDER CONTAINING TERNARY PHOTOINITIATOR SYSTEM

Patentnummer: [EP0285369B1](#)

Anmeldung: EP19880302777
DE19883884647T
US19880156992
US19870034066
JP19880082114
CA19880562881
KR19880003682
MX19880010944

Priorität: US19870034066 19870402
US19880156992 19880218
CA19880562881 19880330

Patentfamilie: [EP0285369B1](#)
[EP0285369A3](#)
[EP0285369A2](#)
[DE3884647T2](#)
[DE3884647D1](#)
[US4828583A](#)
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Anmelder: MINNESOTA MINING AND MANUFACTURING CO
MINNESOTA MINING AND MFG

Erfinder: EFU ANDORIYUU UBERU ZA SAADO
ERITSUKU JIYOOJI RAASON
JIYOERU DEBITSUDO OTSUKUSUMAN
LARSON ERIC G C O MINNESOTA MI
OXMAN JOEL D C O MINNESOTA MIN
UBEL ANDREW F III C O MINNESOT
UBEL N ANDREW F

IPC-Notationen: B05D0003-06
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[C08J0005-14](#)
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
C08F0002-50



Source: US4735632 A [EN] Coated **abrasive** binders made from a photocurable addition-polymerizable composition containing a free-radically-polymerizable monomer and a photoinitiator system containing (i) an arylidonium salt, (ii) a sensitizing compound, and (iii) an electron donor having an oxidation potential that is greater than zero and less than or equal to that of p-dimethoxybenzene (1.32 volts vs. S.C.E.) . The binders cure rapidly and deeply under ultraviolet or visible light, even when filled with large amounts of mineral grain or with coarse grades of minerals

FatBase - JP1020973_A2

Dokument Nr.: 29

Titel: **GRINDING TOOLS** THAT CONTAIN UNIFORM DISTRIBUTION OF **ABRASIVE** GRITS AND METHOD OF MANUFACTURE THEREOF



Patentnummer: [WO2009026776A1](#)

Anmeldung: WO2008CN000331
EP20080706508
US20080249851
CA20082645301
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CN200710009468

Priorität: CN200710009468 20070828
WO2008CN000331 20080213
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Patentfamilie: **WO2009026776A1**
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Anmelder: JIAXIANG HOU

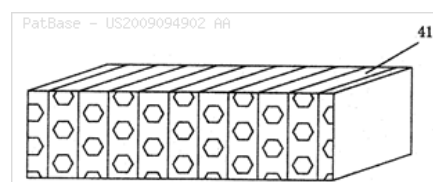
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C04B0035-645
C30B0030-00

CPC-Notationen: B24D0007-066
B24D0018-0045
B24D0018-0054
B24D0099-005

Zusammenfassung:

Source: US2009094902 AA [EN] The present invention relates to a method of uniformly distributing **abrasive** grits on **grinding tools**. It can be applied in the **cutting, grinding** segments of diamond **tools**, which are typically used in **cutting** and drilling various hard and fragile materials, such as granite, marble, concrete, asphalt, etc. The present invention provides a template, the template designed based on the arranging requirement of **abrasive** particles such as diamond grits. The template can adsorb only a single layer of **abrasive** particles and is then placed onto a sheet, where the diamond grits are pressed into the sheet, with the diamond grits distributed uniformly on the sheet



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 30

Titel: FIBER-CONTAINING DIAMOND-IMPREGNATED **CUTTING TOOLS**

Patentnummer: [WO2013028256A8](#)

Anmeldung: WO2015US22965
WO2012US44003
WO2007US86156
EP20120826384
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US20160378992
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Priorität: US20060867882P 20061130
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Patentfamilie:

WO2013028256A8
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Anmelder: BOART LONGYEAR COMPANY
BOART LONGYEAR US
DRIVDAHL KRISTIAN S
LAMBERT CHRISTIAN M
LONGYEAR TM INC
PEARCE CODY A
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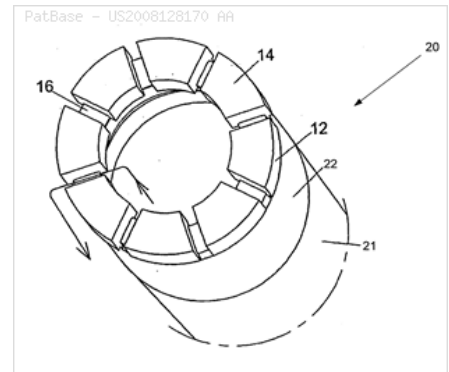
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E21B0010-48
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E21B0025-00
E21B0025-04

Zusammenfassung:

Source: US2008128170 AA [EN] Fibers for diamond-impregnated **cutting tools** and their associated methods for manufacture and use are described. The **cutting tools** contain a diamond-impregnated **cutting** portion that contains fibers made from carbon, glass, ceramic, polymer, and the like. The fibers can be in any form, including chopped and milled fibers. The fibers may also be coated with metal, ceramic, or other performance-enhancing coatings. The fibers may be used to both control the tensile strength control the erosion rate of the matrix to optimize the **cutting** performance of the **tools**. Additionally, the fibers may also weaken the structure and allow higher modulus binders to be used for the **cutting tools** at a lower cost, allowing the amount of fibers to be tailored to retain the diamonds in the **cutting** portion for the desired amount. And as the **cutting** portion erodes, the fibers may also increase the lubricity at the face of the **cutting** portion. Using the fibers allows the **cutting tools** to last longer and make them safer and more economical because they need to be replaced less often



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 31

Titel: EARTH-BORING BITS AND OTHER PARTS INCLUDING CEMENTED CARBIDE

Patentnummer: [WO2010021802A3](#)

Anmeldung: WO2009US51126

EP20120196590

EP20090790629

US20120491649

US20120491638

US20110207478

US20080196815

JP20110523846T

CA20092732518

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Priorität: US20080196815 20080822

EP20090790629 20090720

WO2009US51126 20090720

US20110207478 20110811

US20120491638 20120608

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Patentfamilie: [WO2010021802A3](#)

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[US8858870B2](#)

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Anmelder: CHANDLER MORRIS E

COLEMAN HEATH C

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MIRCHANDANI PRAKASH K

TDY IND INC

TDY IND LLC

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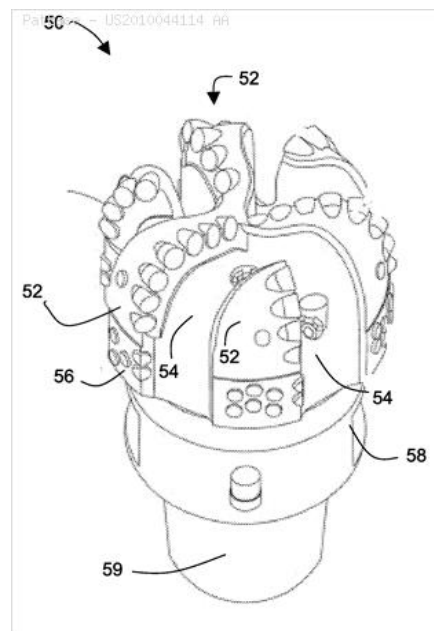
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B22F2005-001
C22C0029-08
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Y10T0428-12146
Y10T0428-12486

Zusammenfassung:

Source: US2010044114 AA [EN] An article of manufacture includes a cemented carbide piece, and a joining phase that binds the cemented carbide piece into the article. The joining phase includes inorganic particles and a matrix material. The matrix material is a metal and a metallic alloy. The melting temperature of the inorganic particles is higher than the melting temperature of the matrix material. A method includes infiltrating the space between the inorganic particles and the cemented carbide piece with a molten metal or metal alloy followed by solidification of the metal or metal alloy to form an article of manufacture



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 32

Titel: CUBIC BORON NITRIDE COMPACT

Patentnummer: [WO2006046128A1](#)

Anmeldung: WO2005IB03230
WO2005IB03221
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KR101226422B1
KR101226376B1
BRPI0517359A
BRPI0517360A
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PL1831130T3
ZA200703475A
ZA200703476A
ZA200703479A

Anmelder:

ANDERSIN STIG AKE
CAN NEDRET
ELEMENT SIX ABRASIVES SA
ELEMENT SIX PRODUCTION PTY LTD
FRIES ROBERT
GOUDEMOND IAIN PATRICK

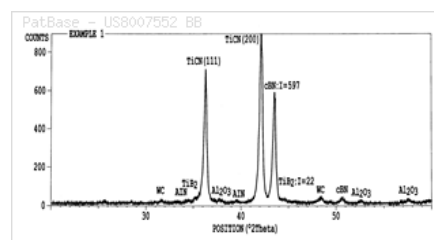
Erfinder: ANDERSIN STIG AKE
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PATRICK GOUDEMOND IAIN
PATRICK GOUDEMOND LAIN
ROBERT FRIES

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C22C0029-16
C22C0032-00

CPC-Notationen: C04B0035-5831
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C04B2235-5445
C04B2235-5472
C04B2235-604
C04B2235-785
C22C0001-1084
C22C0026-00
C22C2026-006
Y10T0407-27
Y10T0428-252

Zusammenfassung:

Source: US2009056232 AA [EN] A CBN compact comprises CBN and a matrix phase incorporating a secondary hard phase selected from TiCN, TiC, TiN and mixtures and solid solutions thereof and a maximum amount of titanium diboride where the XRD peak height of the (101) titanium diboride peak (after background correction) is less than 12 percent of the peak height of the (111) CBN peak



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 33

Titel: SINTERED **ABRASIVE** PARTICLES, METHOD OF MAKING THE SAME, AND **ABRASIVE** ARTICLES INCLUDING THE SAME

Patentnummer: [WO2014165390A1](#)

Anmeldung: WO2014US32043
EP20140780310
US20190511962
US20140782475
JP20190085818
JP20160506336T
CN201480020093

Priorität: US20130808955P 20130405
JP20160506336T 20140327
US20140782475 20140327
WO2014US32043 20140327
US20150782475 20151005
JP20190085818 20190426
US20190511962 20190715

Patentfamilie: **WO2014165390A1**
EP2981378A1
EP2981378A4
US10400146B2
US2019338172A1
US2016068729A1
JP2019178061A2
JP6550374B2
JP2016521235T2
CN105102158A
CN105102158B

Anmelder: 3M INNOVATIVE PROPERTIES CO

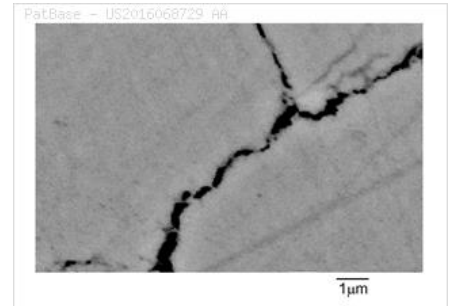
Erfinder: ERICKSON DWIGHT D
ROSENFLANZ ANATOLY Z



IPC-Notationen:	B22F0001-00 B22F0003-10 B24D0003-00 B24D0003-04 B24D0003-06 B24D0011-00 C01F0007-02 C01F0007-38 C01F0007-44 C04B0035-111 C04B0035-626 C09K0003-14	CPC-Notationen:	C01F0007-027 C01F0007-38 C01P2004-03 C01P2004-45 C01P2004-61 C01P2004-62 C04B0035-1115 C04B0035-62665 C04B0035-6268 C04B2235-3218 C09K0003-1409
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Zusammenfassung:

Source: US2016068729 AA [EN] A method of making sintered **abrasive** particles includes passing alumina precursor particles through a flame under conditions such that they are converted to alpha alumina. The precursor particles comprise a precursor of alpha alumina and have an average particle size of less than or equal to 500 microns. Sintered **abrasive** particles have a cellular microstructure comprising alpha alumina crystal grains of alpha alumina having a maximum dimension of less than about 3 microns are also **disclosed**. The sintered **abrasive** particles have an average particle size of less than or equal to 500 microns, and are essentially free of seed particles and alpha alumina grain size modifiers. **Abrasive** articles comprising a binder and a plurality of the sintered **abrasive** particles are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 34

Titel: **ABRASIVE TOOL**

Patentnummer: [WO9824593A1](#)

Anmeldung: WO1997US18277
 EP19970910868
 DE19976029653T
 US19960753838
 JP19980525564T
 CA19972272258
 AU19970048139
 CN19971080258
 KR19997004862
 TW19970117437
 AR1997P105622
 AT19970910868T
 BR1997PI13559
 CO19970070524
 DK19970910868T
 ES19970910868T
 NZ19970335752

Priorität: US19960753838 19961202
 EP19970910868 19971002
 WO1997US18277 19971002

Patentfamilie: **WO9824593A1**
EP0946332B1
EP0946332A1
DE69729653T2
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 US5976205A
 JP2000516156T2
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 AU737706B2
 AU199748139A1
 CN1239451A
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 KR20000057351A
 KR100371979B1
 TW394724B
 AR020303AA
 AT269779E
 BRPI9713559A
 CO4900084A1
 DK0946332T3
 ES2225957T3
 NZ335752A

Anmelder: NORTON COMPANY
 SAINT GOBAIN ABRASIVES INC

Erfinder: ANDREWS R M
 ANDREWS RICHARD M
 BOYLE SCOTT
 OWEN R L
 OWEN ROBERT L
 POULIMENOS CHRIS S
 WALLAHORA RICHARD W

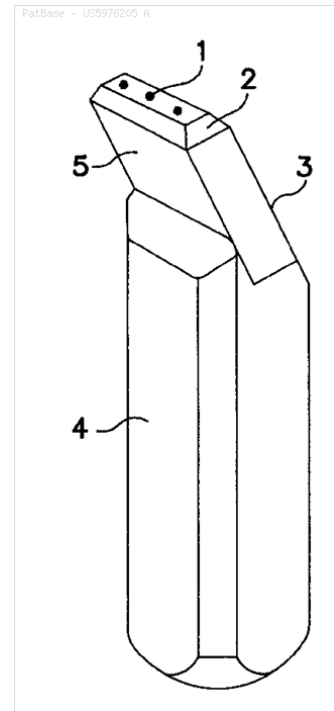


IPC-Notationen: B22F0003-00
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B24D0003-04
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C22C0001-05

CPC-Notationen: B22F0003-23
B22F0007-06
B22F2005-001
B24D0003-06
C22C0001-05
C22C0001-051
Y10S0076-12
Y10T0407-1904
Y10T0407-27

Zusammenfassung:

Source: US5976205 A [EN] The present invention provides a metal bonded **abrasive tool** wherein the **tool** has improved **life** and **mechanical** properties. The invention further includes the bond composition which allows for improved **life** and **mechanical** properties, particularly in diamond blade dressing **tools**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 35

Titel: DOUBLED-SIDED AND MULTI-LAYERED PCD AND PCBN **ABRASIVE** ARTICLES

Patentnummer: [WO2006099194A3](#)

Anmeldung: WO2006US08691
WO2004US28035
EP20060737829
US20050077995
US20030655758

Priorität: US20030655758 20030905
US20050077995 20050310
WO2006US08691 20060310

Patentfamilie: [WO2006099194A3](#)
[WO2006099194A2](#)
[WO2005025805A1](#)
[EP1877223A4](#)
[EP1877223A2](#)
[US2005210755A1](#)
[US2005050801A1](#)

Anmelder: CHO HYUN SAM
HAN KYUNG RYUL
SONG KI JEON

Erfinder: CHO HYUN SAM
HAN KYUNG RYUL
SONG KI JEON

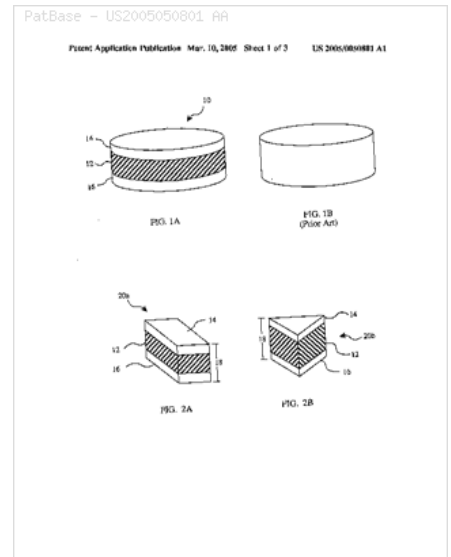


IPC-Notationen: B22F0003-00
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C09C0001-68
C09K0003-14

CPC-Notationen: B21C0003-025
B22F0007-008
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B22F0007-08
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B22F2005-002
B22F2998-00
B23B0027-141
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B23P0015-28
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C22C0026-00
C22C2026-006
Y10T0428-12028
Y10T0428-12056
Y10T0428-24355
Y10T0428-30

Zusammenfassung:

Source: US2005050801 AA [EN] A doubled-sided PCD or PCBN compact as well as a new multi-layered PCD and PCBN can be produced using high pressure high temperature processes allowing for increased effective thickness of **abrasive tools**. A polycrystalline compact can include a substrate having a first surface and a second surface which are non-contiguous. Additionally, a first polycrystalline layer can be attached to the first surface of the substrate and a second polycrystalline layer attached to the second surface of the substrate. The first and second polycrystalline layers can include superabrasive particles bonded together by sintering or chemical bonding with an additional metal. Such double-sided PCD and PCBN compacts as well as a new multiple layered PCD and PCBN allow for increased effective thickness of a **tool** without suffering from non-homogenous results typical of standard PCD and PCBN compacts, regardless of superabrasive particle size. Each polycrystalline layer can include superabrasive particles of varying particle sizes such that the final tool is tailored for specific abrading characteristics. Such doubled-sided and/or multiple layered PCD and PCBN compacts can be incorporated into a wide variety of abrasive tools for use in cutting, milling, grinding, polishing, drilling and other similar abrasive applications



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 36

Titel: BONDED DIAMOND BODY, **TOOL** COMPRISING THE SAME, AND METHOD FOR MANUFACTURING BONDED DIAMOND BODY

Patentnummer: [WO2015072250A1](#)

Anmeldung: WO2014JP76928
EP20140862191
US20140026286
JP20150547689T
CN201480056847
KR20167009696
IN201617011896

Priorität: JP20130236971 20131115
WO2014JP76928 20141008

Patentfamilie: **WO2015072250A1**
EP3069806A1
EP3069806A4
US10603720B2
US2016221080A1
JP2015072250A1
JP6416776B1
CN105916615A
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KR20160085754A
KR102241354B1
IN201617011896A

Anmelder: SUMITOMO ELEC HARDMETAL CORP
SUMITOMO ELECTRIC HARDMETAL CORP
SUMITOMO ELECTRIC INDUSTRIES

Erfinder: HIGASHI TAISUKE
SOGABE MARI
YAMAGUCHI TADASHI
YURUGI SHINICHIRO

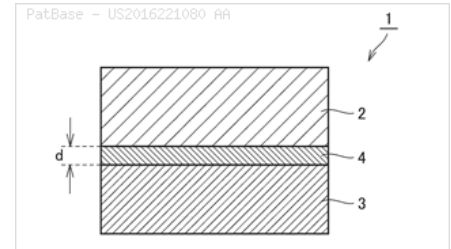
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C22C0026-00
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CPC-Notationen: B22F0003-12
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B23B0027-20
B23B2226-315
B24D0003-06
B24D0018-0009
C22C0026-00
C22C0029-005
C22C0029-02
C22C2204-00



Zusammenfassung:

Source: US2016221080 AA [EN] A bonded diamond body having a high bonded strength is provided. The bonded diamond body includes a sintered polycrystalline diamond body, a hard substrate, and a hard layer provided between the sintered polycrystalline diamond body and the hard substrate, the sintered polycrystalline diamond body containing a diamond grain and a sintering aid, the hard substrate containing tungsten carbide and cobalt, and the hard layer containing cobalt and a hard grain made of a carbide, a nitride, or a carbonitride having a Vickers hardness of 1100 Hv or more



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 37

Titel: A POLYCRYSTALLINE SUPER HARD CONSTRUCTION AND A METHOD FOR MAKING SAME

Patentnummer: [WO2014068138A1](#)

Anmeldung: WO2013EP73035
US20130440809
GB20120019883
CN201380068634

Priorität: GB20120019883 20121105
US20120722710P 20121105
US20130440809 20131105
WO2013EP73035 20131105

Patentfamilie: [WO2014068138A1](#)
[US2015298292A1](#)
[GB2507569A1](#)
[GB201219883A0](#)
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Anmelder: ELEMENT SIX ABRASIVES SA
ELEMENT SIX LTD

Erfinder: CAN NEDRET
RIET CLEMENT DAVID VAN D

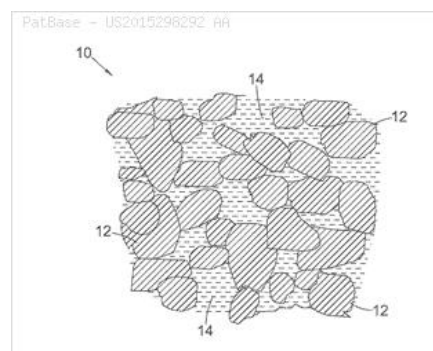


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E21B0010-567
E21B0010-573

CPC-Notationen: B22F0003-14
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B24D0003-10
B24D0018-00
B24D0099-005
C22C0026-00
C22C0029-08
C23F0001-02
C23F0001-28
C30B0029-04
E21B0010-567
E21B0010-5735

Zusammenfassung:

Source: US2015298292 AA [EN] A polycrystalline super hard construction comprising a body of polycrystalline diamond (PCD) material and a plurality of interstitial regions between inter-bonded diamond grains forming the polycrystalline diamond material; the body of PCD material comprises a working surface positioned along an outside portion of the body; a first region substantially free of a solvent/catalysing material; a second region remote from the working surface that includes solvent/catalysing material in a plurality of the interstitial regions; and a substrate attached to the second region along an interface. The first region extends a depth from the working surface and the thickness of the second region between the interface with the substrate and an interface with the first region is between around 20 microns to around 200 microns at one or more points along the interface with the substrate



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 38

Titel: **CUTTING ELEMENTS** HAVING A NON-UNIFORM ANNULUS LEACH DEPTH, EARTH-BORING **TOOLS** INCLUDING SUCH **CUTTING ELEMENTS**, AND RELATED METHODS



Patentnummer: [US9714545B2](#)

Anmeldung: US20170654966
US20140248008

Priorität: US20140248008 20140408
US20170654966 20170720

Patentfamilie: [US9714545B2](#)
[US10024113B2](#)
[US2017314334A1](#)
[US2015283618A1](#)

Anmelder: BAKER HUGHES INC

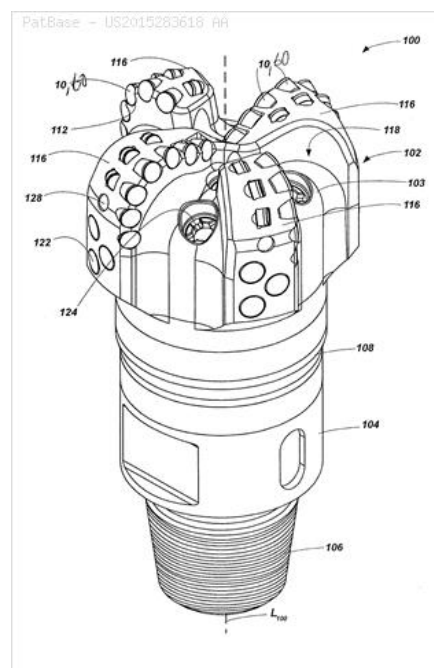
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STOCKEY DAVID A

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C22C0026-00
E21B0010-55
E21B0010-573

CPC-Notationen: B22F0003-24
B22F0007-06
B22F2003-244
B22F2005-001
B24D0099-005
C22C0026-00
E21B0010-573

Zusammenfassung:

Source: US2015283618 AA [EN] Polycrystalline diamond compact (PDC) **cutting elements** include leached and un-leached regions. The leached region may be or include a leached annular region. An inner boundary of the leached annular region remote from a side surface of the polycrystalline diamond may have a non-linear profile in a plane extending through the PDC **cutting element** along a longitudinal axis of the **cutting element**. Methods of forming PDC **cutting elements** include configuring polycrystalline diamond of a PDC **cutting element** to have such a leached annular region with a non-linear profile. Earth-boring **tools** may be formed that include such PDC **cutting elements**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 39

Titel: SUPERHARD CONSTRUCTIONS AND METHODS OF MAKING SAME

Patentnummer: [WO2014191555A3](#)

Anmeldung: WO2014EP61267
US20180208053
US20140892712
GB20140009616
GB20130009798
CN201480039267

Priorität: GB20130009798 20130531
WO2014EP61267 20140530
US20150892712 20151120
US20180208053 20181203

Patentfamilie: [WO2014191555A3](#)
[WO2014191555A2](#)
[US2019337123A1](#)
[US2016144483A1](#)
[GB2516359B2](#)
[GB2516359A1](#)
[GB201409616A0](#)
[GB201309798A0](#)
[CN105392584A](#)
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Anmelder: ELEMENT SIX ABRASIVES SA

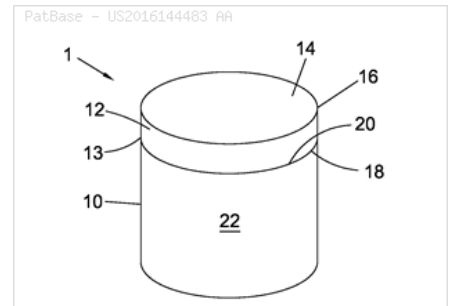
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OZBAYRAKTAR MEHMET SERDAR
VALENTINE KANYANTA



IPC-Notationen:	B22F0007-06 B23B0027-00 B23B0051-00 B23C0005-00 B23D0077-00 B24D0003-00 B24D0003-06 B24D0003-14 B24D0007-18 E21B0010-00 E21B0010-46 E21B0010-567 E21B0010-573	CPC-Notationen:	B22F0007-06 B23B0027-00 B23B0051-00 B23B2222-28 B23B2226-125 B23B2226-315 B23C0005-00 B23C2222-28 B23C2226-125 B23C2226-315 B23D0077-00 B23D2277-2435 B23D2277-245 B23D2277-2464 B24D0003-001 B24D0003-06 B24D0003-14 B24D0007-18 E21B0010-00 E21B0010-46 E21B0010-567 E21B0010-573 E21B0010-5735
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Zusammenfassung:

Source: US2016144483 AA [EN] A superhard polycrystalline construction (1) comprises a body (12) of polycrystalline superhard material having a **cutting** face (14) and a substrate (10) bonded to the body of polycrystalline superhard material along an interface (18). The substrate comprises a substrate body and a first end surface (20) forming the interface, the first end surface of the substrate comprising a projection extending from the body of the substrate into the body of superhard material towards the **cutting** face. The projection has an outer peripheral surface around which the body of polycrystalline superhard material extends. The body of polycrystalline superhard material has a thickness (h) from the **cutting** face along the peripheral side **edge** (13) to the interface with the substrate of at least around 4 mm and at least a portion of the projection has a thickness measured in a plane extending along the longitudinal axis of the construction of at least around 4 mm. There is also **disclosed** a method of making such a superhard polycrystalline construction



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 40

Titel: **ABRASIVE** PRODUCT

Patentnummer: [EP0046374B1](#)

Anmeldung: EP19810303687
DE19813167088T
US19810292124
JP19810127667
CA19810383579
AU19810074051
ZA19810004916

Priorität: ZA19800004996 19800814
ZA19800007383 19801126
ZA19810004916 19810717
CA19810383579 19810811
JP19810127667 19810814

Patentfamilie: [EP0046374B1](#)
[EP0046374A3](#)
[EP0046374A2](#)
[DE3167088D1](#)
[US4378975A](#)
[JP57054076A2](#)
[JP5037792B4](#)
[JP1839014C3](#)
[CA1193870A1](#)
[AU542351B2](#)
[AU198174051A1](#)
[ZA8104916A](#)

Anmelder: DAVIES AULETTE
DE BEERS IND DIAMOND
DE BEERS INDUSTRIAL DIAMOND DIVISION LTD
DE BIAZU IND DAIAMONDO DEIBIJON LTD
TOMLINSON PETER N

Erfinder: DAVIES AULETTE
OORETSUTO DEEBISU
PIITAA NOERU TOMURINSON
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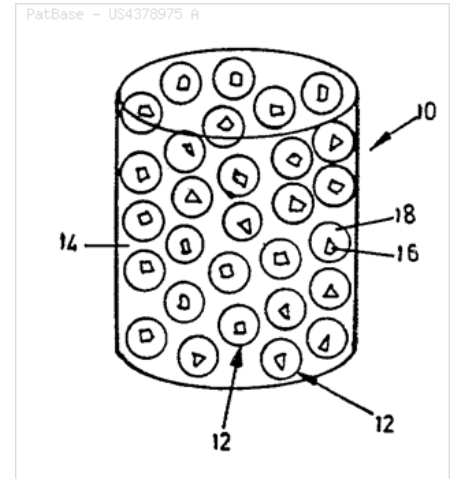
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CPC-Notationen: B22F0007-06
B22F2999-00
[B24D0003-06](#)
C09K0003-1445
C22C0026-00
E21B0010-46
E21B0010-5676



Zusammenfassung:

Source: US4378975 A [EN] The invention provides an **abrasive** body which will generally be of cylindrical shape comprising a plurality of superhard **abrasive** particles such as diamond bonded together by means of a tough wear-resistant nickel based alloy having a melting point of below 1000 DEG C. These alloys are known as hard facing alloys. The **abrasive** bodies may be used as inserts for drill crowns. The bodies are made by mixing the **abrasive** particles with the alloy in powdered form, producing a green-state, coherent body from the mixture, generally by cold pressing, and sintering the green-state product under conditions which inhibit degradation of the **abrasive** particle



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 41

Titel: POLYCRYSTALLINE SUPER HARD CONSTRUCTION AND A METHOD FOR MAKING SAME

Patentnummer: [WO2014068130A1](#)

Anmeldung: WO2013EP73007
US20130440781
GB20120019877
CN201380068303

Priorität: GB20120019877 20121105
US20120722688P 20121105
US20130440781 20131105
WO2013EP73007 20131105

Patentfamilie: [WO2014068130A1](#)
[US2015259987A1](#)
[GB2507566A1](#)
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Anmelder: ELEMENT SIX ABRASIVES SA

Erfinder: CAN NEDRET
SARIDIKMEN HABIB

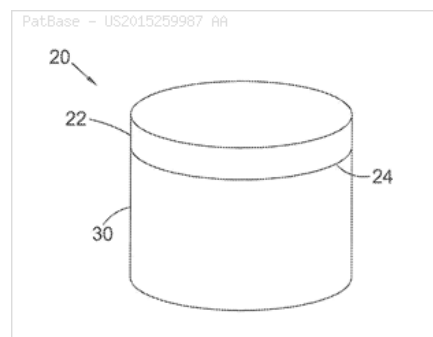


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CPC-Notationen: B22F0007-06
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B24D0018-0009
C04B0041-91
C22C0026-00
C23F0001-02
C23F0001-28
E21B0010-567

Zusammenfassung:

Source: US2015259987 AA [EN] A polycrystalline super hard construction comprising a body of polycrystalline diamond (PCD) material and a plurality of interstitial regions between inter-bonded diamond grains forming the polycrystalline diamond material; the body of PCD material comprises a working surface positioned along an outside portion of the body; a first region substantially free of a solvent/catalysing material; and a second region remote from the working surface that includes solvent/catalysing material in a plurality of the interstitial regions. The first region extends to a depth of at least about 800 microns from the working surface into the body of polycrystalline diamond material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 42

Titel: Composite of bonded cubic boron nitride crystals on a silicon carbide substrate

Patentnummer: [US4110084A](#)

Anmeldung: US19770787858

Priorität: US19770787858 19770415

Patentfamilie: [US4110084A](#)

Anmelder: GEN ELECTRIC

Erfinder: LEE MINYOUNG
SZALA LAWRENCE E

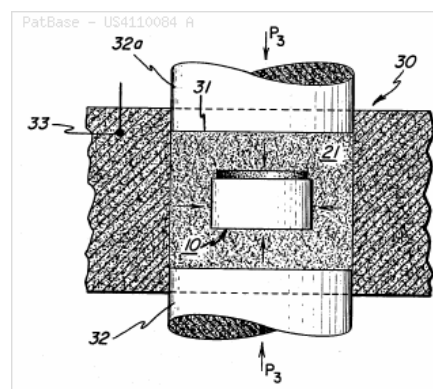


IPC-Notationen: B22F0007-06
B24D0003-08
E21B0010-56
E21B0010-567

CPC-Notationen: B22F0007-06
B22F2999-00
B24D0003-08
E21B0010-567

Zusammenfassung:

Source: US4110084 A [EN] A mass of cubic boron nitride (CBN) crystals, aluminum or aluminum alloy and a silicon carbide ceramic substrate are disposed in a container which is placed within a pressure-transmitting powder medium. Pressure ranging from about 20,000 psi to about 200,000 psi is applied to the powder medium resulting in substantially isostatic pressure being applied to the container and its contents. To the resulting shaped substantially-isostatic system of powder-enveloped container, heat and pressure are applied simultaneously whereby the aluminum or aluminum alloy is liquefied and infiltrated through the interstices between the CBN crystals and diffused into the contacting face of the silicon carbide substrate sufficiently to produce, upon **cooling**, an adherently bonded integral composite



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 43

Titel: **ABRASIVE** PRODUCT

Patentnummer: [EP0449547B1](#)

Anmeldung: EP19910302569
DE19916010075T
US19910675144
JP19910132454
GB19900006703
CA19912038661
AU19910073723
KR19910004689
TW19910102785
AT19910302569T
IE19910000984
ZA19910002120

Priorität: GB19900006703 19900326
CA19912038661 19910325

Patentfamilie: [EP0449547B1](#)
[EP0449547A3](#)
[EP0449547A2](#)
[DE69110075T2](#)
[DE69110075D1](#)
[US5137543A](#)
[JP6091409A2](#)
[GB9006703A0](#)
[CA2038661A](#)
[AU640469B2](#)
[AU199173723A1](#)
[KR19910016444A](#)
[KR100208642B1](#)
[TW200421B](#)
[AT123245E](#)
[IE67061B](#)
[IE910984A1](#)
[ZA9102120A](#)

Anmelder: DE BEERS IND DIAMOND
DE BEERS INDUSTRIAL DIAMOND DIVISION PROPRIETARY
DENHAM CHRISTOPHER E
HEATH PETER J

Erfinder: DENHAM CHRISTOPHER ERIC
DENHAM CHRISTOPHER ERIC
HEAT PETER JAMES
KURISUTOFUAA ERITSUKU DENHAMU
PETER JAMES HEATH
PIITAA JIEEMUSU HIISU

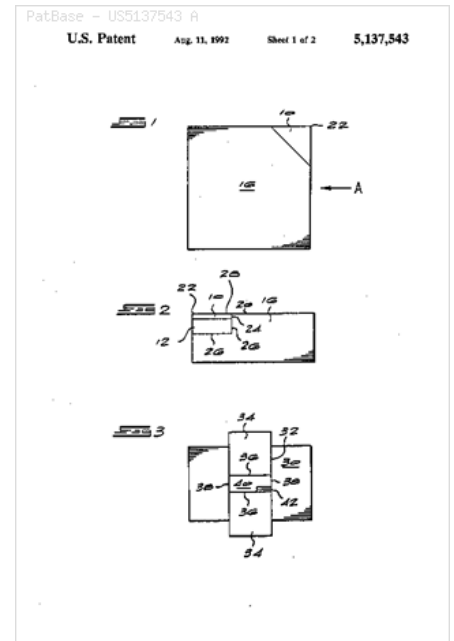
IPC-Notationen: B23B0027-14
B23B0027-16
B23C0005-16
B23C0005-20
[B24D0003-00](#)
B24D0003-28
B24D0007-14
B24D0017-00
B24D0099-00
E21B0010-46
E21B0010-58

CPC-Notationen: B23B0027-148
B23B0027-1622
B23B2200-201
B23B2226-125
B23B2226-315
B23B2226-61
B24D0099-00
E21B0010-58



Zusammenfassung:

Source: US5137543 A [EN] A **tool** insert comprises a composite **abrasive** compact bonded to a polymer-based support. The composite **abrasive** compact consists of a compact layer bonded to a substrate and is bonded to the support through bonding surfaces. The composite **abrasive** compact provides a **cutting edge** for the **tool** insert



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 44

Titel: GROUP IVB BORIDE BASED **CUTTING TOOLS** FOR MACHINING GROUP IVB BASED MATERIALS

Patentnummer: [WO9426469A1](#)

Anmeldung: WO1994US03557
EP19970120371
EP19940914753
DE19970120371T
DE19946033019T
DE19946011163T
DE19940914753T
US19950425566
US19950425163
US19930060772
JP19940525411T
CA19942237074
CA19942146665
AU19940066996
CN19941090666
KR19957004987
KR19950704987
AT19940120371T
AT19940914753T
ES19940914753T
ES19970120371T
RU19950122465

Priorität: US19930060772 19930510
CA19942146665 19940331
CA19942237074 19940331
EP19940914753 19940331
WO1994US03557 19940331
WO1994US03559 19940331
US19950425163 19950420
US19950425566 19950420

Patentfamilie: [WO9426469A1](#)
[EP0844050B1](#)
[EP0697938B1](#)
[EP0697938A1](#)
[EP0844050A3](#)
[EP0697938A4](#)
[EP0844050A2](#)
[DE69433019T2](#)
[DE69411163T2](#)
[DE0844050T1](#)
[DE0697938T1](#)
[DE69433019D1](#)
[DE69411163D1](#)
[US5632941A](#)
[US5580836A](#)
[US5427987A](#)
[JP2879475B2](#)
[JP7509187T2](#)
[CA2237074A](#)
[CA2146665A](#)
[AU674225B2](#)
[AU199466996A1](#)
[CN1114103A](#)
[KR960702373A](#)
[KR19967002373A](#)



KR19960702373A
KR100227879B1
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AT246572E
ES2083937T3
ES2083937T1
ES2117614T1
RU2107607C1
RU95122465A

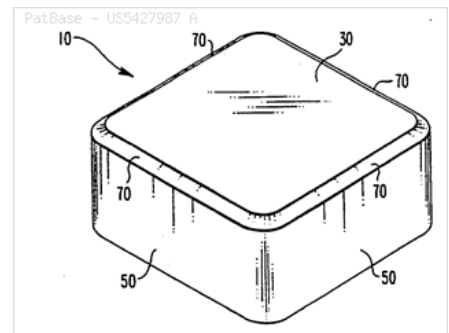
Anmelder: KENNAMETAL INC
Erfinder: AHUJA DEEPAK P
BROOKS HOLLY S
MEHROTRA PANKAJ K
MEHROTRA PANKAJ KUMAR

IPC-Notationen: B23B0027-14
B23P0013-00
B23P0015-28
B24D0003-06
B24D0003-34
C04B0035-58

CPC-Notationen: **B24D0003-06**
B24D0003-34
B24D0003-342
C04B0035-58071
C04B0035-58078
C04B0035-645
Y10S0264-36

Zusammenfassung:

Source: US5427987 A [EN] A densified titanium diboride based ceramic composition is provided having W and Co therein and a fine grain size. The composition has particular usefulness as a **cutting tool** for the machining of titanium based alloys at high speeds



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 45

Titel: Crenelated **abrasive tool**

Patentnummer: [WO9822260A1](#)

Anmeldung: WO1997US17581
EP19970945370
DE19976008914T
US19960749370
JP19980523637T
CA19972271806
CN19971099980
KR19997004455
TW19970115475
AT19970945370T

Priorität: US19960749370 19961121
WO1997US17581 19970930

Patentfamilie: **WO9822260A1**
EP0946333B1
EP0946333A1
DE69708914T2
DE69708914D1
US5868125A
JP2000510773T2
CA2271806A
CN1238717A
KR20000057165A
TW474857B
AT210003E

Anmelder: NORTON CO
SAINT GOBAIN ABRASIVES INC

Erfinder: MAOUJOUD MOHAMMED
MAOUJOUT MOHAMMED

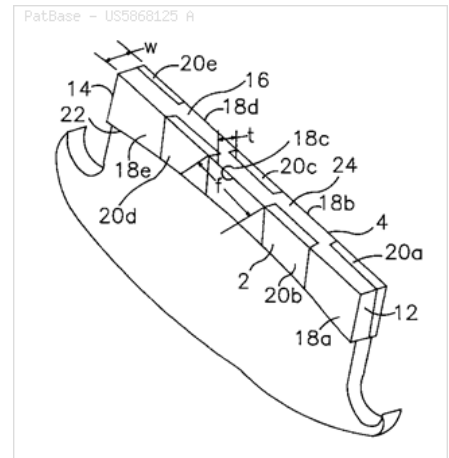


IPC-Notationen: B23B0051-04
B24D0003-00
B24D0003-04
B24D0003-06
B24D0005-00
B24D0005-06
B24D0005-14
B24D0007-00
B24D0007-06
B24D0007-18
B28D0001-02
B28D0001-04
B28D0001-12
B28D0001-14

CPC-Notationen: **B24D0003-06**
B28D0001-121

Zusammenfassung:

Source: US5868125 A [EN] An **abrasive tool** for **cutting** extremely **abrasive-resistant** materials includes a novel, **abrasive** segment with a generally crenelated, rectangular appearance. The segment has a single piece vein of a primary **abrasive** and first bond material extending completely along the length of the segment. The vein transverses the width of the segment at least once in a non-linear path and alternately coincides with inner and outer faces. Gaps between the vein and the faces opposite the vein coincident faces are occupied by a second bond material, and optionally, a secondary **abrasive**, thus forming multiple, separated **abrasive** regions. The bottom surface of the segment is attached to a core at an **operative** perimeter which defines the **cutting edge** of the **tool**. The segment can be adapted to conform to the curvature of diverse **cutting** edges, and thus can be used in rotary and reciprocating saw blades and core drilling bits. The crenelated construction of the **abrasive** segment provides a fast **cutting**, durable tool incorporating less of costly superabrasives, such as diamond, than comparable tools. Despite an intricate configuration of primary and secondary abrasives within the segment, the novel tool has enhanced structural integrity. A method of making the novel abrasive tool is provided in which primary abrasive and first bond material are compacted to shape a vein preform which is presintered in a vein mold to produce a green vein. The green vein is placed in a segment mold and then second bond material and optional secondary abrasive are deposited in cavities between the vein and segment faces to create separated abrasive regions. The segment is sintered to cure the bond material permitting the segment to be attached to the operative perimeter of the tool core as a unit. The method of making the abrasive tool is fast which contributes to low fabrication costs



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 46

Titel: **Cutting-off wheel** for dry **cutting** metals, stones and other hard materials comprises thin **disc** with granular **grinding** agent and sealed with barrier of sealing substance keeping water away from pores



Patentnummer: [DE10049317B4](#)

Anmeldung: DE20001049317

Priorität: DE20001049317 20001005

Patentfamilie: [DE10049317B4](#)
[DE10049317A1](#)

Anmelder: DRONCO AG

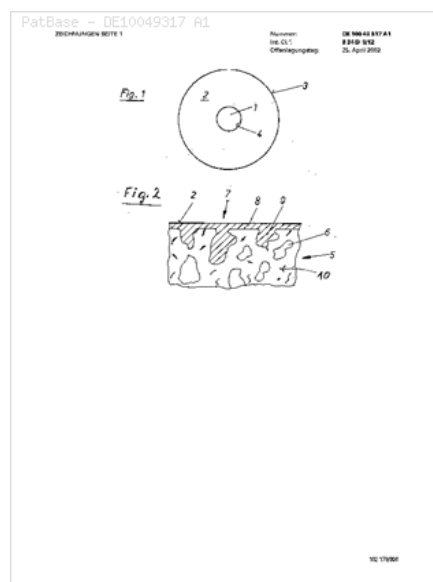
Erfinder: ADASCH VOLKER
HESS KAI UWE

IPC-Notationen: B23D0061-00
B23D0061-02
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0005-00
B24D0005-12
B28D0001-22
B28D0001-24

CPC-Notationen: B23D0061-025
B24D0003-28
[B24D0003-348](#)
B24D0005-12

Zusammenfassung:

Source: DE10049317 A1 [EN] The **cutting off wheel** is formed by a thin **disc** with granular **grinding** agent, **filler** and reinforcement structure. It is sealed with a barrier of sealing substance (7) to keep out water from the pores (6) and cavities (10). The sealing substance can be paraffin or paint



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 47

Titel: **ABRASIVE CUTTING TOOL**

Patentnummer: [US6273082B1](#)

Anmeldung: US19980055217

Priorität: US19910712989 19910610
US19910741678 19910807
US19930024649 19930301
US19950480715 19950607
US19980055217 19980406

Patentfamilie: **US6273082B1**

Anmelder: ULTIMATE ABRASIVE SYSTEMS L L
ULTIMATE ABRASIVE SYSTEMS LLC

Erfinder: TSELESIN NAUM T

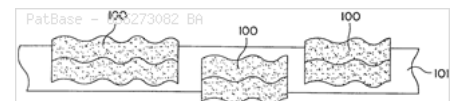


IPC-Notationen: B23D0061-02
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B24D0005-10
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B24D0018-00
B28D0001-12
C22C0032-00

CPC-Notationen: B23D0061-021
B23D0061-026
B23D0061-185
B24D0003-06
B24D0005-10
B24D0005-123
B24D0011-001
B24D0018-0072
B24D2203-00
B28D0001-121
C22C0032-00

Zusammenfassung:

Source: US6273082 BA [EN] Structurally independent **cutting** members are formed with **abrasive** material comprising a plurality of particles protruding through a surface of the retaining material comprising a mesh material for durable **cutting** members; and, the structurally independent **cutting** members are selectively continuous or **discontinuous** and spatially mounted along the working **edge** of a core. Some of the **cutting** members or portions of the **cutting** members are arranged for stock removal, and some are arranged for gauge keeping. Since the individual portions of the **cutting** portions are separate, more stock removal portions can be included, with fewer gauge keeping portions as may be required. The structurally independent **cutting** members may have a variety of profile shapes, such as contoured configurations to provide stock removal using high pressure **cutting** forces applied normal to the **cutting** face of the workpiece and gauge keeping functions using low pressure **cutting** forces applied laterally to the **cutting** face to the workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 48

Titel: **ABRASIVE CUTTING TOOL**
Patentnummer: [US5791330A](#)
Anmeldung: US19950480715
Priorität: US19910712989 19910610
US19910741678 19910807
US19930024649 19930301
US19950480715 19950607
Patentfamilie: **US5791330A**
Anmelder: ULTIMATE ABRASIVE SYSTEMS L L
ULTIMATE ABRASIVE SYSTEMS LLC
Erfinder: TSELESIN NAUM N

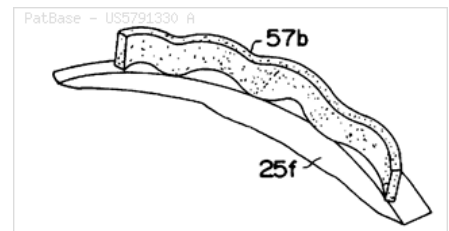


IPC-Notationen: B23D0061-02
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B24D0003-06
B24D0005-10
B24D0005-12
B24D0011-00
B24D0018-00
B28D0001-12
C22C0032-00

CPC-Notationen: B23D0061-021
B23D0061-026
B23D0061-185
B24D0003-06
B24D0005-10
B24D0005-123
B24D0011-001
B24D0018-0072
B24D2203-00
B28D0001-121
C22C0032-00

Zusammenfassung:

Source: US5791330 A [EN] Structurally independent **cutting** members are formed with **abrasive** material comprising a plurality of particles protruding through a surface of the retaining material comprising a mesh material for durable **cutting** members; and, the structurally independent **cutting** members are selectively continuous or **discontinuous** and spatially mounted along the working **edge** of a core. Some of the **cutting** members or portions of the **cutting** members are arranged for stock removal, and some are arranged for gauge keeping. Since the individual portions of the **cutting** portions are separate, more stock removal portions can be included, with fewer gauge keeping portions as may be required. The structurally independent **cutting** members may have a variety of profile shapes, such as contoured configurations to provide stock removal using high pressure **cutting** forces applied normal to the **cutting** face of the workpiece and gauge keeping functions using low pressure **cutting** forces applied laterally to the **cutting** face to the workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 49

Titel: CEMENTED CARBIDE BASE OUTER BLADE **CUTTING WHEEL** AND MAKING METHOD

Patentnummer: [EP2543478B1](#)

Anmeldung: EP20120174147
DE201260022706T
US20120541263
JP20140198155
JP20110148045
CN201210229740
KR20120072928
TW20120123892
MY20120002952
PH20120000195
SG20120049326
TH20121003313

Priorität: JP20110148045 20110704
EP20120174147 20120628
JP20140198155 20140929

Patentfamilie: [EP2543478B1](#)
[EP2543478A3](#)
[EP2543478A2](#)
[DE602012022706D1](#)
[US9016269B2](#)
[US2013008422A1](#)
[JP2015037833A2](#)
[JP2013013966A2](#)
[JP5880652B2](#)
[JP5630389B2](#)
[CN102862129A](#)
[CN102862129B](#)
[KR20130004886A](#)
[KR101720228B1](#)
[TW201328802A](#)
[MY157511A](#)
[PH2012000195A](#)
[SG186587A1](#)
[TH56318B](#)
[TH125136A](#)

Anmelder: KASASHIMA MASAKI
MAEGAWA HARUKAZU
MINOWA TAKEHISA
NAGASAKI YOSHIFUMI
SHINETSU CHEMICAL CO

Erfinder: MAEGAWA HARUKAZU
MAEKAWA NAOKAZU
MASAKI KASASHIMA
NAGASAKI KINSHI
TAKEHISA MINOWA
YOSHIFUMI NAGASAKI

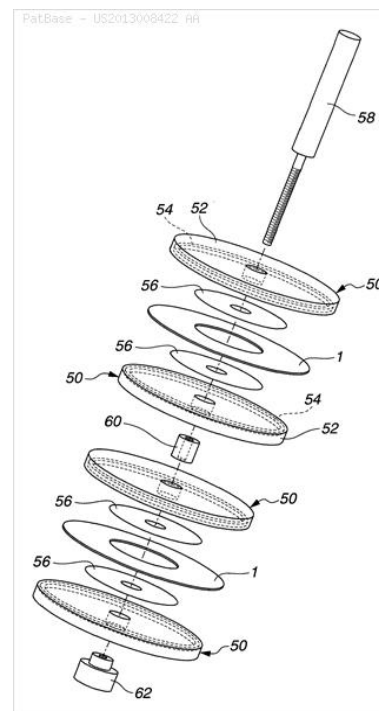


IPC-Notationen: B23D0061-04
B23P0015-40
B24D0003-00
B24D0003-06
B24D0003-28
B24D0005-06
B24D0005-12
B24D0018-00
B28D0001-04
B28D0005-02

CPC-Notationen: B23P0015-40
B24D0003-06
B24D0003-28
B24D0005-06
B24D0005-12
B28D0005-022

Zusammenfassung:

Source: US2013008422 AA [EN] An outer blade **cutting wheel** comprising an annular thin **disc** base of cemented carbide and a blade section of metal or alloy-bonded **abrasive** grains on the outer periphery of the base is provided. The **abrasive** grains are diamond and/or cBN grains having an average grain size of 45-310 micro m and a TI of at least 150. The blade section includes overlays having a thickness tolerance ($T3_{max}-T3_{min}$) of 0.001 mm to 0.1xT2 mm. The blade section has a roundness ($OD_{max}/2-OD_{min}/2$) of 0.001 mm to 0.01xODmax mm



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 50

Titel: SAW WIRE AND METHOD OF MANUFACTURING SAW WIRE

Patentnummer: [WO2010071198A1](#)

Anmeldung: WO2009JP71129
EP20090833500
US20090140770
JP20100543012T
CN200980156938
KR20117014448
TW20090143606
IN2011CN05062
MY20110002859
VN20110001897

Priorität: JP20080322369 20081218
JP20080322370 20081218
JP20090205363 20090904
JP20100543012 20091218
WO2009JP71129 20091218

Patentfamilie: [WO2010071198A1](#)
[EP2390055A1](#)
[EP2390055A4](#)
[US2011308371A1](#)
[JP2010071198A1](#)
[JP5516420B2](#)
[JP5516420B1](#)
[CN102317037A](#)
[CN102317037B](#)
[KR20110102890A](#)
[KR101509852B1](#)
[TW201043366A](#)
[TWI455781B](#)
[IN05062CN2011A](#)
[MY155774A](#)
[VN18795A1](#)

Anmelder: MORITA MITSURU
NIPPON STEEL AND SUMITOMO METAL CORP
NIPPON STEEL MATERIALS CO LTD
SAKAMOTO HIROAKI
TANAKA MASAMOTO
TATSUMI KOHEI

Erfinder: MORITA MITSURU
SAKAMOTO HIROAKI
TANAKA MASAMOTO
TATSUMI KOHEI

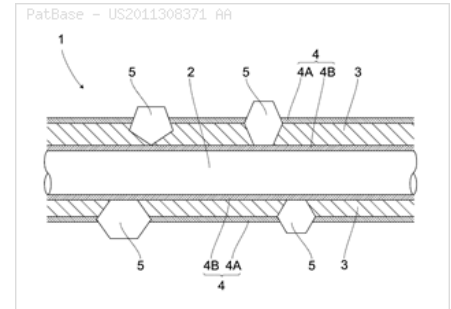
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[B24D0003-04](#)
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B24D0003-08
B24D0011-00
B24D0018-00

CPC-Notationen: B23D0061-185
B23D0065-00
B24D0003-08
B24D0011-00
B24D0011-001
B24D0018-00
B24D0018-0018
Y10T0083-909



Zusammenfassung:

Source: US2011308371 AA [EN] There are provided a fixed-abrasive grain saw wire with a superior **cutting** performance and a manufacturing method thereof. Particularly, there are provided a fixed-abrasive grain saw wire with **abrasive** grains adhered to a metal wire via a Zn-based or Sn-based low-melting-point metal and a high-melting-point metal having a melting point higher than that of the low-melting-point metal, and a manufacturing method thereof



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 51

Titel: **ABRASIVE** ARTICLE AND METHOD OF FORMING

Patentnummer: [WO2014172611A1](#)

Anmeldung: WO2014US34611
EP20140786083
US20140256209
JP20160509117T
JP20160509117
CN201480032995
KR20157032805
TW20140114089
IN2015DN10032
RU20150149282

Priorität: US20130813815P 20130419
US20130813833P 20130419
US20140256209 20140418
WO2014US34611 20140418

Patentfamilie: **WO2014172611A1**
EP2986416A1
EP2986416A4
US9409243B2
US2014311472A1
JP2016515478A2
JP6109409B2
JP2016515478T2
CN105283271A
CN105283271B
KR20150143809A
TW201441355A
IN10032DN2015A
RU2015149282A

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: KHAUND ARUP K
REHRIG PAUL W
TIAN YING GANG

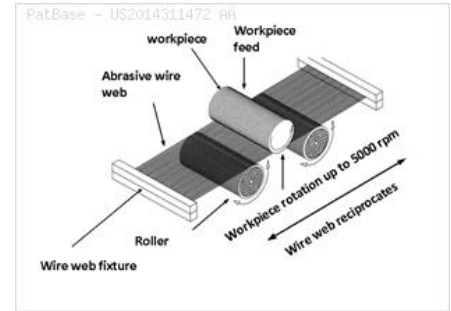
IPC-Notationen: B23D0061-18
B23D0065-00
B24B0027-06
B24D0003-00
B24D0003-02
B24D0003-34
B24D0011-00
B28D0001-02
B28D0005-00
B28D0005-04
C09K0003-14
H01L0021-304
H01L0021-306
H01L0021-67

CPC-Notationen: B23D0061-185
B23D0065-00
B24B0027-0633
B24D0011-00
B24D0099-00
H01L0021-304
H01L0021-30625
H01L0021-67092



Zusammenfassung:

Source: US2014311472 AA [EN] An **abrasive** article including a substrate as an elongated member, a first layer overlying the substrate, **abrasive** particles overlying the first layer, fillets connecting the first layer and the **abrasive** particles, a bonding layer overlying the **abrasive** particles, the first layer and the fillets, and the fillets have a fillet characteristic relative to an **abrasive** application, the fillet characteristic selected from the group consisting of tacking factor (tfl/tf), a fillet-to-particle factor (tf/dab), a fillet-to-bonding layer factor (tf/tbl), a contact factor (Ab/Af), a fillet size variance (Vf), and a combination thereof



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 52

Titel: **ABRASIVE** ARTICLES INCLUDING **ABRASIVE** PARTICLES BONDED TO AN ELONGATED BODY, AND METHODS OF FORMING THEREOF



Patentnummer: [WO2011020109A3](#)

Anmeldung: WO2010US45647
EP20100808875
US20100857374
JP20120524936T
CA20102770508
CN201080040120
KR20127005648
IN2012MN00623
MX20120001809
RU20120108943

Priorität: US20090234205P 20090814
US20100857374 20100816
WO2010US45647 20100816

Patentfamilie: [WO2011020109A3](#)
[WO2011020109A2](#)
[EP2464486A2](#)
[US9028948B2](#)
[US2011045292A1](#)
[JP5537660B2](#)
[JP2013501637T2](#)
[CA2770508C](#)
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[CN102665988A](#)
[CN102665988B](#)
[KR20120040730A](#)
[KR101433750B1](#)
[IN00623MN2012A](#)
[MX2012001809A1](#)
[RU2508968C2](#)
[RU2012108943A](#)

Anmelder: DING RAN
LIEBELT SUSANNE
SAINT GOBAIN ABRASIFS S A
SAINT GOBAIN ABRASIVES INC
SEHN GOBEHN ABRAZIF
SEHNT GOBEHN EHBREJZIVS INK
SUBRAMANIAN KRISHNAMOORTHY
TIAN YINGGANG

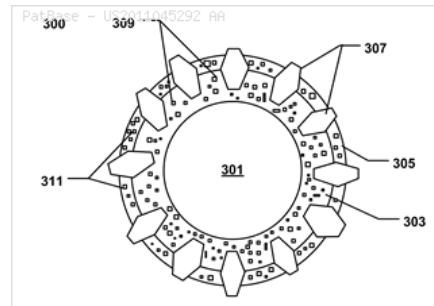
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SUSANNE LIEBELT
YINGGANG TIAN

IPC-Notationen: B23D0061-18
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[B24D0003-06](#)
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B24D0011-00
B24D0018-00
B28D0001-02
D02G0003-00
D06N0007-02

CPC-Notationen: B23D0061-185
B23D0065-00
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Y10T0428-24372
Y10T0428-2916
Y10T0428-2927
Y10T0428-2944

Zusammenfassung:

Source: US2011045292 AA [EN] An **abrasive** article includes an elongated body, a bonding layer including a metal overlying a surface of the elongated body, and a coating layer including a polymer material overlying the bonding layer. The **abrasive** article further includes **abrasive** grains contained within the bonding layer and coating layer, and wherein the bonding layer comprises an average thickness (tbl) at least about 40 percent of the average grit size of the **abrasive** grains



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 53

Titel: **ABRASIVE** ARTICLE AND METHOD OF FORMING

Patentnummer: [WO2017004037A1](#)

Anmeldung: WO2016US39810
EP20160818594
US20180158457
US20170840003
US20160195236
JP20190138046
JP20170566395T
CN201680046609
KR20197025084
KR20187001640
TW20170141769
TW20160120000
BR20171127420
MX20170016807
RU20180102390

Priorität: US20150186225P 20150629
JP20170566395T 20160628
US20160195236 20160628
WO2016US39810 20160628
US20170840003 20171213
US20180158457 20181012
JP20190138046 20190726

Patentfamilie: **WO2017004037A1**
[EP3313615A1](#)
[EP3313615A4](#)
[US9878382B2](#)
[US10583506B2](#)
[US10137514B2](#)
[US2019084062A1](#)
[US2018161895A1](#)
[US2016375514A1](#)
[JP2019206079A2](#)
[JP6797252B2](#)
[JP6564474B2](#)
[JP2018521866T2](#)
[CN107921608A](#)
[CN107921608B](#)
[KR20190104427A](#)
[KR20180009816A](#)
[KR102017468B1](#)
[TW201808537A](#)
[TW201700219A](#)
[TWI664057B](#)
[TWI621505B](#)
BR112017027420A2
[MX2017016807A1](#)
RU2685839C1



Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SEN GOBEN ABRAZIVS INK

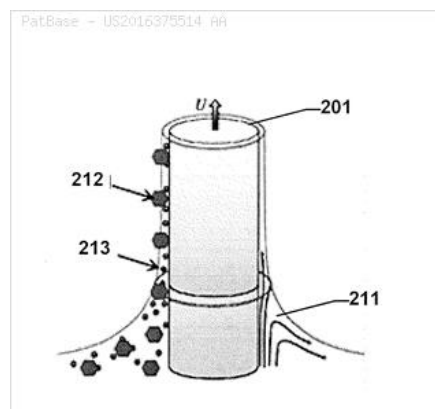
Erfinder: BROSNAN MORIN A
KKHAUND ARUP K
MAUREEN A BROSNAN
PEARLMAN JOHN J
PERLMAN DZHON DZH
TIAN YING GANG
TYAN INGAN
YINGGANG TIAN

IPC-Notationen: B23D0061-18
B24D0003-00
B24D0003-06
B24D0011-00
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B28D0005-04
H01L0021-304

CPC-Notationen: B23D0061-18
B23D0061-185
B24D0003-06
B24D0011-001
B24D0018-00
B24D0018-0018
B24D0018-0027
B24D0018-0072
B28D0005-04
B28D0005-045

Zusammenfassung:

Source: US2016375514 AA [EN] An **abrasive** article includes a substrate having an elongated body, a plurality of **discrete** tacking regions defining a **discontinuous** distribution of features overlying the substrate, where at least one **discrete** tacking region of the plurality of **discrete** tacking regions includes a metal material having a melting temperature not greater than 450 degrees centigrade, a plurality of **discrete** formations overlying the substrate and spaced apart from the plurality of **discrete** tacking regions, and a bonding layer overlying the substrate, plurality of **discrete** tacking regions, and plurality of **discrete** formations



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 54

Titel: ELECTROPLATED **TOOL**, SCREW-SHAPED GRINDSTONE FOR **GRINDING** GEAR, METHOD FOR MANUFACTURING ELECTROPLATED **TOOL**, AND METHOD FOR MANUFACTURING SCREW-SHAPED GRINDSTONE FOR **GRINDING** GEAR



Patentnummer: [WO2017014197A1](#)

Anmeldung: WO2016JP71038
US20160745209
JP20170529887T
CN201680042008
ID2018P0000754
IN201847005129
PH20180500134

Priorität: JP20150142957 20150717
JP20150142958 20150717
WO2016JP71038 20160715

Patentfamilie: **WO2017014197A1**
[US10857652B2](#)
[US2019015951A1](#)
[JP2017014197A1](#)
[JP6605604B1](#)
CN107848051A
[ID72508B](#)
[ID201807643A](#)
[IN201847005129A](#)
[PH2018500134A](#)

Anmelder: HONDA MOTOR CO LTD

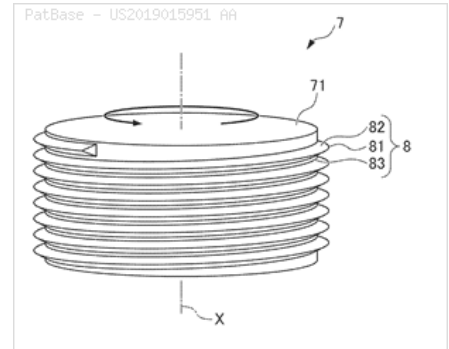
Erfinder: KOSHINO DAISUKE
KUBODERA YU
NAGAYOSHI SHOGO
OTSUKA TAKAHIRO
TOMIZAWA YUICHI

IPC-Notationen: B23F0021-02
B24B0019-00
B24D0003-00
B24D0003-06
B24D0003-10
B24D0005-06
B24D0007-18
B24D0018-00
C09K0003-14

CPC-Notationen: B23F0021-02
B23F0021-026
B24B0019-009
B24D0003-00
B24D0003-06
B24D0003-10
B24D0005-06
B24D0007-18
B24D0018-0018
C04B2235-427
C09K0003-1409

Zusammenfassung:

Source: US2019015951 AA [EN] Provided are: an electroplated **tool**; a screw-shaped grindstone for **grinding** a gear; a method for manufacturing the electroplated **tool**; and a method for manufacturing the crew-shaped grindstone for **grinding** a gear. Said **tool** having a parent material, a plating layer that has a high-level portion and a low-level portion formed as strips on the parent material at different heights along the direction intersecting the processing direction, and electrodeposited **abrasive** grains exposed from the surface of the plating layer. The difference in height of the plating layer is preferably 50-100 percent of the average particle diameter of the **abrasive** grains, the width of the high-level portion of the plating layer is preferably 150-200 percent of the average particle diameter of the **abrasive** grains, and the width of the low-level portion of the plating layer is preferably 100-800 percent of the average particle diameter of the **abrasive** grains



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 55

Titel: A **GRINDING TOOL**
Patentnummer: [EP3381611A1](#)
Anmeldung: EP20170163111
Priorität: EP20170163111 20170327
Patentfamilie: **EP3381611A1**
Anmelder: DR MUELLER DIAMANTMETALL AG
Erfinder: KRAWCZYK THOMAS
 SUNTHARAKUMARAN VINO

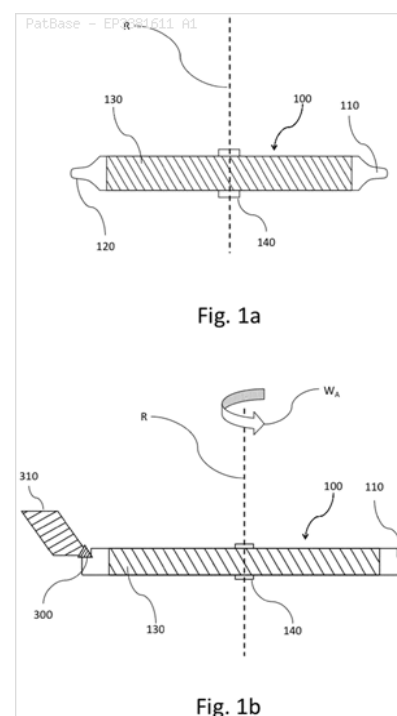


IPC-Notationen: B23F0021-02
 B24B0053-075
 B24B0053-14
B24D0003-06
 B24D0005-02

CPC-Notationen: B24B0053-075
 B24B0053-14
B24D0003-06
 B24D0005-02

Zusammenfassung:

Source: EP3381611 A1 [EN] **Grinding tool** (100) comprising a **grinding** portion (110), wherein the **grinding** portion (110) is shaped according to a predetermined shape (120) and is substantially rotationally symmetric with respect to a symmetry axis. The **grinding tool** (100) is manufactured according to a dressing process, the dressing process comprising the steps of (a) rotating the **grinding tool** (100) about the symmetry axis with a **cutting** speed; and (b) putting **cutting** means (300) in engagement with the **grinding** portion (110) and moving the **cuttings** means (300) along a given path thereby **cutting** and shaping the **grinding** portion (110). The **cutting** means traverses across the **grinding** portion (110) with a feed rate. The **grinding** portion (110) is made of a first material, wherein the first material comprises metal-bonded cubic crystalline boron nitride grains, and the **cutting** means (300) is made of a second material, wherein the second material comprising at least a cubic crystalline boron nitride material and/or diamond



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 56

Titel: ELECTROLYTIC GRINDING TOOLS

Patentnummer: [US3476677A](#)

Anmeldung: US19670705245
US19650432801

Priorität: US19650432801 19650215
US19670705245 19671102

Patentfamilie: [US3476677A](#)
[US3377150A](#)

Anmelder: CARBOND CORP

Erfinder: CORLEY WILLIAM G
SERMON GEORGE T

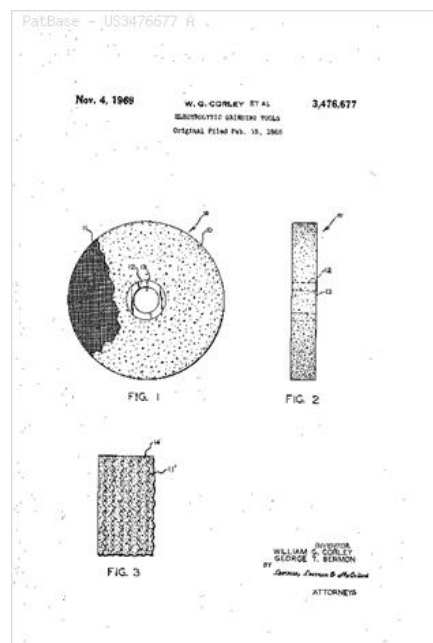
IPC-Notationen: B23H0005-08
B24D0018-00

CPC-Notationen: B23H0005-08
B24D0018-00



Zusammenfassung:

Source: US3476677 A [EN] ABSTRACT OF THE DISCLOSURE An electrolytic grinding wheel having a carbonaceous, electrically conductive matrix with hard abrasive grains uniformly dispersed therein. Means are provided on the wheel to receive electrical current. Electrically conductive, perforate, flexible lamina are bonded within the matrix and extend from the current receiving means to the working surface. This is a division of application Ser. No. 432,801, filed Feb. 15, 1965, now Patent No. 3,377,150



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 57

Titel: **ABRASIVE TOOL** CONTAINING COATED SUPERABRASIVE GRAIN

Patentnummer: [EP0864399B1](#)

Anmeldung: EP19980200600
DE19986024061T
US19970813145
JP19980055488
CA19982227009
AT19980200600T
ES19980200600T

Priorität: US19970813145 19970307
CA19982227009 19980115

Patentfamilie: [EP0864399B1](#)
[EP0864399A3](#)
[EP0864399A2](#)
[DE69824061T2](#)
[DE69824061D1](#)
[US5855314A](#)
[JP10264034A2](#)
[JP3080305B2](#)
[CA2227009C](#)
[CA2227009A](#)
[AT267669E](#)
[ES2222550T3](#)

Anmelder: NORTON COMPANY
SAINT GOBAIN ABRASIVES INC

Erfinder: BULJAN SERGEJ TOMISLAV
EAGAR THOMAS W
EAGER THOMAS W
MILLER BRADLEY J
SCHULZ ERIC
SHIUE REN KAE

IPC-Notationen: B23K0001-00
[B24D0003-00](#)
[B24D0003-02](#)
[B24D0003-04](#)
[B24D0003-06](#)
B24D0003-10
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B24D0018-00
C09K0003-14

CPC-Notationen: [B24D0003-06](#)
B24D0011-00
B24D0018-00



Zusammenfassung:

Source: US5855314 A [EN] An **abrasive** grit for a metal bonded Single Layer **abrasive tool** includes **abrasive** grains coated with a first active component. The active component is **mechanically-bound** to the surface of the superabrasive grains. Preferably the **abrasive** is a superabrasive, especially diamond, and the first active component is titanium, either in the form of **elemental** Ti or TiH₂. The novel grit is made by mixing the first active powder component in a liquid binder to form an adhesive paste; mixing the paste with the **abrasive** grains to wet the grains, and drying the mixture to adhere active component to the grains. The coated **abrasive** can be brazed onto a core to form a Single Layer **tool**, especially with a brazing composition that includes a bronze alloy and small concentrations of a second active component. During brazing the novel **abrasive** grains provide excellent surface contact with the brazing composition and the braze strongly bind the grains to the **tool** core. The brazed composition is easy to chemically or electrochemically strip from the cores of worn abrasive tools to permit reconstruction of the tools

PatBase - JP10264034 A2 表1						
	ろう付用合金組成 (重量部*)				第1 活性成分	ろう付条件 温度 時間 ℃ 分
	Cu	Sn	Ag	TiH ₂		
比較例1	77.00	23.00			TiH ₂	860.00 10.00
例2	77.00	23.00		1.50	TiH ₂	860.00 10.00
例3	77.00	23.00		2.00	TiH ₂	860.00 10.00
例4	77.00	23.00		3.00	TiH ₂	860.00 10.00
比較例2	77.00	23.00		2.00	なし	860.00 10.00
例5	65.70	17.70	16.60	2.00	TiH ₂	845.00 10.00
比較例3	65.70	17.70	16.60	2.00	なし	845.00 10.00
例6	65.70	17.70	16.60	2.00	Ti	860.00 10.00

* ろう付用合金組成物あたりの重量部

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 58

Titel: POROUS **ABRASIVE** ARTICLES WITH AGGLOMERATED **ABRASIVES** AND METHOD FOR MAKING THE AGGLOMERATED **ABRASIVES**



Patentnummer: [WO03086704A1](#)

Anmeldung: WO2003US08946
EP20030746550
DE20031092532T
US20020120969
JP20080184076
JP20030583698T
GB20040024865
CA20032479713
AU20030225955
CN20038008046
TW20030106328
AR2003P101004
AR2006P105823
AT20030009092
BR2003PI09103
CH20030001641
CH20080000162
CZ20040001022
DK20040001739
ES20040050059
FI20040001294
IN2004CN02241
IN2004CN02258
IN2004CN02259
IN2007CN00299
LU20030091109
MX2004PA09888
NO20040004912
PL20030372652
RU20040133326
SE20040002426
SE20040002456
ZA20040007415
ZA20040007550
ZA20040007869

Priorität: US20020120969 20020411
US20020328802 20021224
JP20030583698 20030321
JP20030583698T 20030321
WO2003US08856 20030321
WO2003US08936 20030321
WO2003US08946 20030321

Patentfamilie: WO03086704A1
EP1492645B1
EP1492645A1
EP1492645A4
DE10392532B4
DE10392532T5
US6679758B2
US2003194947A1
JP2008254175A2
JP5274131B2
JP4199130B2
JP2005522339T2
GB2405410B2
GB2405410A1
GB200424865A0
CA2479713C
CA2479713A
AU2003225955B2
AU2003225955A1
CN1646262A
CN100506477C
TW200406279A
TWI267424B
AR039107AA
AR058771AB
AT500376B1
AT500376A2
BRPI0309103A
CH697786B1
CH697084A
CZ305225B6
CZ20041022A3
DK200401739A5
ES2244349B2
ES2244349AA
FI20041294A
IN218782B
IN219678B
IN221215B
IN00299CN2007A
IN02241CN2004A
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IN02259CN2004A
LU91109A1
MXPA04009888A1
NO20044912L
NO20044912A
PL207106B1
PL372652A1
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SE200402456L
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SE200402426A0
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ZA200407415A
ZA200407550A
ZA200407869A

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN ABRASIVES TECH CO
SAINT GOBAIN ABRASIVES TECHNOL
SAINT GOBAIN SA
SEHNT GOBEHN ABRAZIVS INK

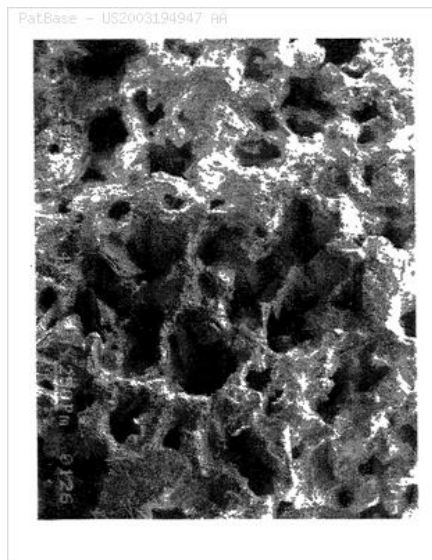
Erfinder: BONNER ANNE M
BRAJT EHRIK
ERIC BRIGHT
LAMBERT EDWARD L
MATSUMOTO DEAN S
SHELDON DAVID A
VU MIANKSU
WU MIANXUE
XAVIER ORLHAC

IPC-Notationen: B24B
B24B0001-00
B24B0005-36
B24B0005-37
B24D
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B24D0018-00
C09K0003-14

CPC-Notationen: B24B0001-00
B24B0005-363
B24D0003-18
B24D0003-20
B24D0003-26
B24D0003-32
B24D0003-348
B24D0011-00
B24D0018-00
C09K0003-1436

Zusammenfassung:

Source: US2003194947 AA [EN] A bonded **abrasive tool**, having a structure permeable to fluid flow, comprises sintered agglomerates of a plurality of **abrasive** grains and a binding material, the binding material being characterized by a melting temperature between 500 and 1400 degrees centigrade, and the sintered agglomerates having a loose packing density of ≥ 1.6 g/cc and three-dimensional shape; a bond material; and about 35-80 volume percent total porosity, including at least 30 volume percent interconnected porosity. Methods for making the sintered agglomerates and **abrasive tools** containing the sintered agglomerates are described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 59

Titel: METHOD OF ABRADING A WORKPIECE

Patentnummer: [WO2005053904A1](#)

Anmeldung: WO2004US37120
EP20040800862
US20040982503
JP20060541229T
CN200480035000
BR2004PI16947
ZA20060005221

Priorität: US20030723765 20031126
US20040982503 20041105
WO2004US37120 20041105

Patentfamilie: [WO2005053904A1](#)
[EP1697084A1](#)
[US7278904B2](#)
[US2005113005A1](#)
[JP2007514553T2](#)
[CN1886232A](#)
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[ZA200605221A](#)

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

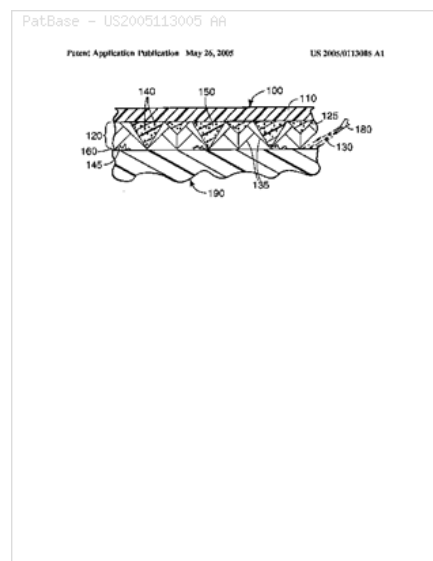
Erfinder: LAMPHERE CRAIG F
WOO EDWARD J BANGE DONNA W LAM



IPC-Notationen:	B24B B24B0001-00 B24B0029-00 B24D B24D0003-34 C09G C09G0001-00 C09G0001-02 C09G0001-04 C09G0001-16 C09K0003-14	CPC-Notationen:	B24B0001-00 B24B0029-00 B24D0003-346
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Zusammenfassung:

Source: US2005113005 AA [EN] A method of abrading a surface of a workpiece with a structured **abrasive** article in the presence of a liquid comprising water and at least one of a sulfonate or sulfate anionic surfactant



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 60

Titel: ROUGHING **DISC** HAVING A CARRIER LAYER

Patentnummer: [WO2018028849A1](#)

Anmeldung: WO2017EP63090
EP20170733362
JP20190506661T
CA20173033406
AU20170311190
CN201780062668
KR20197005123
BR20191102336
HK20190127024
IN201917004723
RU20190106513
SG20191101044
SG20211001268
ZA20190000649

Priorität: DE201610114851 20160810
RU20190106513 20170531
WO2017EP63090 20170531

Patentfamilie: **WO2018028849A1**
[EP3496897A1](#)
[JP2019524464T2](#)
[CA3033406A](#)
[AU2017311190A1](#)
[CN109890562A](#)
[KR20190035767A](#)
[BR112019002336A2](#)
[HK40003600A1](#)
[IN201917004723A](#)
[RU2019106513A3](#)
[RU2019106513A](#)
[SG10202101268QA1](#)
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[ZA201900649A](#)

Anmelder: KLINGSPOR AG

Erfinder: CONRADI BERND
THOMAS KAMPS

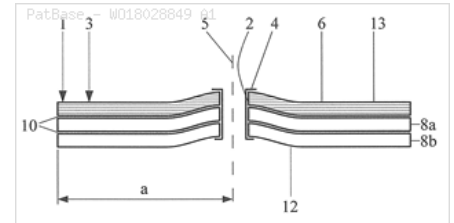


IPC-Notationen: B24B
B24B0037-22
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B24D0003-28
B24D0007-00
B24D0007-04
B24D0011-02

CPC-Notationen: B24B0037-22
B24D0003-001
B24D0003-002
B24D0003-28
B24D0011-02

Zusammenfassung:

Source: WO18028849 A1 [EN] The invention relates to a roughing **disc** for machining material surfaces, comprising a **disc-like** main body (3) with a **tool** side (13) that is able to face towards a **tool** and a workpiece side (12) that is able to face towards a workpiece, wherein the main body (3) comprises a central **cutout** (2), through which an axis of rotation (5) passes, for direct or indirect attachment of a drive shaft of the **tool**, a **disc-like** carrier layer (6) arranged on the **tool** side (13), at least one **abrasive** layer (8a, 8b) and a separating layer between adjacent layers. The carrier layer (6) is formed from a material mixture which is free of **additives** with an **abrasive** action and which comprises at least one mineral **additive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 61

Titel: Conductive coated **abrasives**

Patentnummer: [EP0414494B1](#)

Anmeldung: EP19900309151
DE19906009903T
US19900551091
JP19900219898
CA19902023209
AU19900061172
KR19900012835
AT19900309151T
HK19980106181
ZA19900006589

Priorität: US19890396513 19890821
US19900495458 19900316
US19900551091 19900716
CA19902023209 19900813

Patentfamilie: [EP0414494B1](#)
[EP0414494A3](#)
[EP0414494A2](#)
[DE69009903T2](#)
[DE69009903D1](#)
[US5108463B1](#)
[US5108463A](#)
[JP3188187A2](#)
[JP2869169B2](#)
[CA2023209C](#)
[CA2023209A](#)
[AU633956B2](#)
[AU199061172A1](#)
[KR19910004304A](#)
[KR100197820B1](#)
[AT107215E](#)
[HK1006953A1](#)
[ZA9006589A](#)

Anmelder: MINNESOTA MINING AND MANUFACTUR
MINNESOTA MINING AND MFG

Erfinder: BUCHANAN SCOTT JAMES
SCOTT J BUCHANAN C O MINNESOTA
SUKOTSUTO JIEEMUSU BUKIYANAN

IPC-Notationen: B24B
[B24D0003-02](#)
[B24D0003-34](#)
B24D0018-00
C09K0003-14

CPC-Notationen: [B24D0003-344](#)



Zusammenfassung:

Source: US5108463 A [EN] A coated **abrasive** article having carbon black aggregates incorporated into the construction thereof, in a concentration sufficient to reduce or eliminate the buildup of static electricity during its use

PatBase - JP2869表 B2 - 1		
実施例	DEF	発生電流 (マイクロアンペア)
4	(a)94, 1	0, 03-0, 05
4	(b)87, 7	0, 05-0, 07
5	(a)16, 0	1, 35-1, 40
5	(b)16, 4	0, 67-1, 34
6	(a)74, 2	0, 03-0, 04
6	(b)85, 5	0, 05-0, 06
7	(a) 8, 3	1, 37-1, 59
7	(b)13, 5	0, 55-0, 69

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 62

Titel: **ABRASIVE** ARTICLES WITH NOVEL STRUCTURES AND METHODS FOR **GRINDING**

Patentnummer: [US2008066387A1](#)

Anmeldung: US20070862946

Priorität: US20020120969 20020411
US20020328802 20021224
WO2003US08936 20030321
US20040510541 20041007
US20070862946 20070927

Patentfamilie: **US2008066387A1**

Anmelder: SAINT GOBAIN ABRASIFS TECH
SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

Erfinder: BONNER ANNE M
BRIGHT ERIC
LAMBERT EDWARD L
MATSUMOTO DEAN S
ORLHAC XAVIER
SHELDON DAVID A

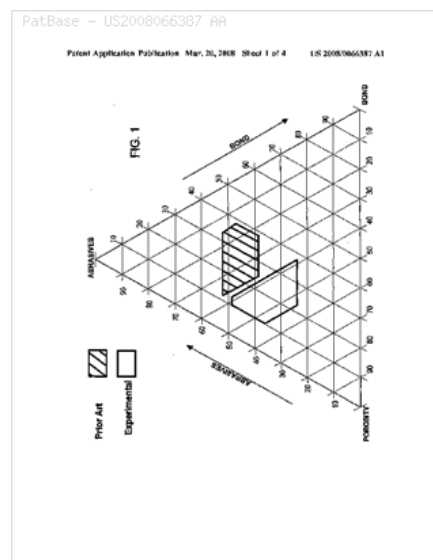


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CPC-Notationen: B24B0001-00
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B24D0011-00
B24D0018-00
C09K0003-1436

Zusammenfassung:

Source: US2008066387 AA [EN] Bonded **abrasive tools**, having novel porous structures that are permeable to fluid flow, comprise a relatively low volume percentage of **abrasive** grain and bond, and a relatively low hardness grade, but are characterized by excellent **mechanical** strength and **grinding** performance. Methods for making the **abrasive tools** utilizing agglomerated **abrasive** grain are described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 63

Titel: POROUS **ABRASIVE** ARTICLES WITH AGGLOMERATED **ABRASIVES** AND METHOD FOR MAKING THE AGGLOMERATED **ABRASIVES**



Patentnummer: [US7422513B2](#)

Anmeldung: US20060330673

Priorität: US20020120969 20020411
US20030668531 20030923
US20060330673 20060112

Patentfamilie: [US7422513B2](#)
[US2006160476A1](#)

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN ABRASIVES TECH CO
SAINT GOBAIN ABRASIVES TECHNOL
SAINT GOBAIN SA

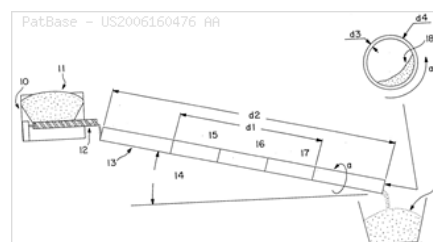
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WU MIANXUE

IPC-Notationen: B24B0001-00
B24B0005-36
[B24D0003-00](#)
[B24D0003-18](#)
B24D0003-26
B24D0003-32
B24D0018-00
C09K0003-14

CPC-Notationen: B24B0005-363
[B24D0003-18](#)
B24D0003-26
B24D0003-32
[B24D0003-348](#)
B24D0018-00
C09K0003-1436

Zusammenfassung:

Source: US2006160476 AA [EN] A bonded **abrasive tool**, having a structure permeable to fluid flow, comprises sintered agglomerates of a plurality of **abrasive** grains and a binding material, the binding material being characterized by a melting temperature between 500 and 1400 degrees C, and the sintered agglomerates having a loose packing density of less than or equal to 1.6 g/cc and three-dimensional shape; a bond material; and about 35-80 volume percent total porosity, including at least 30 volume percent interconnected porosity. Methods for making the sintered agglomerates and **abrasive tools** containing the sintered agglomerates are described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 64

Titel: POROUS **ABRASIVE** ARTICLES WITH AGGLOMERATED **ABRASIVES**

Patentnummer: [EP2767364B1](#)

Anmeldung: EP20140167114
EP20120151983

Priorität: US20020120969 20020411
EP20030746550 20030321
WO2003US08946 20030321

Patentfamilie: [EP2767364B1](#)
[EP2455185B1](#)
[EP2767364A3](#)
[EP2455185A3](#)
[EP2767364A8](#)
[EP2767364A2](#)
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Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

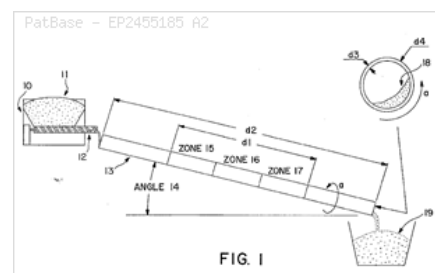
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WU MIANXUE



IPC-Notationen:	B24B0001-00 B24B0005-36 B24D0003-00 B24D0003-18 B24D0003-26 B24D0003-32 B24D0018-00 C09K0003-14	CPC-Notationen:	B24B0005-363 B24D0003-18 B24D0003-26 B24D0003-32 B24D0003-348 B24D0018-00 C09K0003-1436
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Zusammenfassung:

Source: EP2455185 A2 [EN] A bonded **abrasive tool**, having a structure permeable to fluid flow, comprises sintered agglomerates of a plurality of **abrasive** grains and a binding material, the binding material being characterized by a melting temperature between 500 and 1400 degrees centigrade, and the sintered agglomerates having loose packing density of $\approx 1.6\text{g/cc}$ and three-dimensional shape; a bond material; and about 35-80 volume percent total porosity, including at least 30 volume percent interconnected porosity. Methods for making the sintered agglomerates e.g., Fig. 1, and **abrasive tools** containing the sintered agglomerates are described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 65

Titel: **ABRASIVE**, METHOD OF POLISHING WAFER, AND METHOD OF PRODUCING SEMICONDUCTOR DEVICE

Patentnummer: [WO9931195A1](#)

Anmeldung: WO1998JP05736

EP19980961410
US20120411196
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US20080170587
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US20060484611
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KR20007006683
TW19980140320
TW19980133043
TW19980121198
SG20020002565

Priorität: JP19970349240 19971218
JP19980083042 19980330
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JP20030394020 19981218
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WO1998JP05736 19981218
KR20007006683 20000617
US20000581814 20000908
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KR20037005273 20030415
WO1998JP05736 20030415
JP20030394020 20031125



WO1998JP05736 20050110
US20060484611 20060712
WO1998JP05736 20061127
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JP20060335113 20061212
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WO1998JP05736 20070330
US20070878504 20070725
US20080170587 20080710
US20110217447 20110825
US20120411196 20120302

Patentfamilie:

WO9931195A1
EP1043379A1
EP1043379A4
US8616936B2
US8162725B2
US8137159B2
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US7115021B2
US6343976B1
US2012227331A1
US2011312251A1
US2008271383A1
US2007266642A1
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US2002090895A1
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KR100752909B1
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TWI272300B
TW577913B
SG128425A1

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YUUTO OOTUKI

IPC-Notationen: B24B0001-00
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C08J0005-14
C08K0003-00
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C09C0001-68
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C09G0001-02
C09K0003-14
H01L0021-02
H01L0021-304
H01L0021-3105

CPC-Notationen: C09G0001-02
C09K0003-1409
C09K0003-1463
H01L0021-31053

Zusammenfassung:

Source: US6343976 BA [EN] To polish polishing target surfaces of SiO 2 insulating films or the like at a high rate without scratching the surface, the present invention provides an **abrasive** comprising a slurry comprising a medium and dispersed therein at least one of i) cerium oxide particles constituted of at least two crystallites and having crystal grain boundaries or having a bulk density of not higher than 6.5 g/cm 3 and ii) **abrasive** grains having pores. Also provided are a method of polishing a target member and a process for producing a semiconductor device which make use of this **abrasive**

PatBase - TW577913 B

中華民國專利公報【19】【12】

【11】公告編號: 577913
【44】中華民國 93 (2004) 年 03 月 01 日
【51】Int. Cl.: C09G1/02

發明 全 2 頁

【54】名 稱: 研磨劑、基於之研磨法及半導體裝置之製造法

【21】申請案號: 087121198
【11】公開編號: 19960330
【52】優先權: 19960330 日本 83042
19971218 日本 348240

【72】發 明 人:
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寺崎裕樹 TERASAKI, HIROKI
倉田隆 KURATA, YASUSHI
松田純 MATSUZAWA, JUN
大瀧裕人 OOTUKI, YUUTO
丹野達仁 TANNO, KIYOHITO

【71】申請人:
日立化成工業股份有限公司 HITACHI CHEMICAL CO., LTD.
日本

【74】代理人: 林志明 先生

1 2

【57】申請專利範圍:
1.一種研磨劑，其特徵為，含有將具有由二個以上之結晶子所構成之結晶粒界之氧化銻粒子分散於液體之液體，具有結晶粒界之氧化銻粒子之中央值為40-1500nm，結晶粒界之最大徑為3000nm以下，結晶子之最大徑為600nm以下者。
2.如申請專利範圍第1項所述之研磨劑，其中具有結晶粒界之氧化銻粒子之中央值為100-1200nm。
3.如申請專利範圍第1項所述之研磨劑，其中具有結晶粒界之氧化銻粒子之中央值為300-1000nm。
4.如申請專利範圍第1項或2、3項所述之研磨劑，其中結晶子之中央值為5-25nm。
5.如申請專利範圍第1項或2、3項所述之研磨劑，其中結晶子之中央值為5-150nm。
6.如申請專利範圍第3項所述之研磨劑。

- 1421 -

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 66

Titel: POLISHING PAD AND METHOD FOR MANUFACTURING POLISHING PADS

Patentnummer: [WO2007025226A1](#)

Anmeldung: WO2006US33392
US20050162068
TW20060131394

Priorität: US20050162068 20050826

Patentfamilie: [WO2007025226A1](#)
[US2007049164A1](#)
[TW200714414A](#)

Anmelder: DASKIEWICH SCOTT B
DOYLE JEFFREY C
JH RHODES CO INC
JH RHODES COMPANY INC
THOMSON CLIFFORD O

Erfinder: DASKIEWICH SCOTT B
DASKIEWICH SCOTT B
DOYLE JEFFREY C
THOMSON CLIFFORD O

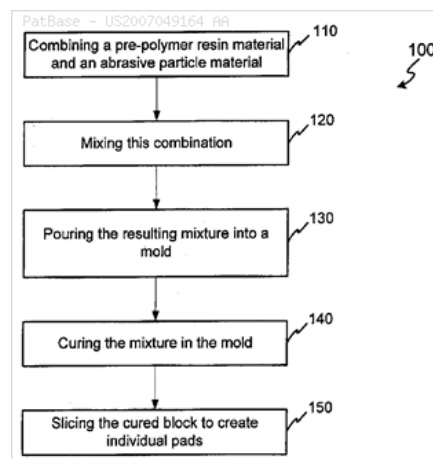


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B24B0037-04
B24B0051-00
[B24D0003-02](#)
[B24D0003-34](#)
B24D0013-00
B24D0013-14
B24D0018-00

CPC-Notationen: B24B0037-245
[B24D0003-34](#)
B24D0018-0009

Zusammenfassung:

Source: US2007049164 AA [EN] A polishing pad comprising particles having an average diameter between 1 nanometer and 100 nanometers, wherein the total weight of the particles is greater than about 3 percent of the total weight of the pad. Also, a method of manufacturing a polishing pad comprises the steps of: mixing a pre-polymer and **abrasive** particles together; wherein the **abrasive** particles have an average diameter of between 1 nanometer and 100 nanometers in diameter, and wherein the **abrasive** particles comprise more than about 3 percent by weight of the polishing pad; mixing a curative with the mixed pre-polymer and particles; and pouring the mixture of pre-polymer, particles and curative into a mold. In one exemplary embodiment the particles are silica and the pre-polymer is a polyurethane pre-polymer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 67

Titel: PROCESSING **TOOL**, METHOD OF PRODUCING **TOOL**, PROCESSING METHOD AND PROCESSING APPARATUS



Patentnummer: [US6685539B1](#)

Anmeldung: US20050149223
US20030684506
US20000639239
JP19990306335
JP19990278608

Priorität:

Patentfamilie: [US6685539B1](#)
[US2005227591A1](#)
[US2004082278A1](#)
[JP2001150311A2](#)
[JP2001129764A2](#)

Anmelder: ENOMOTO TOSHIYUKI
INOUE SHIGERU
MAKINO FRAES SEIKI KK
RICOH KK
TANI YASUHIRO

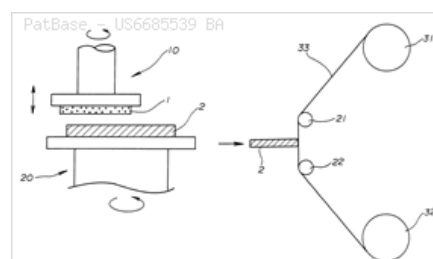
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INOUE SHIGERU
TANI YASUHIRO

IPC-Notationen: B24B0001-00
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[B24D0003-02](#)
B24D0003-20
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H01L0021-02
H01L0021-304

CPC-Notationen: B24B0007-228
B24B0009-065
B24B0021-002
B24B0021-04
[B24D0003-00](#)
[B24D0003-34](#)
H01L0021-304

Zusammenfassung:

Source: US6685539 BA [EN] A processing **tool** is used to carry out a fixed-abrasive **grinding** process on a surface of a silicon work-piece. The processing **tool** includes **abrasive** grains made up silica grains. A primary average grain size of the silica grains is desirably 0.8 nm to 10 and mum



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 68

Titel: SYSTEM AND METHOD FOR CONTEXTUAL ADDRESSING OF COMMUNICATIONS ON A NETWORK

Patentnummer: [US9464365B2](#)

Anmeldung: US20140340820
US20140174602
US20120472179
US20070953454

Priorität: US20060882351P 20061228
US20070953454 20071210
US20070963454 20071221
US20120472179 20120515
US20140174602 20140206
US20140340820 20140725

Patentfamilie: [US9464365B2](#)
[US8740670B2](#)
[US8671154B2](#)
[US2014335308A1](#)
[US2014234568A1](#)
[US2012289126A1](#)
[US2009150514A1](#)

Anmelder: BOERRIES MARCO
CHERIAN ISAAC K
CHINNAKARUPPAN PALANIAPPAN
DAVIS MARC ELIOT
HERENDEEN JULIE
HIGGINS CHRISTOPHER WILLIAM
MARTINEZ RONALD
O SULLIVAN JOSEPH JAMES
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SAINT GOBAIN CERAM AND PLASTICS INC
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SIMPSON MATTHEW A
TANIKELLA BRAHMANANDAM V
TROUT ROBERT CARTER
VEDANTHAM RAMANUJAM
VEDDANTHAM RAMANUJAM
YAHOO INC

Erfinder: BOERRIES MARCO
CHERIAN ISAAC K
CHINNAKARUPPAN PALANIAPPAN
DAVIS MARC ELIOT
HERENDEEN JULIE
HIGGINS CHRISTOPHER WILLIAM
MARTINEZ RONALD
O SULLIVAN JOSEPH JAMES
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VEDDANTHAM RAMANUJAM

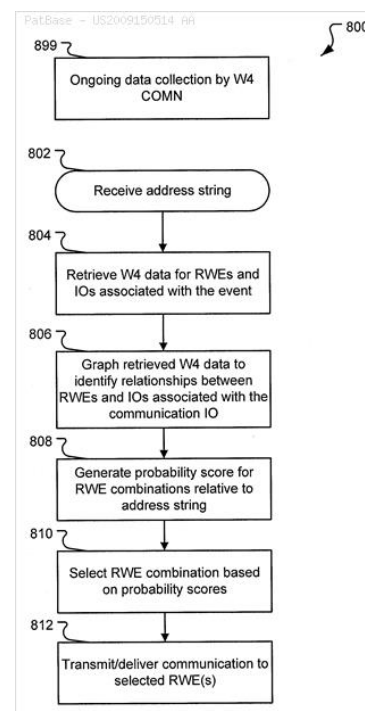


IPC-Notationen: B24B0001-00
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CPC-Notationen: B24B0007-228
B24B0027-0633
B24D0003-06
B24D0005-06
C30B0029-20
H01L0021-0242
H01L0023-15
H01L2924-00
H01L2924-0002
H04L0029-08972
H04L0029-12028
H04L0029-12594
H04L0061-103
H04L0061-3065
H04L0067-327
Y10T0428-21
Y10T0428-24355

Zusammenfassung:

Source: US2009150514 AA [EN] The **disclosure** describes systems and methods delivering communications based on contextual addresses. An address string containing two or more identifiers, which may not be unique identifiers, and at least one conditional **operator** are provided as the address for a message or communication. The system identifies contextual relationships between a plurality of entities based on prior communications between the entities over the network. Based the contextual relationships, each identifier in the address string is disambiguated to identify one of the entities as a recipient and any associated delivery conditions controlling the delivery of the communication. The communication is then delivered to the identified recipient in accordance with the delivery condition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 69

Titel: BONDED **ABRASIVE** ARTICLE AND METHOD OF **GRINDING**

Patentnummer: [WO2014106156A1](#)

Anmeldung: WO2013US78225
EP20130869142
US20130143260
JP20180126854
JP20170027261
JP20150550833T
JP20150550833
CN201380073086

Priorität: US20120748002P 20121231
JP20150550833T 20131230
JP20170027261 20131230
US20130143260 20131230
WO2013US78225 20131230
JP20180126854 20180703

Patentfamilie: **WO2014106156A1**
EP2938461A1
EP2938461A4
US9278431B2
US2014187123A1
JP2018187763A2
JP2017124488A2
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Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

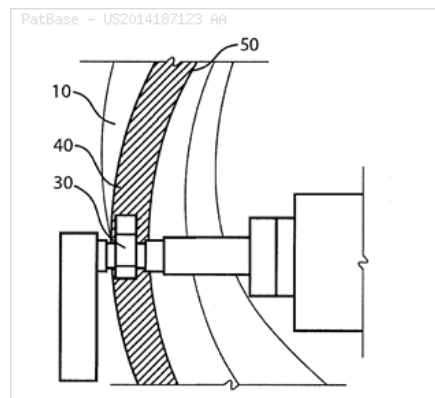
Erfinder: RAMANATH SRINIVASAN
SAUCIER KENNETH A
UPADHYAY RACHANA
WANG CONG

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B24D0007-00

CPC-Notationen: B24B0001-00
B24B0009-00
B24D0003-008
B24D0003-06
B24D0003-342
B24D0005-00

Zusammenfassung:

Source: US2014187123 AA [EN] An **abrasive** article configured to grind a workpiece having a fracture toughness of less than about $6 \text{ MPa} \cdot \text{m}^{1/2}$ includes a body comprising **abrasive** particles contained within a bond material comprising a metal, wherein the body comprises a ratio of VAG/VBM of at least about 1.3, wherein VAG is a volume percent of **abrasive** particles within a total volume of the body and VBM is a volume percent of bond material within the total volume of the body, and wherein the **abrasive** particles have an average particle size of 1 to 45 microns



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 70

Titel: BONDED **ABRASIVE** ARTICLE AND METHOD OF **GRINDING**

Patentnummer: [WO2014106157A1](#)

Anmeldung: WO2013US78227
EP20130868550
DE201360042191T
US20130143290
JP20150550834T
CN201380073092

Priorität: US20120747901P 20121231
EP20130868550 20131230
US20130143290 20131230
WO2013US78227 20131230

Patentfamilie: **WO2014106157A1**
EP2938460B1
EP2938460A1
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DE602013042191D1
US9266219B2
US2014187124A1
JP6064058B2
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Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

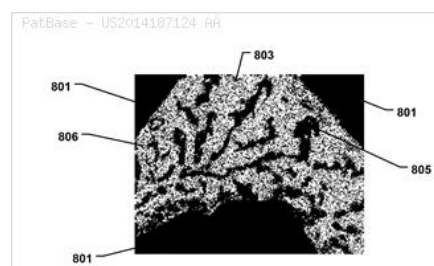
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UPADHYAY RACHANA
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B24D0007-02

CPC-Notationen: B24B0001-00
B24B0009-00
B24D0003-008
B24D0003-06
B24D0003-342
B24D0005-00

Zusammenfassung:

Source: US2014187124 AA [EN] An **abrasive** article configured to grind a workpiece having a fracture toughness at least about 7 MPa·m^{0.5} includes a body comprising **abrasive** particles contained within a bond material comprising a metal, wherein the body comprises a ratio of VAG/VBM of at least about 1.3, wherein VAG is a volume percent of **abrasive** particles within a total volume of the body and VBM is a volume percent of bond material within the total volume of the body, and wherein the **abrasive** particles have an average particle size of 40 to 60 microns



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 71

Titel: **DISCONTINUOUS ABRASIVE** PARTICLE RELEASING SURFACES

Patentnummer: [US2009258585A1](#)

Anmeldung: US20090489179
US20080209149
US20070929963
US20070846073
US20070828270
US20060503058

Priorität: US20060764110P 20060201
US20060818571P 20060705
US20060503058 20060814
US20070828270 20070725
US20070846073 20070828
US20070929963 20071030
US20080209149 20080911
US20090489179 20090622

Patentfamilie: [US2009258585A1](#)
[US2009011692A1](#)
[US2008057844A1](#)
[US2008020678A1](#)
[US2007293130A1](#)
[US2007178817A1](#)

Anmelder: AJERE BOLA
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SIERRA MADRE MARKETING GROUP
SMRG

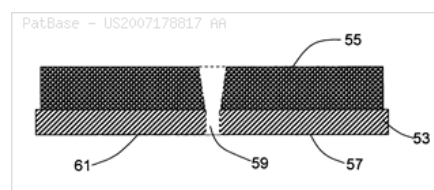
Erfinder: AJERE BOLA
BERNER MICHAEL
MIEKKA FRED N

IPC-Notationen: B24B0001-00
B24B0023-00
B24D0011-00
B24D0015-00
B24D0015-02
C09K0003-14

CPC-Notationen: A45D0029-04
[B24D0003-346](#)
B24D0011-00
B24D0015-02
B24D0015-045

Zusammenfassung:

Source: US2007178817 AA [EN] **Discontinuous abrasive** particle releasing surfaces are **disclosed** that may be employed in low speed wet **grinding**, **sanding**, and polishing **operations**. The **discontinuous abrasive** surfaces of the present invention may consist of **abrasive** containing protrusions attached to rigid or flexible surfaces or alternatively may be comprised of closed cell foam compositions impregnated with **abrasive** materials such as aluminum oxide. The voids present in the **discontinuous abrasive** surfaces of the present invention serve to hold water and remove debris. The resulting **discontinuous abrasive** particle releasing surfaces are long lasting and may be made low in cost



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 72

Titel: **ABRASIVE** SLICING **TOOL** FOR ELECTRONICS INDUSTRY

Patentnummer: [WO2010002832A3](#)

Anmeldung: WO2009US49158
US20140533178
US20090494602
CN200980124815
KR20117001261

Priorität: US20080077604P 20080702
US20090494602 20090630
WO2009US49158 20090630
US20140533178 20141105

Patentfamilie: **WO2010002832A3**
WO2010002832A2
US8882868B2
US2015052821A1
US2010000159A1
CN102076462A
CN102076462B
KR20110019435A
KR101269498B1

Anmelder: HALL RICHARD W
RAMANATH SRINIVASAN
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
WALIA PARUL

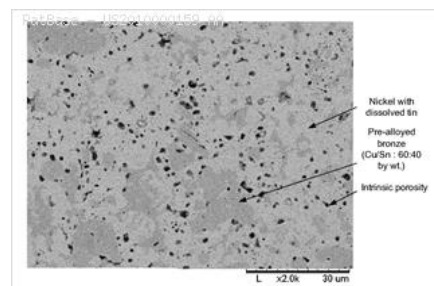
Erfinder: HALL RICHARD W J
SRINIVASAN RAMANATH
WALIA PARUL

IPC-Notationen: B24B0001-00
B24B0037-00
B24B0037-20
B24D0003-00
B24D0003-04
B24D0003-06
B24D0003-10
B24D0005-12

CPC-Notationen: **B24D0003-06**
B24D0005-12

Zusammenfassung:

Source: US2010000159 AA [EN] A bond matrix for metal bonded **abrasive tools** includes a metal bond system, porosity and an optional **filler**. **Tools** according to embodiments of the invention exhibit long **tool life**, produce an acceptable quality of **cut** and can have self-dressing properties. The bond matrix can be used, for example, in **abrasives tools** configured for the electronics industry, such as 1A8 **wheels** for slicing ball grid arrays (BGAs) and other such slicing **operations**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 73

Titel: BONDED **ABRASIVE** ARTICLES, METHOD OF FORMING SUCH ARTICLES, AND **GRINDING** PERFORMANCE OF SUCH ARTICLES

Patentnummer: [WO2012031251A3](#)

Anmeldung: WO2011US50412
EP20110822752
US20110225130
JP20130527353T
CA20112809450
CN201180042442
KR20137007295
TW20110131579
AR2011P103211
IL20110224906
IN2013DN02287

Priorität: US20100379923P 20100903
US20110225130 20110902
WO2011US50412 20110902

Patentfamilie: **WO2012031251A3**
WO2012031251A2
EP2611574A4
EP2611574A2
US2012066982A1
JP2013536765T2
CA2809450A
CN103079765A
KR20130062998A
TW201223699A
AR083734AA
IL224906A0
IN02287DN2013A

Anmelder: RAMANATH SRINIVASAN
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SAINT GOBAIN ABRASIVES INC
SAUCIER KENNETH A
UPADHYAY RACHANA

Erfinder: RAMANATH SRINIVASAN
SAUCIER KENNETH A
UPADHYAY RACHANA

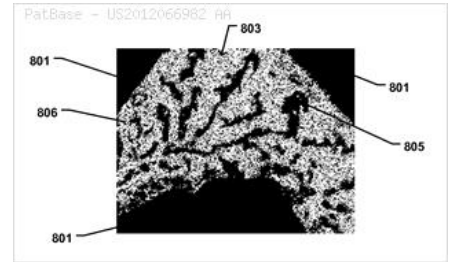
IPC-Notationen: B24B0001-00
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B24D0003-34
B24D0018-00
C01B0031-34
C01B0032-949
C09C0001-68
C09K0003-14

CPC-Notationen: B24B0001-00
B24D0003-02
B24D0003-06
B24D0003-14
B24D0003-34
C09K0003-14



Zusammenfassung:

Source: US2012066982 AA [EN] An **abrasive tool** having a bonded **abrasive** body including **abrasive** grains contained within a bond material comprising a metal. During a **grinding operation**, the bonded **abrasive** body has a power variance $[(P_o - P_n) / P_o] \times 100$ percent of not greater than about 40 percent, wherein P_o represents the **grinding** power to grind a workpiece with the bonded **abrasive** body at an initial **grinding** cycle and P_n represents the **grinding** power to grind the workpiece for a n th **grinding** cycle, wherein $n > 4$



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 74

Titel: **ABRASIVE** ARTICLES WITH NANOPARTICULATE **FILLERS** AND METHOD FOR MAKING AND USING THEM

Patentnummer: [WO2010085587A1](#)

Anmeldung: WO2010US21702
WO2007US87598
EP20100701597
EP20070865705
US20090359817
US20070671037
JP20110548111T
JP20090543104T
CN201080012412
CN200780046939
KR20117019532
KR20097012691
TW20100101974
TW20070149593
SG20110052586

Priorität: US20060871720P 20061222
US20070671037 20070205
WO2007US87598 20071214
US20090359817 20090126
WO2010US21702 20100122

Patentfamilie: **WO2010085587A1**
WO2008079743A1
EP2389423A1
EP2118226A1
EP2118226A4
US8083820B2
US7497885B2
US2009176443A1
US2008148651A1
JP2012515662T2
JP2010513050T2
CN102356139A
CN101573424A
KR20110113635A
KR20090091302A
TW201036761A
TW200902233A
SG173075A1

Anmelder: 3M INNOVATIVE PROPERTIES CO
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JOSEPH WILLIAM D
KOLLODGE JEFFREY S
QIAN JULIE Y

Erfinder: BARAN JIMMIE RAE JR
BARAN JR JIMMIE R
GAGLIARDI JOHN JAMES
JOSEPH WILLIAM DALE
KOLLODGE JEFFREY SCOTT
QIAN JULIE YU

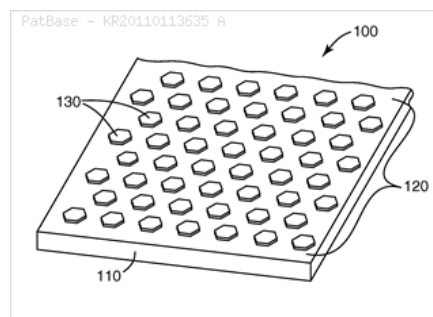


IPC-Notationen: B24B0001-00
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C09C0001-68
C09K0003-14
H01L0021-02
H01L0021-304

CPC-Notationen: B24B0037-245
B24D0003-20
B24D0003-344
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2008148651 AA [EN] The **disclosure** relates to fixed **abrasive** articles having a plurality of three-dimensional **abrasive** composites including **abrasive** particles dispersed in a matrix material including a polymeric binder and a plurality of nanoparticulate inorganic **filler** particles having a volume mean diameter no greater than 1000 nanometers (nm) . In some embodiments, the volume mean diameter of the **abrasive** particles is less than 500 nm, and the volume mean diameter of the inorganic **filler** particles is no greater than 200 nm. In other embodiments using non-ceria **abrasive** particles, the ratio of the amount of matrix material to the amount of non-ceria **abrasive** particles on a volumetric basis is at least 2. In alternate embodiments using non-ceria **abrasive** particles, the ratio of the amount of non-ceria **abrasive** particles to the amount of inorganic **filler** particles on a volumetric basis is no greater than 3. Also provided are methods of making and using fixed **abrasive** articles according to the **disclosure**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 75

Titel: ANTILOADING COMPOSITIONS AND METHODS OF SELECTING SAME

Patentnummer: [WO2005039827A1](#)

Anmeldung: WO2004US30802
EP20040788858
DE200460038673T
US20090321291
US20070726849
US20070726848
US20060492614
US20030688833
JP20060535504T
CA20042630017
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TW20040129634
AR2004P103756
AR2008P101171
BR2004PI15453
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CO20060044981
DK20040788858T
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HK20060113824
IL20040174976
IL20040219406
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IN2006MN00424
MY20040004234
NO20060002159
NZ20040546674
PL20040788858T
PT20040788858T
RU20060112606
SG20080085185
TH20041003832
UA20060004281
ZA20060003028

Priorität: US20030688833 20031017
CA20042542191 20040917
CA20042630017 20040917
EP20040788858 20040917
WO2004US30802 20040917
WO2004US30802 20060417
US20060492614 20060724
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CA20082542191 20080610
US20090321291 20090120



Patentfamilie: WO2005039827A1
EP1677949B1
EP1677949A1
DE602004038673D1
US8337574B2
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US2009199487A1
US2007173180A1
US2007169420A1
US2006260208A1
US2005085167A1
JP4331755B2
JP2007508442T2
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AU2004283199B2
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CN1867427A
CN1867427B
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KR100758523B1
TW200521177A
TWI287560B
AR046293AA
AR067235AB
BRPI0415453B1
BRPI0415453A
CL2004002657A1
CO5690624A2
DK1677949T3
ES2391560T3
HK1093177B
HK1093177A3
HK1093177A1
IL174976A1
IL174976A0
IL219406A0
IN235461B
IN00424MN2006A
MY147416A
NO20062159L
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NO20062159A
NZ546674A
PL1677949T3
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RU2318649C1
RU2006112606A
SG148182A1
TH73666A
UA88774C2
ZA200603028A

Anmelder: NEVORET DAMIEN C
SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN ABRASVIES INC
SAINT GOBAIN SA
SWEI GWO S
YANG PATRICK

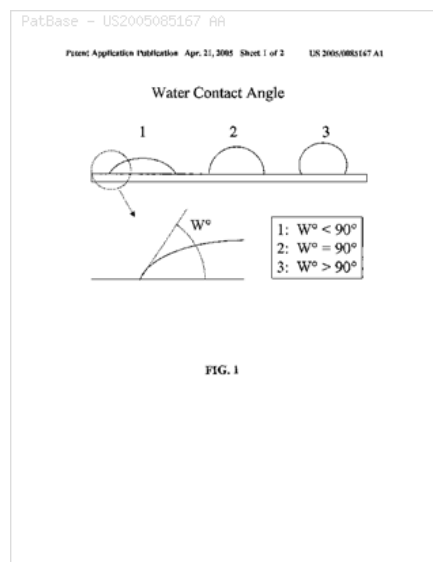
Erfinder: NEVORET DAMEIN
NEVORET DAMIEN C
PATRICK SWEI GWOW S NEVORET DAM
YANG PATRICK

IPC-Notationen: B24B0001-00
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B24D0003-00
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B24D0003-20
B24D0003-34
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B24D0017-00
B24D0099-00
C08J0005-14
C08L0101-00
C08L0101-12
C09K
C09K0003-14

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

Source: US2005085167 AA [EN] An antiloading composition includes a first organic compound. The compound has a water contact angle criterion that is less than a water contact angle for zinc stearate. The first compound also satisfies at least one condition selected from the group consisting of a melting point T_{melt} greater than about 40 degrees C, a coefficient of friction **F** less than about 0.3, and an antiloading criterion P greater than about 0.3. Another embodiment includes a second organic compound, having a different water contact angle from that of the first organic compound. The composition has a particular water contact angle W degrees p that is determined, at least in part, by the independent W degrees g of each compound and the proportion of each compound in the composition. Also, an **abrasive** product includes the antiloading composition. A method of **grinding** a substrate is **disclosed** that includes employing effective amount of an antiloading composition. Further **disclosed** is a method of selecting an antiloading compound



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 76

Titel: **ABRASIVE TOOLS** AND METHODS FOR FORMING SAME

Patentnummer: [WO2016109734A1](#)

Anmeldung: WO2015US68166
US20180203328
US20170810410
US20150985041

Priorität: US20140097783P 20141230
US20150985041 20151230
US20170810410 20171113
US20180203328 20181128

Patentfamilie: **WO2016109734A1**
[US9844853B2](#)
[US10189146B2](#)
[US2019091834A1](#)
[US2018065230A1](#)
[US2016184976A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC SAINT GOBAIN ABRASIFS

Erfinder: LAVALLEE JR LAWRENCE J
MONTGOMERY MICHAEL K
PACELLA NAN Y
SAHLIN KATHERINE M

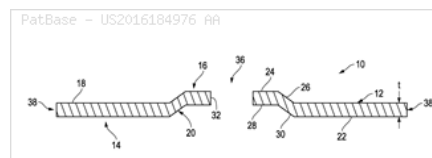
IPC-Notationen: B24B0001-00
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[B24D0003-02](#)
[B24D0003-06](#)
B24D0003-28
B24D0005-02
B24D0005-12
B24D0007-02
B24D0011-00
B24D0018-00

CPC-Notationen: [B24D0003-001](#)
[B24D0003-005](#)
B24D0005-02
B24D0005-12
B24D0007-02
B24D0018-00
B24D0018-0009



Zusammenfassung:

Source: US2016184976 AA [EN] An **abrasive tool** can include a bonded **abrasive** including a body and a barrier layer bonded to a major surface of the body. The body can include **abrasive** particles contained within a bond material. The barrier material can include a metal-containing film. In an embodiment, the barrier layer may further include a polymer-containing film. In another embodiment, the barrier layer may include a biaxially oriented material. The **abrasive tool** may be formed such that the barrier layer is formed in-situ with the formation of the bonded **abrasive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 77

Titel: **ABRASIVE** ARTICLES AND METHODS FOR MAKING SAME

Patentnummer: [WO2009076255A3](#)

Anmeldung: WO2008US85786
EP20080859537
DE200860034032T
US20080329658

Priorität: US20070992923P 20071206
EP20080859537 20081208
US20080329658 20081208
WO2008US85786 20081208

Patentfamilie: [WO2009076255A3](#)
[WO2009076255A2](#)
[EP2231365B1](#)
[EP2231365A4](#)
[EP2231365A2](#)
[DE602008034032D1](#)
[US8449635B2](#)
[US2009145044A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
YOU XIAORONG

Erfinder: YOU XIAORONG

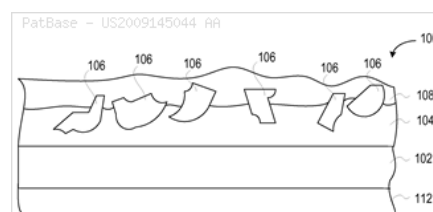
IPC-Notationen: B24B0001-00
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[B24D0003-02](#)
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C09C0001-68
C09C0003-14
C09C0249-00
C09C0251-00
C09K0003-14
G03C0001-00

CPC-Notationen: [B24D0003-34](#)
B24D0011-00
B24D0011-001
C09K0003-1409



Zusammenfassung:

Source: US2009145044 AA [EN] The [disclosure](#) is directed to an **abrasive** article. The **abrasive** article includes a backing having a major surface and a make layer. The make layer is disposed over the major surface of the backing. The make layer includes **abrasive** grains and a photoinitiator that increases the depth of ultraviolet cure of the make layer by at least about 50 percent compared to bis (2,4,6-trimethyl benzoyl) phenyl phosphine oxide. The [disclosure](#) is also directed to a method for forming the **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 78

Titel: CUBIC BORON NITRIDE **GRINDING WHEEL**

Patentnummer: [EP2433749B1](#)

Anmeldung: EP20110180246
DE201160020741T
US20110217432
JP20100214774
CN201110293683

Priorität: JP20100214774 20100927
EP20110180246 20110906

Patentfamilie: [EP2433749B1](#)
[EP2433749A3](#)
[EP2433749A2](#)
[DE602011020741D1](#)
[US9149912B2](#)
[US2012073211A1](#)
[JP2012066365A2](#)
[JP5764893B2](#)
[CN102416602A](#)
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Anmelder: JTEKT CORP
ONO NAOTO
SOMA SHINJI
YAMASHITA TOMOKAZU

Erfinder: ONO NAOTO
SOMA SHINJI
YAMASHITA TOMOKAZU

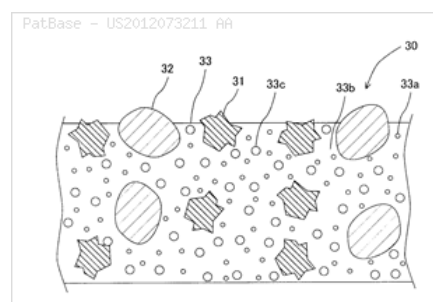
IPC-Notationen: B24B0001-00
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B24D0003-14
[B24D0003-18](#)
[B24D0003-34](#)
B24D0005-00
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0003-14
[B24D0003-342](#)
B24D0005-00



Zusammenfassung:

Source: US2012073211 AA [EN] It is an object of the present invention to provide a cubic boron nitride **grinding wheel** especially suitable for a rough **grinding**. A CBN **grinding** particle included in a CBN **grinding wheel** has a single crystal CBN **grinding** particle having a tetrahedron construction and a multi crystal CBN **grinding** particle. The single crystal CBN **grinding** particle is blended with a ratio of equal to or more than 50 percent to a total summed volume of the single and multi CBN **grinding** particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 79

Titel: BONDED **ABRASIVE** ARTICLE AND METHOD OF **GRINDING**

Patentnummer: [WO2014106159A1](#)

Anmeldung: WO2013US78231
US20150819670
US20130143306

Priorität: US20120748006P 20121231
US20130143306 20131230
US20150819670 20150806

Patentfamilie: **WO2014106159A1**
[US9102039B2](#)
[US10377016B2](#)
[US2015336240A1](#)
[US2014187125A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: JACOB MATTHEW F
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RAMANATH SRINIVASAN
SALES LENNY C
SAUCIER KENNETH A
UPADHYAY RACHANA
WANG CONG

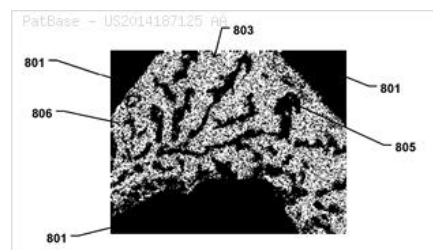
IPC-Notationen: B24B0001-00
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[B24D0003-06](#)
B24D0003-20
B24D0007-02

CPC-Notationen: [B24D0003-008](#)
[B24D0003-06](#)



Zusammenfassung:

Source: US2014187125 AA [EN] An **abrasive** article comprising: a first body comprising a first bond material having **abrasive** particles contained within the first bond material, wherein the first body comprising the first bond material comprises a ratio of VAG (1) /VBM (1) of at least about 1.3; a second body comprising a second bond material having **abrasive** particles contained within the second bond material, wherein the second body comprising the second bond material comprises a ratio of VAG (2) /VBM (2) of less than about 1.3, and wherein VAG is a volume percent of **abrasive** particles within a total volume of the first or second body respectively and VBM is a volume percent of the first or second bond material within the total volume of the first or second body respectively



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 80

Titel: DRY **GRINDING** CEMENTED CARBIDE WORKPIECES WITH SILVER-COATED DIAMOND GRIT

Patentnummer: [EP0065690B1](#)

Anmeldung: EP19820104040
DE19823274075T
JP19820082969
CA19820400758
AU19820083701
AT19820104040T
BR19820002886
ES19820512201
IE19820001177
IL19820065701
ZA19820003067

Priorität: US19810264765 19810518
CA19820400758 19820408
EP19820104040 19820510

Patentfamilie: [EP0065690B1](#)
[EP0065690A1](#)
[DE3274075D1](#)
[JP57201173A2](#)
[CA1194318A1](#)
[AU198283701A1](#)
[AT23286E](#)
[BR8202886A](#)
[ES8304836A1](#)
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[IL65701A1](#)
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[ZA8203067A](#)

Anmelder: GEN ELECTRIC

Erfinder: EDOUIN ARUBAATO PASUKOO
PASCOE EDWIN ALBERT
RUARK WILLIAM WEBSTER
UIRIAMU UEBUSUTAA RAAKU

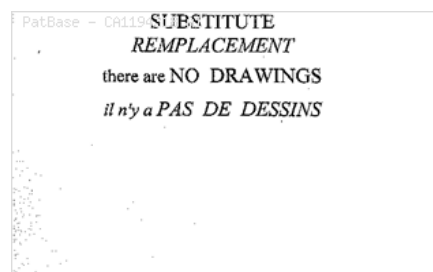
IPC-Notationen: B24B0001-00
[B24D0003-00](#)
B24D0003-20
B24D0003-28
C09K0003-14

CPC-Notationen: C09K0003-1445



Zusammenfassung:

Source: EP0065690 A1 [EN] **Disclosed** is an improved method for dry **grinding** a workpiece comprising a non-ferrous metal carbide-containing alloy with a resin bonded **grinding element** having diamond particles embedded in the **grinding** surface thereof. Such improvement for increasing the **grinding** ratio and decreasing the power required to rotate the **grinding element** during **grinding operations** comprises coating the exterior surfaces of each said diamond particle with a layer of metal consisting essentially of silver prior to embedding the diamond particles in the **grinding element**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 81

Titel: STRUCTURED **ABRASIVE** ARTICLE AND METHOD OF USING THE SAME

Patentnummer: [WO2011034635A1](#)

Anmeldung: WO2010US29553
EP20100723438
DE201060017355T
US20090560797
JP20120529757T
CN201080037197
KR20127009198
BR20121105697

Priorität: US20090560797 20090916
EP20100723438 20100401
WO2010US29553 20100401

Patentfamilie: **WO2011034635A1**
[EP2477789B1](#)
[EP2477789A1](#)
[DE602010017355D1](#)
[US8348723B2](#)
[US2011065362A1](#)
[JP5739891B2](#)
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[BR112012005697B1](#)
[BR112012005697A2](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
BARAN JR JIMMIE R
CULLER SCOTT R
GRAHAM PAUL D
WOO EDWARD J

Erfinder: JIMMIE R BARAN JR
PAUL D GRAHAM
SCOTT R CULLER
WOO EDWARD J

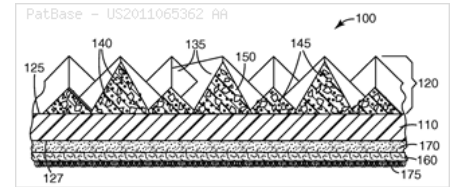
IPC-Notationen: B24B0001-00
[B24D0003-00](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0011-02
C09C0001-68
C09G0001-02
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
B24D0011-001
B24D0011-02
C09G0001-02



Zusammenfassung:

Source: US2011065362 AA [EN] A structured **abrasive** article includes a backing having a structured **abrasive** layer disposed on and secured thereto. The structured **abrasive** layer includes shaped **abrasive** composites that comprise **abrasive** particles and nonionic polyether surfactant dispersed in a crosslinked polymeric binder. The **abrasive** particles have a mean particle size of less than 10 micrometers. The nonionic polyether surfactant is not covalently bound to the crosslinked polymeric binder and is present in an amount of from 2.5 to 3.2 percent by weight based on a total weight of the shaped **abrasive** composites. The structured **abrasive** articles are useful for abrading a workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 82

Titel: COATED **ABRASIVE** ARTICLES AND METHODS OF MAKING AND USING THE SAME

Patentnummer: [WO2010002493A8](#)

Anmeldung: WO2009US42208
EP20090773945
DE200960008897T
US20080177496
JP20110516361T
CN200980131956

Priorität: US20080164355 20080630
US20080177496 20080722
EP20090773945 20090430
WO2009US42208 20090430

Patentfamilie: [WO2010002493A8](#)
[WO2010002493A1](#)
[EP2303980B1](#)
[EP2303980A1](#)
[DE602009008897D1](#)
[US2009325466A1](#)
[JP5572159B2](#)
[JP2011526842T2](#)
[CN102124070A](#)
[CN102124070B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: KINCAID DON H
THURBER ERNEST L

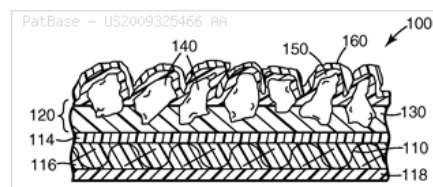
IPC-Notationen: B24B0001-00
B24D0003-20
B24D0011-00
[C08J0005-14](#)
C09K0003-14
F16D0069-02

CPC-Notationen: B24D0003-20



Zusammenfassung:

Source: US2009325466 AA [EN] A coated **abrasive** article comprises a backing, optionally having at least one of a presize layer, a saturant, and a backsize layer thereon; and an **abrasive** layer adjacent and secured to the fabric backing. The **abrasive** layer may comprise a make layer, a size layer, and **abrasive** particles, or the **abrasive** particles may be dispersed in a binder. At least one of the make layer or presize layer comprises a reaction product of a binder precursor comprising from 45 to 75 percent by weight of resole phenolic resin, from 5 to 40 percent by weight of polyepoxide, from 1 to 20 percent by weight of polyfunctional (meth) acrylate, and an effective amount of photoinitiator to free-radically B-stage the binder precursor. Methods of making and using the coated **abrasive** article are also [disclosed](#)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 83

Titel: Alumina bonded **abrasive** for cast iron

Patentnummer: [US5139539A](#)

Anmeldung: US19910780417
US19900547636
US19890392825
US19880245589
US19840666131

Priorität: US19810331442 19811215
US19830536830 19830930
US19840615663 19840531
US19840666131 19841030
US19880245589 19880919
US19890392825 19890727
US19900547636 19900702
US19900547823 19900702
US19910780417 19911022

Patentfamilie: [US5139539A](#)
[US5139536A](#)
[US4988370A](#)
[US4883501A](#)
[US4800685A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: HAYNES JR DOUGLAS G

IPC-Notationen: B24B0001-00
[B24D0003-34](#)
C04B0035-111
C09K0003-14

CPC-Notationen: B24B0001-00
[B24D0003-346](#)
C04B0035-1115
C09K0003-14

Zusammenfassung:

Source: US4800685 A [EN] This invention concerns the **discovery** that sol-gel process alumina **abrasive** grain provides superior performance in bonded **abrasives** for **grinding** cast iron. In a preferred form it is **disclosed** that bonded **abrasives** of sol-gel process alumina **abrasives** in combination with other **abrasive** grains such as those of silicon carbide and fused alumina also provide superior **grinding** of cast iron

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 84





Titel: [Grinding tool](#)
Patentnummer: [EP0179404B1](#)
Anmeldung: EP19850113197
DE19853577819T
US19850789770
JP19840221410
Priorität: JP19840221410 19841022
Patentfamilie: [EP0179404B1](#)
[EP0179404A3](#)
[EP0179404A2](#)
[DE3577819D1](#)
[US4671021A](#)
[JP61100352A2](#)
Anmelder: TOYODA VAN MOPPES LIMITED
TOYODA VAN MOPPES LTD
Erfinder: SEKIYA YASUHISA
TAKAHASHI KUNIO

IPC-Notationen: B24B0003-00
B24B0003-12
[B24D0003-00](#)
[B24D0003-02](#)
[B24D0003-34](#)

CPC-Notationen: [B24D0003-00](#)
[B24D0003-342](#)

Zusammenfassung:

Source: US4671021 A [EN] A [grinding tool](#) has diamond superabrasive grains as the [abrasive](#) and a bond to retain the [abrasive](#) grains. The bond is made of organic polymer or metal and contains as a [filler](#) both a solid film-forming lubricant and finely divided diamond superabrasive grains having a grain size smaller than one-third that of the diamond superabrasive grains as the [abrasive](#). The [grinding tool](#) of this invention is suitable for [grinding](#) a hard [cutting](#) material such as [cutting tools](#) made of titanium nitride cermet and exhibits outstanding [cutting](#) performance and durability

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 85

Titel: **Grinding** body for polishing surfaces

Patentnummer: [DE19736504C2](#)

Anmeldung: DE19971036504

Priorität: DE19971036504 19970822

Patentfamilie: [DE19736504C2](#)
[DE19736504A1](#)

Anmelder: IPACH AND T GMBH

Erfinder: GLIENKE PETER O

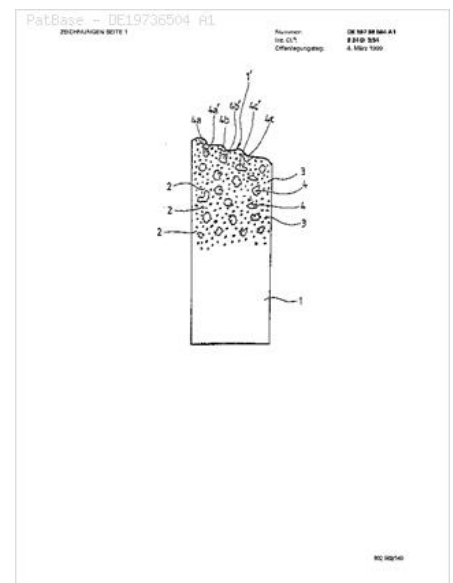
IPC-Notationen: B24B0003-00
B24B0003-34

CPC-Notationen: B24B0003-34



Zusammenfassung:

Source: DE19736504 A1 [EN] The **grinding** body (1) has a **grinding** agent (3) such as fine-grained hard sandstone, quartz particles etc., and a binding agent as well as an **additive** (4) having a cellular and/or pore structure to hold fluid substances which improve the polishing action. The **additives** can be polymer granulate or expanded perlite. The **additive** can contain a fluid anhydrous surfactant mixture



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 86

Titel: COMPOSITE **ABRASIVE** ARTICLE
Patentnummer: [US2557047A](#)
Anmeldung: US19470750650
Priorität: US19470750650 19470527
Patentfamilie: [US2557047A](#)
Anmelder: CARBORUNDUM CO
Erfinder: GOEPFERT GEORGE J
HOWARD ELMER E

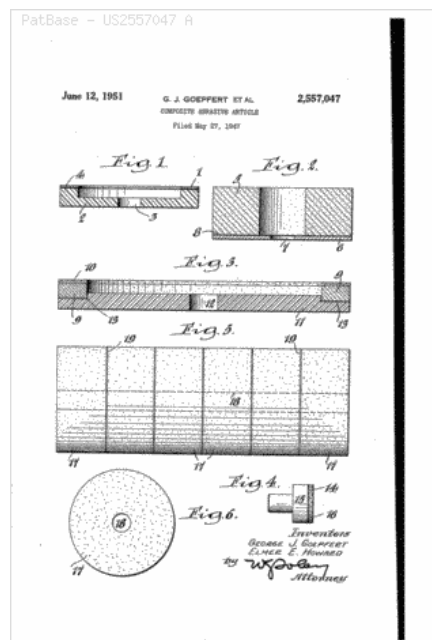


IPC-Notationen: B24B0003-00
B24B0003-48
[B24D0003-02](#)
[B24D0003-34](#)
B24D0005-00
B24D0005-16
B24D0007-00
B24D0007-16
B28D0001-02
B28D0001-12

CPC-Notationen: [B24D0003-02](#)
[B24D0003-34](#)
B24D0005-16
B24D0007-16
B28D0001-12

Zusammenfassung:

Source: US2557047 A [EN] (Claim 1) 1,1.. An. article as claimed_ iti claim 10-
wherein the: glycol_ ester- is



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 87

Titel: WAFER **GRINDING WHEEL**

Patentnummer: [US2020198084A1](#)

Anmeldung: US20190417896
CN201910680928
KR20180168164

Priorität: KR20180168164 20181224

Patentfamilie: [US2020198084A1](#)
[CN111347344A](#)
[KR20200078881A](#)

Anmelder: SAMSUNG ELECTRONICS CO LTD

Erfinder: CHOI SANG IL
JEON SEONG GI
JEONG CHANG SU
KANG TAE GYU

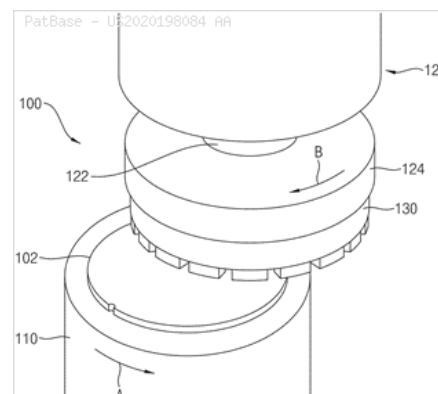


IPC-Notationen: B24B0003-34
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C01B0032-25
C09G0001-02
C09K0003-14
C30B0029-04
C30B0029-60

CPC-Notationen: B24B0003-34
B24B0009-065
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B24D0003-06
B24D0003-14
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B24D0018-0072
C01B0032-25
C01B0032-28
C01P2004-54
C01P2004-61
C01P2004-62
C09G0001-02
C09K0003-1409
C30B0029-04
C30B0029-60

Zusammenfassung:

Source: US2020198084 AA [EN] A **grinding wheel** includes a plurality of **wheel** tips. The plurality of **wheel** tips include a plurality of diamond **abrasive** grains and a bonding material mixed with the diamond **abrasive** grains. The plurality of diamond **abrasive** grains have a ratio of a length in a long axis direction to a width in a short axis direction of 1: 2.5 to 1: 3.5 and includes edges or vertices having a **grinding** angle of 90 degrees or less



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 88

Titel: **ABRASIVE** MATERIAL HAVING AN ANTILOADING COATING

Patentnummer: [WO2006017008A1](#)

Anmeldung: WO2005US22756
EP20050767048
US20050166538
JP20070520344T
JP20040203510

Priorität: JP20040203510 20040709
WO2005US22756 20050624

Patentfamilie: **WO2006017008A1**
EP1765553A1
US2006016128A1
JP2006022272A2
JP2008511450T2

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY
OKA HITOSHI
THREE M INNOVATIVE PROPERTIES CO

Erfinder: OKA HITOSHI

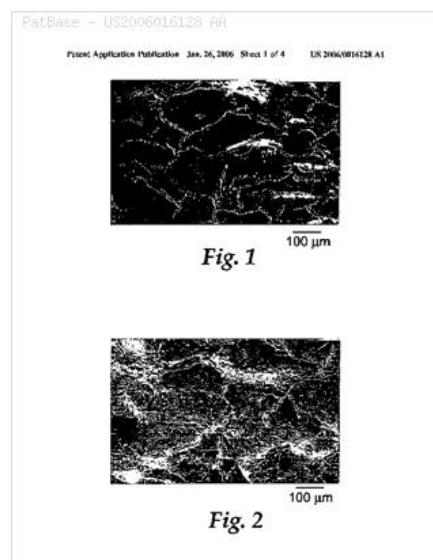
IPC-Notationen: B24B0003-34
B24B0037-00
B24D0003-00
B24D0003-34
B24D0011-00
C09K0003-14

CPC-Notationen: B24B0003-346
B24D0003-342



Zusammenfassung:

Source: US2006016128 AA [EN] To determine what fine structure of the surface on which antiload agents are applied performs the function of antiload agents sufficiently. An **abrasive** material having an antiload coating on an outermost surface thereof, in which the antiload coating contains an antiload agent and a binding resin, the binding resin is formed into a film with cracks, and a reticulate fine structure is formed on an entire surface of the antiload coating by the cracks



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 89

Titel: METHOD FOR **GRINDING** GLASS

Patentnummer: [WO200064630A1](#)

Anmeldung: WO2000US10747
EP20000928264
JP20110123048
JP20000613610T
JP20000613610
AU20000046524D
AU20000046524
KR20067017898
KR20017013575

Priorität: US19990130797P 19990423
JP20000613610 20000420
WO2000US10747 20000420

Patentfamilie: [WO200064630A1](#)
[EP1175279A1](#)
[JP2011224773A2](#)
[JP4808848B2](#)
[JP2002542055T2](#)
[AU200046524A5](#)
[AU200046524A1](#)
[KR20060101791A](#)
[KR20010113890A](#)

Anmelder: 3M CO MINNESOTA MINING AND MFG COMPANY
3M INNOVATIVE PROPERTIES CO
THREE M INNOVATIVE PROPERTIES CO

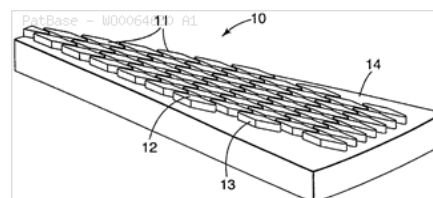
Erfinder: WOO EDWARD J



IPC-Notationen:	B24B0005-00 B24B0005-01 B24B0007-20 B24B0007-24 B24B0009-08 B24D0003-00 B24D0003-02 B24D0003-20 B24D0003-28 B24D0003-34 B24D0007-00 B24D0007-06	CPC-Notationen:	B24B0007-241 B24D0003-28 B24D0003-344 B24D0007-06
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Zusammenfassung:

Source: WO0064630 A1 [EN] A method of **grinding** a surface of a glass workpiece is reported which includes (a) contacting a **grinding** layer of an **abrasive** article (10) with the surface of the glass workpiece, the **grinding** layer comprising a plurality of **abrasive** composites (11), the composites (11) comprising an organic resin, a metal salt selected from alkali metal salts, alkaline metal salts and combinations thereof, and single diamond **abrasive** particles dispersed homogeneously throughout said **abrasive** composites (11); (b) introducing a lubricant between the **grinding** layer of the **abrasive** article (10) and the surface of the glass workpiece; and (c) moving the **grinding** layer of the **abrasive** article (10) and the surface of the glass workpiece relative to one another



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 90

Titel: RESIN BONDED **GRINDING WHEEL**

Patentnummer: [WO2012145284A3](#)

Anmeldung: WO2012US33880
EP20120774388
US20120111280
CA20122833342
CN201280018778
BR20131126817
RU20130146357

Priorität: US20110476428P 20110418
US20120111280 20120417
WO2012US33880 20120417

Patentfamilie: [WO2012145284A3](#)
[WO2012145284A2](#)
[EP2699387A4](#)
[EP2699387A2](#)
[US2014057534A1](#)
[CA2833342C](#)
[CA2833342A](#)
[CN103492126A](#)
[CN103492126B](#)
[BR112013026817A2](#)
[RU2567165C2](#)
[RU2013146357A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
HAJDUK JANUSZ
MCARDLE JAMES L

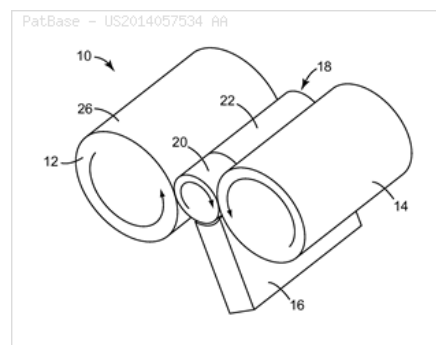
Erfinder: HAJDUK JANUSZ
KHAJDUK JANUSH
MCARDLE JAMES L
MKARDLE DZHEJMS L

IPC-Notationen: B24B0005-22
B24D0003-10
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-04

CPC-Notationen: B24B0005-22
B24D0003-10
B24D0003-28
B24D0003-30
[B24D0003-344](#)
[B24D0003-346](#)

Zusammenfassung:

Source: US2014057534 AA [EN] A resin bonded **grinding wheel** suitable for **grinding** polycrystalline diamond compacts is **disclosed**. The resin bonded **grinding wheel** uses a high concentration of diamonds based on a volume percent along with a mixture of hard and soft **filler** particles to effectively grind the polycrystalline diamond compacts while eliminating or reducing the need to continuously dress the outer surface of the resin bonded **grinding wheel**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 91

Titel: [GRINDING WHEEL](#)
Patentnummer: [WO2011080328A3](#)
Anmeldung: WO2010EP70949
 DE200910055428
Priorität: DE200910055428 20091230
Patentfamilie: [WO2011080328A3](#)
[WO2011080328A2](#)
[DE102009055428B4](#)
[DE102009055428A1](#)
Anmelder: ADASCH VOLKER
 DEEKEN STEFAN
 DRONCO AG
 LANGER WERNER
 REMP MARCEL
 SGL CARBON SE
 TRAPP VICTOR
Erfinder: ADASCH VOLKER DR
 DEEKEN STEFAN DR
 LANGER WERNER
 REMP MARCEL
 TRAPP VICTOR DR

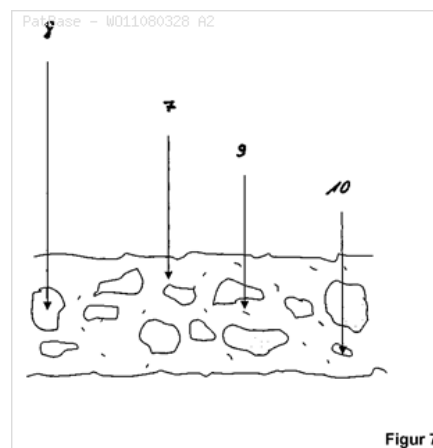


IPC-Notationen: B24B0007-16
 B24D0003-10
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[B24D0003-34](#)
 B24D0005-12
 B24D0007-02
 B24D0007-04
 B24D0007-14
 B24D0018-00
 B32B0018-00
 C04B0035-74
 C09K0003-14

CPC-Notationen: [B24D0003-344](#)
 B24D0005-12
 B24D0007-02

Zusammenfassung:

Source: WO11080328 A2 [EN] The invention relates to a roughing and/or **cut-off wheel** for machining workpieces and/or separating workpieces, wherein the roughing and/or **cut-off wheel** (1) has a hardened body (2) , wherein the hardened body (2) has at least a granular **grinding** medium (8) , **filler** (9) and polymer as the binding agent matrix, wherein the **filler** (9) comprises expanded graphite and/or graphene



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 92

Titel: IMPROVEMENTS IN OR RELATING TO RESIN-BONDED ARTICLES

Patentnummer: [GB1211752A](#)

Anmeldung: GB19680040973
19680829
NL19680012245

Priorität: US19670664181 19670829

Patentfamilie: [GB1211752A](#)
[FR1582671A](#)
[BE720137A](#)
[NL6812245A](#)

Anmelder: ENGELHARD HANOVIA INC

Erfinder:

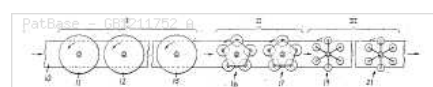


IPC-Notationen: B24B0007-20
B24B0007-24
[B24D0003-34](#)

CPC-Notationen: B24B0007-24
B24B0007-241
[B24D0003-344](#)

Zusammenfassung:

Source: GB1211752 A [EN] 1,211,752. Surfacing. ENGLEHARD HANOVIA Inc. 27 Aug., 1968 [29 Aug., 1967], No. 40973/68. Heading B3D. [Also in Division C4] Hard materials are surfaced with a resinbonded **abrasive** article comprising a substantially homogeneous mixture of **abrasive** particles of particle size of 5-200 microns and a particulate **filler** bonded by resinous material, the article having agglomerates of additional **abrasive** particles dispersed at random therethrough, the additional **abrasive** particles having a particle size of less than 5 microns. In the Figure glass sheets 10 suitably mounted in a conventional conveying means, e.g. embedded in plaster of Paris, are passed through the successive **grinding** and polishing stages I, II, III. **Grinding wheels** 12-15 remove progressively decreasing predetermined amounts of surface material. The sheets then pass to a satellite spider **wheel** 16 comprising diamond particles in a metal bond and then to a similar **wheel** 17 of **abrasive** articles of the invention. The sheets then pass to conventional garnet or iron oxide polishing stations 19-21



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 93

Titel: ANNULAR GRINDSTONE

Patentnummer: [DE102019204461A1](#)

Anmeldung: DE201910204461
US20190360681
JP20180065229
CN201910211293
KR20190028058
TW20190110551
SG20191002228

Priorität: JP20180065229 20180329
KR20190028058 20190312

Patentfamilie: [DE102019204461A1](#)
[US2019299366A1](#)
[JP2019171543A2](#)
[CN110315415A](#)
[KR20190114759A](#)
[TW201942375A](#)
[SG10201902228PA1](#)

Anmelder: DISCO ABRASIVE SYSTEMS LTD
DISCO CORP

Erfinder: AIKAWA HIROKI

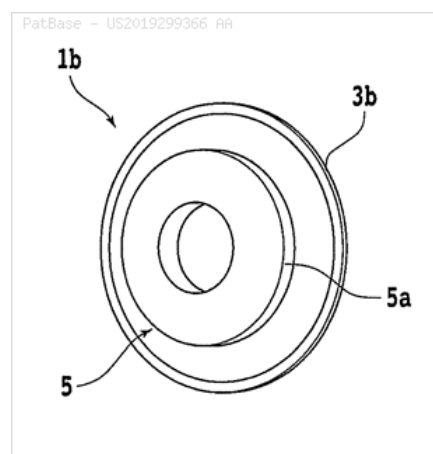


IPC-Notationen: B24B0007-22
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B24D0018-00
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C03B0033-023
C22C0019-03
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H01L0021-301
H01L0021-67

CPC-Notationen: B24B0007-22
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B24B0041-04
B24D0003-06
B24D0005-12
B24D0007-066
B24D0018-0018
B26D0001-0006
B26D2001-0053
H01L0021-67092

Zusammenfassung:

Source: US2019299366 AA [EN] An annular grindstone includes a grindstone portion including a binding material, and **abrasive** grains which are dispersed into the binding material to be fixed, in which the binding material contains a nickel-iron alloy. Preferably, a contained ratio of iron in the nickel-iron alloy is in a range of 5 wt percent or more to less than 60 wt percent. More preferably, a contained ratio of iron in the nickel-iron alloy is in a range of 20 wt percent or more to 50 wt percent or less. Preferably, the annular grindstone includes the grindstone portion only. In addition, the annular grindstone further includes an annular base including a grip portion, in which the grindstone portion is exposed at an outer peripheral **edge** of the annular base



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 94

Titel: FIXED **ABRASIVE** THREE-DIMENSIONAL LAPPING AND POLISHING PLATE AND METHODS OF MAKING AND USING THE SAME

Patentnummer: [WO2019164722A1](#)

Anmeldung: WO2019US17827
US20190277827
TW20190105423

Priorität: US20180632808P 20180220
US20180745249P 20181012
US20190277827 20190215

Patentfamilie: [WO2019164722A1](#)
[US2019255676A1](#)
[TW201936883A](#)

Anmelder: ENGIS CORP

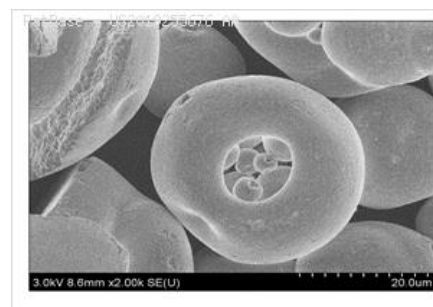
Erfinder: BENE A ION C
ONYENEMEZU CLEMENT N
ROSCZYK BENJAMIN R



IPC-Notationen:	B24B0007-24 B24B0037-00 B24B0037-04 B24B0037-10 B24D0003-00 B24D0003-28 B24D0003-34 C09K0003-14	CPC-Notationen:	B24B0007-241 B24B0037-042 B24D0003-28 B24D0003-344 C09K0003-14
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Zusammenfassung:

Source: US2019255676 AA [EN] A fixed **abrasive** three-dimensional plate includes micron size diamond beads or a mixture of **abrasive** particles and metal oxide beads, ranging in size from a few microns to a few tens of microns, incorporated into a matrix of one or more inorganic binders and **fillers**. The composition is formed into a rigid plate blank, and the **abrasive** plate is mounted on a substrate forming a lapping/polishing plate. The **abrasive** plate is capable of delivering high material removal rates coupled with reduced surface roughness when lapping/polishing advanced materials, including sapphire, titanium carbide reinforced alumina, silicon carbide, gallium nitride, aluminum nitride, zinc selenide, and other compound semiconductor materials, as well as, glass, ceramic, metallic, and composite workpieces. The diamond beads incorporated in the fixed **abrasive** three-dimensional plate include diamond particles ranging in size from a few nanometers to a few tens of microns, bonded with one or more inorganic binders and additives



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 95

Titel: FIXED **ABRASIVE** ARTICLES

Patentnummer: [WO03008151A1](#)

Anmeldung: WO2002US21940
EP20020746972
EP20000303717
US20030382079
US20010910425
JP20030513743T
JP20000134966
AU20020316648
CN20028014752
KR20047000826
KR20000023670
TW20020116153
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Priorität: US19990132175P 19990503
US20000563628 20000502
US20010910425 20010720
WO2002US21940 20020712
US20030382079 20030305

Patentfamilie: **WO03008151A1**
EP1409201A1
EP1052062A1
US7014538B2
US2004082288A1
US2002077037A1
JP2001062701A2
JP2004535306T2
AU2002316648A1
CN1535197A
KR20040017328A
KR20010020807A
TW565488B
TH56129A

Anmelder: 3M INNOVATIVE PROPERTIES CO
APPLIED MATERIALS INC
TIETZ JAMES V

Erfinder: BIRANG MANOOCHER
EMAMI RAMIN
LI SHIJIAN
ROSENBERG LAWRENCE M
ROSENBERG LEGAL REPRESENTATIVE
ROSENBERG SANDRA L
SCALES MARTIN
SCALES MARTY
TIETZ J V
TIETZ JAMES VICTOR
WHITE JOHN M

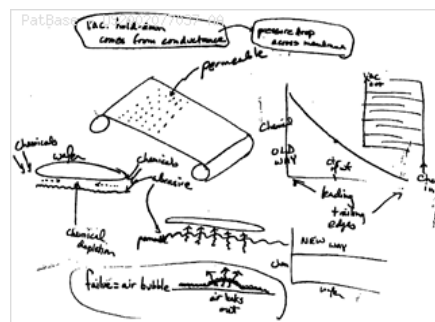


IPC-Notationen: B24B0007-24
 B24B0037-00
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 B24B0053-007
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 B24D0007-12
 B24D0011-00
 B24D0013-14
 H01L0021-302
 H01L0021-304

CPC-Notationen: B24B0037-205
 B24B0053-017
B24D0003-00
 B24D0003-28
B24D0003-34

Zusammenfassung:

Source: US2002077037 AA [EN] Described are fixed **abrasive** articles including wear indicators



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 96

Titel: **EDGE** FINISHING APPARATUS AND METHODS FOR LAMINATE PRODUCTION

Patentnummer: [WO2017139608A1](#)

Anmeldung: WO2017US17413
EP20170706936
DE201760013264T
US20170427484
JP20180541395T
CN201780011143
KR20187025775

Priorität: US20160294146P 20160211
US20170427484 20170208
EP20170706936 20170210
WO2017US17413 20170210

Patentfamilie: **WO2017139608A1**
[EP3414053B1](#)
[EP3414053A1](#)
[DE602017013264D1](#)
US2017232571A1
JP2019504775T2
[CN108770349A](#)
[KR20180108804A](#)

Anmelder: CORNING CO LTD
CORNING INC

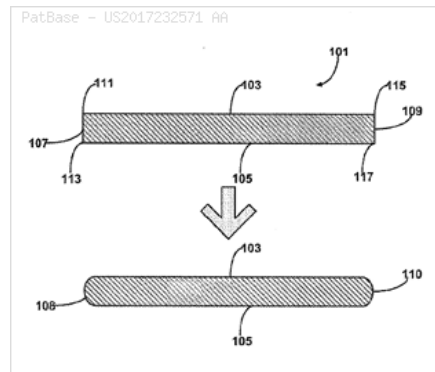
Erfinder: BANKAITIS JONAS
HUZINEC GARY MICHAEL

IPC-Notationen: B24B0009-10
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B24D0005-14

CPC-Notationen: B24B0009-10
B24B0009-102
B24D0003-06
B24D0005-02
B24D0005-14

Zusammenfassung:

Source: US2017232571 AA [EN] Embodiments of a **grinding wheel** and methods for **edge** finishing glass substrates are **disclosed**. In one or more embodiments, the **grinding wheel** includes a metal matrix structure, a plurality of primary **abrasive** particles and a plurality of secondary **abrasive** particles bonded to the matrix structure, wherein one of the primary **abrasive** diamond particles and secondary **abrasive** particles comprises resin bond diamond particles. In some embodiments, the other of the primary **abrasive** diamond particles and secondary **abrasive** particles comprises metal bond diamond particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 97

Titel: **ABRASIVE** ARTICLES WITH RESIN CONTROL **ADDITIVES**

Patentnummer: [WO2004022285A1](#)

Anmeldung: WO2003US22681
EP20030748959
DE20036041159
US20020236588
JP20040534249T
AU20030268008
CN20038021127
KR20057003761
TW20030120992
BR2003PI14002
MX2005PA02356
TH20031002892

Priorität: US20020236588 20020906
EP20030748959 20030721
WO2003US22681 20030721

Patentfamilie: **WO2004022285A1**
EP1534468B1
EP1534468A1
DE60341159D1
US6858292B2
US2004048057A1
JP2005537941T2
AU2003268008A1
CN1678431A
KR20050057177A
KR101021389B1
TW200413132A
TWI291910B
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MXPA05002356A1
TH64895A

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: PHILIP EDWARD KENDALL

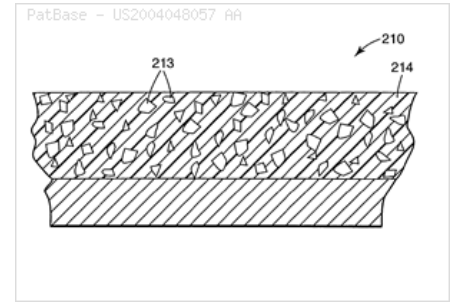
IPC-Notationen: B24B0019-00
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B32B0005-16
G02B0006-00

CPC-Notationen: B24B0011-00
B24D0003-002
B24D0003-344
B24D0011-00
Y10T0428-25
Y10T0428-252
Y10T0428-254
Y10T0428-256
Y10T0428-258
Y10T0428-259



Zusammenfassung:

Source: US2004048057 AA [EN] The present invention is directed to **abrasive** articles comprising a resin transfer **additive** and methods of abrading a workpiece with the **abrasive** article. The resin control **additive** is a metal salt of a long chain fatty acid. The **abrasive** article comprises a backing having a major surface, and an **abrasive** layer secured to at least a portion of the major surface. The **abrasive** layer comprises a binder, **abrasive** particles distributed in the binder, and a resin control **additive** distributed in the binder, and wherein the **abrasive** layer has a substantially uniform thickness



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 98

Titel: **Abrasive** member for very high return loss optical connector ferrules

Patentnummer: [US6012969A](#)

Anmeldung: US19960744321
JP19950302676

Priorität: JP19950302676 19951121

Patentfamilie: **US6012969A**
JP9141547A2

Anmelder: FUJI PHOTO FILM CO LTD

Erfinder: FUJIYAMA MASAOKI
ISHIGURO TADASHI
RYOKE KATSUMI
RYOMO KATSUMI



IPC-Notationen: B24B0019-00
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
G02B0006-38

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0011-001
G02B0006-3863

Zusammenfassung:

Source: US6012969 A [EN] An **abrasive** member for a very high return loss optical connector ferrule is used in abrading an end of an optical connector ferrule having a ferrule hole, in which an optical fiber has been inserted and secured, into a convex spherical surface. The **abrasive** member comprises a flexible substrate and an **abrasive** layer, which is formed on the surface of the flexible substrate and comprises a binder and **abrasive** grains. The surface roughness Ra, expressed in terms of arithmetic mean deviation, of the **abrasive** layer falls within the range of 0.01 μm to 0.05 μm . The **abrasive** member carries out polishing such that the surface smoothness of the ferrule surface and the optical fiber surface may be kept high, such that a difference in level between the ferrule surface and the optical fiber surface may not occur, and such that the very high return loss characteristics may thereby be obtained

PatBase	温度℃	砥粒 kg/cm ²	速度 m/分	研磨層Ra nm	光量伝達 ロスdB	段差 μm
実施例1	40	100	100	45	50	0.05
実施例2	40	150	100	35	50	0.05
実施例3	40	200	100	25	50	0.01
実施例4	40	250	100	20	50	0.01
実施例5	40	300	100	15	50	0.01
比較例1	なし			60	45	0.1
比較例2	30	100	100	55	45	0.1

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 99

Titel: **ABRASIVE** TAPE
Patentnummer: [US4922675A](#)
Anmeldung: US19890337778
JP19880090951
Priorität: JP19880090951 19880413
Patentfamilie: [US4922675A](#)
[JP1264776A2](#)
[JP7102505B4](#)
[JP2096234C3](#)
Anmelder: FUJI PHOTO FILM CO LTD
Erfinder: FUJIYAMA MASAOKI
IWASAKI TAKASHI
KOSHA HIDEAKI
SATO MASAMI
SUZUKI MASAMI
YONEYAMA TAKASHI

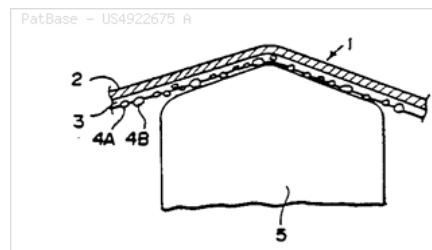


IPC-Notationen: B24B0021-00
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B24D0011-00
G11B0005-127
G11B0005-187

CPC-Notationen: B24B0021-16
B24D0003-004
B24D0003-28
B24D0003-346
B24D0011-00
G11B0005-1871
Y10T0428-24983
Y10T0428-259

Zusammenfassung:

Source: US4922675 A [EN] An **abrasive** tape comprises a flexible substrate and an **abrasive** layer which is overlaid on the flexible substrate and which contains **abrasive** grains and a binder. The **abrasive** grains comprise first **abrasive** grains, which have a mean grain diameter within the range of 0.07 μm to 0.40 μm and a Mohs hardness within the range of 5 to 7, and second **abrasive** grains, which have a mean grain diameter within the range of 0.20 μm to 0.60 μm and a Mohs hardness not lower than 8.5



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 100

Titel: METHOD OF ABRADING A METAL WORKPIECE

Patentnummer: [WO2008082880A1](#)

Anmeldung: WO2007US87194
US20070746923

Priorität: US20060882941P 20061231
US20070746923 20070510

Patentfamilie: [WO2008082880A1](#)
[US2008155904A1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: CULLER SCOTT R
MEWES DEAN H
MOREN LOUIS S
PETERSON SCOTT W
WELYGAN DENNIS G

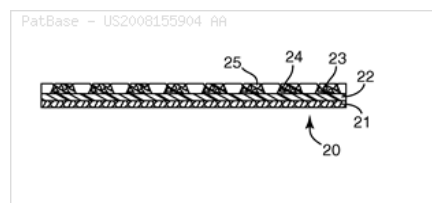


IPC-Notationen: B24B0021-00
[B24D0003-34](#)
B24D0011-00

CPC-Notationen: B24B0001-00
B24B0055-02
B24D0011-00

Zusammenfassung:

Source: US2008155904 AA [EN] A method of abrading a metal workpiece including contacting a metal workpiece with an **abrasive** article, wherein the **abrasive** article includes a flexible waterproof backing having a first surface bearing a cured primer coating; and a plurality of shaped structures, each structure having a distal end spaced from said backing and an attachment end attached to the primer coating on the backing, said shaped structures including a mixture of **abrasive** particles and cured particulate binder, wherein the metal workpiece is contacted with the distal ends of the shaped structures to form an abrading interface; moving the **abrasive** article relative to the metal workpiece while providing sufficient force between the metal workpiece and the distal ends of the shaped structures of the **abrasive** article to abrade the metal workpiece; and applying liquid **coolant** proximate the abrading interface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 101

Titel: **GRINDING DISK** HAVING PLANT SEED CAPSULES AS A **FILLER** AND METHOD FOR THE PRODUCTION THEREOF

Patentnummer: [WO2010086371A1](#)

Anmeldung: WO2010EP50996
EP20100701675
DE201050004595T
DE200910006699
US20100146670
JP20110546841T
CN201080006095
BR2010PI07425
ES20100701675T
HK20120104985
MX20110007914
PL20100701675T

Priorität: DE200910006699 20090129
EP20100701675 20100128
WO2010EP50996 20100128

Patentfamilie: **WO2010086371A1**
EP2391482B1
EP2391482A1
DE102009006699A1
DE502010004595D1
US2011281511A1
JP2012516241T2
CN102300675A
BRPI1007425A2
ES2437392T3
HK1164216A1
MX2011007914A1
PL2391482T3

Anmelder: KEULER JOSEF
RHODIUS SCHLEIFWERKZEUGE GMBH AND CO KG
STANG CHRISTIAN

Erfinder: KEULER JOSEF
STANG CHRISTIAN

IPC-Notationen: B24B0027-00
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B24D0003-20
B24D0003-32
B24D0003-34
C07B0051-00
C07D0309-18

CPC-Notationen: B24D0003-20
B24D0003-32
B24D0003-342
B24D0003-348



Zusammenfassung:

Source: US2011281511 AA [EN] The invention relates to a synthetic-resin-bonded **grinding disk** comprising a mixture of **abrasive** grain, binding agent, and pore formers, wherein the pore formers are plant seeds and are contained in the finished **grinding disk**. The **grinding disk** is composed of 60 to 90 wt percent of **abrasive** grain and 10 to 40 wt percent of a binding agent, wherein the plant seeds constitute up to 80 wt percent of the binding agent. The plant seeds can contain oil and can be rape seeds, poppy seeds, clover seed, lupin seeds, mustard seeds, serradella vetch seeds, or similar plant seeds. The **grinding disk** can be produced by mixing **abrasive** grain, binding agent, and plant seeds, pouring the starting mixture into a mold provided therefor, pressing the mixture, pre-drying the mixture, and curing the **grinding disk**. The plant seeds are not burned in the production of the **grinding disk**. The **grinding disk** is cured at temperatures of up to 250 degrees centigrade, preferably of up to 200 degrees centigrade, more preferably of up to 180 degrees centigrade, and more preferably of up to 150 degrees centigrade

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 102

Titel: ANNULAR GRINDSTONE AND MANUFACTURING METHOD OF ANNULAR GRINDSTONE

Patentnummer: [DE102019201317A1](#)

Anmeldung: DE201910201317
US20190258071
JP20180017074
CN201910039159
KR20190012691
TW20190103501
SG20191000643

Priorität: JP20180017074 20180202
KR20190012691 20190131

Patentfamilie: [DE102019201317A1](#)
[US2019240812A1](#)
[JP2019130649A2](#)
[CN110125825A](#)
[KR20190094112A](#)
[TW201934266A](#)
[SG10201900643YA1](#)

Anmelder: DISCO ABRASIVE SYSTEMS LTD
DISCO CORP

Erfinder: SOICHI KATAYAMA

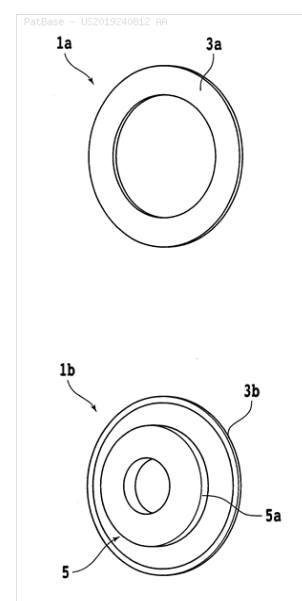


IPC-Notationen: B24B0027-06
B24B0041-04
B24D0003-06
B24D0003-10
B24D0005-02
B24D0005-12
B24D0007-02
B24D0018-00
C25D0005-14
C25D0007-04
C25D0015-00
H01L0021-301
H01L0021-304

CPC-Notationen: B24B0041-04
B24D0003-10
B24D0005-12
B24D0018-00
B24D0018-0009
B24D0018-0018
B24D0018-0027
B24D0018-0072
B24D2203-00
C25D0005-14
C25D0007-04
C25D0015-00

Zusammenfassung:

Source: US2019240812 AA [EN] An annular grindstone includes a grindstone portion in which **abrasive** grains are fixed with a bonding material containing nickel and has a through hole at the center thereof. The grindstone portion has a laminated structure of a total of three or more layers in which a first layer and a second layer having a porous structure are alternately laminated on top of another along a penetrating direction of the through hole and both of outermost layers in the laminated structure which are exposed outside are the first layers



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 103

Titel: SURFACE-MODIFYING **TOOLS**

Patentnummer: [WO9601721A1](#)

Anmeldung: WO1995GB01614
EP19950924432
DE19956024876T
US19970765559
JP19960504190T
GB19980009712
GB19950014019
GB19940014066
AU19950028932
IN1995DE01288

Priorität: GB19940014066 19940712
GB19950014019 19950710
GB19980009712 19950710
WO1995GB01614 19950710

Patentfamilie: [WO9601721A1](#)
[EP0769993B1](#)
[EP0769993A1](#)
[DE69524876T2](#)
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[JP10503430T2](#)
[GB2322312B2](#)
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[GB9809712A0](#)
[GB9514019A0](#)
[GB9414066A0](#)
[AU199528932A1](#)
[IN01288DE1995A](#)

Anmelder: BALL BURNISHING MACH TOOLS
LINZELL GEOFFREY ROBERT

Erfinder: LINZELL GEOFFREY ROBERT

IPC-Notationen: B24B0029-00
B24B0031-00
B24B0031-116
B24D0003-20
[B24D0003-34](#)

CPC-Notationen: B24B0029-00
B24B0031-116
[B24D0003-34](#)
Y10T0428-31663



Zusammenfassung:

Source: US5902360 A [EN] PCT No. PCT/GB95/01614 Sec. 371 Date Jan. 9, 1997 Sec. 102 (e) Date Jan. 9, 1997 PCT Filed Jul. 10, 1995 PCT Pub. No. WO96/01721 PCT Pub. Date Jan. 25, 1996 In a method for removing metal from the surface of a workpiece by continuously rubbing the surface with a **tool** in a friction-inducing manner and in the presence of a friction-enhancing agent (an anti-lubricant) and in which a thin layer of the friction-enhancer must be available at the **tool** surface, there is provided a **tool** which carries the friction-enhancing agent in the form of a composition of an **abrasive** and a rubbery solid siloxane reaction product admixed with a liquid, mobile, anti-lubricant siloxane stably dispersed therewithin, and the use of the **tool** to excoriate and condition the surface by removing therefrom the oxide film thereon and leaving its place a siloxane film, and a conditioned metal surface having siloxane molecules each individually bonded directly to the metal over a relatively large area of the surface to provide a relatively uniform siloxane layer

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 104

Titel: Lightweight, tough synthetic composite grindstone

Patentnummer: [DE19703879A1](#)

Anmeldung: DE19971003879

Priorität: DE19971003879 19970203

Patentfamilie: [DE19703879A1](#)

Anmelder: WALTHER CARL KURT GMBH

Erfinder: WALTHER HENNING D

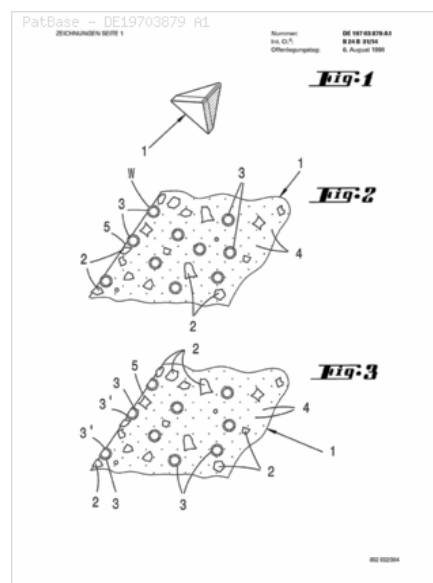


IPC-Notationen: B24B0031-00
B24B0031-14
[C08J0005-14](#)

CPC-Notationen: B24B0031-14

Zusammenfassung:

Source: DE19703879 A1 [EN] The composite grindstone, comprises a bonded, granular grit (2) . The novelty is incorporation of hollow (glass) microspheres (3) into the grindstone, up to the point of conferring buoyancy. These have walls (W) which are frangible during use. Preferably the composite contains 40-75 percent polyester resin (4) , 10-30 percent **grinding** mineral (2) and 1-20 percent microspheres (3)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 105

Titel: POLISHING **TOOL** AND MANUFACTURING METHOD THEREFOR

Patentnummer: [EP1175965A3](#)

Anmeldung: EP20010118039
US20010910907
JP20010224182
KR20010044866
TW20010118119

Priorität: JP20000224485 20000725
JP20010010830 20010118
JP20010125010 20010423
JP20010224182 20010725

Patentfamilie: [EP1175965A3](#)
[EP1175965A2](#)
[US2002016139A1](#)
[JP2003011066A2](#)
[KR20020009510A](#)
[TW519506B](#)

Anmelder: EBARA CORP
WADA YUTAKA

Erfinder: HIROKAWA KAZUTO
HIYAMA HIROKUNI
MATSUO HISANORI
MATSUO NAONORI
WADA TAKETAKA
WADA YUTAKA

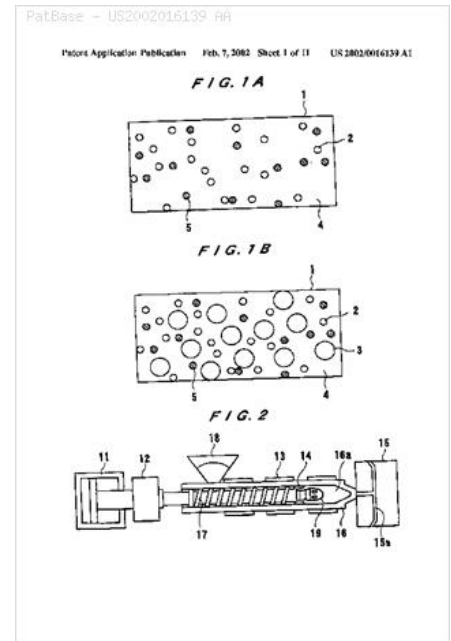
IPC-Notationen: B24B0037-00
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B24D0003-20
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B24D0003-32
[B24D0003-34](#)
B24D0018-00
[C08J0005-14](#)
C09K0003-14
H01L0021-02
H01L0021-304
H01L0021-306

CPC-Notationen: B24B0037-24
B24D0003-32
[B24D0003-346](#)
B24D0018-00
H01L0021-30625



Zusammenfassung:

Source: US2002016139 AA [EN] A polishing **tool** applicable to various types of polishing objects is provided that enables to stabilize the polishing speed and to obtain superior surface details while reducing the formation of defects such as scratches on the polished surface. The **tool** is **operated** by pressing and sliding on the polishing object in a swinging motion and the surface is polished with **abrasive** particles imbedded in a matrix comprised primarily of a thermoplastic resin such as butadiene styrene, polybutadiene or MBS resin of acryl rubber group. The polishing **tool** includes fixed-abrasive polishing **tool** that contains **abrasive** particles within the polishing **tool**, or a polishing pad containing non-fixed-abrasive particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 106

Titel: POLISHING METHOD

Patentnummer: [EP1211024A3](#)

Anmeldung: EP20010128235
US20010995613
JP20000398807
JP20000395729
JP20000365620
KR20010074987
TW20010129565

Priorität: JP20000365620 20001130
JP20000395729 20001226
JP20000398807 20001227

Patentfamilie: [EP1211024A3](#)
[EP1211024A2](#)
[US6777335B2](#)
[US2002098701A1](#)
[JP2002203818A2](#)
[JP2002198331A2](#)
[JP2002166356A2](#)
[KR20020042500A](#)
[KR100589070B1](#)
[TW558479B](#)

Anmelder: JSR CORP

Erfinder: HASEGAWA KOU
HASEGAWA TORU

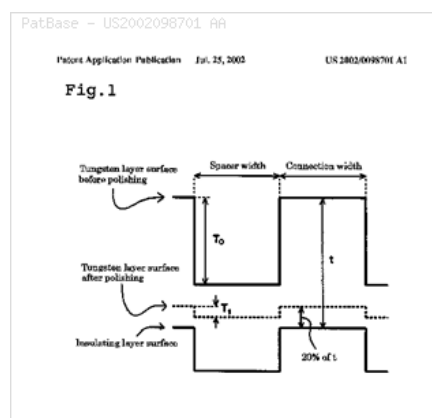


IPC-Notationen: B24B0037-00
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C09K0003-14
H01L0021-02
H01L0021-304
H01L0021-306

CPC-Notationen: B24B0037-24
[B24D0003-34](#)

Zusammenfassung:

Source: US2002098701 AA [EN] It is an object of the present invention to provide a polishing method, with which a surface of high flatness can be obtained without fail at a high removal rate and in a stable manner. The polishing method is to polish a surface to be polished of an object to be polished by using a polishing pad while existing an aqueous chemical **mechanical** polishing solution containing an oxidizing agent such as hydrogen peroxide between polishing surface of the polishing pad equipped with a polishing part that contains **abrasive**, and the surface to be polished to be polished of the object to be polished. The aqueous chemical **mechanical** polishing solution may be contained a heterocyclic compound, a multivalent metal ion, an organic acid and the like. Also, the aqueous chemical **mechanical** solution may be contained no **abrasive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 107

Titel: POLISHING PAD AND PRODUCTION METHOD THEREOF

Patentnummer: [EP1468785B8](#)

Anmeldung: EP20040008869
DE200460046809T
US20080197643
US20040822815
JP20040118514
CN200410043041
KR20040025633
TW20040110455

Priorität: JP20030110853 20030415
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US20080197643 20080825

Patentfamilie: [EP1468785B8](#)
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[KR20040090469A](#)
[KR101089466B1](#)
[TW200507982A](#)
[TWI325801B](#)

Anmelder: JSR CORP

Erfinder: GEN MIHARA
HASEGAWA TORU
KOU HASEGAWA
MIHARA IWAO
SAKURAI FUJIO
YOSHINORI IGARASHI
ZENNORI IGARASHI

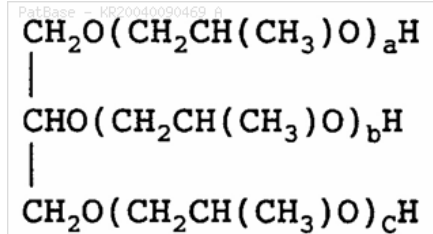
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B24D0011-00
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B24D0018-00
C08G0018-10
C08G0018-28
[C08J0005-14](#)
C08L0075-04
C09K0003-14
H01L0021-304

CPC-Notationen: A63F0009-0098
B24B0037-24
[B24D0003-342](#)
B24D0018-00
G06C0001-00
G09B0019-02
G09B0019-22



Zusammenfassung:

Source: US2004224622 AA [EN] There are provided a polishing pad which exhibits excellent polishing stability and excellent slurry retainability during polishing and even after dressing, can prevent a reduction in polishing rate effectively and is also excellent in an ability to flatten an substrate to be polished, and a method for producing the polishing pad. The method comprises dispersing water-soluble particles such as beta-cyclodextrin into a crosslinking agent such as a polypropylene glycol so as to obtain a dispersion, mixing the dispersion with a polyisocyanate such as 4,4'-diphenylmethane diisocyanate and/or an isocyanate terminated urethane prepolymer, and reacting the mixed solution so as to obtain a polishing pad having the water-soluble particles dispersed in the matrix



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 108

Titel: POLISHING PAD

Patentnummer: [EP1418021B1](#)

Anmeldung: EP20030025202
DE20036025925T
US20030700554
JP20070228264
JP20020321856
CN200310120349
KR20030077870
TW20030130950

Priorität: JP20020321856 20021105
JP20070228264 20070903

Patentfamilie: [EP1418021B1](#)
[EP1418021A1](#)
[DE60325925D1](#)
[US6992123B2](#)
[US2004118051A1](#)
[JP2007326217A2](#)
[JP2004158581A2](#)
[JP4798103B2](#)
[JP4039214B2](#)
[CN1498723A](#)
[CN100443263C](#)
[KR20040040374A](#)
[KR100681980B1](#)
[TW200414967A](#)
[TWI264344B](#)

Anmelder: JSR CORP

Erfinder: HASEGAWA KUO
HASEGAWA TORU
HIROMI AOI
KAWAHASHI NOBUO
KOJI SHIO
KOU HASEGAWA
SHIHO HIROSHI
SHIHO KOUJI

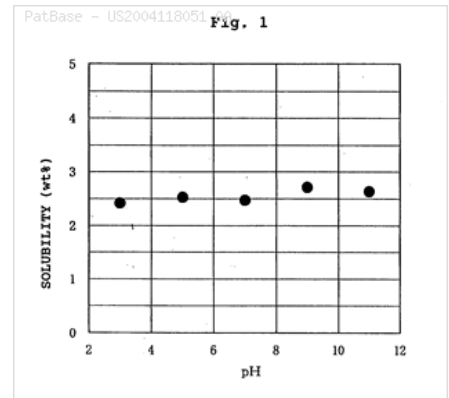


IPC-Notationen: B24B0037-00
B24B0037-24
B24D0003-32
[B24D0003-34](#)
[C08J0005-14](#)
C08L0001-00
C08L0001-26
C08L0003-00
C08L0005-00
C08L0009-00
C08L0047-00
C08L0089-00
C08L0101-00
H01L0021-30
H01L0021-304

CPC-Notationen: B24B0037-24
B24D0003-32
[B24D0003-344](#)
C09K0003-1436

Zusammenfassung:

Source: US2004118051 AA [EN] A polishing pad of the present invention contains a water-insoluble matrix material comprising a crosslinked polymer such as a crosslinked 1,2-polybutadiene and water-soluble particles dispersed in the material, such as saccharides. The solubility of the water-soluble particles in water is 0.1 to 10 wt percent at 25 degrees centigrade, and the amount of water-soluble particles eluted from the pad when the pad is immersed in water is 0.05 to 50 wt percent at 25 degrees centigrade. Further, in the polishing pad of the present invention, the solubility of the water-soluble particles in water is 0.1 to 10 wt percent at 25 degrees centigrade at a pH of 3 to 11, and solubility thereof in water at 25 degrees centigrade at a pH of 3 to 11 is within ± 50 percent of solubility thereof in water at 25 degrees centigrade at a pH of 7. In addition, the water-soluble particles contain an amino group, an epoxy group, an isocyanurate group, and the like. This polishing pad has good slurry retainability even if using slurries different in pH and also has excellent polishing properties such as a polishing rate and planarity.



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 109

Titel: **ABRASIVE** ARTICLES AND METHODS OF MAKING AND USING THE SAME

Patentnummer: [WO2004012906A1](#)

Anmeldung: WO2003US16605
EP20030731382
DE20036017068T
US20020211755
JP20040525983T
AU20030240787
CN20038018459
AT20030731382T
BR2003PI12984

Priorität: US20020211755 20020802
WO2003US16605 20030528

Patentfamilie: **WO2004012906A1**
EP1525074B1
EP1525074A1
DE60317068T2
DE60317068D1
US6755878B2
US2004020133A1
JP2005534511T2
AU2003240787A1
CN1671511A
CN100352607C
AT376478E
BRPI0312984A

Anmelder: 3M INNOVATIVE PROPERTIES CO

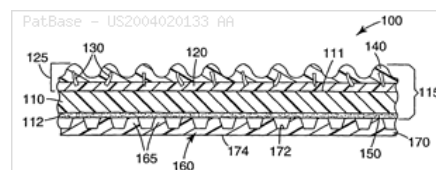
Erfinder: FOLLENSBEE ROBERT A
PAXTON RICHARD R
PAXTON RICHARD T
SLAMA DAVID F
SWANSON MARK A

IPC-Notationen: B24B0037-00
B24D0011-00
B24D0011-02

CPC-Notationen: B24D0011-02

Zusammenfassung:

Source: US2004020133 AA [EN] **Abrasive** articles have an adhesive layer in contact with a liner having protrusions that contact the adhesive layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 110

Titel: GRANULAR **ABRASIVE** MATERIAL

Patentnummer: [DE3604848C2](#)

Anmeldung: DE19863604848
US19930022743
JP19860276904
GB19860027768
FR19860016219
AT19860002748
CH19860004185
IT19860085645
NL19860003018
NO19860004194
SE19860004512

Priorität: DE19863604848 19860215
US19860942263 19861216
US19890302122 19890126
US19900518336 19900507
US19910713006 19910610
US19920938508 19920831
US19930022743 19930218

Patentfamilie: [DE3604848C2](#)
[DE3604848A1](#)
[US5259147A](#)
[JP62192480A2](#)
[JP2040277B4](#)
[JP1612740C3](#)
[GB2186588B2](#)
[GB2186588A1](#)
[GB8627768A0](#)
[FR2594433B1](#)
[FR2594433A1](#)
[AT394857B](#)
[AT274886A](#)
[CH667082A](#)
[IT1201911A](#)
[IT8685645A0](#)
[NL8603018A](#)
[NO864194L](#)
[NO167972C](#)
[NO167972B](#)
[NO864194A](#)
[NO864194A0](#)
[SE8604512L](#)
[SE464872C](#)
[SE464872B](#)
[SE8604512A0](#)

Anmelder: FUERAI SHIYUMIRUGERU AND MAS FAB
FUERAI SHIYUMIRUGERU AND MASCHF
FUERAI SHUMIRUGERU UNTO MAS FA
SCHMIRGEL U MASCH FABR VER
VER SCHMIRGEL AND MASCHF
VER SCHMIRGEL U MASCHINEN FABR



Erfinder: BIGORAJSKI GUENTER DR RER NAT
BIGORAJSKI GUNTER
BUORUFUGANGU FUARUTSU
EXNER HERBERT DR RER NAT
FALZ WOLFGANG DR ING
GIYUNTERU BIGORAJISUKII
HERUBERUTO EKUSUNERU

IPC-Notationen: B24B0037-00
C04B0035-10
C04B0035-18
C09C0001-68
C09K0003-14

CPC-Notationen: C09K0003-1418
Y10T0428-24413

Zusammenfassung:

Source: US5259147 A [EN] A granular **abrasive** material is produced from a dispersion consisting of raw materials containing alumina, compounds containing silica and other **additives**. The dispersion is ground to a sinterable slip with a grain size of less than 1 micrometer. The slip is dried and may be pressed before being subjected to a multi-stage heating process to produce sintered corundum crystals

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 111

Titel: FIXED **ABRASIVE** PAD WITH SURFACTANT FOR CHEMICAL **MECHANICAL** PLANARIZATION

Patentnummer: [WO2011142986A1](#)

Anmeldung: WO2011US34439
US20110696908
JP20130510126T
CN201180023624
KR20127031934
TW20110116384
SG20120083150

Priorität: US20100333351P 20100511
US20110696908 20110429
WO2011US34439 20110429

Patentfamilie: [WO2011142986A1](#)
[US2013059506A1](#)
[JP2013526777T2](#)
[CN102892553A](#)
[CN102892553B](#)
[KR20130081229A](#)
[TW201213121A](#)
[TWI532597B](#)
[SG185523A1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
BARAN JR JIMMIE R
QIAN JULIE Y

Erfinder: BARAN JIMMIE RAE JR
BARAN JR JIMMIE R
QIAN JULIE YU

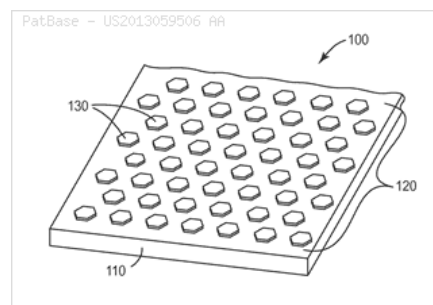
IPC-Notationen: B24B0037-04
B24B0037-24
B24B0037-26
[B24D0003-34](#)
B32B0027-18
H01L0021-304

CPC-Notationen: B24B0037-245
B24B0037-26
[B24D0003-344](#)



Zusammenfassung:

Source: US2013059506 AA [EN] A fixed **abrasive** pad (100) in the form of a structured **abrasive** article is provided that has a structured **abrasive** layer (120) disposed on a backing (110). The structured **abrasive** layer (120) includes a polymeric binder, **abrasive** particles dispersed in the binder and a nonionic polyether surfactant dispersed in the binder. The **abrasive** particles have a mean particle size of less than 200 nm and the surfactant is in the binder in an amount of from 0.75 to 2.2 weight percent based upon the total weight of the structured **abrasive** layer. A method of abrading a workpiece using the provided fixed **abrasive** pad is also provided



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 112

Titel: ABRASIVE MEANS AND A GRINDING PROCESS

Patentnummer: WO9908837A1

Anmeldung: WO1998DK00350
EP19980938594
DE19986006029T
US20000485730

Priorität: DK19970000943 19970815
WO1998DK00350 19980814

Patentfamilie: WO9908837A1
EP1017540B1
EP1017540A1
DE69806029T2
DE69806029D1
US6435958B1

Anmelder: DAMGAARD MORTEN J
OEDING PER BUUS
STRUERS AS RODOVRE

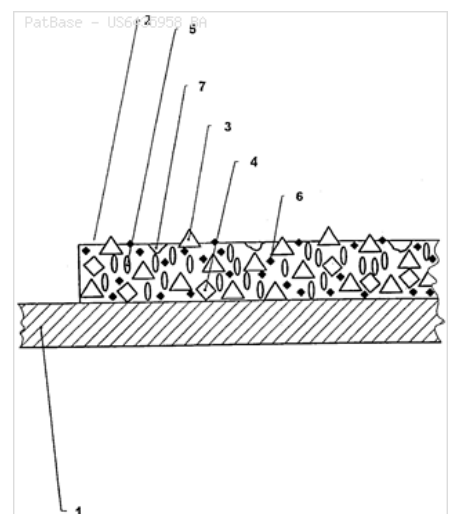
Erfinder: DAMGAARD MORTEN J
ODING PER BUUS
OEDING PER BUUS

IPC-Notationen: B24B0037-04
B24B0037-24
B24B0053-00

CPC-Notationen: B24B0037-245
B24D0011-02

Zusammenfassung:

Source: US6435958 BA [EN] An abrasive element for grinding samples during supply of liquid lubricant includes a layer of binding agent containing grains of a grinding agent and particles of an organic acid, the organic acid being soluble in the lubricant and the particles thereof having sizes of 5 to 250 and mum



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 113

Titel: **ABRASIVE** ARTICLE WITH IMPROVED PACKING DENSITY AND **MECHANICAL** PROPERTIES AND METHOD OF MAKING



Patentnummer: [WO2010075050A3](#)

Anmeldung: WO2009US67960
EP20090835567
US20090624572
CA20092760866
AU20090330425
TW20090143274
AR2009P105075
TH20091005794

Priorität: US20080140289P 20081223
US20090624572 20091124
WO2009US67960 20091215

Patentfamilie: **WO2010075050A3**
WO2010075050A2
EP2406039A4
EP2406039A2
US8523968B2
US2010154316A1
CA2760866A
AU2009330425A1
TW201024028A
TWI418440B
AR074877AA
TH109315A

Anmelder: FIFE JOEL ALAN
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
ZUYEV KONSTANTIN S

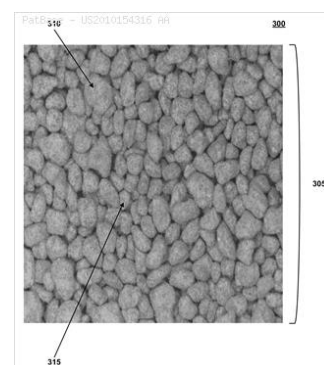
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ZUYEV KONSTANTIN S

IPC-Notationen: B24B0037-04
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B24D0003-34
B24D0018-00
B24D0099-00
B32B0027-14
C09C0001-68
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-001
B24D0018-00
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2010154316 AA [EN] An **abrasive** article with improved packing density and **mechanical** properties and method of making are **disclosed**. A method of making an **abrasive** mix with improved processability facilitates improved packing density, resulting in **abrasive** articles with improved **mechanical** properties



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 114

Titel: POROUS POLISHING PAD AND PROCESS FOR PRODUCING THE SAME

Patentnummer: [US2019314954A1](#)

Anmeldung: US20190385653
JP20190077738
CN201910305360
KR20180044465
TW20190113212

Priorität: KR20180044465 20180417
JP20190077738 20190416

Patentfamilie: [US2019314954A1](#)
[JP2019188594A2](#)
[CN110385641A](#)
[KR20190121009A](#)
[KR102054309B1](#)
[TW201943774A](#)

Anmelder: SK C AND C
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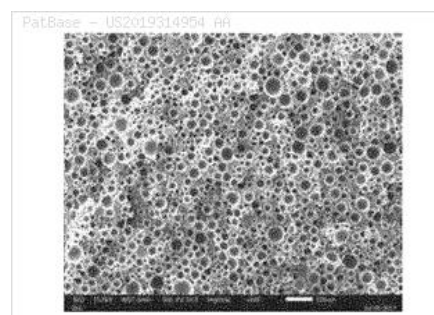
Erfinder: AHN JAE IN
HEO HYE YOUNG
SEO JANG WON
YUN JONG WOOK
YUN SUNG HOON

IPC-Notationen: B24B0037-20
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B24B0037-24
B24D0003-28
B24D0003-32
[B24D0003-34](#)
B24D0011-00
B24D0018-00
B29C0039-02
C08G0018-10
[C08J0005-14](#)
C08J0009-04
C08J0009-32
C08L0075-04
H01L0021-304

CPC-Notationen: B24B0037-20
B24B0037-22
B24B0037-24
B24D0003-28
[B24D0003-348](#)
B24D0011-005
B24D0018-0009
B29C0039-02
C08G0018-10
C08J0009-04
C08J0009-32
C08J2203-22
C08J2205-044
C08J2205-048
C08J2207-00
C08J2375-04
H01L0021-304
H01L2924-069

Zusammenfassung:

Source: US2019314954 AA [EN] Embodiments relate to a porous polishing pad for use in a chemical [mechanical](#) planarization (CMP) process of semiconductors and a process for preparing the same. According to the embodiments, the size and distribution of the plurality of pores contained in the porous polishing pad can be adjusted in light of the volume thereof. Thus, the plurality of pores have an apparent volume-weighted average pore diameter in a specific range, thereby providing a porous polishing pad that is excellent in such physical properties as polishing rate and the like



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 115

Titel: **ABRASIVE** MATERIAL AND PRODUCTION METHOD OF **ABRASIVE** MATERIAL

Patentnummer: [WO2016067857A1](#)

Anmeldung: WO2015JP78401
US20150522780
JP20160512716T
CN201580057685
KR20177014055
TW20150133783

Priorität: JP20140219748 20141028
WO2015JP78401 20151006

Patentfamilie: **WO2016067857A1**
[US10456888B2](#)
[US2017312886A1](#)
[JP2016067857A1](#)
[JP6091704B1](#)
CN107073688A
[KR20170073678A](#)
[KR101944695B1](#)
[TW201621025A](#)

Anmelder: BANDO CHEMICAL IND

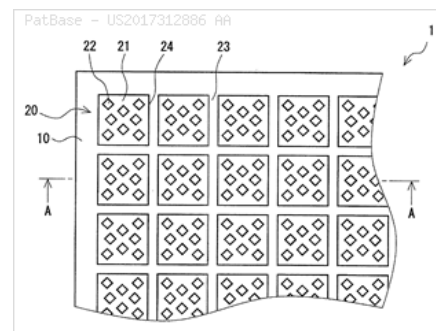
Erfinder: IWANAGA TOMOKI
MUKAI FUMIHIRO
SAITO KAZUO
TAKAGI DAISUKE
TAURA TOSHIKAZU

IPC-Notationen: B24B0037-24
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B24D0003-10
B24D0003-14
B24D0003-34
B24D0011-00
B24D0018-00
C08J0005-14
C09K0003-14

CPC-Notationen: B24B0037-24
B24D0003-04
B24D0003-10
B24D0003-14
B24D0011-00
B24D0018-0045
B24D0018-0072

Zusammenfassung:

Source: US2017312886 AA [EN] It is an object of the present invention to provide an **abrasive** material which enables: processing efficiency and finished planarity of a substrate material to be simultaneously improved at a high level; polishing costs to be reduced; and a difficult-to-process substrate composed of sapphire or silicon carbide to be polished efficiently and precisely. An **abrasive** material comprises a substrate and an **abrasive** layer laminated on a front face side of the substrate, wherein the **abrasive** layer includes a binder containing an inorganic substance as a principal component, and **abrasive** particles dispersed in the binder, wherein a front face of the **abrasive** layer comprises a plurality of regions provided through dividing by grooves, and wherein a maximum peak height (R_p) on the front face of the **abrasive** layer is no less than 2.5 micro m and no greater than 70 micro m



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 116

Titel: **ABRASIVE** PRODUCTS AND METHODS FOR FINISHING SURFACES

Patentnummer: [WO2013138765A1](#)

Anmeldung: WO2013US32402
US20130839921
GB20170016227
GB20140018275
CA20132867350
CN201380011959
CH20140001313
MX20140010552
RU20140140666

Priorität: US20120611811P 20120316
US20120611881P 20120316
US20130839921 20130315
WO2013US32402 20130315

Patentfamilie: **WO2013138765A1**
US9138867B2
US2013298471A1
GB2515946B2
GB2515946A1
GB201716227A0
GB201418275A0
CA2867350C
CA2867350A
CN104144769A
CH708019B1
MX353248B
MX2014010552A1
RU2595788C2
RU2014140666A

Anmelder: CAI YING
MANNING JAMES J
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SENT GOBEN EBREJZIVS INK
WANG JIANNA

Erfinder: CAL YING
MANNING JAMES J
WANG JIANNA
YING CAI

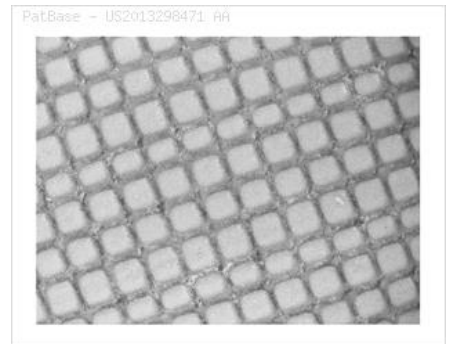
IPC-Notationen: B24B0037-24
B24D0003-00
B24D0003-04
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B24D0011-00
B24D0018-00
C09C0001-68
C09K0003-14

CPC-Notationen: B24B0037-245
B24D0003-28
C09K0003-1436



Zusammenfassung:

Source: US2013298471 AA [EN] An engineered coated **abrasive** product having a three dimensional pattern of **abrasive** structures formed by embossing an **abrasive** slurry formulation that was first surface coated with a functional powder, wherein the **abrasive** slurry includes green, unfired **abrasive** aggregates having a generally spheroidal or toroidal shape, the aggregates formed from a composition comprising **abrasive** grit particles and a nanoparticle binder. The coated **abrasive** product is capable of finishing and repairing defects in surfaces, including coated surfaces



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 117

Titel: **ABRASIVE** ARTICLE, **ABRASIVE** SYSTEM AND METHOD FOR USING AND FORMING SAME

Patentnummer: [WO2020206382A1](#)

Anmeldung: WO2020US26754
US20200840312

Priorität: IN201941013460 20190403

Patentfamilie: [WO2020206382A1](#)
[US2020316754A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: JAYARAM ROBIN CHANDRAS
THANGAMANI ARUNVEL

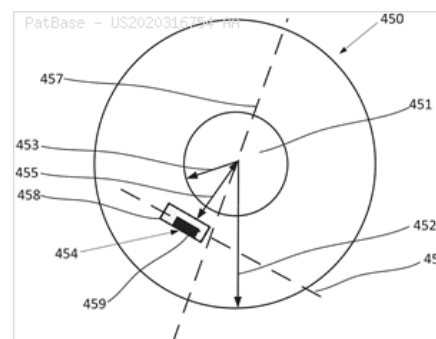


IPC-Notationen: B24B0049-10
B24D0003-10
B24D0003-34
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0003-10
B24D0003-346
B24D0011-001

Zusammenfassung:

Source: US2020316754 AA [EN] An **abrasive** article includes a body and an electronic assembly coupled to the body, the electronic assembly including an electronic device, and a first portion between the body and the communication device, the first portion having a material of an average relative magnetic permeability of not greater than 15



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 118

Titel: DIAMOND **TOOL** - USING METAL COATED DIAMONDS THE METAL CONTG ABRASION AND FRICTION REDUCING **ADDITIVES**

Patentnummer: [DE2109787A1](#)

Anmeldung: DE19712109787
FR19720005778
BE19720779536
IT19720020568
NL19720002728

Priorität: DE19712109787 19710302

Patentfamilie: **DE2109787A1**
FR2127672A5
BE779536A
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NL7202728A

Anmelder: WINTER AND SOHN ERNST

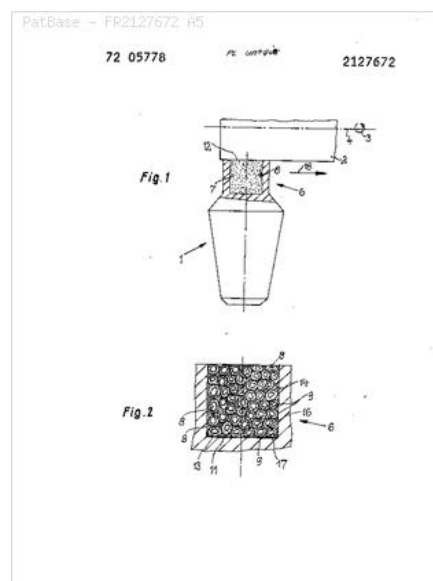
Erfinder: WIEMANN H J



IPC-Notationen:	B24B0053-12 B24D0003-04 B24D0003-10 B24D0003-34 B24D0007-00 B24D0018-00 C09K0003-14	CPC-Notationen:	B24B0053-12 B24D0003-10 B24D0003-342 B24D0003-348 B24D0007-00 B24D0018-00 C09K0003-1445
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Zusammenfassung:

Source: FR2127672 A5 [EN] **Tool** for **cutting** shavings, esp. an **abrasive disc** made with diamond or from nitride particles coated with a metal and embedded in a soft metal wherein the coating metal contains SiC as abrasion resistant **additive** and graphite to resist friction. The soft metal **filler** is esp. Ag



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 119

Titel: **ABRASIVE** ARTICLES AND METHODS FOR MAKING SAME

Patentnummer: [WO2006112909A1](#)

Anmeldung: WO2006US02836
WO2006US02835
EP20060719620
EP20060719619
DE200660016091T
DE200660010822T
US20090563888
US20070962002
US20060342329
US20060342242
JP20080506445T
JP20070553241T
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KR20077026424
KR20077019702
TW20060103324
TW20060103322
AR2006P100321
AR2006P100322
AT20060719619T
AT20060719620T
BR2006PI07298
BR2006PI08177
CL20060000183
CL20060000184
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Priorität: US20050648168P 20050128
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Patentfamilie: WO2006112909A1
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RU2007137995A
TH81369A
TH81943A
UA86300C2
ZA200705903A

Anmelder:

GAETA ANTHONY C
RICE WILLIAM C
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIFS TECH
SAINT GOBAIN ABRASIVES INC
SEHNT GOBEHN EHBREJZIVS INK
YOU XIAORONG

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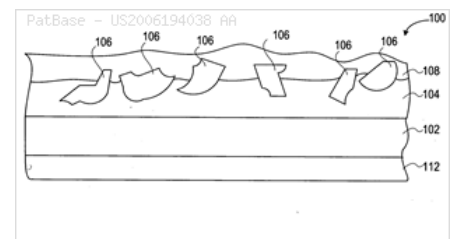
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YOU XIAO RONG

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 C09K0003-14

CPC-Notationen:
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 B24D0011-001
 B24D2203-00
 B82Y0030-00
 B82Y0040-00
 C08J0005-005
 Y10T0428-25

Zusammenfassung:

Source: US2006194038 AA [EN] The **disclosure** is directed to a radiation curable composition including **abrasive** grains and a binder composition. The binder composition includes about 10 wt percent to about 90 wt percent cationically polymerizable compound, not greater than about 40 wt percent radically polymerizable compound, and about 5 wt percent to about 80 wt percent particulate **filler** based on the weight of the binder composition. The particulate **filler** includes dispersed submicron particulates



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 120

Titel: METAL-COATED CUBIC BORON NITRIDE **ABRASIVE** GRAIN, PRODUCTION METHOD THEREOF, AND RESIN BONDED **GRINDING WHEEL**

Patentnummer: [WO2004061041A1](#)

Anmeldung: WO2004JP00015
EP20040700295
DE200460027757T
US20040751116
JP20050507666T
CN200480001827
KR20057012496
AT20040700295T
PT20040700295T
ZA20050004865

Priorität: JP20030000448 20030106
US20030440385P 20030116
US20040751116 20040105
WO2004JP00015 20040106
WO2004JP00015 20050701

Patentfamilie: **WO2004061041A1**
EP1702969B1
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EP1702969A4
DE602004027757D1
US7097678B2
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KR20050088151A
KR100724678B1
AT471361E
PT1702969T
ZA200504865A

Anmelder: IHARA EIJI
OTSUBO HIROHIKO
SHIMIDZU TATSUYA
SHOWA DENKO KK

Erfinder: IHARA EIJI
OTSUBO HIROHIKO
SHIMIDZU TATSUYA
TATSUYA OHTSUBO HIROHIKO IHARA

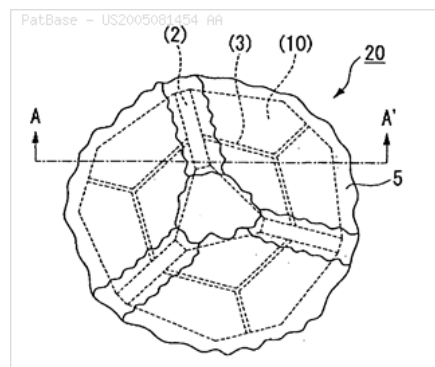


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C09K
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CPC-Notationen: B22F0001-025
B22F2999-00
B24D0003-06
C04B0035-62842
C04B2235-386
C04B2235-52
C04B2235-5418
C04B2235-762
C09K0003-14
C09K0003-1409
C22C0001-053
C23C0018-1635
C23C0018-1651
C23C0018-1653
C23C0018-1865
C23C0018-1882
C23C0018-32
C25D0007-00

Zusammenfassung:

Source: US2005081454 AA [EN] A metal-coated cubic boron nitride **abrasive** grain obtained by forming grooves, in which the ratio (w/d) of the width (w) to the depth (d) is less than 1, and the ratio (w/L) of the width (w) to the length (L) is less than 0.1, on the surface of a cubic boron nitride **abrasive** grain. In this cubic boron nitride **abrasive** grain, the retention force (bonding strength) between the metallic coating and the cubic boron nitride **abrasive** grain is improved; therefore, it is possible to fabricate a resin bonded **grinding wheel**, in which a high **grinding** ratio (long **life**) and a low **grinding** power (superior **grinding** performance) are achieved, using such cubic boron nitride **abrasive** grains



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 121

Titel: Vitreous **grinding tool** containing metal coated **abrasive**

Patentnummer: [WO9737815A1](#)

Anmeldung: WO1997US06274
EP19970918647
DE19976009080T
US19960670857
JP19970536540T
JP19970536540
CA19972246726
AU19970026704
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ZA19970002907

Priorität: US19960015112P 19960410
US19960670857 19960628
WO1997US06274 19970407

Patentfamilie: **WO9737815A1**
EP0892696B1
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ZA9702907A

Anmelder: NORTON CO
SAINT GOBAIN ABRASIVES INC

Erfinder: LEE ROUNAN
LI ROUNAN

IPC-Notationen: B24D
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B24D0003-14
B24D0003-18
B24D0005-06
C09K
C09K0003-14

CPC-Notationen: **B24D0003-18**
C09K0003-1445



Zusammenfassung:

No clipped image for: AT210536 E

Source: US5607489 A [EN] A vitreous bonded **abrasive tool** comprises 12 to 50 percent bond, 5 to 50 percent metal coated superabrasive, at least 10 percent porosity and 2 to 20 percent solid lubricant. The **abrasive tool** containing titanium or nickel coated diamond is particularly effective in **grinding** ceramic material, such as sapphire

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 122

Titel: METAL-COATED **ABRASIVES, GRINDING WHEEL** USING METAL-COATED **ABRASIVES** AND METHOD OF PRODUCING METAL-COATED **ABRASIVES**

Patentnummer: [WO03084717A1](#)

Anmeldung: WO2003JP04654
EP20030723106
DE20036045186
US20030509855
JP20020301214
AU20030230237
CN20038007719
KR20047015907
PT20030723106T
ZA20040007652

Priorität: JP20020108727 20020411
US20020372431P 20020416
JP20020301214 20021016
EP20030723106 20030411
WO2003JP04654 20030411
US20040509855 20040930

Patentfamilie: **WO03084717A1**
EP1497077B1
EP1497077A1
EP1497077A4
DE60345186D1
US2005129975A1
JP2004001165A2
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PT1497077T
ZA200407652A

Anmelder: IHARA EIJI
SHOWA DENKO K K

Erfinder: IHARA EIJI

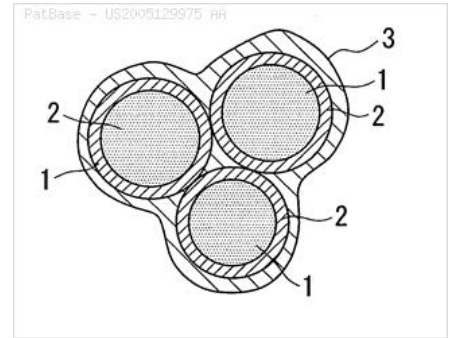
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C09K0003-14

CPC-Notationen: **B24D0003-00**
B24D0003-06
B24D0005-00
B24D0018-0018
C09K0003-14
C09K0003-1445
C25D0005-08
Y10T0428-12931



Zusammenfassung:

Source: US2005129975 AA [EN] The present invention provides an **abrasive** which can attain a sufficient retention force in a resinoid **grinding wheel** even in the case of a small grain size. The **abrasive** is produced by bonding plural **abrasive** grains coated with a metal layer by a metal. The metal layer is made of the metal selected from the group consisting of nickel, nickel-phosphorus, cobalt, cobalt-phosphorus, titanium, copper, chromium, iron, zirconium, niobium, **molybdenum** and tantalum. Also the **abrasive** grains are made of at least one selected from the group consisting of hard substances such as cubic boron nitride, diamond, alumina and silicon carbide, each having an average grain size within a range from 0.5 to 300 μm



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 123

Titel: **ABRASIVE TOOL** AND METHOD FOR PRODUCING AN **ABRASIVE TOOL** OF THIS KIND

Patentnummer: [WO2017032396A1](#)

Anmeldung: WO2015EP69267
EP20150753683
DE201550009455T
US20150754071
JP20180508653T
CA20152995886
AU20150407196
CN201580082378
KR20187007219
BR20181103397
ES20150753683T
HK20180112967
IL20150257184
IN201847009644
MX20180001646
PL20150753683T
RU20180104543
TR20190014122T

Priorität: EP20150753683 20150821
WO2015EP69267 20150821

Patentfamilie: **WO2017032396A1**
[EP3337643B1](#)
[EP3337643A1](#)
[DE502015009455D1](#)
[US2020047315A2](#)
[US2018243885A1](#)
[JP6684895B2](#)
[JP2018528866T2](#)
[CA2995886A](#)
[AU2015407196A1](#)
CN107921610A
[KR20180042290A](#)
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[HK1253841A1](#)
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[IN201847009644A](#)
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[RU2689834C9](#)
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[TR201914122T4](#)

Anmelder: AUGUST R GGEBERG GMBH AND CO KG
AUGUST RUGGERBERG GMBH AND CO KG
PFERD MILWAUKEE BRUSH CO INC
RUEGGERBERG AUGUST GMBH AND CO KG

Erfinder: SHTUKENKHOLTS BERND
STUCKENHOLZ BERND
VALDER PETER
WALDER PETER

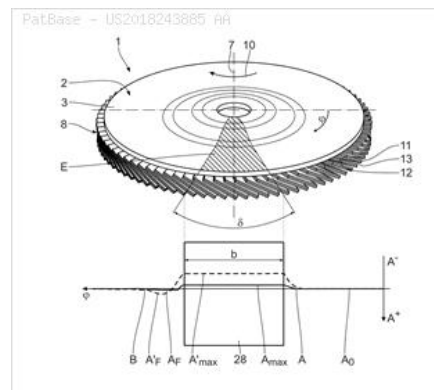


IPC-Notationen: B24D
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B24D0013-06
B24D0013-16

CPC-Notationen: B24D0003-34
B24D0003-348
B24D0013-04
B24D0013-06
B24D0013-16

Zusammenfassung:

Source: US2018243885 AA [EN] An **abrasive tool** includes a support, on which a plurality of **abrasive** flaps is arranged. The **abrasive** flaps each have a base and **abrasive** material, which is attached to the base by means of a binder. To increase the useful **life** and total material abrasion, the **abrasive** flaps are reinforced by a cured filling resin. The reinforcement of the **abrasive** flaps reduces the cyclical deflection thereof around a zero position due to workpiece machining, thereby avoiding increased wear on the **abrasive** flaps



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 124

Titel: A GRINDSTONE

Patentnummer: [WO8905712A1](#)

Anmeldung: WO1987FI00169
EP19880900370
JP19870500562T
FI19900002946
NO19900002651

Priorität: WO1987FI00169 19871215
FI19900002946 19900612

Patentfamilie: [WO8905712A1](#)
[EP0390775A1](#)
[JP3502554T2](#)
[FI902946A0](#)
[NO902651L](#)
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Anmelder: PARTEK AB

Erfinder: KEPPON MARTTI
NURMI TOIVO
PALM CARL OLOF
SUNDEN FRED

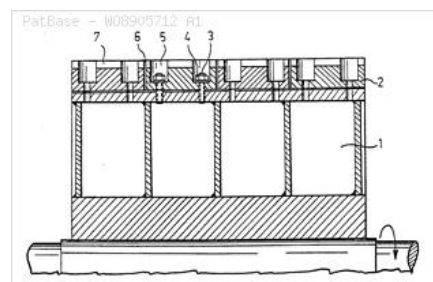


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[B24D0003-34](#)
B24D0018-00
C04B0014-02
C04B0014-04
C04B0014-38

CPC-Notationen: B24D0003-12
[B24D0003-346](#)
B24D0018-0009

Zusammenfassung:

Source: WO8905712 A1 [EN] The invention relates to a grindstone for production of ground-wood pulp. The **grinding** surface is formed by **grinding** grits and a concrete matrix binding together the grits. The matrix comprises a cement mixture, and the hardness of the cement mixture in relation to the grits is so controlled that the **grinding** surface is self-sharpening during the **grinding** process. The invention is also concerned with a method for the manufacture of a casting mixture for a grind-stone. The method comprises the steps of mixing together water and a slowhardening, sulphate-resisting low-heat Portland cement mixture, the water/cement ratio being about 0.30 to 0.35; effecting the rheology of the casting mixture by a plasticizing agent instead of excess water; and compacting the mixture by stirring, vibrating, compressing or in some other way



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 125

Titel: Composite **abrasive-articles** and manufacturing method therefor

Patentnummer: [US5011510A](#)

Anmeldung: US19890410591
JP19880252252

Priorität: JP19880252252 19881005

Patentfamilie: [US5011510A](#)
[JP2180561A2](#)
[JP2601333B2](#)

Anmelder: MITSUI MINING AND SMELTING CO

Erfinder: HAYAKAWA IZUMI
SOBOI HIROSHI
UBAGAI HIROSHI

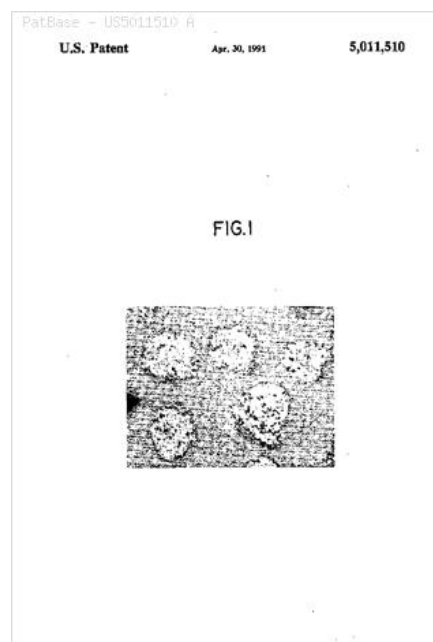


IPC-Notationen: [B24D0003-00](#)

CPC-Notationen: B22F0001-0096
[B24D0003-06](#)
B24D0003-14
C22C0026-00

Zusammenfassung:

Source: US5011510 A [EN] A composite **abrasive-articles** according to the present invention is obtained by: mixing diamond pieces of **abrasive** articles or cubic boron nitride pieces of **abrasive** articles and metal powder, molding this mixture into a uniformed small piece of **abrasive** articles, then or simultaneously with this molding, completely sintering the uniform small piece of **abrasive** articles after the molding, and mixing the completely sintered piece of **abrasive** articles after the sintering with resin, metal or glass of a low melting point so as to be solidified into a predetermined shape. In the composite **abrasive-article** of this type, the completely sintered piece of abrasion articles made of the diamond pieces of abrasion articles or cubic boron nitride piece of **abrasive** articles and metal powder is dispersed and solidified in a matrix made of either resin, metal, or glass having a low melting point. The composite **abrasive-articles** are preferably used for **grinding**, polishing, and/or **cutting** metal, ceramics, stone, or the like



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 126

Titel: BONDED **ABRASIVE** ARTICLE AND METHOD OF FORMING

Patentnummer: [WO2012031229A3](#)

Anmeldung: WO2011US50384
EP20170186154
EP20110822738
DE201160040690T
US20170592406
US20150984576
US20140221515
US20110225114
JP20160051339
JP20140146575
JP20130527346T
CA20112809435
CN201610416800
CN201180042265
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TW20150103963
TW20110131580
AR2011P103210
BR20131105026
IN2013DN02285
IN201818047813
MX20130002251

Priorität: US20100379920P 20100903
US20100379920P 20100930
CN201180042265 20110902
EP20110822738 20110902
IN2013DN02285 20110902
JP20130527346 20110902
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JP20140146575 20110902
US20110225114 20110902
WO2011US50384 20110902
US20140221515 20140321
US20150984576 20151230
JP20160051339 20160315
US20170592406 20170511

Patentfamilie: **WO2012031229A3**
WO2012031229A2
EP2611575B1
EP3272460A1
EP2611575A4
EP2611575A2
DE602011040690D1
US9676077B2
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US8715381B2
US10377017B2
US2017246726A1
US2016129553A1
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JP5584365B2



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Anmelder: RAMANATH SRINIVASAN
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 SAINT GOBAIN ABRASIVES INC
 SAUCIER KENNETH A
 UPADHYAY RACHANA

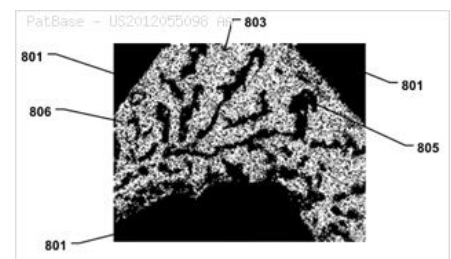
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CPC-Notationen: B24D0003-06
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 B24D0003-14
 B24D0003-342
 B24D0018-00
 B24D0018-009
 C09K0003-14
 C09K0003-1409

Zusammenfassung:

Source: US2012055098 AA [EN] An **abrasive** article includes a body having **abrasive** grains contained within a bond material comprising a metal or metal alloy, wherein the body comprises a ratio of VAG/VBM of at least about 1.3, wherein VAG is the volume percent of **abrasive** grains within the total volume of the body and VBM is the volume percent of bond material within the total volume of the body



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 127

Titel: **Abrasive** material for precision surface treatment and a method for the manufacturing thereof

Patentnummer: [WO9514553A1](#)

Anmeldung: WO1994IB00368
EP19940931671
DE19946016855T
DE19946016855
US19970823733
US19940342087
JP20050018892
JP19950514941T
CA19942177170
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CN19941094269
KR19960702738
RU19960113049

Priorität: BY19930001013 19931123
US19940342087 19941117
WO1994IB00368 19941121
US19970823733 19970325

Patentfamilie: **WO9514553A1**
EP0730513B1
EP0730513A1
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Anmelder: INZH TS PLAZMOTEG
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PLASMOTEG ENGINEERING CENTER
PLASMOTEG ENGINEERING CT
TEGO SCIENT AND ENGINEERING CE
TEGO SCIENT AND ENGINEERING CT O

Erfinder: AKULICH V V
AKULICH VALERII VLADIMIROVICH
AKULICH VALERII VLADMIRIOVICH
AKULICH VALERIJ VLADIMIROVICH
SALIFANOV O V
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TOCHITSKY E I
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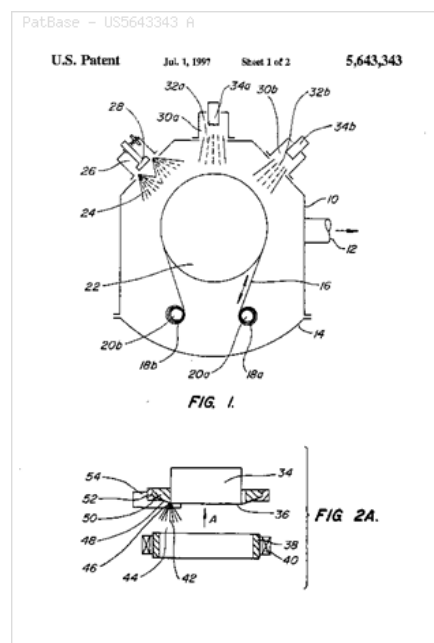


IPC-Notationen: **B24D0003-00**
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CPC-Notationen: **B24D0003-004**
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C23C0014-325

Zusammenfassung:

Source: US5643343 A [EN] An **abrasive** material is proposed which is useful for the precision treatment of surfaces. This material may be in the form of an **abrasive** layer adhered by chemical and/or physical bonds to a carrier, the latter preferably made of a flexible material such as plastic. Alternatively, the **abrasive** material may be in the form of a free **abrasive** without a carrier. The **abrasive** material may be in the form of a vacuum condensate consisting of at least 80 atomic percent of an ultradispersed composite superhard diamond-like substance, preferably containing carbon, and including not more than 0.1 atomic percent hydrogen and oxygen, combined. The **abrasive** material is preferably obtained from the pulse-flows of an accelerated electroerosive plasma



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 128

Titel: **ABRASIVE** COMPOSITION AND ARTICLE FORMED THEREFROM

Patentnummer: [WO2008112357A1](#)

Anmeldung: WO2008US53122
EP20080729112
DE200860020106T
US20080530699
JP20090553663T
CN200880007851
KR20097021210

Priorität: US20070894486P 20070313
EP20080729112 20080206
US20080530699 20080206
WO2008US53122 20080206

Patentfamilie: **WO2008112357A1**
EP2134510B1
EP2134510A1
DE602008020106D1
US8206473B2
US2010037531A1
JP5400625B2
JP2010521323T2
CN101636249A
CN101636249B
KR20100015491A
KR101391528B1

Anmelder: 3M INNOVATIVE PROPERTIES CO US
HUZINEC GARY MICHAEL
KOVAL WILLIAM FRANCIS

Erfinder: HUZINEC GARY MICHAEL
KOVAL WILLIAM FRANCIS

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-04
B24D0003-14
B24D0003-34
B24D0018-00
C09K0003-14

CPC-Notationen: B24D0003-14
B24D0003-342
B24D0018-0009
C09K0003-1409
C09K0003-1454



Zusammenfassung:

Source: US2010037531 AA [EN] An **abrasive** composition including vitreous binding material; **abrasive** material; and a dimensional stabilizing **additive** (DSA) , present in an amount that is from about 1 to about 40 volume percent of the **abrasive** composition, wherein the dimensionally stabilizing **additive** is inert to the binding material, and has a Mohs hardness of between 4 and 9, and wherein the **abrasive** composition does not include hollow sphere **fillers**. Also included is a method of making an **abrasive** articles, articles formed thereby; and articles formed from the **abrasive** compositions

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 129

Titel: COMPOSITE BOND **WHEEL** AND **WHEEL** HAVING RESIN BONDING PHASE

Patentnummer: [US6187069B1](#)

Anmeldung: US19990405220
JP19990249187
KR19990040639
TW19990116515
MY19990004119
TH19991003528

Priorität: JP19980272295 19980925
JP19980316650 19981106
JP19990249187 19990902

Patentfamilie: [US6187069B1](#)
[JP2000198075A2](#)
[JP3791254B2](#)
[KR20000023342A](#)
[KR100407227B1](#)
[TW425338B](#)
[MY131807A](#)
[TH27591B](#)
[TH40608A](#)

Anmelder: MITSUBISHI MATERIALS CORP

Erfinder: HOSHI JUNJI
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SAWADA YOSHIHIRO
SHAWATA YOSHIHIRO
SUZUKI KENICHI

IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
[B24D0003-06](#)
B24D0003-10
B24D0003-20
B24D0003-28
B24D0005-12
B24D0007-00

CPC-Notationen: [B24D0003-06](#)
B24D0003-28

Zusammenfassung:

Source: US6187069 BA [EN] The present invention provides a composite bond **wheel** that has both excellent wear resistance and self-edging properties. The composite bond **wheel** of the invention includes: a grain layer including **abrasive** grains and a bonding phase; wherein the bonding phase includes a metal bonding phase and a resin bonding phase, wherein said metal bonding phase includes a metal having the **abrasive** grains and outside-opening pores dispersed therein, and wherein at least a portion of the outside-opening pores are filled with a resin of the resin bonding phase



U.S. Patent Feb. 13, 2001 Sheet 1 of 3 US 6,187,069 B1

Fig.1

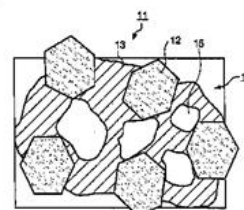
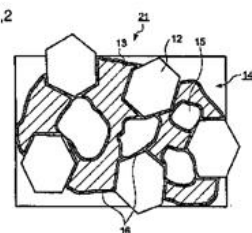


Fig.2



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 130

Titel: SUPER HARD ALLOY BASEPLATE OUTER CIRCUMFERENCE **CUTTING** BLADE AND MANUFACTURING METHOD THEREOF

Patentnummer: [WO2012073855A1](#)

Anmeldung: WO2011JP77311
EP20110844821
DE201160067182T
US20110990121
JP20150081469
JP20150081461
JP20110258631
JP20110258611
CN201180065608
KR20137016382
TW20110143755
PH20180500478
SG20130041520
TH20131002826

Priorität: JP20100264821 20101129
JP20100264828 20101129
EP20110844821 20111128
JP20110258611 20111128
JP20110258631 20111128
WO2011JP77311 20111128
JP20150081461 20150413
JP20150081469 20150413

Patentfamilie: **WO2012073855A1**
[EP2647469B1](#)
[EP2647469A1](#)
[EP2647469A4](#)
[DE602011067182D1](#)
US2013252521A1
[JP2015163431A2](#)
[JP2015155142A2](#)
[JP2012131017A2](#)
[JP2012131016A2](#)
[JP5967250B2](#)
[JP5967249B2](#)
[JP5776515B2](#)
[JP5776514B2](#)
[CN103313825A](#)
[CN103313825B](#)
KR20140005911A
[TW201238715A](#)
[TWI556913B](#)
[PH2018500478B](#)
[PH2018500478A](#)
[SG190924A1](#)
[TH75073B](#)
[TH135313A](#)

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SHINETSU CHEMICAL CO



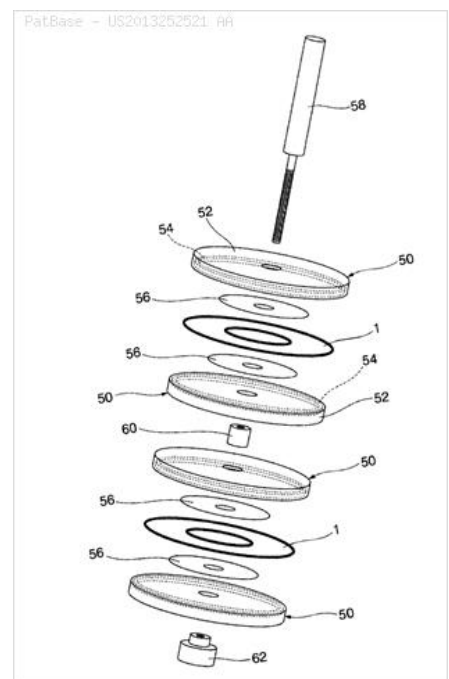
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IPC-Notationen: B24D0003-00
B24D0003-02
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B24D0003-28
B24D0003-30
B24D0003-34
B24D0005-12

CPC-Notationen: B24D0003-06
B24D0003-10
B24D0005-12

Zusammenfassung:

Source: US2013252521 AA [EN] The disclosed cemented carbide base outer blade cutting wheel comprises a base in the form of an annular thin disc of cemented carbide, and a blade section on the outer periphery of the base. The blade section contains: diamond and/or CBN abrasive grains pre-coated with a magnetic material; a metal or alloy bond formed by electroplating or electroless plating for bonding abrasive grains together and to the base; a resin infiltrated between abrasive grains and between abrasive grains and the base, said resin being a thermoplastic resin having a melting point of up to 350 degrees centigrade or a thermoset resin obtained by curing a liquid thermosetting resin composition having a curing temperature of up to 350 degrees centigrade. The method for manufacturing said outer blade cutting wheel is also disclosed.



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 131

Titel: VITREOUS BOND **ABRASIVE** ARTICLES AND METHODS OF MAKING THE SAME

Patentnummer: [WO2016210057A1](#)

Anmeldung: WO2016US38902
EP20160815259
US20160573326
JP20170566791T
CN201680036945

Priorität: US20150184695P 20150625
US20160573326 20160623
WO2016US38902 20160623

Patentfamilie: **WO2016210057A1**
[EP3313614A1](#)
[EP3313614A4](#)
[US2018104793A1](#)
[JP2018522746T2](#)
[CN107787264A](#)
[CN107787264B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: ADEFRI NEGUS B
ANDERSON THOMAS J
FRANKE CARSTEN
GIVOT MAIKEN
GOERS BRIAN D
KEIPERT STEVEN J
SMITHSON ROBERT L W

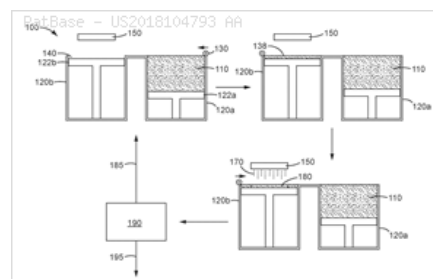


IPC-Notationen: **B24D0003-00**
B24D0003-02
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B24D0018-00
B29C0064-165

CPC-Notationen: **B24D0003-06**
B24D0003-14
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B24D0007-10
B24D0007-14
B24D0011-00
B24D0011-04
B24D0018-0009
B24D2203-00
B29C0064-165

Zusammenfassung:

Source: US2018104793 AA [EN] Methods of making vitreous bond **abrasive** articles and their precursors using powder bed jetting are **disclosed**. Vitreous bond **abrasive** articles prepared by the method include **abrasive** articles having arcuate or tortuous **cooling** channels, unitary structured **abrasive discs**, **abrasive** segments, shaped **abrasive** particles, and **abrasive wheels**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 132

Titel: SINTERED VITRIFIED SUPERFINISHING GRINDSTONE

Patentnummer: [WO2016157560A1](#)

Anmeldung: WO2015JP72213
US20150559716
JP20150075918

Priorität: JP20150075918 20150402
WO2015JP72213 20150805

Patentfamilie: [WO2016157560A1](#)
[US10589401B2](#)
[US2018257199A1](#)
[JP2016196050A2](#)
[JP6446313B2](#)

Anmelder: MIZUHO CO LTD
MIZUHO KK

Erfinder: MATSUMORI NOBORU
NABEMOTO TOSHIYUKI
NAKAZAWA TOSHIO

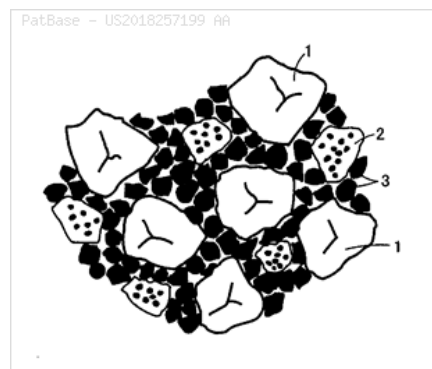
IPC-Notationen: [B24D0003-00](#)
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[B24D0003-06](#)
B24D0003-14
[B24D0003-18](#)
B24D0011-00
B24D0018-00
C09G0001-02
C09K0003-14

CPC-Notationen: [B24D0003-06](#)
[B24D0003-18](#)
B24D0018-0009
C09G0001-02
C09K0003-1418
C09K0003-1454



Zusammenfassung:

Source: US2018257199 AA [EN] A sintered vitrified superfinishing grindstone is provided which is a sintered product which is obtained by compression molding of a mixed powder of: a sinterable vitrified binder composed of a powder of a borosilicate glass composition; hard **abrasive** grains; and soft **abrasive** grains; and which includes bonded portions formed by necking due to heat compression, between particles of the powder of the borosilicate glass composition which are in contact with each other; and wherein the sinterable vitrified binder contains from 94 to 100 percent by mass of a powder composed of a low-melting-point borosilicate glass composition containing from 35 to 55 percent by mole of SiO₂; from 3 to 5 percent by mole of Al₂O₃; from 10 to 35 percent by mole of B₂O₃; and from 25 to 30 percent by mole of R₂O+R₀



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 133

Titel: BONDED **ABRASIVE** ARTICLES AND METHODS OF MANUFACTURE

Patentnummer: [WO2016081302A1](#)

Anmeldung: WO2015US60581
EP20150861920
DE201560047507T
US20190430669
US20150525457
JP20170527263T
CN201580063358
KR20177016570

Priorität: US20140083016P 20141121
EP20150861920 20151113
US20150525457 20151113
WO2015US60581 20151113
US20170525457 20170509
US20190430669 20190604

Patentfamilie: **WO2016081302A1**
[EP3221087B1](#)
[EP3221087A1](#)
[EP3221087A4](#)
[DE602015047507D1](#)
[US10350732B2](#)
[US2019283214A1](#)
[US2017334039A1](#)
[JP6758780B2](#)
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[CN107000168A](#)
[CN107000168B](#)
[KR20170086588A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

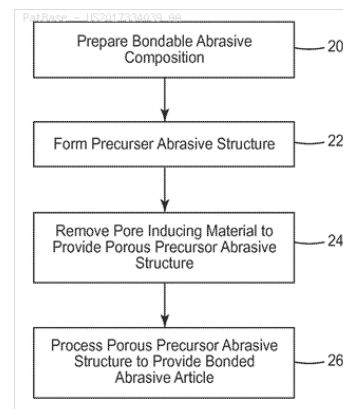
Erfinder: LUKOWSKI MARK A

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B24D0003-34
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C09K0003-14

CPC-Notationen: **B24D0003-18**
B24D0003-32
B24D0003-342
B24D0018-00
B24D0018-0009
B24D0018-0072
C09K0003-1409

Zusammenfassung:

Source: US2017334039 AA [EN] Methods for manufacturing bonded **abrasive** articles, for example vitrified bonded **grinding wheels**. A bondable **abrasive** composition is prepared including **abrasive** particles, a binder medium and a gamma-pyrone pore inducing material, such as ethyl maltol. A precursor **abrasive** structure is formed from the composition. The gamma-pyrone pore inducing material is removed from the precursor **abrasive** structure to provide a porous precursor **abrasive** structure that is further processed to provide a bonded **abrasive** article. In some embodiments, the binder medium includes a vitreous bonding material, and the bonded **abrasive** article is a porous vitrified bonded **grinding wheel**.



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 134

Titel: FORMULATIONS FOR COATED DIAMOND **ABRASIVE** SLURRIES

Patentnummer: [WO03076136A1](#)

Anmeldung: WO2003US01767
EP20030705846
US20020091080
JP20030574389T
AU20030207627
CN20038005099
KR20047013749
TW20030103646
MY20030000547

Priorität: US20020091080 20020305
WO2003US01767 20030121

Patentfamilie: [WO03076136A1](#)
[EP1480787A1](#)
[US7235296B2](#)
[US2003175498A1](#)
[JP2005518953T2](#)
[AU2003207627A1](#)
[CN1638921A](#)
[CN100436062C](#)
[KR20040089701A](#)
[TW200303915A](#)
[TWI288172B](#)
[MY143725A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: DAHLKE GREGG DANIEL
HUNT WILLIAM JOHN
KENDALL PHILIP EDWARD

IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B32B0005-16
B32B0019-00
B32B0019-02
C09K0003-14

CPC-Notationen: [B24D0003-34](#)
Y10T0428-25
Y10T0428-254
Y10T0428-273
Y10T0428-2982

Zusammenfassung:

Source: US2003175498 AA [EN] The present invention is directed to an **abrasive** article and methods of making the **abrasive** article. An **abrasive** coating on the **abrasive** article comprises at least 20 percent by weight of a superabrasive particle. The **abrasive** coating is derived from an **abrasive** slurry. The **abrasive** slurry may comprise and a dispersant having an AV wherein $AV=1000 \cdot \left[\frac{\text{Amine Value}}{\text{Mw}} \right]$. The dispersant comprises a polymer having a molecular weight (Mw) of greater than 500 g/mol and an AV of greater than 4.5, a polymer having a molecular weight (Mw) of greater than 10,000 g/mol and an AV of greater than 1.0, or a polymer having a molecular weight (Mw) of greater than 100,000 g/mol and an AV of greater than 0



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 135

Titel: **Abrasive** article having vanadium oxide incorporated therein

Patentnummer: [WO9324279A1](#)

Anmeldung: WO1993US04749
EP19930913990
US19920893491
JP19940500617T
CA19932135060
AU19930043818
KR19940704405
TW19920104850
BR1993PI06477

Priorität: US19920893491 19920604
WO1993US04749 19930519

Patentfamilie: **WO9324279A1**
EP0643637A1
US5203884A
JP8503663T2
CA2135060A
AU663393B2
AU199343818A1
KR950701856A
TW223034B
BRPI9306477A

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: BOSTON DAVID R
BUCHANAN SCOTT J
HEDRICK STEVEN T
KAUSCH WILLIAM L
LARSON WAYNE K
MORRISON ERIC D

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
F16H0001-32
F16H0055-02
F16H0055-24

CPC-Notationen: B24D0003-28

Zusammenfassung:

No clipped image for: CR2135060 AA

Source: US5203884 A [EN] An **abrasive** article (i.e., a coated **abrasive** article or a three-dimensional, low density **abrasive** article) having a sufficient amount of vanadium oxide incorporated therein to provide having a reduced tendency to buildup static electricity during the abrading of a workpiece. Preferably, the **abrasive** article further comprises a compatible binder (preferably, a sulfonated polymer) to **aid** in securing the vanadium oxide to the **abrasive** article. In another aspect, a method of making the same is taught

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 136

Titel: RESIN SYSTEMS FOR COATED PRODUCTS; AND METHOD

Patentnummer: [EP0321230B1](#)

Anmeldung: EP19880311853
DE19883885253T
US19870132485
JP19880316083
CA19880585725
AU19880026812
CN19881009282
KR19880016766
BR1988PI06605
MX19880014175
ZA19880009325

Priorität: US19870132485 19871214
CA19880585725 19881213

Patentfamilie: [EP0321230B1](#)
[EP0321230A3](#)
[EP0321230A2](#)
[DE3885253T2](#)
[DE3885253D1](#)
[US4871376A](#)
[JP1222867A2](#)
[JP8022510B4](#)
[CA1331284A1](#)
[AU611510B2](#)
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[CN1035306A](#)
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Anmelder: MINNESOTA MINING AND MFG

Erfinder: DEHART CAROLINE G
DEWALD CAROLYN GRACE C O MINNE
KIYARORIN GUREISU DEWARUDO
WALD CAROLYN GRACE DE



IPC-Notationen:	B24D0003-00 B24D0003-02 B24D0003-34 B24D0011-00	CPC-Notationen:	B24D0003-007 B24D0003-342 Y10T0428-24372 Y10T0442-2115
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Zusammenfassung:

Source: US4871376 A [EN] Improved resin/**filler** compositions for use in forming coated **abrasives** having a substrate/bonding system/**abrasive** composite structure, are provided. Also, methods for making such improvements are described. In general, the improvements result from inclusion in the resin/**filler** composition, a coupling agent providing for bonding between the resin and the **filler**. Preferred classes of coupling agents comprise: silanes, titanates, and zircoaluminates. Improvements effected by methods according to the present invention concern: viscosity of resulting resin/**filler** mixtures, retention of **filler** in suspension with a resin, and improved performance characteristics of products made according to the method, in particular improved resistance to deterioration upon contact with water, or upon use and/or storage in humid environments

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 137

Titel: COATED **ABRASIVE** ARTICLE

Patentnummer: [WO2017079513A1](#)

Anmeldung: WO2016US60455
EP20160795215
US20160773232
GB20150019508

Priorität: GB20150019508 20151104
US20160773232 20161104
WO2016US60455 20161104

Patentfamilie: **WO2017079513A1**
EP3370918A1
US10611939B2
US2018320038A1
GB201519508A0

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: BEARD THOMAS A
HILL PHILIP S
KEEN POLLY H R
SMITH JAMES R

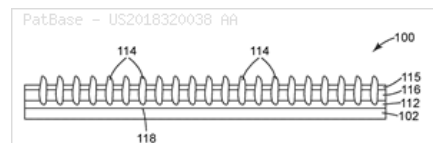


IPC-Notationen: **B24D0003-00**
B24D0003-02
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B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-344**
B24D0011-00
C09K0003-1436

Zusammenfassung:

Source: US2018320038 AA [EN] An **abrasive** article (100) comprising a backing (102); a make resin (112) contacting the backing (102); **abrasive** particles (114) contacting the make resin (112); and a size resin (116) contacting both the **abrasive** particles (114) and the make resin (112), wherein the make resin (112) includes an alkyl quaternary ammonium clay, which can take the form of Garamite



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 138

Titel: **ABRASIVE** ARTICLES AND METHODS OF MAKING AND USING THE SAME

Patentnummer: [WO2006127728A1](#)

Anmeldung: WO2006US19957
US20050135766

Priorität: US20050135766 20050524

Patentfamilie: **WO2006127728A1**
US2006265966A1

Anmelder: 3M INNOVATIVE PROPERTIES CO
KEIPERT STEVEN J
ROSTAL WILLIAM J

Erfinder: KEIPERT STEVEN J
ROSTAL WILLIAM J

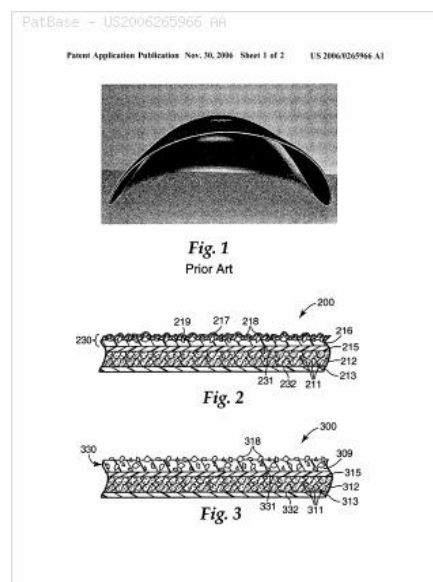
IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0011-02
B24D0018-00

CPC-Notationen: **B24D0003-004**
B24D0003-348
B24D0011-02
B24D0018-0027



Zusammenfassung:

Source: US2006265966 AA [EN] A coated **abrasive** article having a reinforced vulcanized fiber backing with an **abrasive** layer affixed thereto and methods of making and using the same. The reinforced vulcanized fiber backing contains a reinforcing material that comprises a reaction product of a curable material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 139

Titel: Novel **grinding wheels** utilizing polycrystalline diamond or cubic boron nitride grit

Patentnummer: [EP0374515A1](#)

Anmeldung: EP19890121688
US19880286450
JP19890324177
CA19890612328
KR19890018646

Priorität: US19880286450 19881216
CA19890612328 19890921

Patentfamilie: [EP0374515A1](#)
[US4923490A](#)
[JP2218560A2](#)
[CA1322661A1](#)
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Anmelder: GEN ELECTRIC

Erfinder: BOVENKERK HAROLD PAUL
HARORUDO POORU BOOBENKAAKU
JOHNSON NEIL ROBERT
NEIRU ROBAATO JIYONSON



IPC-Notationen:	B24D0003-00 B24D0003-04 B24D0003-06 B24D0003-10 B24D0003-14 B24D0003-20 B24D0003-28 C22C0026-00 C23C0026-00	CPC-Notationen:	B22F2999-00 B24D0003-06 B24D0003-14 C22C0026-00
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Zusammenfassung:

No clipped image for: JP2218560 A2

Source: US4923490 A [EN] The invention provides **grinding tools** comprising thermally stable polycrystalline diamond or cubic boron nitride **abrasive** particles and single crystal diamond or cubic boron nitride **abrasive** particles attached to a support means via a bonding matrix such as a sintered or electrodeposited metal or alloy matrix, a resinous matrix, or a vitreous matrix

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 140

Titel: **ABRASIVE** ARTICLES AND METHODS FOR FORMING SAME

Patentnummer: [WO2016109735A1](#)

Anmeldung: WO2015US68167
EP20200158851
EP20150876306
DE201560047941T
US20150984291
JP20200019078
JP20170534316T
CN201580074683
KR20177018884
TW20170131422
TW20150144547
BR20171114033
ES20150876306T
IL20150253117
IN201717023682
MX20170008306
PL20150876306T
TR20200005614T

Priorität: US20140097848P 20141230
EP20150876306 20151230
JP20170534316T 20151230
US20150984291 20151230
WO2015US68167 20151230
JP20200019078 20200206

Patentfamilie: **WO2016109735A1**
EP3240656B1
EP3683016A1
EP3240656A1
EP3240656A4
DE602015047941D1
US9982175B2
US2016186027A1
JP2020097108A2
JP2018508369T2
CN107206574A
KR20170093936A
KR101964036B1
TW201821580A
TW201638289A
TWI630267B
BR112017014033A2
ES2788498T3
IL253117A1
IL253117A0
IN201717023682A
MX2017008306A1
PL3240656T3
TR202005614T4

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: RALPH BAUER
SANDHYA JAYARAMAN RUKMANI
SARANGI NILANJAN
VUJCIC STEFAN
ZHONG YANG

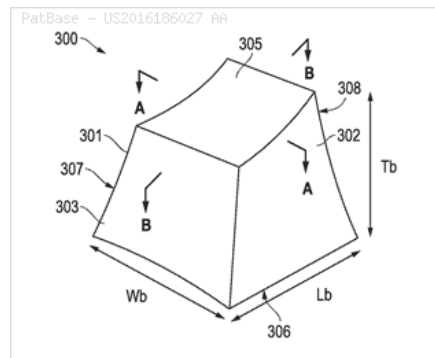


IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-06
B24D0003-14
B24D0003-18
B24D0003-28
B24D0003-34
B24D0005-00
B24D0005-12
B24D0007-00
B24D0018-00
C09K
C09K0003-14
C30B0029-20

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0018-0072
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2016186027 AA [EN] An **abrasive** article can include a body including a bond material and **abrasive** particles contained within the bond material. The **abrasive** particles can include nanocrystalline alumina. The bond material can include an inorganic material including a ceramic



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 141

Titel: Manufacturing process for a metal bonded **grinding tool** and the metal bonded **grinding tool** produced thereby

Patentnummer: [DE2413466A1](#)

Anmeldung: DE19742413466
US19740453061
JP19730031366
GB19740011480
FR19740009548
AU19740066621

Priorität: JP19730031366 19730320

Patentfamilie: [DE2413466A1](#)
[US3973925A](#)
[JP49119288A2](#)
[JP52027878B4](#)
[JP898212C3](#)
[GB1453671A](#)
[FR2222174B1](#)
[FR2222174A1](#)
[AU458695B2](#)
[AU197466621A1](#)

Anmelder: IKUO SUZUKI
TOMOYASU IMAI
TOSHIO ASAEDA
TOYODA KOKI KK
TOYODA MACHINE WORKS LTD

Erfinder: ASAEDA TOSHIO
IMAI TOMOYASU
SUZUKI IKUO

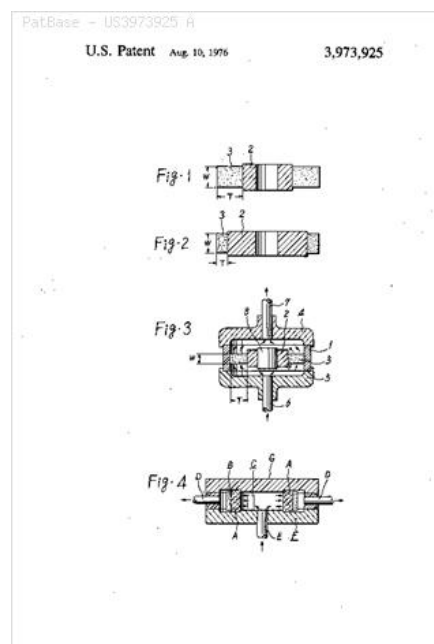
IPC-Notationen: [B24D0003-00](#)
[B24D0003-04](#)
B24D0003-10
B24D0007-00
B24D0018-00

CPC-Notationen: B24D0007-00
B24D0018-0027



Zusammenfassung:

Source: US3973925 A [EN] A manufacturing process for a metal bonded **grinding tool** includes the steps of; (a) preparing a rim of porous material, (b) press-forming the **abrasive** grains in contact with the rim to a specified structural dimension, and (c) forcibly passing a chemical plating liquid through a contacting body of the **abrasive** grains and the rim obtained in step (b) for continuously making the metal precipitate on the surfaces of the **abrasive** grains and in the pores of the rim so as to uniformly and continuously bond therebetween in any **grinding tool** of desired dimension



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 142

Titel: Titanium diboride-based composite articles with alumina dispersoids, having improved fracture toughness

Patentnummer: [US4863490A](#)

Anmeldung: US19880158493

Priorität: US19880158493 19880222

Patentfamilie: [US4863490A](#)

Anmelder: GTE LABORATORIES INC

Erfinder: BULJAN SERGEJ TOMISLAV V
GEARY JR EARL G



IPC-Notationen: [B24D0003-00](#)
[B24D0003-04](#)
B24D0003-14
[B24D0003-34](#)

CPC-Notationen: [B24D0003-00](#)
B24D0003-14
[B24D0003-342](#)

Zusammenfassung:

Source: US4863490 A [EN] Composite articles, [cutting tools](#), and wear parts are prepared by densification of a mixture comprising alumina whiskers, chopped fibers, or particles uniformly distributed in a titanium diboride matrix. Optionally, other dispersoids may also be incorporated. The preferred composite article or [cutting tool](#) has a fracture toughness equal to or greater than about 2.5 MN/m^{3/2}. Methods of preparation and use are also presented

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 143

Titel: **GRINDING** STONE WITH LUBRICATION PARTICLES AND MANUFACTURING METHOD THEREOF

Patentnummer: [EP1462216A1](#)

Anmeldung: EP20030029175
US20030737854
JP20030084674

Priorität: JP20030084674 20030326

Patentfamilie: [EP1462216A1](#)
[US2004198205A1](#)
[JP2004291114A2](#)

Anmelder: TOYODA MACHINE WORKS LTD

Erfinder: KASUGA SATOYUKI
KASUGA TOMOYUKI
MORITA HIROSHI
OKUBO SATOSHI
SOMA SHINJI
TAMASHIMA HIDEKI
YOSHIMI TAKAYUKI

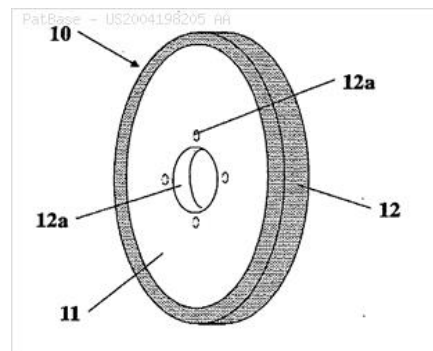
IPC-Notationen: [B24D0003-00](#)
[B24D0003-04](#)
B24D0003-14
[B24D0003-34](#)
B24D0005-00
B24D0018-00
C09C0001-68

CPC-Notationen: [B24D0003-348](#)
B24D0018-0027



Zusammenfassung:

Source: US2004198205 AA [EN] A solid fats and oils is impregnated in an air space of a stone matrix, as lubrication particles, of a **grinding** stone. The fats and oils is melted out of the air space to a peripheral surface of the **grinding** stone to lubricate friction between the **grinding** stone and a workpiece and to create a space again in the air space of the stone matrix. The created space can perform to receive a **cutting** tip and to **discharge** it. The melted lubrication particles lubricate friction between the **grinding** stone and the workpiece to restrain a generation of heat in order to reduce a **grinding** resistance. As a result, it restrains a loss of **grinding** particles on the peripheral surface of the **grinding** stone to keep a high quality of the **grinding** characteristics of the workpiece and to extend a truing interval and a **life** of the **grinding** stone



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 144

Titel: **ABRASIVE** ARTICLE INCLUDING UNAGGLOMERATED **ABRASIVE** PARTICLE INCLUDING SILICON CARBIDE AND AN INORGANIC BOND MATERIAL CROSS-REFERENCE TO RELATED APPLICATION



Patentnummer: [WO2019067761A1](#)

Anmeldung: WO2018US53184
EP20180863264
US20180144799
JP20200518026T
CN201880063780
KR20207012308
IL20180273603
IN202027014949

Priorität: US20170564781P 20170928
US20180144799 20180927
WO2018US53184 20180927

Patentfamilie: **WO2019067761A1**
[EP3687732A1](#)
[US10597567B2](#)
[US2019100683A1](#)
[JP6781357B1](#)
[JP2020535977T2](#)
[CN111278604A](#)
[KR20200050472A](#)
[IL273603AA](#)
[IN202027014949A](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

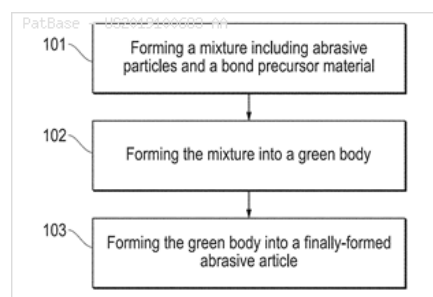
Erfinder: FOX STEPHEN E
JAYARAMAN RUKMANI SANDHYA
SARANGI NILANJAN

IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-16
B24D0003-18
B24D0003-34
C09G0001-02
C09K0003-14

CPC-Notationen: **B24D0003-18**
B24D0003-34
C09K0003-1427

Zusammenfassung:

Source: US2019100683 AA [EN] An **abrasive** article including a body having a bond material extending throughout the body and including at least 8 wt percent aluminum oxide (Al₂O₃) for a total weight of the bond material, and also including unagglomerated **abrasive** particles including silicon carbide (SiC) contained within the bond material and present in an amount of greater than 30 vol percent for a total volume of the body



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 145

Titel: COATED **ABRASIVE** ARTICLE HAVING ALUMINA-ZIRCONIA **ABRASIVE** PARTICLES AND GLASS DILUENT PARTICLES

Patentnummer: [WO2014028437A1](#)

Anmeldung: WO2013US54648
EP20130829591
US20130421522
JP20150527527T
CN201380042475

Priorität: US20120684362P 20120817
US20130421522 20130813
WO2013US54648 20130813

Patentfamilie: **WO2014028437A1**
EP2885109B1
EP2885109A1
EP2885109A4
US2015217428A1
JP2015525686T2
CN104736298A
CN104736298B

Anmelder: 3M INNOVATIVE PROPERTIES CO
PROVOW RONALD D
RAMBOSEK THOMAS W

Erfinder: PROVOW RONALD D
RAMBOSEK THOMAS W

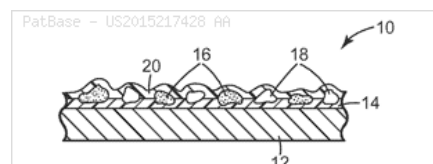
IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-34
B24D0011-00
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-04**
B24D0003-346
B24D0011-00
C09K0003-1409



Zusammenfassung:

Source: US2015217428 AA [EN] A coated **abrasive** article having an **abrasive** layer formed from alumina-zirconia (AZ) **abrasive** particles and glass diluent particles was found to have excellent **grinding** performance when compared to **abrasive** layers formed from 100 percent AZ particles or a blend of 60 percent AZ particles and 40 percent aluminum oxide particles. Replacing the significantly harder aluminum oxide particles with the much softer glass particles while still being able to maintain the same performance of the **abrasive disc** was an unexpected result



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 146

Titel: **GRINDING** MATERIAL AND PRODUCTION METHOD OF **GRINDING** MATERIAL

Patentnummer: [WO2016203914A1](#)

Anmeldung: WO2016JP65327
US20160737755
JP20160534748T
CN201680035613
KR20177037193
TW20160118109

Priorität: JP20150123882 20150619
WO2016JP65327 20160524

Patentfamilie: **WO2016203914A1**
[US2018185985A1](#)
[JP2016203914A1](#)
[JP6085723B1](#)
[CN107708930A](#)
[CN107708930B](#)
[KR20180012307A](#)
[KR101990947B1](#)
[TW201715013A](#)
[TWI702281B](#)

Anmelder: BANDO CHEMICAL IND LTD

Erfinder: IWANAGA TOMOKI
SAITO KAZUO
SHIMOYAMA KENJI
TAURA TOSHIKAZU

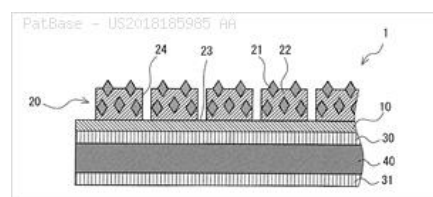
IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-34
B24D0011-00
C09K0003-14

CPC-Notationen: **B24D0003-04**
B24D0003-14
B24D0003-34
B24D0003-346
B24D0011-001
B24D0011-02
B24D0013-147
B24D2203-00
C09K0003-1409
C09K0003-1436



Zusammenfassung:

Source: US2018185985 AA [EN] The purpose of the present invention is to provide a **grinding** material which has a superior **grinding** rate and planarizing accuracy, with the **grinding** rate being less likely to be reduced over a relatively long period of time. The present invention is directed to a **grinding** material including a base, a **grinding** layer overlaid on a front face side of the base and including **grinding** grains and a binder for the **grinding** grains, and an adhesion layer overlaid on a back face side of the base, in which the **grinding** grains are diamond **grinding** grains, a wear quantity of the **grinding** layer as determined by a Taber abrasion test is no less than 0.03 g and no greater than 0.18 g, and, an Asker D hardness measured from a front face side of the **grinding** layer is no less than 80 degrees and no greater than 98 degrees



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 147

Titel: **ABRASIVE** PREFORMS, METHOD OF MAKING AN **ABRASIVE** ARTICLE, AND BONDED **ABRASIVE** ARTICLE

Patentnummer: [WO2016064726A1](#)

Anmeldung: WO2015US56205
EP20150852282
US20150518601
JP20170521529T
CN201580057557
KR20177013317
TH20171002167

Priorität: US20140066432P 20141021
US20150518601 20151019
WO2015US56205 20151019

Patentfamilie: **WO2016064726A1**
[EP3209461A1](#)
[EP3209461A4](#)
[US10259102B2](#)
[US2017225298A1](#)
[JP6718868B2](#)
[JP2017538588T2](#)
[CN107073686A](#)
[CN107073686B](#)
[KR20170071557A](#)
[TH176991A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: BEVERIDGE JACOB S
GOERS BRIAN D
SCHILLO ARMSTRONG MELISSA C

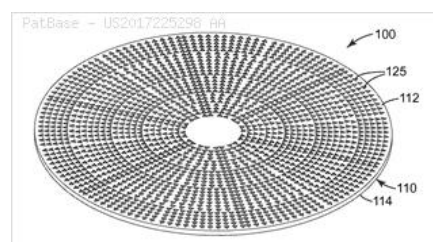


IPC-Notationen: **B24D0003-00**
B24D0003-06
B24D0003-14
B24D0005-04
B24D0005-06
B24D0007-02
B24D0007-06
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-001**
B24D0003-06
B24D0003-14
B24D0005-04
B24D0005-06
B24D0007-02
B24D0007-06
B24D0018-00
B24D0018-0009
B24D0018-0072

Zusammenfassung:

Source: US2017225298 AA [EN] **Abrasive** preforms include a frame having first and second opposed parallel major surfaces. The first major surface has a plurality of first cavities formed therein. The second major surface optionally has a plurality of second cavities formed therein. The frame comprises a binder precursor material. **Abrasive** particles are disposed in at least a portion of the plurality of first cavities and optional plurality of second cavities. Methods of making **abrasive** articles using the **abrasive** preforms and bonded **abrasive** articles preparable thereby are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 148

Titel: Superabrasive [tool](#)

Patentnummer: [EP0620082B1](#)

Anmeldung: EP19970116020
 EP19940104911
 DE19946010338T
 US19930038301
 JP19940057372
 CA19942119306
 CN19941003179
 KR19940006183
 TW19940102711
 AT19940104911T
 BR1994PI01298
 CL19940000444
 ES19940104911T
 HU19940000882
 IL19940109048
 NO19940001132
 PL19940302822
 RU19940009962
 SG19960005809
 SK19940000362

Priorität: US19930038301 19930329
 CA19942119306 19940317
 EP19940104911 19940328
 RU19940009962 19940328

Patentfamilie: [EP0620082B1](#)
[EP0620082A1](#)
[EP0812659A3](#)
[EP0812659A2](#)
[DE69410338T2](#)
[DE69410338D1](#)
[US5443418A](#)
[JP6297338A2](#)
[JP3042749B2](#)
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[AT166276E](#)
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SG45393A1
SK36294A3

Anmelder: NOOTON CO
NORTON COMPANY

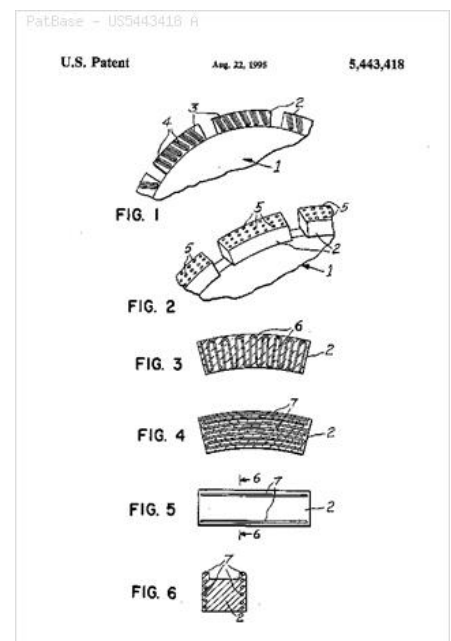
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JIEEN KURANPU
KRAMP JEAN
PELLOW SCOTT W
SKOTT PELLOU
SUKOTSUTO PEROO
ZHAN KREHMP

IPC-Notationen: B24D0003-00
B24D0003-06
B24D0003-34
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B24D0005-06
B24D0005-12
B24D0005-14
B24D0007-06
B24D0007-14
B24D0017-00
B28D0001-12
C04B0035-10
C04B0035-117
C04B0035-80

CPC-Notationen: B24D0003-06
B24D0005-123
B24D0005-14
B28D0001-121
C04B0035-117

Zusammenfassung:

Source: US5443418 A [EN] Superabrasive **tools** incorporating into the structure filamentary particles formed from a microcrystalline alumina confer significant advantages which depend on the orientation of the particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 149

Titel: **ABRASIVE** ARTICLE AND METHOD FOR MAKING THE SAME

Patentnummer: [WO2013142988A1](#)

Anmeldung: WO2013CA50173
US20130373654
CA20132866821
CA20122773197

Priorität: CA20122773197 20120327
CA20132866821 20130311
WO2013CA50173 20130311

Patentfamilie: **WO2013142988A1**
US2015290771A1
CA2866821A
CA2773197A

Anmelder: LI YUNDONG

Erfinder: LI YUNDONG

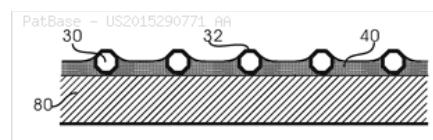
IPC-Notationen: **B24D0003-00**
B24D0003-06
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B24D0007-02
B24D0007-06
B24D0018-00

CPC-Notationen: **B24D0003-06**
B24D0018-0018
B24D0018-0072



Zusammenfassung:

Source: US2015290771 AA [EN] An **abrasive** article comprising a plurality of **abrasive** grains that are precisely arranged in accordance with a predetermined pattern and are chemically bonded with a matrix material, and a method for the making thereof are **disclosed**. A coating layer on each of the **abrasive** grains functions as a bridge to form chemical bonding between the **abrasive** grains and the matrix material. In addition to a plated material, the matrix material can include a braze, a solder, a sintered material, an infiltrant, an organic material, and a vitrified material. The method for making the **abrasive** article comprises the steps of: coating **abrasive** grains with a coating layer that chemically bonds to each of the **abrasive** grains; arranging the coated **abrasive** grains in accordance with a predetermined pattern; and chemically bonding the coated **abrasive** grains with a matrix material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 150

Titel: SHAPED **ABRASIVE** PARTICLES AND METHOD OF MAKING

Patentnummer: [WO2012061016A1](#)

Anmeldung: WO2011US56833
EP20110838450
DE201160057625T
US20170806794
US20150701559
US20110818365
JP20130536668T
CN201180048902
KR20137013584
BR20131109469

Priorität: US20100408788P 20101101
EP20110838450 20111019
US20110818365 20111019
WO2011US56833 20111019
US20130818365 20130222
US20150701559 20150501
US20170806794 20171108

Patentfamilie: **WO2012061016A1**
[EP2635405B1](#)
[EP2635405A1](#)
[EP2635405A4](#)
[DE602011057625D1](#)
[US9822291B2](#)
[US9039797B2](#)
[US10669461B2](#)
[US2018066169A1](#)
[US2015232727A1](#)
[US2013263525A1](#)
[JP6021814B2](#)
[JP2013545840T2](#)
[CN103153544A](#)
[CN103153544B](#)
[KR20140066659A](#)
[KR101863393B1](#)
[BR112013009469B1](#)
[BR112013009469A8](#)
[BR112013009469A2](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
ERICKSON DWIGHT D

Erfinder: ERICKSON DWIGHT D
ERICKSON DWIGHT D

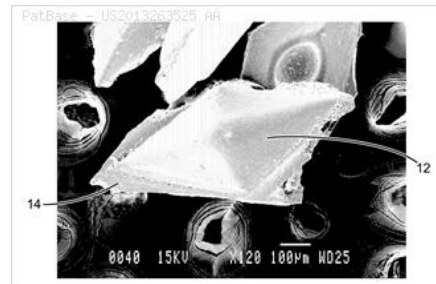
IPC-Notationen: **B24D0003-00**
B24D0003-06
B24D0018-00
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-008**
C09K0003-1418



Zusammenfassung:

Source: US2013263525 AA [EN] A method of making shaped **abrasive** particles including forming an **abrasive** flake comprising a plurality of precursor shaped **abrasive** particles and a frangible support joining the precursor shaped **abrasive** particles together; transporting the **abrasive** flake through a rotary kiln to sinter the **abrasive** flake; and breaking the sintered **abrasive** flake into individual shaped **abrasive** particles. The method is useful to make small shaped **abrasive** particles having insufficient mass to be efficiently individually sintered in a rotary kiln without joining two or more of the shaped **abrasive** particles together



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 151

Titel: **ABRASIVE** ARTICLE HAVING SHAPED SEGMENTS

Patentnummer: [WO2014105638A1](#)

Anmeldung: WO2013US76569
EP20200150800
EP20130868740
DE201360065569T
US20170613868
US20150843755
US20130132140
AU20130371043
KR20157019876
PL20130868740T

Priorität: US20120747965P 20121231
US20130132140 20131218
EP20130868740 20131219
WO2013US76569 20131219
US20150843755 20150902
US20170613868 20170605

Patentfamilie: **WO2014105638A1**
[EP2938463B1](#)
[EP3666463A1](#)
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[DE602013065569D1](#)
[US9700993B2](#)
[US9149913B2](#)
[US10456890B2](#)
[US2017266782A1](#)
[US2015375368A1](#)
[US2014187130A1](#)
[AU2013371043B2](#)
[AU2013371043A1](#)
[KR20150100834A](#)
[KR101803704B1](#)
[PL2938463T3](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC AND SAINT GOBAIN ABRASIFS

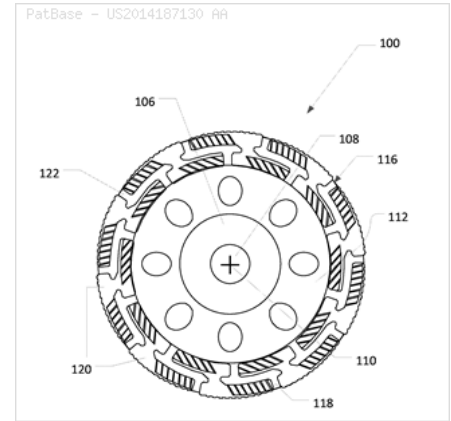
Erfinder: GOSAMO IGNAZIO



IPC-Notationen:	B24D0003-00 B24D0003-10 B24D0005-06 B24D0007-06 B24D0018-00 B24D0099-00 B28D0001-12	CPC-Notationen:	B24D0003-10 B24D0005-06 B24D0007-066 B24D0018-0009 B24D0099-005 B28D0001-122
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Zusammenfassung:

Source: US2014187130 AA [EN] An **abrasive** segment can include an inner segment portion, an outer segment portion, and a central segment portion connected thereto. The inner segment portion can include an inner circumferential wall and an outer circumferential wall. Leading and trailing radial sidewalls can extend between the inner circumferential wall and the outer circumferential wall opposite each other. The outer segment portion can include an inner circumferential wall and an outer circumferential wall. Leading and trailing radial sidewalls can extend between the inner circumferential wall and the outer circumferential wall opposite each other. The central segment portion can include a leading radial sidewall and a trailing radial sidewall. The leading radial sidewall of the central segment portion can establish an acute angle, α , with respect to the outer circumferential wall of the inner segment portion and an obtuse angle, β , with respect the inner circumferential wall of the outer segment portion



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 152

Titel: **ABRASIVE** ARTICLE REINFORCED BY **DISCONTINUOUS** FIBERS

Patentnummer: [WO2014210440A1](#)

Anmeldung: WO2014US44539
WO2014US44515
EP20140817405
EP20140816604
US20140317340
US20140317117
CN201480043929

Priorität: US20130840902P 20130628
US20130840906P 20130628
US20130840919P 20130628
US20130840933P 20130628
US20130841052P 20130628
US20140317117 20140627
US20140317340 20140627
WO2014US44515 20140627
WO2014US44539 20140627

Patentfamilie: **WO2014210440A1**
WO2014210426A1
EP3013529A1
EP3013527A1
EP3013529A4
EP3013527A4
US9855639B2
US9776303B2
US2015000206A1
US2015000204A1
CN105451942A
CN105451942B

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: CICHOWLAS TYLER B
CSILLAG FRANK J
DHAMI DAVINDER S
KLETT MICHAEL W
LAVALLEE LAWRENCE J JR
PARSONS STEVEN F

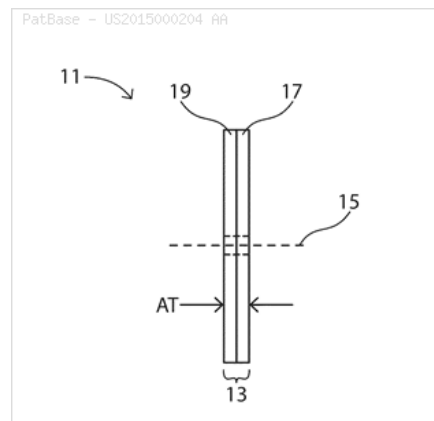
IPC-Notationen: **B24D0003-00**
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B24D0007-16
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B24D0011-02
B24D0018-00
C03C0025-48
C03C0025-50

CPC-Notationen: B24D0003-20
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B24D0005-14
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B24D0007-04
B24D0007-14
B24D0007-16
B24D0011-02
B24D0018-0009
C03C0025-50



Zusammenfassung:

Source: US2015000204 AA [EN] An **abrasive** article has an **abrasive** portion and chopped strand fibers (CSF) with enhanced strength and/or fracture of toughness. The CSF may be coated with a thermoplastic having a loss on ignition of at least about 2 wt percent. The CSF can have a primary coating and a secondary coating on the primary coating. At least some of the CSF can have a length of at least about 6.3 mm



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 153

Titel: METHOD FOR MAKING RESIN BONDED **ABRASIVE TOOLS**

Patentnummer: [WO03064111A1](#)

Anmeldung: WO2002US40692
DE20021097646T
US20020060982
JP20030563777T
GB20040017948
FR20030000963
CA20022472065
AU20020364582
CN20028027540
KR20047011774
TW20030100092
AR2003P100245
AT20020009294
BE20030000070
BR2002PI15570
CH20040001270
CL20030000173
CZ20040000850
DK20040001304
ES20040050041
FI20040001029
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IN2004CN01645
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LU20020091090
MX2004PA07338
NL20031022519
NO20040003597
NZ20020533709
PL20020369733
SE20040001975
TH20021004855
ZA20040005032

Priorität: US20020060982 20020130
WO2002US40692 20021218

Patentfamilie: [WO03064111A1](#)
[DE10297646B4](#)
[DE10297646T5](#)
[US6949129B2](#)
[US2003192258A1](#)
[JP4199126B2](#)
[JP2005515908T2](#)
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[FR2835256A1](#)
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[AU2002364582A1](#)
[CN1617787A](#)
[CN100372650C](#)
[KR20040073603A](#)
[KR100557697B1](#)
[TW200302266A](#)



TWI242597B
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AT500899A2
BE1015339A5
BRPI0215570A
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CL2003000173A1
CZ20040850A3
DK200401304A5
ES2244348B2
ES2244348AA
FI20041029A
HU0402565AB
IN209567B
IN01645CN2004A
ITMI20030089A1
LU91090A1
MXPA04007338A1
NL1022519C2
NL1022519A1
NO20043597L
NO326382B1
NO20043597A
NZ533709A
PL205520B1
PL369733A1
SE200401975L
SE533129C2
SE200401975A0
TH60476A
ZA200405032A

Anmelder: SAINT GOBAIN ABRASIVES INC A C
SAINT GOBAIN SA

Erfinder: SIMON MARC W
SIMON MARK WILLIAM

IPC-Notationen: **B24D0003-00**
B24D0003-20
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B24D0007-00
B24D0018-00
C08J0005-14
C08L0061-00
C08L0061-06
C08L0061-14
C09C0001-40
C09C0001-68
C09C0003-12
C09K0003-14

CPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0005-00
B24D0007-00
B24D0018-00
C01P2004-60
C01P2006-10
C08L0061-06
C08L0061-14
C09C0001-407
C09C0003-12
C09K0003-1409

Zusammenfassung:

Source: US2003192258 AA [EN] A method for producing organically bonded **abrasive** article includes combining an **abrasive** grain component and a phenol-based resin component. The combined components are molded and thermally cured in an atmosphere that comprises humidity, wherein the atmosphere contacts the molded components, thereby producing the organically bonded **abrasive** grain. The **abrasive** grain optionally can first be combined with an organosilicon compound, to form organosilicon-treated **abrasive** grain, and then with the phenol-based resin component. In one example, the phenol-based resin is thermally cured in the presence of steam. **Abrasive** articles produced by the method of the invention generally have improved properties under wet **grinding** conditions. In one example, an **abrasive** article produced by the method of the invention includes ammonia in an amount less than about 50 ppm. In another example, an **abrasive grinding wheel** produced by the method of the invention has a strength retention greater than about 57 percent

PatBase - ZA200405032 A

WO 03/04111 PCT/US02/0097

method of the present invention had improved G-Ratio retention of up to 90%. In addition, these wheels achieved steady state grinding conditions early in the grinding process.

Table 5A

Percent Retention in G-Ratio Before and After Exposure Water-Based Coolant (2 day soak in coolant) using white fused alumina abrasive

	Low MGR (0.025mm (0.001") Infeed Rate)		High MGR (0.051mm (0.002") Infeed Rate)	
Cure Variation ± Specimen # →	#1A (J-Grade)	#4A (K-Grade)	#1A (J-Grade)	#4A (K-Grade)
Standard	67.8	54.3	53.7	41.9
Humidity Cure	89.1	87.3	92.6	86.3
Initially Water Saturated	57.1	55.2	48.8	42.2

TABLE 5B

10 Hertz Power (kW) of BOND A-Type Wheels in Surface Grinding Test

	Low MGR (0.025 mm Infeed)		High MGR (0.051 mm Infeed)	
Cure Variation ± Specimen # →	#1A (J-Grade)	#4A (K-Grade)	#1A (J-Grade)	#4A (K-Grade)
Standard	0.0615	0.0729	0.0288	0.0382
Humidity Cure	0.0549	0.0646	0.0314	0.0327
Initially Water Saturated	0.540	0.0689	0.0299	0.0346

24

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 154

Titel: COMPOSITE **ABRASIVE WHEEL**

Patentnummer: [WO2013070576A3](#)

Anmeldung: WO2012US63662
EP20120847458
DE201260028094T
US20120353467
JP20140541150T
CA20122857088
CN201280052914
KR20147015449
BR20141111329
IN2014CN03358
MX20140005248
PL20120847458T
RU20140118633
TR20170005321T

Priorität: US20110557563P 20111109
EP20120847458 20121106
US20120353467 20121106
WO2012US63662 20121106

Patentfamilie: **WO2013070576A3**
WO2013070576A2
EP2776210B1
EP2776210A4
EP2776210A2
DE602012028094D1
US9321149B2
US2014256238A1
JP6099660B2
JP2015501731T2
CA2857088C
CA2857088A
CN104023916A
CN104023916B
KR20140101757A
KR101951978B1
BR112014011329A2
IN347037B
IN03358CN2014A
MX349839B
MX2014005248A1
PL2776210T3
RU2599067C2
RU2014118633A
TR201705321T4

Anmelder: 3M INNOVATIVE PROPERTIES CO
NGUYEN THU A
VAN LOC X

Erfinder: NGUJEN TKHU A
THU A NGUYEN
VAN LOC X
VAN LOK S

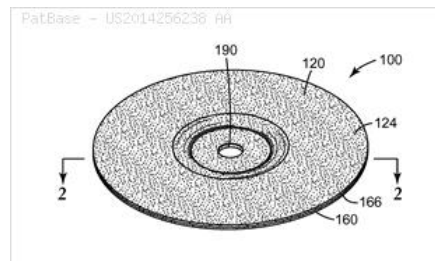


IPC-Notationen: **B24D0003-00**
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B24D0005-12
B24D0005-14
B24D0007-00
B24D0007-14
B24D0009-00
C09K0003-14

CPC-Notationen: B24D0003-20
B24D0005-12
B24D0005-14
B24D0007-14

Zusammenfassung:

Source: US2014256238 AA [EN] A composite **abrasive wheel** comprises primary and secondary **abrasive** portions. The primary **abrasive** portion comprises shaped ceramic **abrasive** particles retained in a first organic binder. The secondary **abrasive** portion is bonded to the primary **abrasive** portion, and comprises secondary crushed **abrasive** particles retained in a second organic binder. The primary **abrasive** portion comprises a larger volume percentage of the shaped ceramic **abrasive** particles than the secondary **abrasive** portion. A central aperture extends through the composite **abrasive wheel**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 155

Titel: Anti-weld **additives** for coated **abrasive** bonds

Patentnummer: [US3058819A](#)

Anmeldung: US19590786851
GB19590044012
FR19600815195

Priorität: US19590786851 19590114

Patentfamilie: **US3058819A**
GB941973A
FR1245180A

Anmelder: CARBORUNDUM CO

Erfinder: PAULSON WILLIAM T

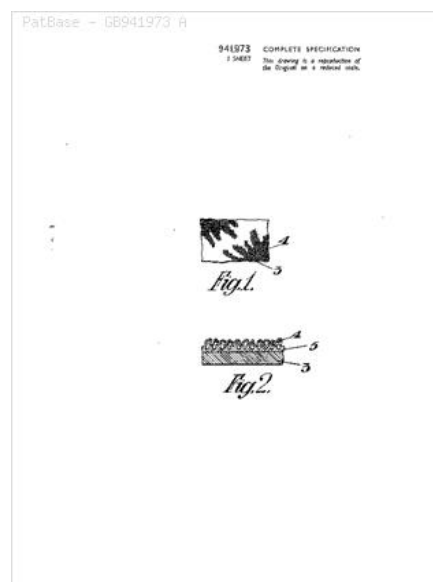
IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-001**
B24D0003-285
B24D0003-344
B24D0011-00



Zusammenfassung:

Source: GB941973 A [EN] A coated **abrasive** article characterized by resistance to **glazing** comprises a backing, **abrasive** particles, and a bond securing the particles to the backing comprising a phenolic resin and a minor amount of thiourea or derivatives thereof, a mercaptan or a polysulphide. The article may have a making coat of a phenolic resin and a sand size comprising a resinous condensation product of a phenol, an aldehyde and a minor amount of thiourea or derivative thereof, a mercaptan or a polysulphide. The aldehyde may be formaldehyde. Thiourea may be present in an amount from 2 to 20 percent by weight based on the initial phenol. Thiourea derivatives referred to are methyl-thiourea, phenyl-thiourea; sulphur derivatives of guanidine, dipentamethylene thiuram tetrasulphide and tertiary dodecyl mercaptan are also referred to. Phenolic resins specified are phenol-formaldehyde, phenol-acetaldehyde, cresol-aldehyde and resorcinol-aldehyde. Suitable backings are cellulosic, e.g. paper, cloth, a laminate of paper plies, cloth plies, or a combination of paper and cloth plies. Abrasive grain may be silicon carbide, garnet and crushed fused alumina. Specification 734,045 is referred to



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 156

Titel: **Abrasive** article containing an inorganic phosphate

Patentnummer: [WO9714534A1](#)

Anmeldung: WO1996US14354
EP19960929944
DE19966028947T
US19970795966
JP19970515807T
KR19980702800

Priorität: US19950545984 19951020
WO1996US14354 19960906
US19970795966 19970206

Patentfamilie: **WO9714534A1**
EP0961670B1
EP0961670A1
DE69628947D1
US5738695A
JP11513619T2
KR19990064305A

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: HARMER WALTER L
HO KWOK LUN

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: B24D0003-28
B24D0003-344

Zusammenfassung:

Source: US5738695 A [EN] An **abrasive** article, and methods of making and using same, comprising an inorganic phosphate selected from the group consisting of an alkali metal metaphosphate, an alkaline earth metal metaphosphate, and a Group IIIA metal orthophosphate; the inorganic phosphate may be present in a peripheral coating layer of a coated **abrasive** article, or an **abrasive** slurry coating in a uniform thickness, or a structured **abrasive** article

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 157



Titel: **ABRASIVE** ARTICLES AND METHOD OF MAKING AND USING THE ARTICLES

Patentnummer: [WO2004043650A1](#)

Anmeldung: WO2003US29567
EP20030759316
DE20036037566
US20030668757
GB20020025913
AU20030275048
AT20030759316T

Priorität: GB20020025913 20021106
GB20020025913 20021107
EP20030759316 20030923
WO2003US29567 20030923

Patentfamilie: **WO2004043650A1**
EP1558427B1
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US6951577B2
US2004144037A1
GB200225913A0
AU2003275048A1
AT514528E

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: CARTER CHRISTOPHER J
WINSPEAR TRACEY E

IPC-Notationen: **B24D0003-00**
B24D0003-20
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B24D0003-34
B24D0011-00
B24D0011-02

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-001
B24D0018-00

Zusammenfassung:

Source: US2004144037 AA [EN] An **abrasive** article comprising **abrasive** particles and a UV-cured formulation and a **filler**, wherein the **filler** is substantially transparent to UV-radiation and the **filler** is present in a range from 20 to 80 percent by weight based on the combined weight of the formulation and **filler** and the **filler** comprises microspheres of aluminosilicate ceramic having an average particle size in a range of from 1 micrometer to 40 micrometers. A method of making and using the **abrasive** articles is also provided

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 158



Titel: PATTERNED COATED **ABRASIVE** FOR FINE SURFACE FINISHING

Patentnummer: [EP0396150B1](#)

Anmeldung: EP19900108486
DE19906033404T
US19890347663
JP19900115928
CA19902015720
AU19900054501
AT19900108486T
BR1990PI02118
DK19900108486T
ES19900108486T
GR20000400681T
MX19900020599
ZA19900003348

Priorität: US19890347663 19890505
CA19902015720 19900430

Patentfamilie: [EP0396150B1](#)
[EP0396150A3](#)
[EP0396150A2](#)
[DE69033404T2](#)
[DE69033404D1](#)
[US5014468A](#)
[JP3073276A2](#)
[JP7080123B4](#)
[JP2130950C3](#)
[CA2015720C](#)
[CA2015720A](#)
[AU621741B2](#)
[AU199054501A1](#)
[AT188158E](#)
[BRPI9002118A](#)
[DK0396150T3](#)
[ES2140371T3](#)
[GR3032981T3](#)
[MX170957B](#)
[ZA9003348A](#)

Anmelder: NORTON CO

Erfinder: AANESUTO EE KOORUMAN
DEIBITSUDO ROSUTOOKAA
ERNEST A COLEMAN
RAVIPATI SITA R
RAVIPATI SITARAMAIAH
ROSTOKER DAVID
SHITARAMEISHIYU RABIPATEI
SITARAMAISH RAVIPATI
UESUREE AARU KAKUTSUMAREKU
WESLEY R KACZMAREK
YUJIN ZADOO
ZADOR EUGENE

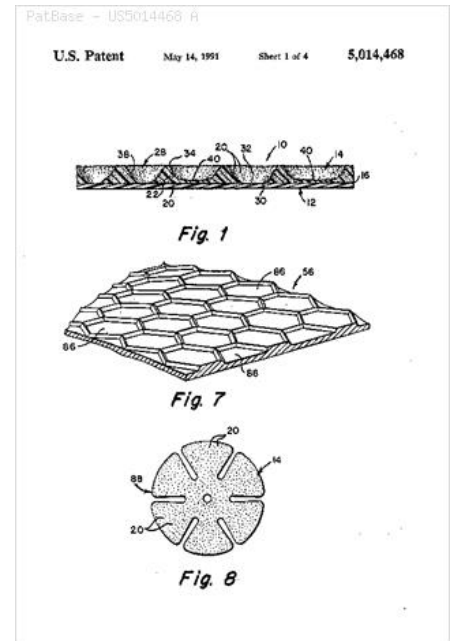
IPC-Notationen: [B24D0003-00](#)
B24D0003-20
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B24D0011-00
B24D0011-04

CPC-Notationen: B24D0003-28
[B24D0003-342](#)
B24D0011-005
B24D0011-04



Zusammenfassung:

Source: US5014468 A [EN] Coated **abrasive** material for fine finishing applications including second fining ophthalmic application, having patterned surface coating of **abrasive** grains dispersed in radiation-cured adhesive binder. The patterned surface coating is defined by a plurality of formations of such **abrasive**/binder each having an inner bottom **edge** defining an area devoid of coated **abrasive**, a top **edge** defining a somewhat larger area devoid of coated **abrasive** and an inner wall connecting the top and bottom edges



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 159

Titel: PRODUCTION OF LAYERED ENGINEERED **ABRASIVE** SURFACES

Patentnummer: [WO200145904A1](#)

Anmeldung: WO2000US41247
US19990466974
AU20010021139D
AU20010021139
TW20000123492

Priorität: US19990466974 19991220
WO2000US41247 20001018

Patentfamilie: **WO200145904A1**
US6293980B2
US2001003884A1
AU200121139A5
AU200121139A1
TW503160B

Anmelder: NORTON CO
PAUL WEI
SAINT GOBAIN ABRASIVES INC
SAINY GOBAIN ABRASIVES INC

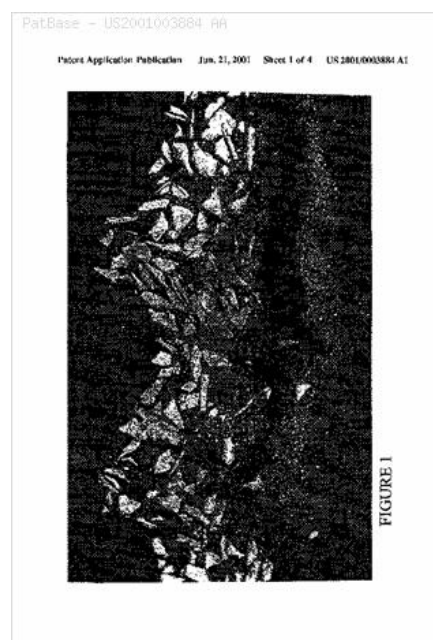
Erfinder: SWEI GWO SHIN
WEI PAUL
YANG WENLIANG PATRICK

IPC-Notationen: **B24D0003-00**
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B24D0003-34
B24D0011-00
B24D0011-04
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-04

Zusammenfassung:

Source: US2001003884 AA [EN] Coated **abrasives** comprising shaped structures deposited on a backing can be given increased versatility by varying the composition comprising the structure such that different characteristics are revealed as the structure is eroded during use



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 160

Titel: **ABRASIVE** ARTICLE

Patentnummer: [WO2006007107A3](#)

Anmeldung: WO2005US17057
EP20050752065
US20040872269
JP20070516502T
CA20052569962
CN200580020133

Priorität: US20040872269 20040618
WO2005US17057 20050516

Patentfamilie: [WO2006007107A3](#)
[WO2006007107A2](#)
[EP1758712A2](#)
[US7294048B2](#)
[US2005282480A1](#)
[JP2008503357T2](#)
[CA2569962C](#)
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Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: MINICK CHRIS A
NELSON ERIC W

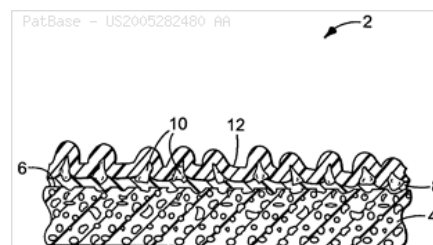


IPC-Notationen: [B24D0003-00](#)
B24D0003-20
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[B24D0003-34](#)
B24D0011-00
B24D0015-00
B24D0015-04

CPC-Notationen: [B24D0003-34](#)
B24D0011-00
Y10T0428-287

Zusammenfassung:

Source: US2005282480 AA [EN] An **abrasive** article includes a substrate having opposed first and second surfaces, a make coat on at least a portion of the first surface, **abrasive** mineral particles on at least a portion of the make coat to provide an **abrasive** surface and a size coat arranged over at least a portion of the **abrasive** surface, wherein the size coat has a Young's modulus of less than 100,000 psi



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 161

Titel: **Abrasive** articles including an antiloading composition

Patentnummer: [WO9858769A1](#)

Anmeldung: WO1998US11922
EP19980925308
US19970881209
CA19982295100

Priorität: US19970881209 19970624
WO1998US11922 19980610

Patentfamilie: **WO9858769A1**
EP0991498A1
US5908477A
CA2295100A

Anmelder: MINNESOTA MINING AND MFG

Erfinder: HARMER WALTER L
KINCAID DON H
KIRK ALAN R
LARSON ERIC G

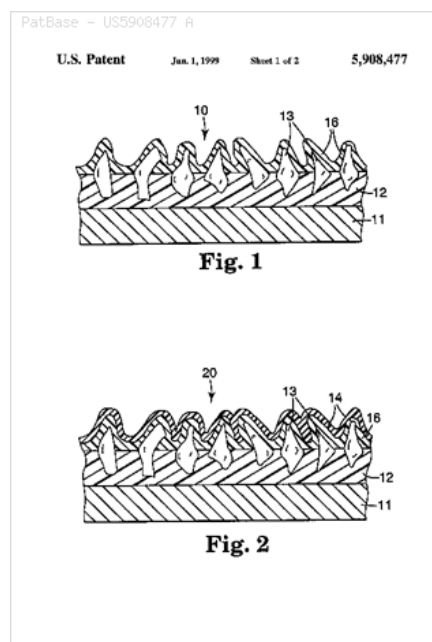
IPC-Notationen: **B24D0003-00**
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B24D0003-28
B24D0003-34
B24D0011-00
B24D0018-00

CPC-Notationen: **B24D0003-004**
B24D0003-28
B24D0003-344
B24D0011-00
B24D0018-00



Zusammenfassung:

Source: US5908477 A [EN] An **abrasive** article is provided that includes a bond system formed from a binder precursor and about 15 percent by weight or less of a wax-containing modifier. An **abrasive** article that includes the bond system exhibits an increase of workpiece surface abraded in a Woodsanding Normal Force Test as compared to an **abrasive** article including a bond system formed from a composition containing substantially no wax-containing modifier



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 162

Titel: METHOD OF MAKING A COATED **ABRASIVE** ARTICLE

Patentnummer: [EP0552698B1](#)

Anmeldung: EP19930100665
DE19936000916T
US19920970950
JP19930009233
CA19932087804
AU19930031949
CN19931002449
KR19930000751
BR1993PI00263
ES19930100665T
MX19930000258
RU19930004414
ZA19930000322

Priorität: US19920823861 19920122
US19920970950 19921103
CA19932087804 19930121

Patentfamilie: [EP0552698B1](#)
[EP0552698A3](#)
[EP0552698A2](#)
[DE69300916T2](#)
[DE69300916D1](#)
[US5368618A](#)
[JP5253851A2](#)
[CA2087804C](#)
[CA2087804A](#)
[AU659263B2](#)
[AU199331949A1](#)
[CN1077722A](#)
[CN1051038C](#)
[KR930016153A](#)
[KR19930016153A](#)
[KR100262803B1](#)
[BRPI9300263A](#)
[ES2080535T3](#)
[MX9300258A1](#)
[RU93004414A](#)
[ZA9300322A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: EDBLOM ELIZABETH C C O MINNESO
MASMAR CRAIG A C O MINNESOTA M
MASMAR CRAIG ALAN
SPENCER DOUGLAS S C O MINNESOT

IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B29C0039-00
B29C0039-18
B29C0070-00
B29C0070-64

CPC-Notationen: B24D0003-28
[B24D0003-342](#)
B24D0011-005
B29C0039-18
B29C0070-64
B29C2791-001
B29K2105-24
B29L2031-736



Zusammenfassung:

Source: US5368618 A [EN] A method of preparing a coated **abrasive** article in which the presence of multiple layers of **abrasive** grains are minimized. In one variation, the method comprises the steps of: (a) providing a backing; (b) applying a make coat precursor to the backing; (c) partially curing the make coat precursor; (d) applying, preferably by projecting, a plurality of **abrasive** grains into the partially cured make coat precursor; and (e) completely curing the partially cured make coat precursor. In another variation of this method, a size coat precursor is applied over the **abrasive** grains and cured make coat, and the size coat precursor is completely cured. In another variation of this method, a size coat precursor is applied over the **abrasive** grains and the partially cured make coat precursor, and the make coat precursor and the size coat precursor are completely cured. The make coat precursor preferably comprises an unsaturated resin that polymerizes via a free radical polymerization mechanism at the site of alpha, beta -unsaturation



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 163

Titel: **ABRASIVE** GRANULES

Patentnummer: [EP0444824B1](#)

Anmeldung: EP19910301398
DE19916015735T
US19900488287
JP19910010087U
CA19912035380
AU19910070284
BR1991PI00833
ES19910301398T
MX19910024597
ZA19910000898

Priorität: US19900488287 19900302
CA19912035380 19910131

Patentfamilie: [EP0444824B1](#)
[EP0444824A3](#)
[EP0444824A2](#)
[DE69115735T2](#)
[DE69115735D1](#)
[US5039311A](#)
[JP4089657U1](#)
[JP2559106Y2](#)
[CA2035380A](#)
[AU637669B2](#)
[AU199170284A1](#)
[BRPI9100833A](#)
[ES2081429T3](#)
[MX172449B](#)
[ZA9100898A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: BLOECHER ULRICH C O MINNESOTA

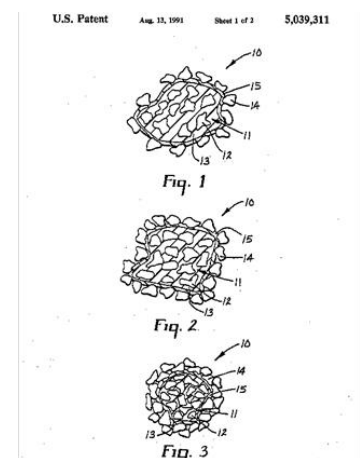


IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
C09C0001-68
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-34](#)
C09K0003-1436

Zusammenfassung:

Source: US5039311 A [EN] An erodable **abrasive** granule comprising a plurality of first **abrasive** grains bonded together by a first binder to form an erodable base agglomerate and at least a partial coating of second **abrasive** grains bonded to the periphery of the base agglomerate by means of a second binder. These **abrasive** granules can be incorporated into a wide variety of **abrasive** articles such as **grinding wheels**, coated **abrasives**, and non-woven **abrasives**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 164

Titel: SCENTED ENGINEERED **ABRASIVES**

Patentnummer: [DE10246402B4](#)

Anmeldung: DE20021046402
US20010972317
GB20020023092
FR20020011896

Priorität: US20010972317 20011005

Patentfamilie: [DE10246402B4](#)
[DE10246402A1](#)
[US6395044B1](#)
[GB2380435B2](#)
[GB2380435A1](#)
[GB200223092A0](#)
[FR2833878B1](#)
[FR2833878A1](#)

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN ABRASIVES TECH CO
SAINT GOBAIN ABRASIVES TECHNOL
SAINT GOBAIN SA

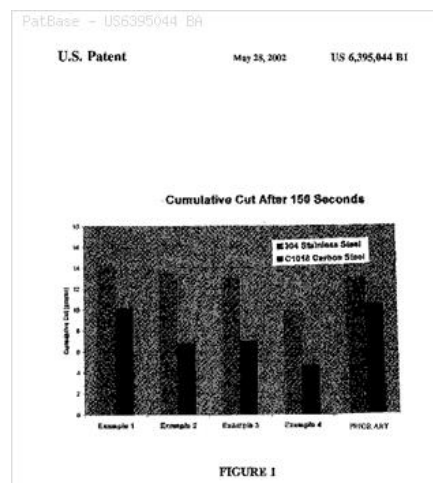
Erfinder: DENES AMERICO GEZA
KINISKY THOMAS G
SWEI SHIN GWO

IPC-Notationen: [B24D0003-00](#)
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[B24D0003-34](#)
B24D0011-00
C11B0009-00

CPC-Notationen: [B24D0003-34](#)
B24D0011-00

Zusammenfassung:

Source: US6395044 BA [EN] The invention provides coated **abrasives** with an engineered surface that releases a pleasing fragrance when used



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 165

Titel: LIQUID RESIN COMPOSITION FOR **ABRASIVE** ARTICLES

Patentnummer: [WO2009053581A1](#)

Anmeldung: WO2008FR51779
EP20080843140
US20120711107
US20080681252
FR20070006880
CN200880118616
TW20080137765
AR2008P104283
CL20080002930
TH20081005057

Priorität: FR20070006880 20071001
WO2008FR51779 20081001
US20100681252 20100709
US20120711107 20121211

Patentfamilie: **WO2009053581A1**
EP2195142A1
US8690978B2
US2013091778A1
US2010270495A1
FR2921667B1
FR2921667A1
CN101883664A
CN101883664B
TW200932797A
TWI478965B
AR068642AA
CL52069B
CL2008002930A1
TH109696A

Anmelder: ARNAUD ALIX
ESPIARD PHILIPPE
POZZOLO SANDRINE
SAINT GOBAIN ABRASIFS TECH ET SERVICES S A S
SAINT GOBAIN ABRASIVES INC

Erfinder: ARNAUD ALEX
ARNAUD ALIX
PHILIPPE ESPIARD
SANDRINE POZZOLO



IPC-Notationen:

B24D0003-00
B24D0003-20
B24D0003-28
B24D0003-34
B32B0027-04
B32B0027-38
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C08G0059-32
C08G0059-68
C08J0003-24
C08J0005-00
C08J0005-14
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C08L0063-00
C08L0063-02
C08L0063-04
C09C0001-68
C09C0003-10
C09C0003-12
C09D0163-02
C09D0163-04
C09K0013-00

CPC-Notationen:

B24D0003-28
C08L0063-00
Y10T0428-25
Y10T0428-256
Y10T0428-257
Y10T0428-259

Zusammenfassung:

Source: US2010270495 AA [EN] The invention relates to a thermally curable liquid resin composition intended for manufacturing **abrasives** that comprises at least one epoxy resin comprising at least two epoxy groups and at least one reactive diluent, said composition having a viscosity, at 25 degrees centigrade, less than or equal to 7000 mPa.s. Application of the resin composition for producing **abrasive** articles, especially bonded **abrasives** and coated **abrasives**. It also relates to the **abrasive** articles comprising **abrasive** grains connected by such a liquid resin composition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 166

Titel: RESIN BONDED METAL-COATED DIAMOND OR CUBIC BORON NITRIDE **ABRASIVE TOOLS**
CONTAINING AN INORGANIC CRYSTALLINE **FILLER** AND GRAPHITE

Patentnummer: [DE2056820A1](#)

Anmeldung: DE19702056820
DE19700442700U
US19690876655
JP19700100632
GB19700053827
FR19700040876
00000000
19701113
ES19700385553
IE19700001464
NL19700016644
SE19700015458
ZA19700007702

Priorität: US19690876655 19691114

Patentfamilie: [DE2056820A1](#)
[DE7042700U](#)
[US3664819A](#)
[JP48018191B4](#)
[GB1278184A](#)
[FR2069455A5](#)
[BE758964A1](#)
[BE758964A](#)
[CH546627A](#)
[ES385553A1](#)
[IE34735L](#)
[IE34735B](#)
[NL148525B](#)
[NL7016644A](#)
[SE373563C](#)
[SE373563B](#)
[ZA7007702A](#)

Anmelder: NORTON COMPANY WORCESTER MASSACHUSETTS VER ST V AM
NORTON CY 1 NEW BOND STREET WORCESTER MASSACHUSETT

Erfinder: COHEN H M
COHEN HARVEY M
SIOUI R H
SIOUI RICHARD H

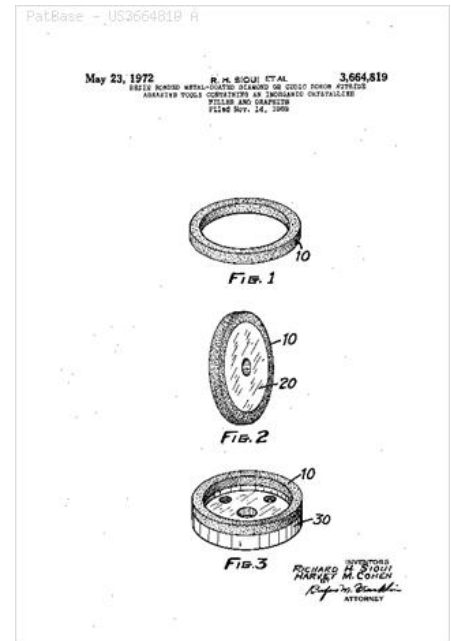
IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
C09K0003-14

CPC-Notationen: [B24D0003-344](#)
C09K0003-1445



Zusammenfassung:

Source: US3664819 A [EN] ABSTRACT OF THE **DISCLOSURE** Organic bonded diamond or cubic boron nitride abrasive **tools**, showing particular utility in the dry **grinding** of metal-carbides, and **tool** steels, respectively, are produced by incorporating graphite, of fine particle size, and a reinforcing **filler** in the bond, and by employing metalclad **abrasive** grits in the amount of 7 to 40%, by volume, of the abrading portion of the **tool**. The graphite is preferably of a flaky shape having an average diameter of less than 300 microns, and is present in the bond in the amount of from 5 to 40 volume percent, with the total **filler** content being from 15 to 70%; the remaining **filler** being, preferably, silicon carbide. FIELD OF THE INVENTION This invention relates to organic bonded diamond and cubic boron nitride **abrasive tools**, such as **grinding wheels**, for **grinding** hard materials such as cemented carbides and **tool** steels. B



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 167

Titel: DRY **GRINDING WHEEL** AND ITS APPLICATION

Patentnummer: [EP0480133A3](#)

Anmeldung: EP19910111247
JP19910189925
CA19912043261

Priorität: US19900594466 19901009
CA19912043261 19910524

Patentfamilie: [EP0480133A3](#)
[EP0480133A2](#)
[JP4226862A2](#)
[CA2043261A](#)

Anmelder: NORTON CO

Erfinder: MUNI ESU RAAMAKURISHIYUNAN
RAMAKRISHNAN MUNI S

IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-34](#)

Zusammenfassung:

Source: EP0480133 A2 [EN] Organically bonded **abrasive** articles comprising seeded sol gel alumina filamentary **abrasive** particles have high dry **grinding** performance when the particles have silicon-enriched surfaces

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 168



Titel: COATED **ABRASIVE** ARTICLE AND A METHOD OF MAKING SAME

Patentnummer: [WO9404318A1](#)

Anmeldung: WO1993US06430
EP19930917030
DE19936016371T
US19940269194
US19920932073
JP19940506246T
CA19932140922
AU19930046687
KR19950700590
BR1993PI06917
ES19930917030T
MX19930004789

Priorität: US19920932073 19920819
WO1993US06430 19930708
US19940269194 19940630

Patentfamilie: [WO9404318A1](#)
[EP0656822B1](#)
[EP0656822A1](#)
[DE69316371T2](#)
[DE69316371D1](#)
[US5490878A](#)
[US5344688A](#)
[JP8500536T2](#)
[CA2140922A](#)
[AU199346687A1](#)
[KR950702894A](#)
[KR19950702894A](#)
[BRPI9306917A](#)
[ES2111165T3](#)
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Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: OSETH DONALD L
PETERSON JEFFREY S

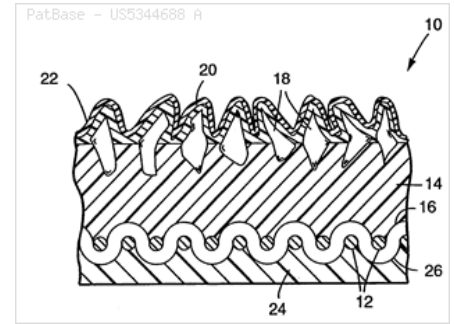


IPC-Notationen: [B24D0003-00](#)
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[C08J0005-14](#)
C09D0004-00
C09D0201-00

CPC-Notationen: B24D0003-28
B24D0011-02
Y10T0428-24033
Y10T0442-2082
Y10T0442-2115

Zusammenfassung:

Source: US5344688 A [EN] A coated **abrasive** article comprising (a) a porous backing having a front side and a back side; (b) in direct contact with the porous backing, a make coat formed from a composition comprising a radiation curable adhesive applied over the front side of the backing; (c) a multiplicity of **abrasive** grits bonded by the make coat to the front side of the backing; and (d) a size coat overlying both the **abrasive** grits and the make coat. The invention also involves several methods for preparing the coated **abrasive** article. In all of these methods, a radiation curable make coat precursor is applied directly to the front side of the porous backing. No treatment coat is required to seal the backing prior to application of the make coat precursor



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 169

Titel: STRUCTURED **ABRASIVE** WITH PARABOLIC SIDES

Patentnummer: [WO2005035195A1](#)

Anmeldung: WO2004US23944
EP20040779148
DE200460019950T
US20030668736
JP20060527968T
CN200480034366
KR20067007689
AT20040779148T
BR2004PI14635

Priorität: US20030668736 20030923
WO2004US23944 20040727

Patentfamilie: **WO2005035195A1**
EP1670616B1
EP1670616A1
DE602004019950D1
US7267700B2
US2005060946A1
JP4555295B2
JP2007505753T2
CN1882420A
CN1882420B
KR20060061386A
KR101085771B1
AT424970E
BRPI0414635A

Anmelder: 3M INNOVATION CO LTD
3M INNOVATIVE PROPERTIES COMPANY

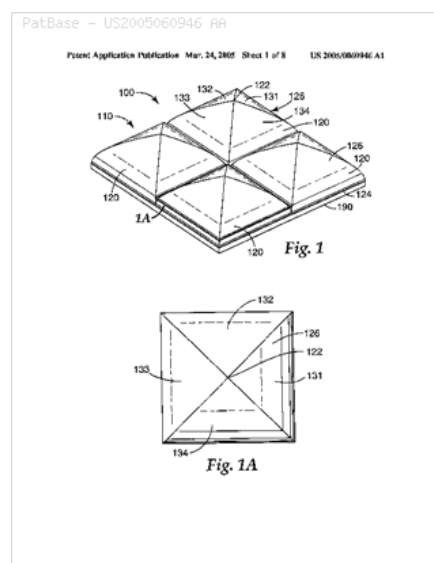
Erfinder: COLLINS STANLEY B HAAS JOHN D

IPC-Notationen: **B24D0003-00**
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B24D0003-28
B24D0011-00
B24D0011-06
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0011-005
B24D0018-0009

Zusammenfassung:

Source: US2005060946 AA [EN] An **abrasive** article and methods of making and using the same are **disclosed**. The **abrasive** article includes a plurality of features on a backing. The features have a base and a body. The body is defined by sidewalls having parabolic sections. In some embodiments, the sidewalls are defined by a series of inner-connected lines segments approximating a parabolic section



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 170

Titel: COMPOSITIONS FOR **ABRASIVE** ARTICLES

Patentnummer: [WO2005035196A1](#)

Anmeldung: WO2004US24136
EP20040779269
DE200460014395T
US20030668753
JP20060527970T
CN200480034365
KR20067005784
AT20040779269T
BR2004PI14650
ES20040779269T

Priorität: US20030668753 20030923
WO2004US24136 20040727

Patentfamilie: [WO2005035196A1](#)
[EP1675707B1](#)
[EP1675707A1](#)
[DE602004014395D1](#)
[US7300479B2](#)
[US2005060947A1](#)
[JP4634386B2](#)
[JP2007505755T2](#)
[CN1882419A](#)
[CN100493850C](#)
[KR20060098367A](#)
[KR101101454B1](#)
[AT398000E](#)
[BRPI0414650A](#)
[ES2308246T3](#)

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

Erfinder: MCARDLE JAMES L CULLER SCOTT R

IPC-Notationen: [B24D0003-00](#)

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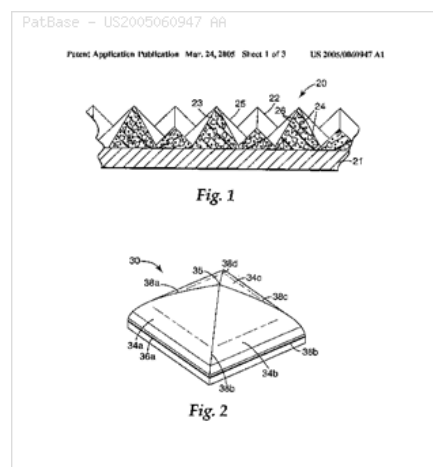
CPC-Notationen:

[B24D0003-002](#)

B24D0003-28
B24D0011-005
B24D0018-0009

Zusammenfassung:

Source: US2005060947 AA [EN] A structured **abrasive** article, methods of making an **abrasive** article, and methods of using an **abrasive** article. The **abrasive** composites forming the **abrasive** article have a height of at least 500 micrometers, and the **abrasive** particles in the composites have an average particle size of at least 40 micrometers, in some embodiments, at least about 85 micrometers. The large topography composites, together with the large ceramic **abrasive** particles, provides an **abrasive** article that has a more consistent **cut**, a longer **cutting life**, and a more consistent surface finish than conventional make/coat **abrasive** articles with the same size and type of **abrasive** particles. Additionally, the large topography composites, together with the large ceramic **abrasive** particles, provide an **abrasive** article that has a more consistent **cut**, a longer **cutting life**, and a more consistent surface finish than structured **abrasive** articles having a smaller topography, even with the same **abrasive** particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 171

Titel: **ABRASIVE** ARTICLE COMPRISING **ABRASIVE** PARTICLES OF A COMPOSITE COMPOSITION

Patentnummer: [WO2014081828A1](#)

Anmeldung: WO2013US71003
EP20130856243
US20130085335
JP20150542051T
CN201380058304
KR20157015043
TW20130142104
AR2013P104188
IN2015DN04821
RU20150121784

Priorität: US20120728496P 20121120
US20130085335 20131120
WO2013US71003 20131120

Patentfamilie: **WO2014081828A1**
EP2922662A1
US2014137482A1
JP2015533670T2
CN104781047A
KR20150082555A
TW201420277A
TWI491471B
AR093483AA
IN04821DN2015A
RU2015121784A

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

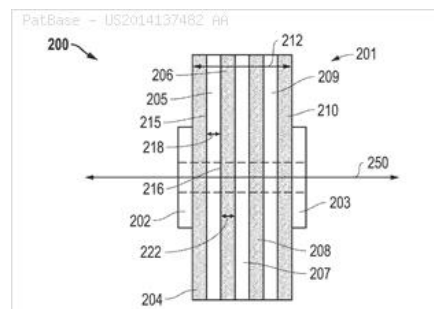
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BONNER ANNE M
COLLIN ANDRE
LI LING YU
LINGYU LI
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MATSUMOTO DEAN S
MUTHU JEEVANANTHAM
PIOTR MIZIAK
STEFANO FRANCOVIGH

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-34
B24D0005-04
B24D0005-08

CPC-Notationen: B24D0003-20
B24D0003-34
B24D0005-04

Zusammenfassung:

Source: US2014137482 AA [EN] An **abrasive** article has a body including an **abrasive** portion with a bond material, **abrasive** particles contained in the bond material, and a reinforcing member contained in the body. The **abrasive** portion can have a fracture propagation toughness WOF of at least about 5 kJ/m². The reinforcing member can have openings with an open area of not greater than about 100 mm² within a major plane of the reinforcing member



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 172

Titel: RESIN BONDED-ABRASIVE ARTICLE HAVING MULTIPLE COLORS

Patentnummer: [WO2018118596A3](#)

Anmeldung: WO2017US66162
EP20170884242
US20170472245
JP20190534261T
CN201780079915
KR20197018169

Priorität: US20160437849P 20161222
US20170472245 20171213
WO2017US66162 20171213

Patentfamilie: [WO2018118596A3](#)
[WO2018118596A2](#)
[EP3558588A4](#)
[EP3558588A2](#)
[US2019322915A1](#)
[JP2020514082T2](#)
[CN110087833A](#)
[KR20190089931A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

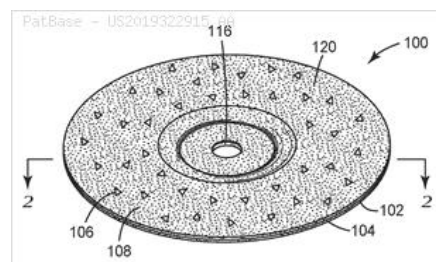
Erfinder: GIVOT MAIKEN
JIWPANICH SIRIPORN
KIM NAMHYUK
MOREN LOUIS S
MORIS ALICE B
VAN LOC XUONG

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B24D0099-00
C09K0003-14

CPC-Notationen: B24D0003-20
B24D0007-14
B24D0018-0009
B24D0099-00
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2019322915 AA [EN] Various embodiments **disclosed** relate to a composite **abrasive** article. The article can be formed from a first portion having a first color and a second portion of the article having a second color different than the first color



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 173

Titel: METHOD FOR PRODUCING A **GRINDING TOOL** AND **GRINDING TOOL**

Patentnummer: [WO2018149483A1](#)

Anmeldung: WO2017EP53281
EP20170705119
US20170485972
JP20190564577T
CA20173053273
AU20170398968
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RU20190123294

Priorität: WO2017EP53281 20170214

Patentfamilie: **WO2018149483A1**
EP3397429A1
US2020061777A1
JP2020507488T2
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AU2017398968A1
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KR20190119044A
BR112019015694A2
MX2019009632A1
RU2731496C9
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Anmelder: AUGUST RUGGEBERG GMBH AND CO KG
RUEGGERBERG AUGUST GMBH AND CO KG

Erfinder: MON TOMAS
SCHMITZ ACHIM
SHMITTS AKHIM
SHTUKENKHOLTS BERND
STUCKENHOLZ BERND
THOMAS MOHN

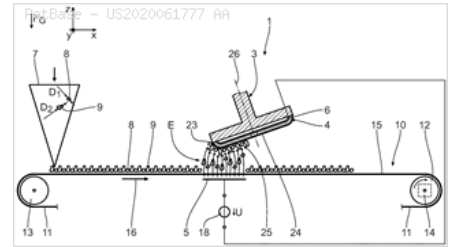
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B24D0007-00
B24D0007-02
B24D0018-00

CPC-Notationen: B24D0003-28
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B24D0003-342
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B24D0005-00
B24D0005-08
B24D0007-00
B24D0007-02
B24D0018-00
B24D0018-0072
B24D2201-00
B24D2203-00



Zusammenfassung:

Source: US2020061777 AA [EN] With a method for the production of a **grinding tool**, a **tool** base body is provided, which configures a three-dimensionally shaped adhesive sur-face by application of a bonding agent. The **tool** base body is positioned in a way that the adhesive surface is arranged in an electrostatic field, be-tween a first electrode and a second electrode. Into the electrostatic field, **abrasive** grains are introduced, which, due to the electrostatic field, move towards the adhesive surface and adhere to same. The **grinding tool** produced in this manner has a three-dimensionally shaped **abrasive** grain layer. The production of the **grinding tool** is simple, flexible and economical. The **grinding tool** has a randomly shaped **abrasive** grain layer and can be applied in a manifold manner with a high **cutting** performance and a long **service life**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 174

Titel: CURABLE COMPOSITION, **ABRASIVE** ARTICLE, AND METHOD OF MAKING THE SAME

Patentnummer: [WO2017192426A1](#)

Anmeldung: WO2017US30353
EP20170737926
US20170099031
JP20180558122T
CN201780027803
KR20187034676

Priorität: US20160332908P 20160506
US20170099031 20170501
WO2017US30353 20170501

Patentfamilie: **WO2017192426A1**
[EP3452253B1](#)
[EP3452253A1](#)
[US10702974B2](#)
[US2019185658A1](#)
[JP2019520222T2](#)
[CN109070314A](#)
[CN109070314B](#)
[KR20190004744A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: LEE HAE SEUNG
SCHILLO ARMSTRONG MELISSA C

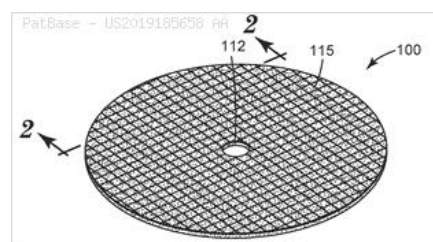


IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0005-12
C08K0003-22
C08K0005-544
C08K0009-02
C08K0009-06
C08L0061-06
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0005-12
C08K0003-22
C08K0005-544
C08K0009-02
C08K0009-06
C08K2003-2227
C08K2201-009
C08L0061-06
C08L0073-00

Zusammenfassung:

Source: US2019185658 AA [EN] A curable composition comprises a phenolic resin and isocyanate-functionalized **abrasive** particles. The isocyanate-functionalized **abrasive** particles consist of the reaction product of at least one isocyanate-functional organosilane and **abrasive** particles. **Abrasive** articles and methods of making them using the isocyanate-functionalized **abrasive** particles are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 175

Titel: **ABRASIVE** ARTICLE AND METHOD OF MAKING THE SAME

Patentnummer: [WO2017078978A1](#)

Anmeldung: WO2016US58647
EP20160862714
US20150933479
JP20180522631T
CN201680064577
BR20181109260

Priorität: US20150933479 20151105
WO2016US58647 20161025

Patentfamilie: **WO2017078978A1**
[EP3370919A1](#)
[EP3370919A4](#)
[US9849563B2](#)
[US2017129075A1](#)
[JP2018532604T2](#)
[CN108349070A](#)
[BR112018009260A2](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

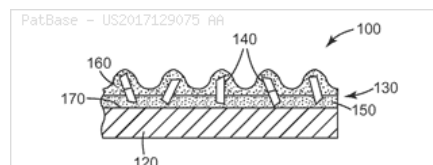
Erfinder: EVERAERTS ALBERT I
IBRAHIM A EL HEDOK
JOHN T BODEN
JOSEPH B ECKEL
KOETHE BRIAN G
MAHFUZA B ALI
MOEGENBURG BRANT A
NIENABER AARON K
REBECCA A PUTANS
SCOTT R CULLER
THOMAS J NELSON
THURBER ERNEST L
WAYNE W MAURER

IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0011-00
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-002**
B24D0003-007
B24D0003-28
B24D0003-344
B24D0011-005
B24D0018-0072

Zusammenfassung:

Source: US2017129075 AA [EN] An **abrasive** article comprises **abrasive** particles adhered to a substrate by a binder material comprising an at least partially cured resole phenolic resin and an aliphatic tack modifier. The amount of resole phenolic resin comprises from 60 to 98 weight percent of the combined weight of the resole phenolic resin and the aliphatic tack modifier. A method of making the **abrasive** article is also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 176

Titel: **ABRASIVE** ARTICLES AND METHODS FOR FORMING SAME

Patentnummer: [WO2017197019A1](#)

Anmeldung: WO2017US32011
EP20170796790
US20170300435
JP20180559190T
CN201610304395
KR20187035687
IN201817044510

Priorität: CN201610304395 20160510
US20170300435 20170510
WO2017US32011 20170510

Patentfamilie: **WO2017197019A1**
EP3455033A1
EP3455033A4
US2019224813A1
JP6655199B2
JP2019514716T2
CN107350980A
CN107350980B
KR20180134431A
KR102161433B1
IN201817044510A

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

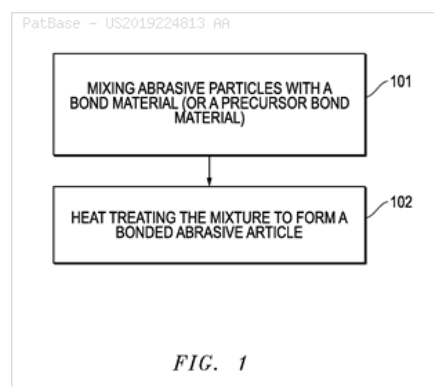
Erfinder: BAI HONGWEI
SHI ZEHUA

IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0018-00
C08L0061-06
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-346
B24D0018-00
B24D0018-0009
B24D0018-0072
C08L0061-06
C08L2205-025
C09K0003-14
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2019224813 AA [EN] An **abrasive** article can include a body including a bond material and **abrasive** particles contained within the bond material. The bond material can include an organic material including a resin, particularly a phenolic resin. A methylene bridge can be present at para or ortho sites of aromatic phenolic rings. The bond material can include an average ortho to para substituent ratio for the methylene bridge within a range including at least 1.5: 1 and not greater than 9: 1, particularly, within a range including at least 3 and not greater than 6.9



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 177

Titel: SYSTEM FOR MAKING **ABRASIVE** ARTICLE

Patentnummer: [WO2018063958A1](#)

Anmeldung: WO2017US53164
EP20170857244
US20170333041
CN201780060134
KR20197012321

Priorität: US20160402663P 20160930
US20170333041 20170925
WO2017US53164 20170925

Patentfamilie: **WO2018063958A1**
EP3519136A1
EP3519136A4
US2019262974A1
CN109789536A
KR20190055224A

Anmelder: 3M CO MINNESOTA MINING AND MFG COMPANY
3M INNOVATIVE PROPERTIES CO

Erfinder: BERRIGAN MICHAEL R
BODEN JOHN T
ECKEL JOSEPH B
KEIPERT STEVEN J
NIENABER AARON K

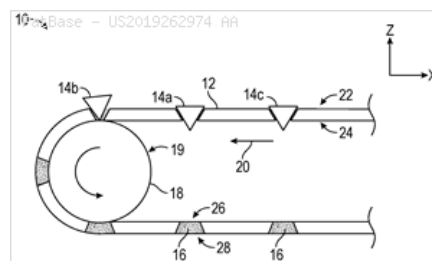


IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0011-00
B24D0018-00
B65G0047-74
B81C0001-00

CPC-Notationen: B24D0003-28
B24D0011-001
B24D0018-0072
B24D0018-009

Zusammenfassung:

Source: US2019262974 AA [EN] In some examples, an **abrasive** particle transfer system including a production **tool** comprising a dispensing surface and a back surface opposite the dispensing surface, wherein the production **tool** has cavities formed therein, wherein, on a respective basis, each of the cavities extends from a first opening at the dispensing surface through the production **tool** to a second opening at the back surface, and wherein the second opening is smaller than the first opening; **abrasive** particles removably disposed within at least some of the cavities such that a portion of each particle protrudes from the back surface through the second opening; and a transfer roll having an outer surface, wherein the production **tool** is guided along a web path such that the portion of the **abrasive** particles protruding from the back surface of the production **tool** contacts the outer surface of the **abrasive** particle transfer roll to displace the **abrasive** particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 178

Titel: [Grinding wheel](#) manufacturing method

Patentnummer: [DE3316650C2](#)

Anmeldung: DE19833316650
US19830492826
JP19820077733
GB19830012440
FR19830007812

Priorität: JP19820077733 19820510

Patentfamilie: [DE3316650C2](#)
[DE3316650A1](#)
[US4618349A](#)
[JP58223564A2](#)
[JP2053196B4](#)
[JP1698390C3](#)
[GB2121330B2](#)
[GB2121330A1](#)
[GB8312440A0](#)
[FR2526353B1](#)
[FR2526353A1](#)

Anmelder: OSAKA KONGO SEITO CO LTD
OSAKA KONGO SEITO KK
OSAKA KONGOU SEITO KK
TOKYO SHIBAURA ELECTRIC CO

Erfinder: HASHIMOTO MASAHIRO
TANI HIDEO

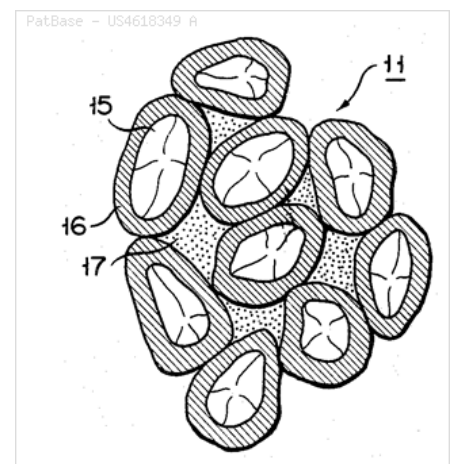
IPC-Notationen: [B24D0003-00](#)
[B24D0003-30](#)

CPC-Notationen: B23H0005-08
[B24D0003-02](#)
[B24D0003-34](#)
B24D0005-00
B24D0018-00
C09K0003-1436



Zusammenfassung:

Source: US4618349 A [EN] A [grinding wheel](#) comprising [abrasive](#) grains each of which is coated with a conductive material and a non-conductive binder interposed among said [abrasive](#) grains. The amount of said conductive material ranges from 30 to 80 percent by weight based on said [abrasive](#) grains. The [abrasive](#) grains coated with said conductive material is contained in said grindstone in an amount ranging from 33 to 64 percent by volume. A method of producing said [grinding wheel](#) is also proposed. The method comprises preparing a mixture of said coated [abrasive](#) grains and said non-conductive binder, filling the mixture into a mold and molding said mixture by applying a pressure while maintaining said mixture at a constant temperature



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 179

Titel: APPARATUS AND METHOD FOR LAMINATED **GRINDING DISKS** EMPLOYING VIBRATION DAMPING MATERIALS

Patentnummer: [EP0229983B1](#)

Anmeldung: EP19860117294
DE19863666786T
DE19853545308
US19860940062
JP19860300221
CA19860526006
AT19860117294T
DK19860006145
ES19860117294T
FI19860005170
GR19890400282T
NO19860005193

Priorität: DE19853545308 19851220
DE19863666786T 19861211
EP19860117294 19861211
CA19860526006 19861222

Patentfamilie: [EP0229983B1](#)
[EP0229983A3](#)
[EP0229983A2](#)
[DE3545308A1](#)
[DE3666786D1](#)
[US5092082A](#)
[JP6215777A2](#)
[JP7108511B4](#)
[JP2075992C3](#)
[CA1321884A1](#)
[AT47811E](#)
[DK167856B1](#)
[DK614586A](#)
[DK614586A0](#)
[ES2012341B3](#)
[FI82064C](#)
[FI82064B](#)
[FI865170A](#)
[FI865170A0](#)
[GR3000247T3](#)
[NO865193L](#)
[NO160978C](#)
[NO160978B](#)
[NO865193A](#)
[NO865193A0](#)

Anmelder: CERASIV GMBH
FELDMUEHLE AG

Erfinder: BRANDIN HENNING DR DIPL ING
HANSU YOTSUTO PATOBERUKU
HENINGU BURANDEIN
KEULER JOSEF
KURASU HAA TOORUMAIAA
PADBERG HANS J DR DIPL CHEM
THORMEIER KLAUS H DR DIPL ING
YOOZEFU KOIRAA

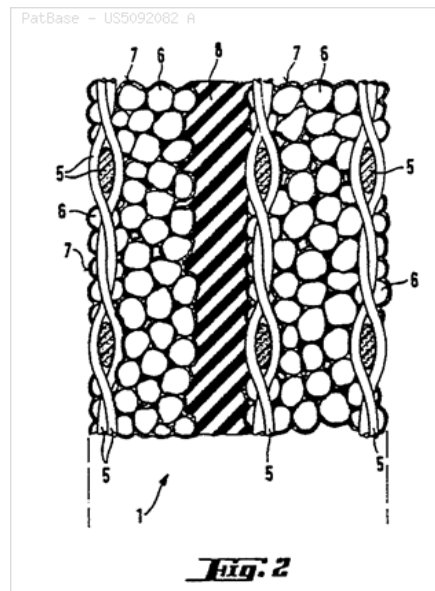


IPC-Notationen: **B24D0003-00**
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B24D0005-00
B24D0005-02
B24D0005-04
B24D0005-06
B24D0005-12
B24D0007-00
C08J0005-14

CPC-Notationen: **B24D0003-34**
B24D0005-02
B24D0005-12

Zusammenfassung:

Source: US5092082 A [EN] Laminated **grinding disks** are **built** up in layers with the interposition of at least one layer of vibration-damping materials as sound insulation, the layer of vibration-damping materials being placed in the mold in the form of fine, free-flowing powder and/or granules. The powder or granules can consist of elastomers which can withstand heating to more than 110 DEG C. The elastomer can be mixed with synthetic resin. The addition of **filler** improves the working qualities of the mixture and improves its granulability



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 180

Titel: **ABRASIVE** MATERIAL AND **ABRASIVE WHEEL**

Patentnummer: [EP2653265B1](#)

Anmeldung: EP20120002759
US20130864626
ES20120002759T

Priorität: EP20120002759 20120420

Patentfamilie: [EP2653265B1](#)
[EP2653265A1](#)
[US2013280995A1](#)
[ES2732931T3](#)

Anmelder: DAMRAU DIRK OLAF
DOPP STEPHAN
HERMES SCHLEIFMITTEL GMBH AND CO KG

Erfinder: DAMRAU DIRK OLAF
DOPP STEPHAN

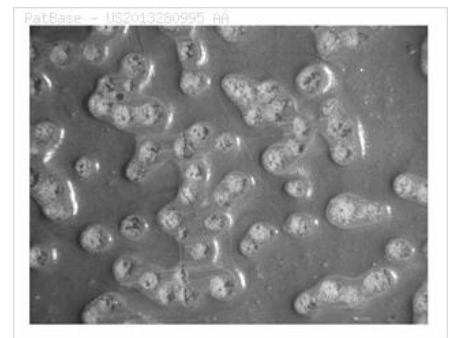
IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0005-06
C09K0003-14

CPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0005-063



Zusammenfassung:

Source: US2013280995 AA [EN] The invention relates to an **abrasive** having a base body and **abrasive** particles applied to the surface of the base body, characterized in that the base body has a multicellular structure. The invention further relates to a process for producing this **abrasive** and to a **grinding tool** based on this **abrasive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 181

Titel: SANDPAPER WITH NON-SLIP COATING LAYER

Patentnummer: [WO2018071361A1](#)

Anmeldung: WO2017US55832
EP20170859665
US20170340554
CA20173040112
CN201780062657

Priorität: US20160406148P 20161010
US20170340554 20171010
WO2017US55832 20171010

Patentfamilie: [WO2018071361A1](#)
[EP3523092A1](#)
[EP3523092A4](#)
[US2019255677A1](#)
[CA3040112A](#)
[CN109803791A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

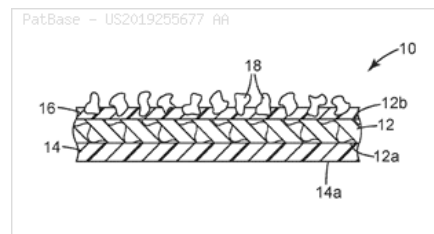
Erfinder: BENSON SARGENT ELIZABETH A
BUCHHOLZ BRETT A
CAMPBELL STEWART W
KADOMA IGNATIUS A
MARTIN MICHAEL C
PETERSEN JOHN G

IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0009-00
B24D0011-00
B24D0011-02
B24D0011-08

CPC-Notationen: [B24D0003-002](#)
[B24D0003-34](#)
[B24D0003-346](#)
B24D0009-00
B24D0011-00
B24D0011-02
B24D0011-08

Zusammenfassung:

Source: US2019255677 AA [EN] The present [disclosure](#) generally relates to **abrasive** articles for abrading a work surface such as, for example, flexible sheet-like **abrasive** articles, as well as methods of making and using such **abrasive** articles. Some embodiments of the **abrasive** articles include an improved, more heat resistant non-slip coating or layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 182

Titel: **ABRASIVE** ARTICLE COATED WITH A LITHIUM SALT OF A FATTY ACID

Patentnummer: [EP0414346B1](#)

Anmeldung: EP19900306358
DE19906006430T
US19890370812
JP19900165501
CA19902017710
KR19900009228
MX19900021021

Priorität: US19890370812 19890623
CA19902017710 19900529

Patentfamilie: [EP0414346B1](#)
[EP0414346A1](#)
[DE69006430T2](#)
[DE69006430D1](#)
[US4988554A](#)
[JP3043158A2](#)
[CA2017710A](#)
[KR19910000302A](#)
[MX164240B](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

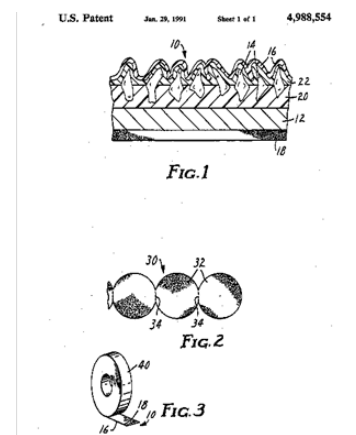
Erfinder: MAABIN JIYON SUKUROODAA
PETERSON SCOTT W C O MINNESOTA
SCHROEDER MARVIN J C O MINNESO
SUKOTSUTO UIRIAMU PIITAASON

IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0011-00
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CPC-Notationen: [B24D0003-004](#)
[B24D0003-344](#)
B24D0011-00
Y10S0428-906
Y10T0428-24364
Y10T0428-24372
Y10T0428-2438
Y10T0428-24413
Y10T0428-24421
Y10T0428-2443
Y10T0428-28
Y10T0428-2839
Y10T0428-2848
Y10T0428-31895

Zusammenfassung:

Source: US4988554 A [EN] A coated **abrasive** article comprising a backing bearing on one major surface thereof a layer of **abrasive** grains overcoated with a loading resistant coating and on the other major surface thereof a layer of pressure-sensitive adhesive. The loading resistant coating comprises a lithium salt of a fatty acid. It may also contain **additives** selected from the group consisting of surfactants, wetting agents, binders, anti-foaming agents, **fillers**, plasticizers, and mixtures thereof. The use of a lithium salt of a fatty acid significantly reduces the amount of transfer between the loading resistant coating of a first coated **abrasive** article and the pressure-sensitive adhesive layer of a second coated **abrasive** article disposed within a package



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 183

Titel: METHOD OF FABRICATING A REINFORCED MEDIUM FOR **ABRASIVE-COATED GRINDING** MATERIAL, AND **ABRASIVE-COATED GRINDING** MATERIAL OBTAINED THEREFROM

Patentnummer: [WO2009071842A3](#)

Anmeldung: WO2008FR52133
EP20080856949
US20080742193
JP20100534532T
FR20070059312
CA20082706361
CN200880117488
KR20107011278
BR2008PI20396

Priorität: FR20070059312 20071126
WO2008FR52133 20081126

Patentfamilie: [WO2009071842A3](#)
[WO2009071842A2](#)
[EP2227354A2](#)
[US2010279061A1](#)
[JP2011504423T2](#)
[FR2924041B1](#)
[FR2924041A1](#)
[CA2706361A](#)
[CN101873911A](#)
[KR20100106318A](#)
[BRPI0820396A2](#)

Anmelder: ARJOWIGGINS ARCHES
ARJOWIGGINS LICENSING SAS
ARJOWIGGINS LICENSING SOC PAR
MAYADE THIERRY

Erfinder: THIERRY MAYADE

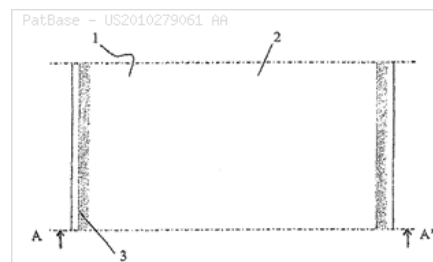


IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
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B24D0011-02
B24D0018-00
B32B0005-00
D21F0001-00
D21H0013-00
D21H0017-28
D21H0017-35
D21H0017-53
D21H0017-55
D21H0023-00

CPC-Notationen: [B24D0003-002](#)
[B24D0003-34](#)
B24D0011-003
B24D0011-02
B24D0018-0072
D21H0017-28
D21H0017-35
D21H0017-53
D21H0017-55
D21H0019-36
D21H0021-16
Y10T0428-24132
Y10T0428-24364
Y10T0428-24785
Y10T0428-2481

Zusammenfassung:

Source: US2010279061 AA [EN] The present invention relates to a machine for fabricating a medium for **abrasive-coated grinding** material, wherein at least one continuous reinforcing **element** in the form of a tape or a yarn is introduced continuously during wet formation of the medium



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 184

Titel: **ABRASIVE** ARTICLES AND RELATED METHODS

Patentnummer: [WO2017117364A1](#)

Anmeldung: WO2016US69141
EP20160829045
US20160066536
JP20180534554T
CN201680077387
IN201847024539

Priorität: US20150273050P 20151230
US20160066536 20161229
WO2016US69141 20161229

Patentfamilie: **WO2017117364A1**
[EP3397426A1](#)
[US10759023B2](#)
[US2019015950A1](#)
[JP2019506304T2](#)
[CN108430699A](#)
[IN201847024539A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

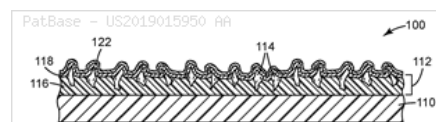
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HILL PHILIP S
MEULER ADAM J
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SCHMIDT DANIEL J
YANG YUGEUN P

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B24D0003-34
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B24D0011-02
C09G0001-02
C09K0003-14

CPC-Notationen: **B24D0003-004**
B24D0003-346
B24D0011-00
B24D0011-001

Zusammenfassung:

Source: US2019015950 AA [EN] Provided are **abrasive** articles that include a plurality of layers, in the following order: a backing; an **abrasive** layer; and a supersize coat. The supersize coat contains a metal salt of a long-chain fatty acid and clay particles dispersed therein. Advantageously, the clay particles enhance the optical clarity of the supersize coat, allowing printed **abrasive** articles to be made with thicker supersize coatings. The addition of clay was also found to improve **cut** performance of the **abrasive** article relative to articles in which the clay particles are absent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 185

Titel: MULTIPURPOSE **TOOLING** FOR SHAPED PARTICLES

Patentnummer: [WO2018063962A1](#)

Anmeldung: WO2017US53173
EP20170857247
US20170331279
CN201780059785

Priorität: US20160402571P 20160930
US20170331279 20170925
WO2017US53173 20170925

Patentfamilie: **WO2018063962A1**
[EP3519138A1](#)
[EP3519138A4](#)
[US2019351531A1](#)
[CN109789535A](#)
[CN109789535B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

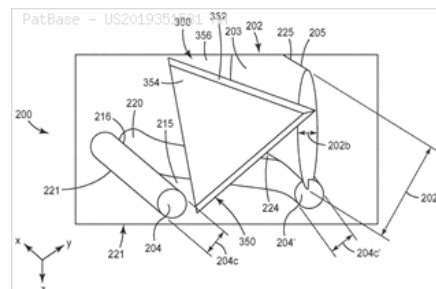
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KAUR JASMEET
MARTINEZ JAIME A
NELSON THOMAS J
WOO EDWARD J

IPC-Notationen: **B24D0003-00**
B24D0003-34
B24D0011-00
B24D0018-00
B29C0047-00
B29C0048-03
B29D0028-00
B81C0001-00
C09K0003-14

CPC-Notationen: **B24D0003-346**
B24D0011-00
B24D0018-0072
B24D2203-00
B29C0048-0018
B29C0048-022
B29C0048-16
B29D0028-00

Zusammenfassung:

Source: US2019351531 AA [EN] A method of transferring a shaped particle to a substrate includes providing a scrim of at least two elongate strands periodically joined together at flexible bond regions to form an array of apertures between the strands. The scrim is extended along at least one direction to increase the minimum dimension of the apertures. Shaped particles are applied to the extended scrim and at least a portion of the shaped particles enter in at least some of the apertures therein. The extended scrim is relaxed and frictionally retains the particles between the elongate strands. The particle loaded scrim is extended along at least one direction to release and transfer the shaped particles to the substrate in a predetermined orientation



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 186

Titel: COMPOSITION CONTAINING GRAPHITE

Patentnummer: [WO02062532A1](#)

Anmeldung: WO2002US02139
EP20020705963
DE20026005216T
US20030412125
US20010779681
JP20020562522T
CA20022435853
AU20020240077
AT20020705963T
BR2002PI06822

Priorität: US20010779681 20010208
WO2002US02139 20020125
US20030412125 20030411

Patentfamilie: [WO02062532A1](#)
[EP1360037B1](#)
[EP1360037A1](#)
[DE60205216T2](#)
[DE60205216D1](#)
[US7294667B2](#)
[US2003204007A1](#)
[US2002146963A1](#)
[JP2004532904T2](#)
[CA2435853A](#)
[AU2002240077A1](#)
[AT300394E](#)
[BRPI0206822B1](#)
[BRPI0206822A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: TEETZEL MICHAEL L

IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0011-02
B60C0001-00
C04B0028-00
C04B0028-26
C08K0003-00
C08K0003-04
C08L0101-00
C09K0003-14
D06N0007-00
D06N0007-04
H05F0001-00

CPC-Notationen: [B24D0003-002](#)
[B24D0003-346](#)
B24D0011-02
Y10T0428-24372
Y10T0428-2438
Y10T0428-24388
Y10T0428-24397
Y10T0428-24405
Y10T0428-24413

Zusammenfassung:

Source: US2002146963 AA [EN] Composition comprising at least about 25 percent by weight graphite particles, based on the total solids content of the composition. The composition is useful, for example, as a coating on the backside of coated **abrasive** articles

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 187



Titel: GRINDING ELEMENT

Patentnummer: [WO2014206739A1](#)

Anmeldung: WO2014EP62152
EP20140730141
DE201450012373T
DE201310212687

Priorität: DE201310212687 20130628
EP20140730141 20140611
WO2014EP62152 20140611

Patentfamilie: [WO2014206739A1](#)
[EP3013919B1](#)
[EP3013919A1](#)
[DE102013212687A1](#)
[DE502014012373D1](#)

Anmelder: BOSCH GMBH ROBERT

Erfinder: WIRZ VIKTOR

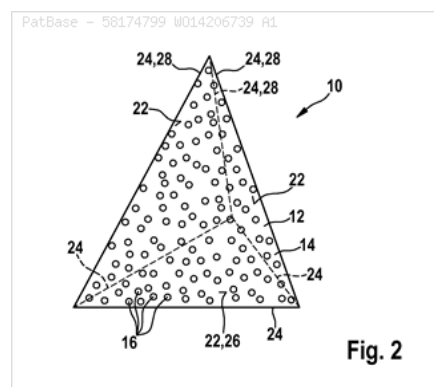
IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0018-00
C09K0003-14

CPC-Notationen: [B24D0003-346](#)
B24D0018-00
C09K0003-14



Zusammenfassung:

Source: WO14206739 A1 [EN] The invention relates to a **grinding element** (10, 110, 210) with a main part (12, 112, 212) which comprises at least one base material (14, 114, 214). The main part (12, 112, 212) comprises at least one additional active material (16, 116, 216) which is provided in order to at least partly influence at least one machining parameter at least in an **operating** state



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 188

Titel: **ABRASIVE** ARTICLE AND METHOD OF MAKING THE SAME

Patentnummer: [WO2018063960A1](#)

Anmeldung: WO2017US53168
EP20170857245
US20170337446
CN201780060611

Priorität: US20160402546P 20160930
US20170337446 20170925
WO2017US53168 20170925

Patentfamilie: **WO2018063960A1**
[EP3519137A1](#)
[EP3519137A4](#)
[US2019344402A1](#)
[CN109789537A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

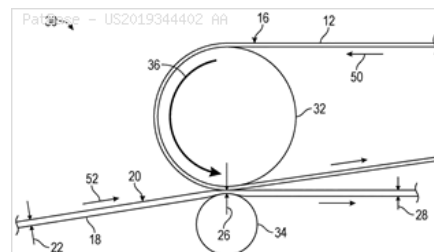
Erfinder: HUBERTY GRAYCE T
MAURER WAYNE W
MOREN LOUIS S
NELSON THOMAS J
NIENABER AARON K
PUTANS REBECCA A
THURBER ERNEST L

IPC-Notationen: **B24D0003-00**
B24D0011-00
B24D0011-02
B24D0018-00
C09K0003-14
D04H0001-00

CPC-Notationen: **B24D0003-00**
B24D0011-00
B24D0011-001
B24D0011-02
B24D0018-00
B24D0018-0072
B29C0048-154
B29C0048-16

Zusammenfassung:

Source: US2019344402 AA [EN] In some examples, an **abrasive** particle transfer system including a production **tool** including a dispensing surface with a plurality of cavities formed therein; **abrasive** particles removably disposed within at least some of the cavities; and a nonwoven substrate having an outer surface opposing the dispensing surface of the production **tool**, wherein the dispensing surface of the production **tool** is configured to apply a compressive force to the outer surface of the nonwoven substrate to compress the nonwoven substrate from a first thickness to a second thickness, wherein, while the nonwoven substrate is compressed to the second thickness by the production **tool**, the **abrasive** particles are transferred from the plurality of cavities to the nonwoven substrate



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 189

Titel: COATED **ABRASIVE** ARTICLE WITH TIE LAYER, AND METHOD OF MAKING AND USING THE SAME



Patentnummer: [WO2006006999A1](#)

Anmeldung: WO2005US13087
EP20050741860
DE200560005682T
US20040871455
JP20070516476T
CA20052569870
CN200580019719
KR20067026516
AT20050741860T
BR2005PI12059

Priorität: US20040871455 20040618
WO2005US13087 20050419

Patentfamilie: [WO2006006999A1](#)
[EP1776209B1](#)
[EP1776209A1](#)
[DE602005005682T2](#)
[DE602005005682D1](#)
[US7150770B2](#)
[US2005279028A1](#)
[JP4782783B2](#)
[JP2008502492T2](#)
[CA2569870A](#)
[CN1968786A](#)
[CN100522488C](#)
[KR20070027586A](#)
[KR101106912B1](#)
[AT390247E](#)
[BRPI0512059B1](#)
[BRPI0512059A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: KEIPERT STEVEN J THURBER ERNES
KINCAID DON H
PROVOW RONALD D
THURBER ERNEST L

IPC-Notationen: [B24D0003-00](#)

B24D0011-00
B24D0017-00
B24D0018-00
B24D0099-00

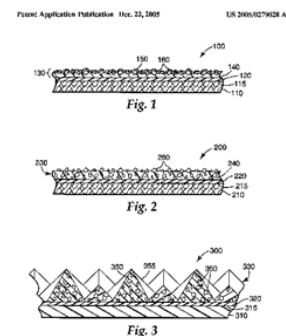
CPC-Notationen:

[B24D0003-004](#)

B24D0003-28
B24D0011-001

Zusammenfassung:

Source: US2005279028 AA [EN] Coated **abrasive** articles have a tie layer that is preparable by at least partially polymerizing an isotropic polymerizable composition comprising a polyfunctional aziridine, an acidic free-radically polymerizable monomer, and an oligomer having at least two pendant free-radically polymerizable groups, wherein homopolymerization of the oligomer results in a polymer having a glass transition temperature of less than 50 degrees Celsius



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 190

Titel: COATED **ABRASIVE** ARTICLE WITH COMPOSITE TIE LAYER, AND METHOD OF MAKING AND USING THE SAME



Patentnummer: [WO2006007036A1](#)

Anmeldung: WO2005US15217
EP20050744013
DE200560005681T
US20040871486
JP20070516486T
CA20052570302
CN200580020204
KR20077001212
AT20050744013T
BR2005PI12141

Priorität: US20040871486 20040618
WO2005US15217 20050503

Patentfamilie: **WO2006007036A1**
EP1773544B1
EP1773544A1
DE602005005681T2
DE602005005681D1
US7150771B2
US2005279029A1
JP4728326B2
JP2008502772T2
CA2570302A
CN1968787A
CN100509291C
KR20070032019A
KR101106843B1
AT390246E
BRPI0512141B1
BRPI0512141A

Anmelder: 3M INNOVATIVE PROPERTIES CO

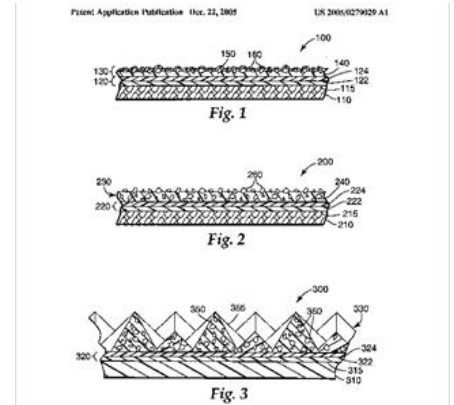
Erfinder: KEIPERT STEVEN J THURBER ERNES
KINCAID DON H
PROVOW RONALD D
THURBER ERNEST L

IPC-Notationen: **B24D0003-00**
B24D0011-00
B24D0017-00
B24D0018-00
B24D0099-00
C08F0002-00
C08F0290-00
C08J0005-14

CPC-Notationen: **B24D0003-004**
B24D0003-28
B24D0011-001

Zusammenfassung:

Source: US2005279029 AA [EN] Coated **abrasive** articles have a composite tie layer. The composite tie layer is preparable by disposing a first polymerizable composition comprising a polyfunctional aziridine on a backing, and disposing a second polymerizable composition comprising at least one acidic free-radically polymerizable monomer and at least one oligomer having at least two pendant free-radically polymerizable groups on the first polymerizable composition, at least partially polymerizing the first and second polymerizable compositions, wherein homopolymerization of the oligomer results in a polymer having a glass transition temperature of less than 50 degrees Celsius



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 191

Titel: METHOD FOR MAKING A SUBSTRATE FOR AN APPLIED **ABRASIVE** PRODUCT AND SUBSTRATE THUS OBTAINED

Patentnummer: [WO2009030850A3](#)

Anmeldung: WO2008FR51424
FR20070056841

Priorität: FR20070056841 20070731

Patentfamilie: [WO2009030850A3](#)
[WO2009030850A2](#)
[FR2919513B1](#)
[FR2919513A1](#)

Anmelder: ARJOWIGGINS LICENSING SAS
ARJOWIGGINS LICENSING SOC PAR
MAYADE THIERRY

Erfinder: MAYADE THIERRY

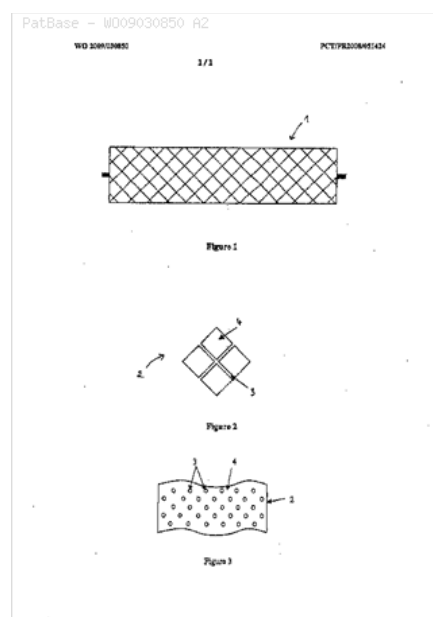
IPC-Notationen: [B24D0003-00](#)
B24D0011-02
[C08J0005-14](#)
C08J0007-00
C08J0007-04
C09J0005-02
D06M0015-00

CPC-Notationen: [B24D0003-004](#)
B24D0011-005
B24D0011-02



Zusammenfassung:

Source: WO09030850 A2 [EN] The invention relates to a method for making a substrate for an applied **abrasive** product that comprises applying a treatment for making at least one area of at least one face of the substrate water-repellent for an attachment layer of **abrasive** grains



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 192

Titel: METHOD FOR PRODUCING CURRENT ENDS **SCHLEIFKOERPERN** (Machine translation)
Patentnummer: [DE612918A](#)
Anmeldung: DE1931D060530D
00000000
Priorität: 19310227
Patentfamilie: **DE612918A**
NL40248C
Anmelder: DEGUSSA
Erfinder: POHL DR THEODOR
SCHNEIDER JOSEF

IPC-Notationen: **B24D0003-00**
B24D0018-00
CPC-Notationen: **B24D0003-00**
B24D0018-00



Zusammenfassung:

Die Erfindung bezieht sich auf die Herstellung umlaufender Schleifkörper von starrer Beschaffenheit aus Schleifmaterial, wie Schmirgel, Korund, Siliciumcarbid u. dgl., und Bindemitteln. Derartige Schleifkörper besitzen stets eine gewisse natürliche Porosität, welche bedingt durch die Größe des Schleifkorns, die Art des verwendeten Schleifkorns, das Mengenverhältnis von Schleifkorn und andere bedingte Schleifkorns ist. Es ist auch bereits vorgeschlagen worden, die Porosität von aus Schleifkorn und Bindemitteln hergestellten Schleifkörpern künstlich zu erhöhen, z. B. derart, daß man der Mischung der Ausgangsstoffe Holzmehl u. dgl. Zusatzstoffe einverleibt und durch Ausbrennen derselben aus dem geformten Körper die Porosität des Fertigproduktes erhöht. Also schlägt z. B. die USA-Patentschrift 1 573 400 vor, 0 zu erhöhen

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 193

Titel: **ABRASIVE** PRODUCTS CONTAINING FUSED ALUMINA ZIRCONIA AND REDUCED TITANIA

Patentnummer: [DE3040992C2](#)

Anmeldung: DE19803040992
US19880277618
JP19800156031
GB19800034473
FR19800023864
CA19800364210

Priorität: GB19790038957 19791109
GB19800034473 19801027
US19800205062 19801107
US19830477065 19830321
US19840676594 19841130
US19860917235 19861007
US19880277618 19881129

Patentfamilie: [DE3040992C2](#)
[DE3040992A1](#)
[US5143522B1](#)
[US5143522A](#)
[JP56088879A2](#)
[JP63032752B4](#)
[GB2062666B2](#)
[GB2062666A1](#)
[FR2469440B1](#)
[FR2469440A1](#)
[CA1163448A1](#)

Anmelder: CARBORUNDUM CO LTD
CARBORUNDUM CY
KENNECOTT CORP
WASHINGTON MILLS ELECTRO MINER

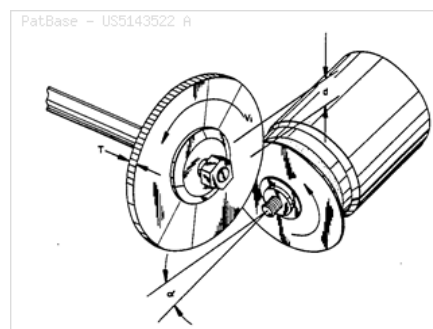
Erfinder: BURIAN GIBUSON
GIBSON BRIAN
SEIDER ROBERT J

IPC-Notationen: [B24D0003-00](#)
C04B0035-10
C04B0035-622
C04B0035-653
C09C0001-68
C09K0003-14

CPC-Notationen: C09K0003-1427

Zusammenfassung:

Source: US5143522 A [EN] An **abrasive** grain comprising about 20 to about 50 percent by weight of zirconia; reduced titania in an amount on analysis expressed as titanium dioxide of 1.5 to about 10 percent by weight; total carbon in an amount of 0.03 to about 0.5 percent by weight; impurities, if any, in a total amount on analysis expressed as the oxides of not greater than 3 percent by weight; and a balance of alumina. The microstructure of the **abrasive** grain comprises primary alumina or zirconia crystals embedded in a supporting alumina-zirconia eutectic matrix. The grain may be produced by combining and melting the alumina and zirconia; adding titania and carbon (excess carbon being required); melting and reducing the titania under reducing furnace conditions; and solidifying the melt in under three minutes by means of a suitable heat sink material. The **abrasive** grain has a high proportion of tetragonal zirconia and may be used to produce coated **abrasive** products or bonded **abrasive** products



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 194

Titel: Vitrified super **abrasive** grain **grinding tool**
Patentnummer: [US5095665A](#)
Anmeldung: US19890367510
JP19880146752
Priorität: JP19880146752 19880616
Patentfamilie: **US5095665A**
JP1316174A2
JP7016881B4
JP2130108C3
Anmelder: NORITAKE CO LTD
Erfinder: NAGATA AKIRA
YOGO TAKAO

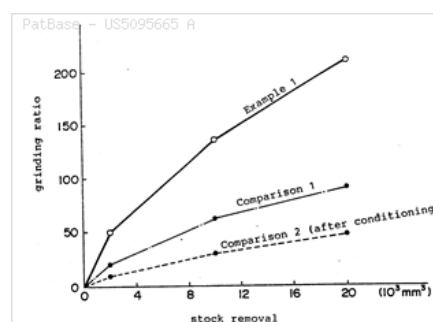


IPC-Notationen: **B24D0003-02**

CPC-Notationen: B24D0003-14
B24D0003-346

Zusammenfassung:

Source: US5095665 A [EN] Vitrified super **abrasive** grain **grinding tool** comprised of **abrasive** grains and first and second **fillers** bonded together by a vitrified bonding material, wherein the **abrasive** grains are super **abrasive** grains, the softening points of the first and second **fillers** are both higher than an inherent firing temperature of the vitrified bonding material for the super **abrasive** grains, the first **filler** is a ceramics which maintains a hollow state before and after firing of the bonding material, and the second **filler** is a ceramics which exists in a non-hollow state. This **grinding tool** has a high porosity at a low concentration while utilizing excellent **grinding** characteristic of super **abrasive** grains with high grain retention force and little burn mark in dry **grinding**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 195

Titel: GLASS BONDED **ABRASIVE TOOL** CONTAINING METAL CLAD GRAPHITE

Patentnummer: [DE3121435A1](#)

Anmeldung: DE19813121435
DE19813120947
US19800154359
US19800154356
JP19810074073
JP19810073635
GB19810011407
FR19810010712
CA19810372318
AU19810069462
AT19810001941
BE19810204916
BR19810003305
CH19810002980
IT19810067462
MX19810187359
SE19810003284

Priorität: US19800154356 19800529
US19800154359 19800529
CA19810372318 19810304

Patentfamilie: [DE3121435A1](#)
[DE3120947A1](#)
[US4354247A](#)
[US4334895A](#)
[JP57021271A2](#)
[JP57010123A2](#)
[GB2077285B2](#)
[GB2077285A1](#)
[FR2483296B1](#)
[FR2483296A1](#)
[CA1178067A1](#)
[AU537562B2](#)
[AU198169462A1](#)
[AT373814B](#)
[AT194181A](#)
[BE888980A](#)
[BR8103305A](#)
[CH640166A](#)
[IT1143482A](#)
[IT8167462A0](#)
[MX156056A](#)
[SE8103284L](#)
[SE450099C](#)
[SE450099B](#)

Anmelder: NORTON CO
ROCKWELL INT CORP
ROCKWELL INTERNATIONAL CORP

Erfinder: KEAT PAUL POWELL
POORU PII KIITO
SHI KEI YAO
YAO SHI KAY



IPC-Notationen: **B24D0003-02**
B24D0003-04
B24D0003-14
B24D0003-34
B24D0005-00
C09K0003-14
G02F0001-29
G02F0001-33
G06E0003-00

CPC-Notationen: B24D0003-14
B24D0003-342
G06E0003-001

Zusammenfassung:

Source: US4334895 A [EN] Glass bonded **grinding wheels** including graphite or other inert dry film lubricant **filler** can be made by conventional techniques if the **filler** material is protected from oxidation by a metal cladding. Diamond or cubic boron nitride **wheels** are particularly described and high **grinding** ratios are achieved. Low porosity can be achieved because of the wettability of the metal cladding by the glass during firing

PatBase - CA1178067 A1

SUBSTITUTE
REPLACEMENT

SECTION is not Present
Cette Section est Absente

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 196

Titel: **ABRASIVE** ARTICLE AND METHOD OF MAKING THE SAME

Patentnummer: [WO2018118695A1](#)

Anmeldung: WO2017US66733
EP20170884551
US20170471015
CN201780078837

Priorität: US20160437869P 20161222
US20170471015 20171215
WO2017US66733 20171215

Patentfamilie: **WO2018118695A1**
[EP3558587A1](#)
[EP3558587A4](#)
[US2020086458A1](#)
[CN110087832A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: CASTILLO MARIA C
ECKEL JOSEPH B
GIVOT MAIKEN
NIENABER AARON K

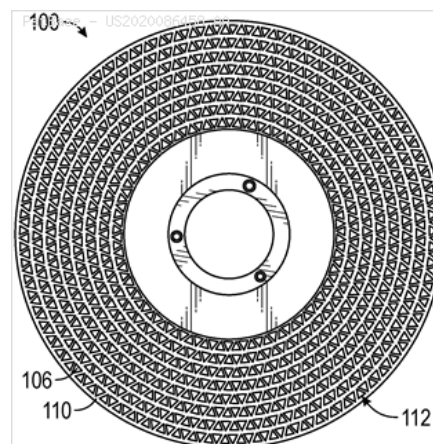


IPC-Notationen: **B24D0003-02**
B24D0003-06
B24D0003-14
B24D0003-20
B24D0007-14
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-02**
B24D0003-06
B24D0003-14
B24D0003-20
B24D0007-14
B24D0018-0009
B24D2203-00
C09K0003-1436

Zusammenfassung:

Source: US2020086458 AA [EN] Various embodiments **disclosed** relate to an **abrasive** article. The **abrasive** article includes a first major surface and an opposed second major surface. Each major surface contacts a peripheral side surface. A central axis extends through the first and second major surfaces. A first layer of **abrasive** particles is dispersed within the **abrasive** article according to a first predetermined pattern. Further a second layer of **abrasive** particles spaced apart from the first layer of **abrasive** particles and is dispersed within the **abrasive** article along a according to a second predetermined pattern. A binder material retains the first and second layers of **abrasive** particles in the **abrasive** article. A portion of the binder material is located between the first and second layers of **abrasive** particles. That portion of the binder material is substantially continuous



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 197

Titel: **Abrasive** composites having a controlled rate of erosion, articles incorporating same, and methods of making and using same

Patentnummer: [EP0605008B1](#)

Anmeldung: EP19930121124
DE19936009420T
US19940252418
US19920999097
JP19930327359
CA19932107955
KR19930031224
AT19930121124T
ES19930121124T

Priorität: US19920999097 19921231
CA19932107955 19931007
US19940252418 19940601

Patentfamilie: [EP0605008B1](#)
[EP0605008A1](#)
[DE69309420T2](#)
[DE69309420D1](#)
[US5518512A](#)
[US5342419A](#)
[JP6206167A2](#)
[CA2107955A](#)
[KR940013731A](#)
[KR19940013731A](#)
[AT150999E](#)
[ES2099895T3](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

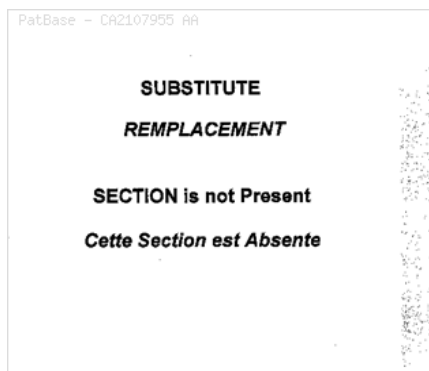
Erfinder: HIBBARD LOUIS D C O MINNESOTA
RUISU DEIBITSUDO HAIBAADO



IPC-Notationen:	B24D0003-02 B24D0003-20 B24D0003-28 B24D0003-34 B24D0011-00 C08K0003-00 C08K0003-34	CPC-Notationen:	B24D0003-28 B24D0003-344 B24D0011-00 C08K0003-346
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Zusammenfassung:

Source: US5342419 A [EN] An **abrasive** composite is presented having a controlled rate of erosion, the composite comprising **abrasive** particles dispersed in the binder, wherein the binder comprises an addition polymerized resin having clay particles dispersed therein. The **abrasive** composite may be adhered to various substrates, including paper, cloth, polymeric films, and nonwovens. The clay particles allow the binder, and thus the composite, to controllably erode upon abrasion of a workpiece, thus exposing fresh **abrasive** particles to the workpiece. Coatable compositions comprising clay particles dispersed in a binder precursor composition, and optionally containing **abrasive** particles, are also described, as well as methods of making and using the composites and articles



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 198

Titel: **ABRASIVE** ARTICLES INCLUDING AN ANTILOADING COMPOSITION

Patentnummer: [WO200000327A1](#)

Anmeldung: WO1999US10599
EP19990923026
US19980107818
JP20000556908T

Priorität: US19980107818 19980630
WO1999US10599 19990513

Patentfamilie: **WO200000327A1**
EP1091832A1
US6261682B1
JP2002519206T2

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: LAW KAM W

IPC-Notationen: **B24D0003-02**
B24D0003-20
B24D0003-28
B24D0003-34
B32B0027-18
C08K0005-00
C08K0005-098
C08L0101-00

CPC-Notationen: **B24D0003-34**
B32B0005-16
B32B0015-00
B32B0027-18
B32B2475-00
C08K0005-098
Y10T0428-28
Y10T0428-31504
Y10T0428-31511
Y10T0428-31547
Y10T0428-31551
Y10T0428-31591
Y10T0428-31786
Y10T0428-3179
Y10T0428-31855
Y10T0428-31895
Y10T0428-31942
Y10T0428-31964



Zusammenfassung:

Source: US6261682 BA [EN] An **abrasive** article comprising a backing, a plurality of **abrasive** particles, a binder which adheres the **abrasive** particles to the backing, and a peripheral coat including an antiload component is provided. The antiload component is of the formula $(C_n H_{2n+1}) - COO - M$, wherein n is greater than 17 and M is selected from Group 1 of the Periodic Table, with the proviso that when M is lithium, n is greater than 21. The antiload component can be included in a coated **abrasive** article, such as a lapping or structured **abrasive** article, and a nonwoven **abrasive** article

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 199

Titel: HIGH TEMPERATURE RESISTANT MOLDING MATERIALS

Patentnummer: [EP0248980B2](#)

Anmeldung: EP19870103043
DE19873782186T
DE19873705540
US19890312884
JP19950323299
JP19950323298
JP19950323297
JP19870139095
ES19870103043T

Priorität: DE19863619541 19860613
DE19873705540 19870220
DE19873782186T 19870304
JP19870139095 19870604

Patentfamilie: [EP0248980B2](#)
[EP0248980B1](#)
[EP0248980A3](#)
[EP0248980A2](#)
[DE3705540C2](#)
[DE3705540A1](#)
[DE3782186D1](#)
[US4918116A](#)
[JP8290961A2](#)
[JP8257918A2](#)
[JP8253658A2](#)
[JP62297347A2](#)
[JP2827176B2](#)
[JP2706063B2](#)
[JP2664021B2](#)
[JP2518849B2](#)
[ES2000424T5](#)
[ES2000424T3](#)
[ES2000424A4](#)

Anmelder: BAKELITE AG
RUETGERSWERKE AG

Erfinder: ADOLPHS PETER DR
ARUNO GARUTOTSUIIRA
GARDZIELLA ARNO DR
KAARU HAINTSU SHIYUBUIIGAA
KAARUUHAINTSU SHIYUBUIIGAA
PEETAA AADORUFUSU
SCHWIEGER KARL HEINZ DR
SUREN JOSEF
YOOZEFU ZUUREN



IPC-Notationen: **B24D0003-02**
 B24D0003-20
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B24D0003-34
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 C04B0035-01
 C04B0035-63
 C04B0035-632
 C04B0035-66
C08J0005-14
 C08K0003-00
 C08K0003-14
 C08K0003-40
 C08K0007-00
 C08K0007-04
 C08K0007-14
 C08L0061-00
 C08L0061-04
 C08L0061-10
 C09K0003-14
 F16D0069-02
 F27D0001-00

CPC-Notationen: B24D0003-285
B24D0003-344
 C04B0035-013
 F16D0069-026

Zusammenfassung:

Source: US4918116 A [EN] Improved high temperature resistant molding materials containing customary **filler** materials and **additives** and a carbon forming bonding agent which is a phenol novolac with a molar ratio of phenol to formaldehyde of 1 to 0.2 to 1 to 0.35 of high quality and free of solvents useful as refractory products, carbon materials, **abrasive wheels**, friction lining and the like

PatBase - JP2518第 1 表

	例 1	例 2	例 3	例 4
比 フェノール：ホルムアルデヒド (P:F)	1:0.2	1:0.25	1:0.30	1:0.35
遊離フェノール	0.1%	0.1%	0.1%	0.1%
融点	室温で液状			

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 200

Titel: METHOD OF MANUFACTURING **GRINDING WHEELS** AND THE LIKE

Patentnummer: [US3377411A](#)

Anmeldung: US19640348735
ES19610272672

Priorität: ES19610272672 19611204
US19640348735 19640302

Patentfamilie: [US3377411A](#)
[ES272672A1](#)

Anmelder: OSBORN MFG CO
THE OSBORN MANUFACTURING COMPANY

Erfinder: CHARVAT VERNON KENNETH

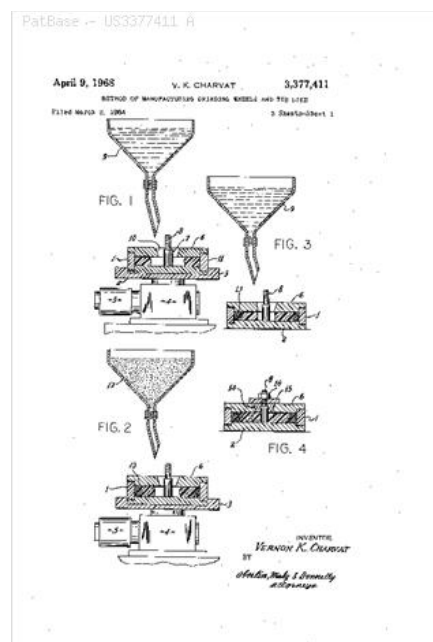


IPC-Notationen: [B24D0003-02](#)
B24D0003-20
B24D0003-32
B24D0005-00
B24D0005-02
B24D0018-00
B29C0041-04
B29C0044-02
B29C0044-04
[C08J0005-14](#)

CPC-Notationen: [B24D0003-02](#)
B24D0003-32
B24D0005-02
B24D0018-00
B24D0018-0009
B29C0041-042
B29C0044-043
B29K2105-16
B29L2031-736

Zusammenfassung:

Source: US3377411 A [EN] [Source: Claim 1] 1. The method of forming an **abrasive** article wh-ich comprises mixing **discrete abrasive** particles in a foamnble binder medium, centrifuging the resultant mixture in a rotatable mold to concentrate said particles in a radially outer local region of said mold and then foaming said centrifuged mixture to produce cells to space substantially all of said concentrated particles only slightly uniformly apart, and setting said binder



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 201

Titel: Erodable agglomerates and **abrasive** products containing the same

Patentnummer: [EP0280463A3](#)

Anmeldung: EP19880301322
US19870027784
JP19880040943
AU19880011155
KR19880001914
BR1988PI00776

Priorität: US19870019059 19870226
US19870420690 19870226
US19870027784 19870319

Patentfamilie: [EP0280463A3](#)
[EP0280463A2](#)
[US4799939A](#)
[JP63234037A2](#)
[AU198811155A1](#)
[KR19880010091A](#)
[BRPI8800776A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: AANESUTO JIYON DOUUERU
BLOECHER ULRICH MINNESOTA MINI
DUWELL ERNEST J MINNESOTA MINI
DUWELL ERNEST JOHN
URURITSUHI BUROEKAA

IPC-Notationen: [B24D0003-02](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-00
[C08J0005-14](#)
C09K0003-14

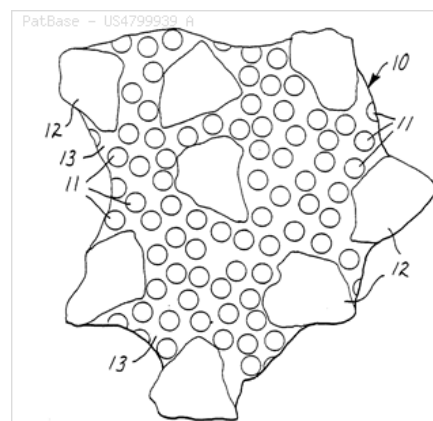
CPC-Notationen: [B24D0003-344](#)
B24D0011-001



Zusammenfassung:

Source: US4799939 A [EN] Erodable agglomerates containing individual **abrasive** grains disposed in an erodable matrix comprising hollow bodies and a binder. The agglomerates are useful for coated **abrasives** and bonded **abrasives**.

Abrasive products containing the agglomerates provide higher stock removal than **abrasive** products bearing a single layer of **abrasive** grains, since the erodable character of the agglomerates allows the sloughing off of spent individual **abrasive** grains during abrading **operations** and the exposing of new **abrasive** grains to the workpiece. The invention also provides a method of preparing the agglomerates of this invention



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 202

Titel: [Grinding wheel](#)
Patentnummer: [DE3537792A1](#)
Anmeldung: DE19853537792
US19850782695
JP19840225200
GB19850025873
FR19850015733
Priorität: JP19840225200 19841026
Patentfamilie: [DE3537792A1](#)
[US4654051A](#)
[JP61103778A2](#)
[GB2168992B2](#)
[GB2168992A1](#)
[GB8525873A0](#)
[FR2572322A1](#)
Anmelder: TOHOKU CHEMICAL IND LTD
TOHOKU KAKO KK
Erfinder: ORITA KEIICHI
YAMASHITA AKIRA



IPC-Notationen: [B24D0003-02](#)
B24D0003-30
[B24D0003-34](#)
[C08J0005-14](#)
CPC-Notationen: B24D0003-30
[B24D0003-34](#)

Zusammenfassung:

Source: US4654051 A [EN] [Grinding wheel](#) having a bonding agent for binding **abrasive** grains, comprising a reaction product of a synthetic resin and cashew nut sheel liquid or its derivatives. The bonding agent may include a surface active agent

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 203

Titel: HIGH GRAIN CONCENTRATION **GRINDING TOOL**

Patentnummer: [WO2007094703A1](#)

Anmeldung: WO2007RU00021
EP20070747781
RU20060104283

Priorität: RU20060104283 20060214
WO2007RU00021 20070119

Patentfamilie: **WO2007094703A1**
EP1992451A1
EP1992451A4
RU2319601C2
RU2006104283A

Anmelder: SUKHONOS SERGEJ IVANOVICH
SUKHONOS SERGEY IVANOVICH

Erfinder: SUKHONOS SERGEJ IVANOVICH
SUKHONOS SERGEY IVANOVICH

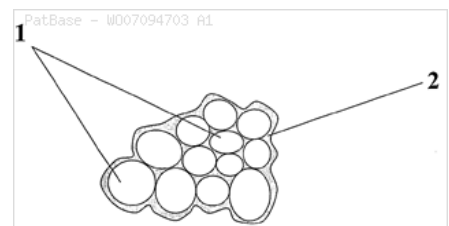
IPC-Notationen: **B24D0003-04**
B24D0003-06
B24D0003-08
B24D0017-00
B24D0018-00
B24D0099-00

CPC-Notationen: **B24D0003-06**



Zusammenfassung:

Source: WO07094703 A1 [EN] The invention relates to **grinding cutting**, drilling and boring **tools** based on **abrasive** grains and a metal binder. The inventive **grinding tool** comprises a working part made of a mixture, which is distributed through the volume thereof and consists of **abrasive** grains bound by a binding metal, and a holder or a hole for inserting a holder, wherein the content of different composition grains, such as natural and synthetic diamond, electrocorundum, corundum and silicon carbide, in the **grinding tool** is greater than 50 percent of the **tool** working part and the remaining space is filled with the binder. Said **grinding tool** is characterised in that the size of **abrasive** grains contained therein ranges from 1 to 2000 mkm and the binder is embodied in the form of different metals and the alloys thereof based on copper, nickel, manganese, phosphorus, tin and germanium, wherein the **abrasive** grains are coated with metal layer whose thickness is equal to or greater than 1 mkm and which is connected to the binding metal by means of a diffusion layer, and the melting point of the coating metal is equal to or greater than the melting point of the binding metal or the different metal alloys. Said invention improves the quality of operating properties of abrasive and grinding tools and borers and increases the performance and service life thereof



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 204

Titel: [Grinding tool](#) with a metal-synthetic resin binder and method of producing the same

Patentnummer: [WO9729886A1](#)

Anmeldung: WO1997IB00099
EP19970901222
DE19975008987T
US19970973085
AT19960000253
BR1997PI02077

Priorität: AT19960000253 19960214
WO1997IB00099 19970207

Patentfamilie: [WO9729886A1](#)
[EP0820364B1](#)
[EP0820364A1](#)
[DE59708987D1](#)
[US6063148A](#)
[AT403671B](#)
[AT25396A](#)
[BRPI9702077A](#)

Anmelder: FISCHBACHER MARKUS
SWAROVSKI TYROLIT SCHLEIF
TYROLIT SCHLEIFMITTEL WERKE SW

Erfinder: FISCHBACHER MARKUS

IPC-Notationen: [B24D0003-04](#)
[B24D0003-06](#)
B24D0003-20
B24D0003-28

CPC-Notationen: [B24D0003-06](#)
B24D0003-28



Zusammenfassung:

Source: US6063148 A [EN] PCT No. PCT/IB97/00099 Sec. 371 Date Oct. 6, 1997 Sec. 102 (e) Date Oct. 6, 1997 PCT Filed Feb. 7, 1997 PCT Pub. No. WO97/29886 PCT Pub. Date Aug. 21, 1997 Grinding [tool](#) for the machining of particularly brittle materials, whose [abrasive](#) rim bond is constructed of two components, whereby one component consists of resinoid such as, for example, high temperature thermoplast or pressure sintered polymer and a second component of low melting sintered metal. The processing temperature of both components by the joint pressure sintering is the same. The nature of the invention consists in the construction of a particular connected network for each of the two different bonding agents and their interrelated spatial intertwining in the [abrasive](#) rim to an interpenetrating network. A process for the production of [abrasive](#) rims for [grinding tools](#) according to the invention is indicated

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 205

Titel: SURFACE FUNCTIONALIZED DIAMOND CRYSTALS AND METHODS FOR PRODUCING SAME
Patentnummer: [US6350191B1](#)
Anmeldung: US20000484389
Priorität: US20000484389 20000114
Patentfamilie: [US6350191B1](#)
Anmelder: GEN ELECTRIC
Erfinder: D EVELYN MARK PHILLIP

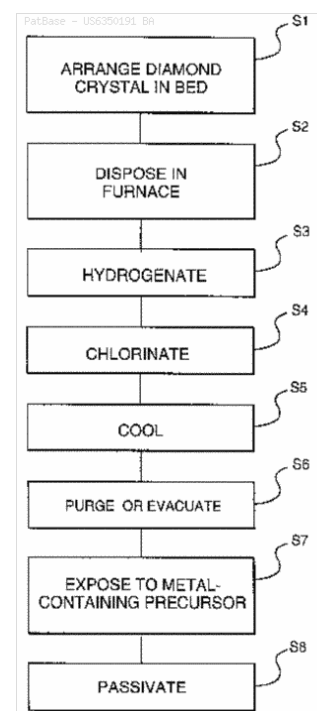


IPC-Notationen: [B24D0003-04](#)
[B24D0003-06](#)
 B24D0018-00
 C09K0003-14
 C23C0016-02
 C30B0033-00

CPC-Notationen: [B24D0003-06](#)
 B24D0018-00
 C09K0003-1445
 C23C0016-0218
 C30B0029-04
 C30B0033-00

Zusammenfassung:

Source: US6350191 BA [EN] A method of functionalizing a diamond crystal comprises hydrogenating a diamond crystal, **chlorinating** the hydrogenated diamond crystal; and exposing the **chlorinated** diamond crystal to a metal precursor. The exposing step deposits a layer of metal on surfaces of the diamond crystals. The diamond crystal formed by the method possesses surface sites that form a strong bond with the layer of metal to prevent separation thereat, and the layer of metal form strong bonds to a matrix material, for example one of a vitreous and metallic matrix. The functionalized diamond crystal can be used in **abrasive** products



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 206

Titel: **ABRASIVE** BODY AND METHOD OF MAKING THE SAME
Patentnummer: [US2077366A](#)
Anmeldung: US19350034633
Priorität: US19350034633 19350803
Patentfamilie: **US2077366A**
Anmelder: NORTON CO
Erfinder: MILLIGAN LOWELL H

IPC-Notationen: **B24D0003-04**
B24D0003-08
CPC-Notationen: B24D0003-08



Zusammenfassung:

Source: US2077366 A [EN] 1. An **abrasive** body comprising diamond grain or grit dispersed in a bond of aluminum and a heavier metal (the molecules of each being present as such) having a specific gravity as an alloy of between ~ 3.0 and 4.0, 2. An **abrasive** body comprising diamond grain or grit dispersed in an alloy comprising a bond of silicon and a heavy metal (the molecules of each being present as such) having a specific gravity as an alloy of between 3.0 and 4.0. 3. An **abrasive** body comprising diamond grain or grit dispersed in a bond of aluminum and copper having a specific gravity as an alloy of between 3.0 and 4.0. 4. An **abrasive** body comprising diamond grain or grit dispersed in a bond of aluminum and zinc (the molecules of each being present as such) having a specific gravity as an alloy of between 3.0 and 4.0. - 5. The method of making an **abrasive** body of hard granular material bonded with a metallic bond which comprises selecting a hard **abrasive**, providing a quantity thereof in **abrasive** particle size, selecting a metal alloy which, when molten, has the same specific gravity within close limits as that of the abrasive material selected, melting the alloy, and bringing together a quantity of the abrasive and a quantity of the alloy and thereafter cooling, 6. The method of making an abrasive body of hard granular material bonded with a metallic bond, which comprises selecting one of the hard commercial abrasives, providing a quantity thereof in abrasive particle size, selecting a metal alloy which, when molten, has the same specific gravity as that of the abrasive selected within close limits, bringing a quantity of abrasive material selected and alloy selected together, the alloy being then in molten form, agitating and solidifying. '7. An abrasive body comprising diamond grain or grit dispersed in a metallic bond having 9. specific gravity as an alloy between 3.0 and 4.0 and consisting of an alloy of a metal heavier than the bond with one of the group of light substances which has alloying properties consisting of aluminum, silicon and magnesium. 8. An abrasive body comprising diamond grain or grit dispersed in alloy bond consisting of substantially 38 parts of copper and 62 parts of aluminum, the molecules of each being present as such

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 207

Titel: METAL BONDED **ABRASIVE** COMPOSITION

Patentnummer: [US3036907A](#)

Anmeldung: US19590841442

Priorität: US19590841442 19590922

Patentfamilie: **US3036907A**

Anmelder: NORTON CO

Erfinder: BIBBINS GARETH L



IPC-Notationen: **B24D0003-04**
B24D0003-08

CPC-Notationen: B24D0003-08

Zusammenfassung:

Source: US3036907 A [EN] (Claim 1) 1. A metal bonded **abrasive** product consisting of **Abrasive** grain of from 5 to volume percent bonded with metal bond consisting essentially of at least 86% by weight of metal selected from the group consisting of iron and ferrite strengthening metals, and mixtures thereof, at least 50% of the weight of the bond being iron, the bond also including from 0.4% to 5% by weight phosphorous, from a trace amount of carbon to 0.8% carbon, and from zero to 7% sulphur, said bond having a melting point above 750° C. and having been sintered at a temperature of between 750° C. and 1100° C., said phosphorous producing grain boundary weakening

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 208

Titel: **ABRASIVE** ARTICLE AND ITS MANUFACTURE

Patentnummer: [US2137201A](#)

Anmeldung: US19370150766

Priorität: US19370150766 19370628

Patentfamilie: **US2137201A**

Anmelder: CARBORUNDUM CO

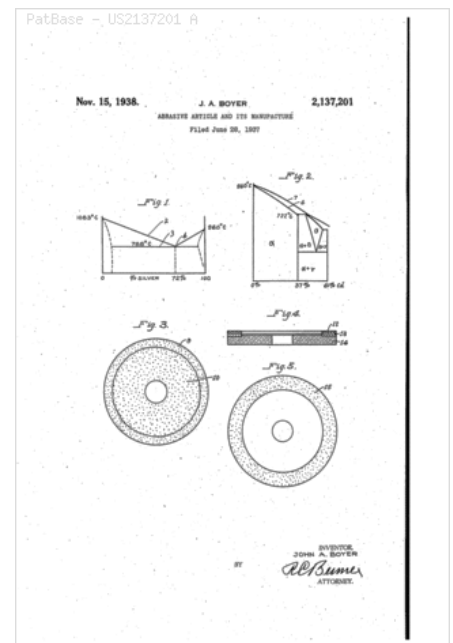
Erfinder: BOYER JOHN A



IPC-Notationen:	B24D0003-04	CPC-Notationen:	B24D0003-08
	B24D0003-08		B24D0003-10
	B24D0003-10		B24D0018-00
	B24D0018-00		

Zusammenfassung:

Source: US2137201 A [EN] 1. An **abrasive** article consisting of abrasive material comprising diamonds embedded and dispersed in a substrate matrix comprising principally of



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 209

Titel: ANNULAR **CUTTING** BLADES

Patentnummer: [DE1963872A1](#)

Anmeldung: DE19691963872
US19690844904
JP19700009651
GB19690061195
FR19700002558
CH19700001384

Priorität: US19690844904 19690725

Patentfamilie: [DE1963872A1](#)
[US3640027A](#)
[JP48040515B4](#)
[GB1243910A](#)
[FR2056122A5](#)
[CH526370A](#)

Anmelder: JOEL M ALBERT
SEL REX CORP
WEISS SHIRLEY IRVING

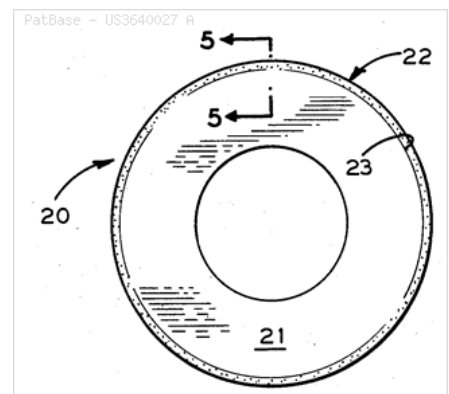
Erfinder: WEISS SHIRLEY IRVING

IPC-Notationen: [B24D0003-04](#)
B24D0003-08
B24D0005-00
B24D0005-12
B24D0018-00

CPC-Notationen: B24D0003-08
B24D0005-12
B24D0005-126
B24D0018-00

Zusammenfassung:

Source: US3640027 A [EN] Annular **cutting** blades having thin metal cores carrying annular **cutting** portions comprising **abrasive** particles such as diamond dust and a metallic matrix in which the particles are embedded; the matrix being of metal or metal alloys of selected hardness



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 210

Titel: **ABRASIVE** COMPOSITION OF MATTER AND METHOD OF FORMING SAME
Patentnummer: [US2367404A](#)
Anmeldung: US19430494077
Priorität: US19430494077 19430709
Patentfamilie:
Anmelder: FISH SCHURMAN CORP
Erfinder: HERMANN KOTT



IPC-Notationen:	B24D0003-04	CPC-Notationen:	B24D0003-08
	B24D0003-08		C09K0003-1445
	C09K0003-14		Y10S0428-932
			Y10T0428-12069
			Y10T0428-12139
			Y10T0428-1216
			Y10T0428-12167
			Y10T0428-12181

Zusammenfassung:

Source: US2367404 A [EN] 1,. The method of forming an **abrasive** composition of matter consisting of small particle sized diamonds dispersed throughout a metallic matrix which comprises surfacing the diamonds with a metal selected from the group of metals consisting of Ag, Au and Cu, forming a mixture of metal powders consisting of A. refractory metal and B. bonding metal therefor, the amount of the bonding metal being at least sufficient to effect a sintering of the refractory metal at temperatures approximating but not over 800-850° C., incorporating the metal surfaced diamonds in said metal powder mixture in an amount within the range one part diamonds to from 5 to 15 parts of the metal powder, by weight, compacting the diamond-metal powder mixture, heating the compacted mixture under non-oxidizing conditions to a temperature approximating 800-850° C. at atmospheric pressure for a short time interval to sinter the same, heating the sintered product under reduced pressures for an extended time interval to a temperature within the range 700-800° C. to degasify the same, immersing the degassed product in B. molten silver solder alloy having a melting point not exceeding 800° C., and removing and cooling the resultant silver-solder impregnated sintered product

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 211

Titel: ARTICLE MADE FROM POWDERED MIXES AND ITS MANUFACTURE

Patentnummer: [US2197655A](#)

Anmeldung: US19360093038

Priorität: US19360093038 19360728

Patentfamilie: [US2197655A](#)

Anmelder: CARBORUNDUM CO

Erfinder: BOYER JOHN A

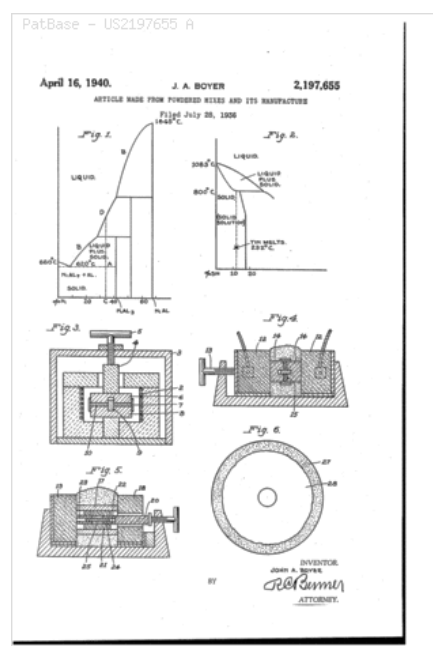


IPC-Notationen: [B24D0003-04](#)
B24D0003-08
C22C0026-00

CPC-Notationen: B22F2998-00
B24D0003-08
C22C0026-00
Y10T0024-4037

Zusammenfassung:

Source: US2197655 A [EN] 1. Having thus described my invention. I claim: 1. The process of forming an **abrasive** article in which the **abrasive** is bonded by a metal alloy consisting essentially of a solid solution, which comprises forming a mix containing **abrasive** grain and at least two components of the said solid solution in finely divided form, one of said components being present in minor proportion and having a melting point substantially lower than the temperature of complete melting of the alloy, and sintering the metal powder by applying pressure to the mix and heating it until the metallic portion of the mix, after passing through a plastic condition, in which a portion of the metal is molten, resolidifies to form a compact solid solution alloy firmly holding the **abrasive** grain, the temperature at all times being below that temperature at which the alloy becomes completely molten



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 212

Titel: **ABRASIVE** ARTICLES AND METHODS FOR FORMING SAME

Patentnummer: [WO2020006491A1](#)

Anmeldung: WO2019US39946
US20190457462
CN201980048287
KR20217003079
BR20201126805
IL20200279764
IN202027055876

Priorität: US20180692309P 20180629
US20190457462 20190628
WO2019US39946 20190628

Patentfamilie: [WO2020006491A1](#)
[US2020001429A1](#)
[CN112437713A](#)
[KR20210014757A](#)
[BR112020026805A2](#)
[IL279764AA](#)
[IN202027055876A](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: RAPAKA SRIKANTH
SARANGI NILANJAN
ZALESKI ROGER P

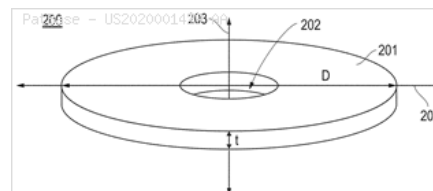
IPC-Notationen: **B24D0003-04**
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B24D0003-34
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-04**
B24D0003-10
B24D0003-18
B24D0003-34
B24D0018-00
C09K0003-1436



Zusammenfassung:

Source: US2020001429 AA [EN] An **abrasive** article including a bonded **abrasive** having a body of a diameter of at least 260 mm and a volume of at least 20 cubic centimeters, the body also having a bond material including an inorganic material, **abrasive** particles having an **abrasive** particle size of at least 40 microns contained in the bond material, and a certain Homogeneity Factor



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 213

Titel: [Grinding wheel](#) for [grinding](#) titanium

Patentnummer: [US4575384A](#)

Anmeldung: US19840615847

Priorität: US19840615847 19840531

Patentfamilie: [US4575384A](#)

Anmelder: NORTON CO

Erfinder: LICHT ROBERT H
RUE CHARLES V



IPC-Notationen: [B24D0003-04](#)
B24D0003-14
B24D0099-00
C09K0003-14

CPC-Notationen: B24D0003-14
B24D0099-00
C09K0003-1436

Zusammenfassung:

Source: US4575384 A [EN] An [abrasive](#) product and process is [disclosed](#), for [grinding](#) titanium metal and its alloy. The product used to grind the titanium consists of a [grinding wheel](#) wherein the [abrasive](#) grains are aggregates of silicon carbide particles bonded together with a refractory bond such as silicon oxynitride or a silicate based material

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 214

Titel: THERMOSET-RESIN IMPREGNATED HIGH-SPEED VITREOUS **GRINDING WHEEL**

Patentnummer: [DE2130277A1](#)

Anmeldung: DE19712130277
US19700047581
FR19710022291
CA19700096516
AU19710030151
BE19710768623
ES19710392327
IT19710069083
ZA19710003881

Priorität: US19700047581 19700618

Patentfamilie: [DE2130277A1](#)
[US3615302A](#)
[FR2099754A6](#)
[CA937054A1](#)
[AU197130151A1](#)
[BE768623R](#)
[BE768623A4](#)
[ES392327A2](#)
[IT988327A](#)
[ZA7103881A](#)

Anmelder: NORTON CO

Erfinder: NELSON R S
ROWSE R A
ROWSE ROBERT ALFRED
STANLEY NELSON ROY

IPC-Notationen: [B24D0003-04](#)
[B24D0003-18](#)
B24D0003-20
B24D0003-32
[B24D0003-34](#)
B24D0018-00

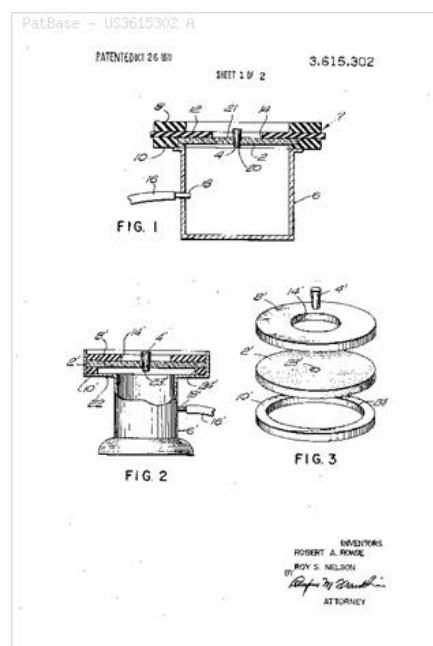
CPC-Notationen: [B24D0003-18](#)
B24D0003-32
[B24D0003-348](#)
B24D0018-0027

Zusammenfassung:

Source: US3615302 A [EN] A porous vitreous bonded high-speed **abrasive grinding wheel** in which between about 95 percent and 100 percent of the pore volume of either the annular portion of the **wheel** adjacent to the **wheel** hole or the entire **wheel** is impregnated with either a thermoset epoxy resin which is a copolymer of a liquid epoxy prepolymer and an amine or organic acid anhydride, or, a thermoset unsaturated polyester resin which is a copolymer of a polyester prepolymer containing ethylenic unsaturation and an ethylenically unsaturated reactive diluent like styrene, vinyl acetate, methyl methacrylate, and the like. The **wheel** is preferably impregnated by applying the mixture of liquid prepolymer and hardener (cross-linking agent) to one side of the **wheel** over the area to be impregnated, preferably with a vacuum applied to one side of the **wheel** to draw the liquid prepolymer-hardener mixture into the pores of the **wheel**. Copolymerization (cross-linking) of the prepolymer-hardener mixture occurs in situ in the pores. The cross-linked epoxy or unsaturated polyester resin may form an internal bushing of solid resin with substantial radial impregnation into the wheel. In such cases, the prepolymer-hardener mixture is introduced into the wheel hole around an arbor with a mold plate over both sides of the hole and extending radially along the wheel surfaces to the extent of desired penetration

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 215



Titel: AMIDE IMPREGNATED **GRINDING WHEELS**

Patentnummer: [DE1652892A1](#)

Anmeldung: DE19671652892
US19660592741
GB19670023264

Priorität: US19660592741 19661108

Patentfamilie: [DE1652892A1](#)
[US3471277A](#)
[GB1139868A](#)

Anmelder: CINCINNATI MILLING MACHINE CO

Erfinder: ACKERMANN RUSSELL A JR
ALBERT ACKERMANN JUN RUSSELL

IPC-Notationen: [B24D0003-04](#)
[B24D0003-18](#)
[B24D0003-34](#)

CPC-Notationen: [B24D0003-18](#)
[B24D0003-34](#)
[B24D0003-348](#)



Zusammenfassung:

Source: US3471277 A [EN] ABSTRACT OF THE **DISCLOSURE** A novel **grinding wheel** has been provided which comprises of **abrasive** grits, a vitrified bond holding said grits together to form the **grinding wheel** and having its interstitial space filled essentially with an amide of a diamine 15 and a carboxylic acid having a melting point of at least 225° **F.** and wherein the amine precursor is an aliphatic diamine, a cycloaliphatic diamine or an aromatic diamine. An improved **grinding** method has also been **disclosed**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 216

Titel: SELF-LUBRICATING **ABRASIVE TOOLS** AND METHOD FOR PRODUCING SAME

Patentnummer: [WO200059684A1](#)

Anmeldung: WO2000CH00121
AU20000027907D
AU20000027907

Priorität: CH19990000626 19990401
WO2000CH00121 20000303

Patentfamilie: **WO200059684A1**
AU200027907A5
AU200027907A1

Anmelder: MEISTER SCHLEIFMITTELWERK AG
MEISTER THOMAS
OTT HELMUT
THURNHER THOMAS

Erfinder: MEISTER THOMAS
OTT HELMUT
THURNHER THOMAS

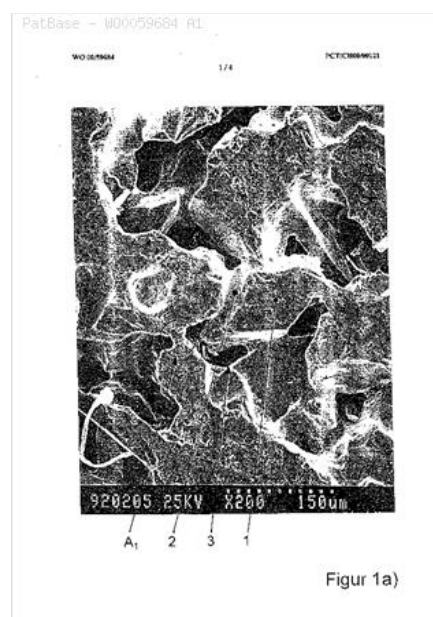
IPC-Notationen: **B24D0003-04**
B24D0003-18
B24D0003-34
B24D0018-00

CPC-Notationen: **B24D0003-18**
B24D0003-34
B24D0018-00



Zusammenfassung:

Source: WO0059684 A1 [EN] The invention relates to a self-lubricating **abrasive tool**. Chip-producing **abrasive** grains (5) are embedded in a porous binding matrix that is impregnated with a lubricant. The aim of the invention is to introduce a sufficient amount of lubricant into the **tool** and to prevent premature centrifugation of said lubricant. To this end, the porosity of the binding matrix is provided with an open-pored fine structure in relation to the average size and/or the average distance of the **abrasive** grains (5). The fine structure is provided with micropores (7) that are basically linked to each other and are filled with the lubricant. The fine structure can be especially maintained by using a grained micropore producer which is essentially dimensionally stable during the hardening of the binding matrix, e.g. by sintering or burning. Said micropore producer is removed when micropores are produced



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 217

Titel: VITRIFIED **ABRASIVE** SOLID MASS HAVING PORES FILLED WITH RESIN, AND SOLID LUBRICANT AGENT

Patentnummer: [US6428587B1](#)

Anmeldung: US20010920742

Priorität: US20010920742 20010803

Patentfamilie: [US6428587B1](#)

Anmelder: NORITAKE CO LTD

Erfinder: ITO KENJI

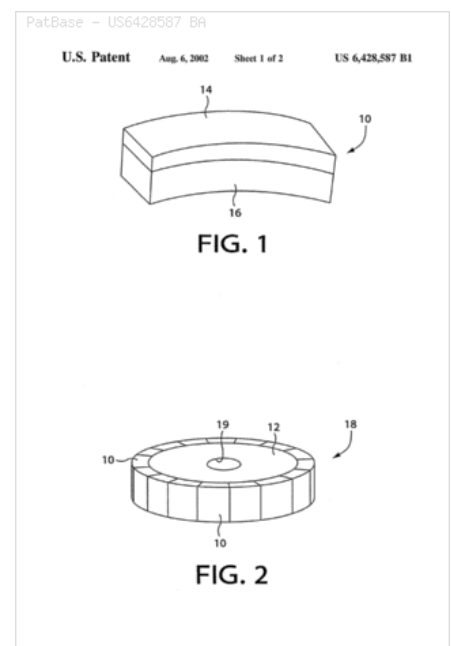
IPC-Notationen: [B24D0003-04](#)
[B24D0003-18](#)
[B24D0003-34](#)
[B24D0018-00](#)

CPC-Notationen: [B24D0003-18](#)
[B24D0003-342](#)
[B24D0018-00](#)



Zusammenfassung:

Source: US6428587 BA [EN] An **abrasive** vitreous bonded solid mass having a vitrified **abrasive** structure comprising **abrasive** grains which are held together by an inorganic bonding agent, the **abrasive** structure is impregnated with a composition which comprises a resin and a solid lubricant agent. The **abrasive** solid mass is manufactured by preparing the composition comprising the resin and the solid lubricant agent, impregnating the vitrified **abrasive** structure with the composition, and curing the composition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 218

Titel: **ABRASIVE** ARTICLE INCLUDING FLEXIBLE WEB

Patentnummer: [WO2020084483A1](#)

Anmeldung: WO2019IB59007

Priorität: US20180751097P 20181026

Patentfamilie: [WO2020084483A1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: HELLER DAIMON K
LIU YUYANG
WILSON DAVID M



IPC-Notationen: **B24D0003-06**

B24D0003-14

B24D0011-00

C09K0003-14

CPC-Notationen:

B24D0003-06

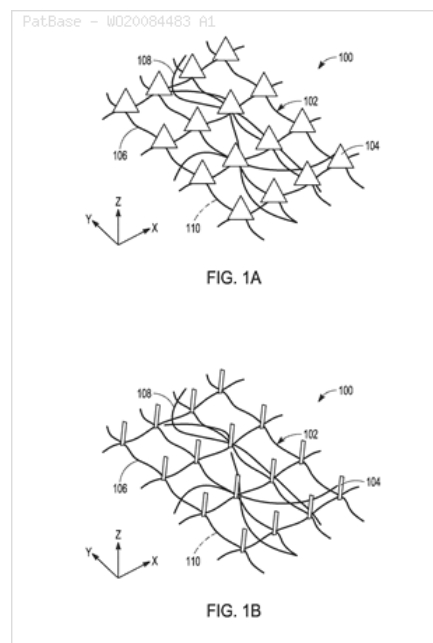
B24D0003-14

B24D0011-005

C09K0003-1409

Zusammenfassung:

Source: WO20084483 A1 [EN] Various embodiments **disclosed** relate to an **abrasive** article. The **abrasive** article includes a fibrous web comprising a plurality high-heat resistant fibers. The fibrous web further includes a plurality of shaped **abrasive** particles attached to the fibrous web



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 219

Titel: LARGE DIAMETER **CUTTING TOOL**

Patentnummer: [WO2014036097A1](#)

Anmeldung: WO2013US57014
EP20130833510
US20130012171
CN201380043628
AR2013P103063
RU20150108681

Priorität: US20120694142P 20120828
US20130012171 20130828
WO2013US57014 20130828

Patentfamilie: **WO2014036097A1**
EP2890522A1
EP2890522A4
US9138869B2
US2014073230A1
CN104684687A
CN104684687B
AR092275AA
RU2015108681A

Anmelder: DELEUZE CHARLES
MCNEAL KELLEY
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SCHOCH ANDREW B
SRINIVASAN SIDDHARTH

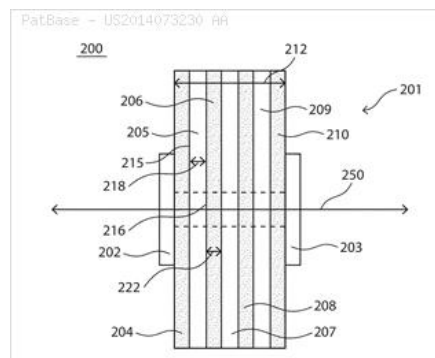
Erfinder: DELEUZE CHARLES
KELLY MNEAL
MCNEAL KELLEY
SCHOCH ANDREW B
SRINIVASAN SIDDHARTH

IPC-Notationen: **B24D0003-06**
B24D0003-30
B24D0003-34
B24D0005-04
B24D0005-12
B26D0001-43

CPC-Notationen: **B24D0003-06**
B24D0003-30
B24D0003-342
B24D0003-346
B24D0005-04
B24D0005-12
B24D0005-123

Zusammenfassung:

Source: US2014073230 AA [EN] An **abrasive cutting tool** includes a body in a shape of a large diameter **disk** having an outer diameter of at least about 60 centimeters. The body has an aspect ratio defined as a ratio (D: T) between the outer diameter to an axial thickness of the body of at least about 10: 1. The body includes an **abrasive** portion having a bond material and **abrasive** particles contained within the bond material. The **abrasive** portion also includes a first **filler** having iron and sulfur with an average particle size of not greater than about 40 microns. The body also includes a reinforcing member and a Thermal Adhesion Factor (TAF) of at least about 30 percent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 220

Titel: ANNULAR GRINDSTONE

Patentnummer: [DE102020207131A1](#)

Anmeldung: DE202010207131
US20200891184
JP20190108506
CN202010465911
KR20200062891
TW20200119421
SG20201004874

Priorität: JP20190108506 20190611

Patentfamilie: [DE102020207131A1](#)
[US2020391351A1](#)
[JP2020199595A2](#)
[CN112059933A](#)
[KR20200141930A](#)
[TW202112497A](#)
[SG10202004874RA1](#)

Anmelder: DISCO ABRASIVE SYSTEMS LTD
DISCO CORP

Erfinder: HIROKI AIKAWA

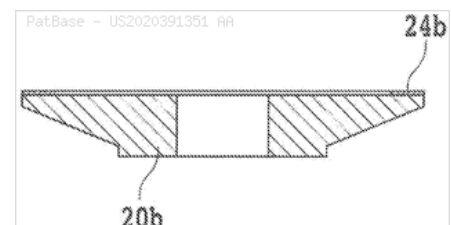


IPC-Notationen: [B24D0003-06](#)
B24D0005-12
B24D0005-16
B24D0018-00
B28D0001-24
B28D0005-02
H01L0021-301

CPC-Notationen: B24D0005-12
B24D0005-16
B24D0018-0018
B28D0001-24
B28D0005-022

Zusammenfassung:

Source: US2020391351 AA [EN] An annular grindstone includes a grindstone section that includes a binder and **abrasive** grains dispersed and fixed in the binder, in which the binder includes a tin-nickel alloy. Preferably, a content of tin in the tin-nickel alloy is equal to or more than 57 wt percent and less than 75 wt percent. In addition, preferably, the annular grindstone consists of the grindstone section. Alternatively, the annular grindstone further includes an annular base having a grip section, and the grindstone section is exposed to an outer peripheral **edge** of the annular base



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 221

Titel: Aluminum-boron-carbon **abrasive** article and method to form said article
Patentnummer: [US6042627A](#)
Anmeldung: US19980069531
Priorität: US19970044362P 19970429
US19980069531 19980429
Patentfamilie: [US6042627A](#)
Anmelder: DOW CHEMICAL CO
Erfinder: DESHMUKH UDAY V
KRYSTOSEK ROBERT D
PYZIK ALEKSANDER J



IPC-Notationen: [B24D0003-06](#)
C04B0041-52
C04B0041-89
C09K0003-14
C22C0029-00
C22C0029-14

CPC-Notationen: [B24D0003-06](#)
C04B0041-009
C04B0041-52
C04B0041-89
C09K0003-1409
C22C0029-00
C22C0029-14

Zusammenfassung:

Source: US6042627 A [EN] An aluminum-boron-carbon **abrasive** article is comprised of at least three phases selected from the group consisting of: B4C; AlB2; AlB12; AlB12C2; Al4C3; AlB24,C4; Al4B1-3C4; AlB24C4 and Al4BC. At least a portion of the surface of the **abrasive** article is comprised of **abrasive** grains of at least one phase selected from the group consisting of AlB24C4, Al4BC and AlB2, where the **abrasive** grains have an average grain size that is at least about two times greater than the average grain size of the grains containing boron and carbon within the **abrasive** article. The aluminum-boron-carbon **abrasive** article of claim 1 is prepared by heating, under a vacuum or inert atmosphere, a body comprised of at least one boron containing phase and at least one carbon containing phase in the presence of a separate source of aluminum, such as aluminum metal or alloy thereof. The boron and carbon containing phase each are selected from the group consisting of: B4C; AlB2; AlB12; AlB12C2; Al4C3; AlB24,C4; Al4B1-3C4; AlB24C4 and Al4BC. The body is heated with the separate source of aluminum, such that at least a portion of the surface of the body is contacted by liquid or vaporous aluminum for a time and temperature sufficient to form the aluminum-boron-carbon abrasive article

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 222

Titel: A SELF-CONDITIONING POLISHING PAD AND A METHOD OF MAKING THE SAME

Patentnummer: [WO2012138705A3](#)

Anmeldung: WO2012US32089

Priorität: US20110472106P 20110405

Patentfamilie: [WO2012138705A3](#)
[WO2012138705A2](#)

Anmelder: DASKIEWICH SCOTT
UNIVERSAL PHOTONICS INC

Erfinder: DASKIEWICH SCOTT

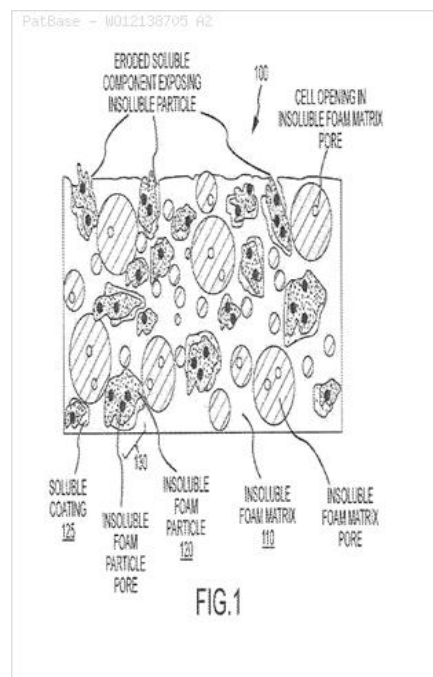
IPC-Notationen: B24D0003-12
B24D0007-00
C09C0001-68
C09K0003-14

CPC-Notationen: B24B0037-24
[B24D0003-344](#)
[B24D0003-346](#)



Zusammenfassung:

Source: WO12138705 A2 [EN] The present invention is directed to a self-conditioning polishing pad. The self-conditioning polishing pad comprises a water-insoluble polymeric foam matrix and water-insoluble polymeric foam particles within the foam matrix. The particles are coated with a water-soluble component over a portion of the surface area of the particle. The particles may have a diameter in the range of 5 to 2000 microns in diameter



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 223

Titel: **ABRASIVE** ARTICLES HAVING A PLURALITY OF PORTIONS AND METHODS FOR FORMING SAME

Patentnummer: [WO2018049204A1](#)

Anmeldung: WO2017US50743
EP20170849641
US20170331836
CN201780065367
KR20197009861

Priorität: US20160385705P 20160909
US20170331836 20170908
WO2017US50743 20170908

Patentfamilie: **WO2018049204A1**
[EP3509793A1](#)
[EP3509793A4](#)
[US2019375073A1](#)
[CN109890567A](#)
[KR20190041019A](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

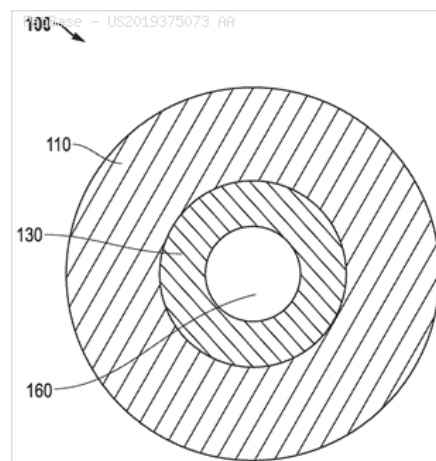
Erfinder: BAYARD FLAVY
JANECZEK PETER
MARTIN AMANDINE
SCHWARZKOPF JOACHIM

IPC-Notationen: B24D0003-14
B24D0003-18
B24D0003-28
B24D0003-32
B24D0003-34
B24D0005-02
B24D0005-14
B24D0007-14
B24D0018-00
C09K0003-14

CPC-Notationen: B24D0003-14
B24D0003-28
B24D0003-344
B24D0005-02
B24D0005-14
B24D0007-14
B24D0018-0009
C09K0003-1436

Zusammenfassung:

Source: US2019375073 AA [EN] An **abrasive** article can include a body including a plurality of portions including a first **abrasive** portion and a second **abrasive** portion. The first **abrasive** portion can include a vitreous bond material and **abrasive** particles contained within the bond material. The second **abrasive** particles can include an organic bond material and **abrasive** particles contained within the bond material. The body can have a burst speed of at least 65 m/s. In an embodiment, the **abrasive** article can include an interior portion coupled to the first and second **abrasive** portions. In another embodiment, the interior portion can optionally include **abrasive** particles or a **filler** material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 224

Titel: [Grinding wheel](#) (Machine translation)

Patentnummer: [DE1012750B](#)

Anmeldung: DE1952C006512

Priorität: 19521007

Patentfamilie: [DE1012750B](#)

Anmelder: CARBORUNDUM CO

Erfinder: DOENHOFF CARL VON
GOEPFERT GEORGE JOSEPH



IPC-Notationen: B24D0003-20
B24D0003-22
[C08J0005-14](#)

CPC-Notationen: B24D0003-22
C08K0003-22
C08K0005-07
C08L0009-02
C08L0061-04

Zusammenfassung:

Claim 1. Schleifkörper, die mit Kautschuk gebunden sind, dadurch gekennzeichnet, daß das neben einem Copolymerisat eines konjugierten Diolefins, z. B. Butadien, mit einem Nitril, wie Acryl- und/oder Methacrylsäurenitril, auch noch verhältnismäßig wenig Benzil enthält.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 225

Titel: Flexible **abrasive** coated cloth

Patentnummer: [DE1470761A1](#)

Anmeldung: DE19641470761
US19630277093
GB19640014084
AU19640043263

Priorität: US19630277093 19630501

Patentfamilie: [DE1470761A1](#)
[US3232729A](#)
[GB1056023A](#)
[AU4326364B1](#)
[AU4326364A1](#)

Anmelder: CARBORUNDUM CO

Erfinder: BUELL HALSEY W
HOLLAND CLAYTON J
JAMES HOLLAND CLAYTON
WILCOX BUELL HALSEY

IPC-Notationen: B24D0003-20
B24D0003-24
B24D0011-00
[C08J0005-14](#)

CPC-Notationen: B24D0003-24
B24D0011-00
B24D0011-005

Zusammenfassung:

Source: GB1056023 A [EN] A flexible **abrasive-coated** cloth comprises a cloth backing having a layer of **abrasive** grains secured to one face by means of an adhesive layer comprising a mixture of animal glue, a water-soluble high boiling plasticizer, for example hexanetriol, and a major proportion of an elastomer, for example a butadiene-styrene copolymer. The cloth may be made by applying the adhesive in aqueous form to the cloth, coating with the **abrasive** grains, and setting the adhesive by partial drying

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 226



Titel: GRINDING MEMBER

Patentnummer: [EP1595647B1](#)

Anmeldung: EP20040015175
DE200450004567T
DE200420007806U
US20050051837
AT20040015175T
DK20040015175T
ES20040015175T

Priorität: DE200420007806U 20040514

Patentfamilie: [EP1595647B1](#)
[EP1595647A3](#)
[EP1595647A2](#)
[DE202004007806U1](#)
[DE502004004567D1](#)
[US2005255802A1](#)
[AT369234E](#)
[DK1595647T3](#)
[ES2288652T3](#)

Anmelder: JOEST PETER
JOST PETER

Erfinder: JOEST PETER
JOST PETER

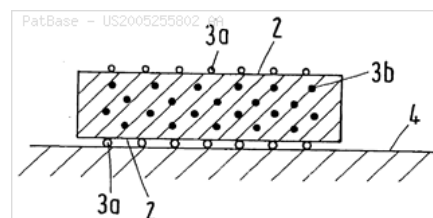


IPC-Notationen: B24D0003-20
B24D0003-26
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B24D0013-00
B24D0013-12
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B24D0015-00
B24D0015-04

CPC-Notationen: B24D0003-26
B24D0003-32
B24D0013-12
B24D0013-147
B24D0015-04

Zusammenfassung:

Source: US2005255802 AA [EN] A **grinding** member is formed as a shape-elastic monolithic **element** and has at least partially a three-dimensional cell structure on a **grinding** surface of the **grinding** member. The **grinding** surface has a first **abrasive** agent. The **grinding** surface has at least partially an open-cell structure with open cells. The open cells of the **grinding** surface communicate via passages with cells of the interior of the **grinding** member. The cells in the interior of the **grinding** member that communicate via passages with the open cells of the **grinding** surface contain a second **abrasive** agent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 227

Titel: ORGANIC BONDED **ABRASIVE** PRODUCT
Patentnummer: [US2529712A](#)
Anmeldung: US19480037513
Priorität: US19480037513 19480708
Patentfamilie: **US2529712A**
Anmelder: NORTON CO
Erfinder: DOUGLAS TEAGUE ERNEST



IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
CPC-Notationen: B24D0003-285
B24D0003-344

Zusammenfassung:

Source: US2529712 A [EN] (Claim 1) 1. An **abrasive** article comprising **abrasive** grains bonded with a bond comprising from volume percent to 95 volume percent of shellac, at least 50 percent of the remainder of the bond by volume being synthetic resin selected from the group consisting of phenol formaldehyde and glyptal and mixtures thereof, and said bond containing between 5 percent and 50 percent inclusive of nitroparaffin having between 2 and 4 carbon atoms by weight based on the synthetic resin

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 228

Titel: Coated **abrasive** article
Patentnummer: [US5669941A](#)
Anmeldung: US19960582325
Priorität: US19960582325 19960105
Patentfamilie: [US5669941A](#)
Anmelder: 3M CO
 MINNESOTA MINING AND MFG
Erfinder: PETERSON LARRY L

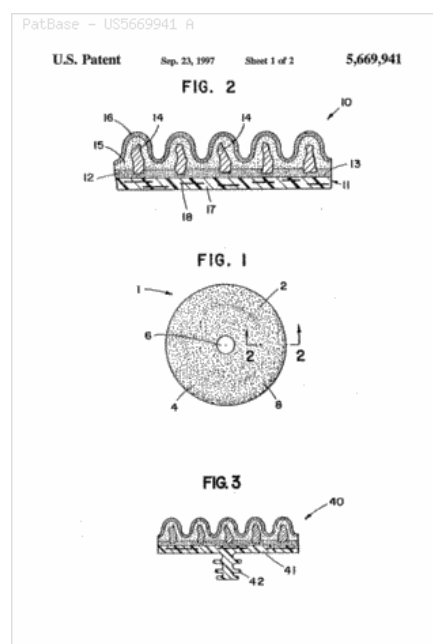


IPC-Notationen: B24D0003-20
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B24D0003-34
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 B24D0007-04
 B24D0013-00
 B24D0013-14

CPC-Notationen: B24D0003-28
B24D0003-344
 B24D0007-04
 B24D0013-14

Zusammenfassung:

Source: US5669941 A [EN] The present invention provides a coated **abrasive** article, wherein the backing includes a tough, heat resistant, thermoplastic binder material, and an effective amount of a fibrous reinforcing material distributed throughout the thermoplastic binder material. The **abrasive** grain adhered to the backing comprise rare earth oxide-modified alpha alumina-based **abrasive** grain, which exhibit a surprising improvement in **grinding** performance in conjunction with the backing



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 229

Titel: **ABRASIVE** PRODUCT HAVING A BINDER COMPRISING AN AMINOPLAST BINDER

Patentnummer: [EP0500369B1](#)

Anmeldung: EP19920301404
DE19926007789T
US19910659752
JP19920034856
CA19922060329
AU19920010698
KR19920002704
BR1992PI00580
ES19920301404T
MX19920000687
ZA19920000772

Priorität: US19910659752 19910222
CA19922060329 19920130

Patentfamilie: [EP0500369B1](#)
[EP0500369A3](#)
[EP0500369A2](#)
[DE69207789T2](#)
[DE69207789D1](#)
[US5236472A](#)
[JP5057625A2](#)
[JP3133453B2](#)
[CA2060329A](#)
[AU642338B2](#)
[AU199210698A1](#)
[KR19920016576A](#)
[BRPI9200580A](#)
[ES2082359T3](#)
[MX9200687A1](#)
[ZA9200772A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MANUFACTU
MINNESOTA MINING AND MFG

Erfinder: ARAN REIMONDO KAAKU
ERITSUKU JIYOOJI RAASON
KIRK ALAN R C O MINNESOTA MINI
KIRK ALAN RAYMOND
LARSON ERIC G C O MINNESOTA MI
LARSON ERIC GEORGE

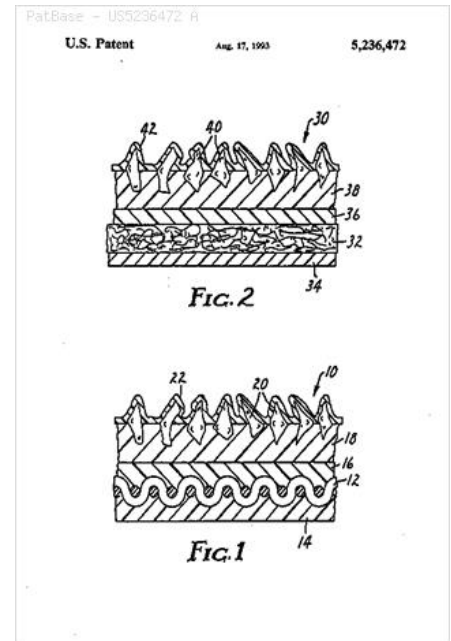
IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0011-02
[C08J0005-14](#)

CPC-Notationen: B24D0003-28
[B24D0003-342](#)
B24D0011-02



Zusammenfassung:

Source: US5236472 A [EN] **Abrasive** products comprising **abrasive** grains bonded together or bonded to a backing by means of a binder comprising an oligomeric aminoplast resin having on average at least one pendant alpha, beta - unsaturated carbonyl group per oligomeric unit. The oligomeric aminoplast resins polymerize via free radical polymerization at the site of the alpha, beta - unsaturation. Polymerization is initiated by a source of free radicals. The source of free radicals can be generated by electron beam radiation or by an appropriate curing agent or initiator upon exposure to heat or radiation energy. The coated **abrasive** of this invention demonstrates improved **grinding** performance under severe conditions as compared with coated **abrasives** comprising radiation curable resins heretofore known



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 230

Titel: WATERPROOF PAPER-BACKED COATED **ABRASIVES**

Patentnummer: [WO9803307A1](#)

Anmeldung: WO1997US08303
EP19970925596
DE19976008122T
US19960681236
JP19980506904T
CA19972255075
AU19970030686
CN19971095101
KR19997000430
TW19970108139
AT19970925596T
BR1997PI10748
IN1997MA01099
RU19980123116
ZA19970004805

Priorität: US19960681236 19960722
WO1997US08303 19970519

Patentfamilie: [WO9803307A1](#)
[EP0921910B1](#)
[EP0921910A1](#)
[DE69708122T2](#)
[DE69708122D1](#)
[US5624471A](#)
[JP11513940T2](#)
[CA2255075C](#)
[CA2255075A](#)
[AU706766B2](#)
[AU199730686A1](#)
[CN1220628A](#)
[CN1077830C](#)
[KR20000067945A](#)
[KR100341954B1](#)
[TW334488B](#)
[AT208245E](#)
[BRPI9710748A](#)
[IN207792B](#)
[IN01099MA1997A](#)
[RU2158672C2](#)
[RU98123116A](#)
[ZA9704805A](#)

Anmelder: NORTON CO

Erfinder: GAETA A C
GAETA ANTHONY C
GAETA EHNTONI S
SUEJ GUO SHIN
SWEI G S
SWEI GWO SHIN

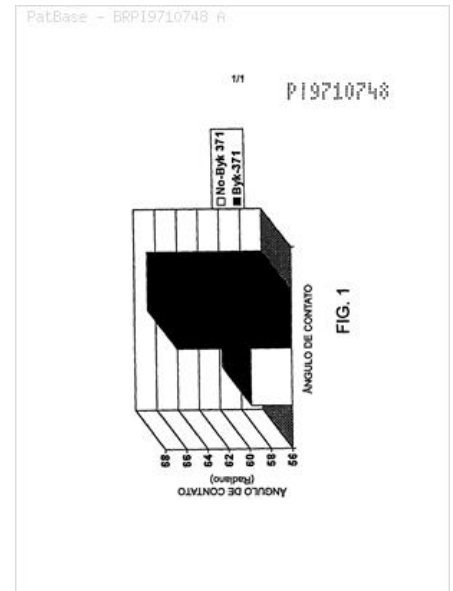
IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0011-02
D21H0019-24

CPC-Notationen: B24D0003-28
B24D0011-00



Zusammenfassung:

Source: US5624471 A [EN] Waterproof coated **abrasive** paper made using a maker and/or size coat comprising a radiation-curable binder that is hydrophobic when polymerized



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 231

Titel: **ABRASIVE** MATERIAL PRODUCT CONTAINING INCLUSION COMPOUND

Patentnummer: [WO2010027937A3](#)

Anmeldung: WO2009US55506
EP20090812091
US20090059312
JP20080224387
CN200980139176

Priorität: JP20080224387 20080902
US20090059312 20090831
WO2009US55506 20090831

Patentfamilie: **WO2010027937A3**
WO2010027937A2
[EP2340151B1](#)
[EP2340151A4](#)
[EP2340151A2](#)
[US8617272B2](#)
[US2011143974A1](#)
[JP2010058187A2](#)
[JP5248954B2](#)
[CN102171001A](#)
[CN102171001B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
THREE M INNOVATIVE PROPERTIES
YAMAHARA MICHIIHIRO

Erfinder: YAMAHARA MICHIIHIRO

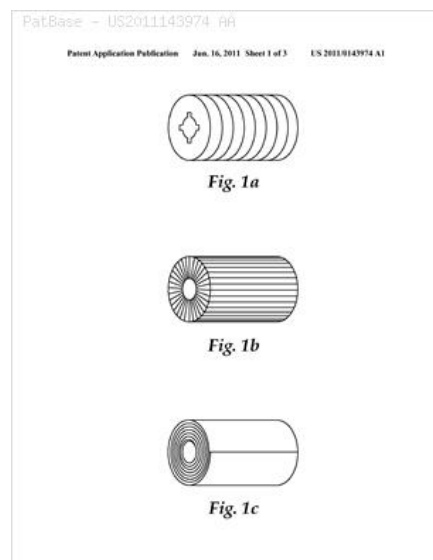
IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0011-08
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0003-346
B24D0011-00



Zusammenfassung:

Source: US2011143974 AA [EN] To provide an **abrasive** material product which shows an excellent effect of controlling heat generation in **abrasive** work and which causes no smearing in **abrasive** work in dry mode. An **abrasive** material product comprising a binder and an inclusion compound composed of a host compound and a lubricant contained therein as a guest compound



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 232

Titel: **ABRASIVE** ARTICLE, **ABRASIVE** SLURRIES AND METHOD OF MAKING AN **ABRASIVE** ARTICLE

Patentnummer: [WO200143919A1](#)

Anmeldung: WO2000US31907
AU20010017838D
AU20010017838

Priorität: US19990461959 19991215
WO2000US31907 20001120

Patentfamilie: **WO200143919A1**
AU200117838A5
AU200117838A1

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: CULLER SCOTT R
WALLACE JOHN T

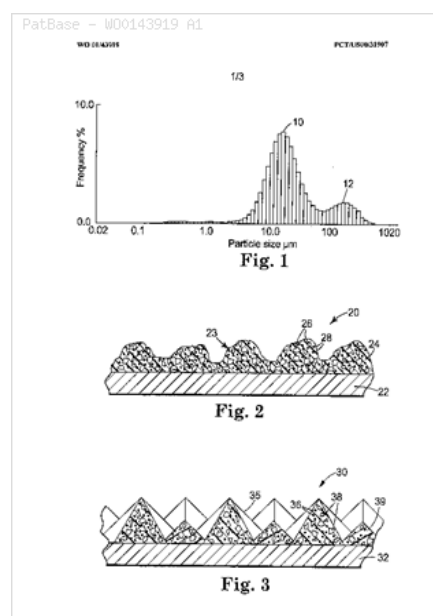


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0018-00
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-001
B24D0018-00
C09K0003-1472

Zusammenfassung:

Source: WO0143919 A1 [EN] The present invention relates to **abrasive** articles having an **abrasive** coating comprised of a binder, **abrasive** particles having a Mohs' hardness of 7 or greater and non-abrasive particles having a Mohs' hardness less than about 6, wherein the non-abrasive particles have a particle size that is greater than the particle size of the **abrasive** particles. The **abrasive** slurries that are used to make the **abrasive** coating of the present invention may be used in both coated, structured and nonwoven **abrasive** articles as well as in making composite particles. The invention also relates to methods of making coated and non-woven **abrasive** articles and methods of making composite particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 233

Titel: PHOTOCURABLE **ABRASIVES**

Patentnummer: [EP0284064B1](#)

Anmeldung: EP19880104736
DE19883852661T
US19890453331
JP19880071676

Priorität: CH19870001181 19870327
US19890377789 19890707

Patentfamilie: [EP0284064B1](#)
[EP0284064A3](#)
[EP0284064A2](#)
[DE3852661D1](#)
[US4997717A](#)
[JP63256368A2](#)
[JP2684053B2](#)

Anmelder: CIBA GEIGY AG
CIBA GEIGY CORP

Erfinder: ILG STEPHAN
MANFURETSUDO REMUBORUTO
REMBOLD MANFRED DR
SUTEFUAN IRUKU



IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
C08G0059-00
C08G0059-68
[C08J0005-14](#)

CPC-Notationen: [B24D0003-344](#)
C08G0059-68
Y10T0428-31511

Zusammenfassung:

Source: US4997717 A [EN] The preparation of **abrasives**, especially **abrasive** papers and **abrasive** fabrics, is improved by using an epoxy resin in conjunction with a cationic photoinitiator as binder for the **abrasive** particles. The binder is cured by irradiation with shortwave light and subsequent heating. The process is distinguished by low curing temperatures and brief curing times

PatBase - JP2684053-62		製法例 の データ		粒子破砕(秒)	
照射(+光線)	照射時間	照射強度	照射距離	直後	20分後
B-1	25% PI-1	10m/分	600-1000	75	84
B-1	25% PI-1	10m/分	450-1500	100	100
B-1	45% PI-1	10m/分	600-1000	145	160
B-1	45% PI-1	20m/分	600-1000	120	125
B-1	25% PI-1/25% A-1	20m/分	900-600	84	84
B-1	45% PI-1/25% A-1	30m/分	600-600	75	77
B-1	45% PI-1/25% A-1	40m/分	300-600	50	50
B-2	25% PI-1	20m/分	1800-500	44	64
B-2	45% PI-1	20m/分	1800-500	84	140
B-2	45% PI-1	20m/分	1500-1000	100	182
B-1/2-2					
80:10	45% PI-1	40m/分	300-1000	84	84
80:20	45% PI-1	40m/分	300-1000	90	103
70:30	45% PI-1	40m/分	300-1000	80	92
B-3	25% PI-1	10m/分	300-1500	140	155
B-3	45% PI-1	20m/分	300-1500	120	130
B-4	25% PI-1	10m/分	300-1500	100	114
B-4	45% PI-1	20m/分	300-1500	112	130
B-2+90%カオリン	45% PI-1	20m/分	1500-1000	120	130
B-2+90%カオリン	45% PI-1	30m/分	1500-1000	120	130
B-2+90%カオリン	45% PI-1	30m/分	300-1000	92	145
B-1/2-2 80:20+25%カオリン	45% PI-1	20m/分	300-1000	170	177
B-1/2-2 80:20+25%カオリン	45% PI-1	30m/分	300-1000	110	115
B-1/2-5 90:10	45% PI-1	10m/分	600-1000	196	210
B-1/2-5 70:30	45% PI-1	10m/分	600-1000	196	200
B-1/2-5 50:50	45% PI-1	10m/分	600-1000	161	170
B-2/2-5 80:20	45% PI-1	20m/分	1200-500	38	56
B-2/2-5 70:30	45% PI-1	20m/分	1200-500	45	53
B-2/2-5 50:50	45% PI-1	20m/分	1200-500	28	35
B-1	45% PI-1	10m/分	600-600	77	154
B-1	45% PI-2	10m/分	600-1000	210	224

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 234

Titel: PROCESS FOR PRODUCING COATED **ABRASIVE** MATERIAL

Patentnummer: [WO9907517A1](#)

Anmeldung: WO1998US13631
JP19970216252
AU19980082778

Priorität: JP19970216252 19970811
WO1998US13631 19980701

Patentfamilie: **WO9907517A1**
JP11048151A2
AU199882778A1

Anmelder: 3M CO
MINNESOTA MINING AND MFG
OHISHI MICHIIHIRO

Erfinder: OHISHI MICHIIHIRO
OISHI MICHIIHIRO

IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
C09D0163-00
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-001



Zusammenfassung:

Source: WO9907517 A1 [EN] The method of the invention simplifies the production process of a coated **abrasive** article and shortens the production time by omitting the step of sealing a porous substrate and by shortening the curing time of a bonding agent. A process for producing a coated **abrasive** article comprising the steps of: providing a porous substrate; applying a first bonding agent on at least one surface of the porous substrate to form a make coat layer; placing **abrasive** particles on the make coat layer; and applying a second bonding agent on the make coat layer and the **abrasive** particles to make a size coat layer, wherein, said first bonding agent, second bonding agent or both agents comprise (i) a solid epoxy resin having a melt viscosity coefficient of 1,000 cps (1 Pa. s) or more at 120 DEG C and (ii) a curing catalyst

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 235

Titel: **Abrasive** member

Patentnummer: [US5456734A](#)

Anmeldung: US19940239387
JP19930106980

Priorität: JP19930106980 19930507

Patentfamilie: [US5456734A](#)
[JP6315865A2](#)
[JP3135741B2](#)

Anmelder: FUJI PHOTO FILM CO LTD

Erfinder: FUJIYAMA MASAOKI
RYOKE KATSUMI
RYOMO KATSUMI
SATO MASAMI



IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
G11B0005-187
G11B0005-41
G11B0005-84

CPC-Notationen: B24D0003-28
[B24D0003-342](#)
G11B0005-1871
G11B0005-41
G11B0005-84

Zusammenfassung:

Source: US5456734 A [EN] An **abrasive** tape for polishing a magnetic head includes a substrate and an **abrasive** layer which is formed on the substrate. The **abrasive** layer is composed of **abrasive** grains and a binder having an acidic functional group. The **abrasive** layer contains basic carbon black having a pH within the range of 7 to 10 and a mean grain size of 0.01 to 0.1 μm

PatBas	研磨テープ	pH	粒径 μm	添加量 (部)	出力 (dB)	ヘッド 傷	研磨率 $\text{Rs}(\%)$
比較例1	--			0	0	5本	$1 \times 10^{1.3}$
比較例2	コナブラックASC	9.0	20	1	0.2	3	$1 \times 10^{1.2}$
実施例1	#	9.0	20	2	1.5	0	1×10^3
実施例2	#	9.0	20	4	2.0	0	1×10^7
実施例3	#	9.0	20	8	2.3	0	1×10^5
実施例4	#	9.0	20	8	2.0	0	5×10^4
比較例3	#	9.0	20	12	1.2	1	5×10^4

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 236

Titel: **Abrasive** article

Patentnummer: [WO9516547A1](#)

Anmeldung: WO1994US12177
EP19950900410
DE19946015174T
US19930168655
JP19950516745T
CA19942178743
AU19940081242
KR19960703150
BR1994PI08298

Priorität: US19930168655 19931216
WO1994US12177 19941024

Patentfamilie: **WO9516547A1**
EP0734309B1
EP0734309A1
DE69415174T2
DE69415174D1
US5391210A
JP9506557T2
CA2178743A
AU675891B2
AU199481242A1
KR960706390A
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BRPI9408298A

Anmelder: MINNESOTA MINING AND MFG

Erfinder: BILKADI ZAYN
KLUN THOMAS P

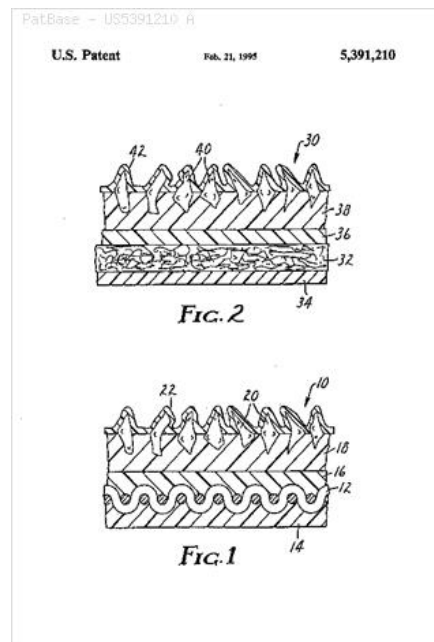


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
C04B0035-01
C08F0290-00
C08F0299-00
C08F0299-02
C08L0033-00
C08L0033-04
C08L0033-06
C08L0057-00
C08L0075-00
C08L0075-16

CPC-Notationen: B24D0003-28
B24D0003-342

Zusammenfassung:

Source: US5391210 A [EN] **Abrasive** articles comprising a plurality of **abrasive** grits and a cured ceramer. The cured ceramer is formed from a liquid dispersion comprising a dispersing liquid and non-aggregated colloidal metal oxide particles dispersed in the dispersing liquid, wherein the dispersing liquid comprises a free-radically polymerizable composition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 237

Titel: MODIFIED RESINS AND **ABRASIVE** ARTICLES MADE WITH THE SAME AS A BOND SYSTEM

Patentnummer: [EP0320172A3](#)

Anmeldung: EP19880311396
US19870129826
JP19880309777
KR19880016279

Priorität: US19870129826 19871208

Patentfamilie: [EP0320172A3](#)
[EP0320172A2](#)
[US4802896A](#)
[JP1205980A2](#)
[KR19890010051A](#)

Anmelder: MINNESOTA MINING AND MFG

Erfinder: GOETHEL WALTER W C O MINNESOTA
KAMU WA ROU
LAW KAM W C O MINNESOTA MINING
UORUTAA UIRIAMU GOESERU



IPC-Notationen:	B24D0003-20 B24D0003-28 B24D0003-34 C08K0005-00 C08K0005-34 C08K0005-3412 C08L0061-00 C08L0061-04 C08L0061-10 C09K0003-14	CPC-Notationen:	B24D0003-285 B24D0003-344 C09K0003-1436
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Zusammenfassung:

No clipped image for: JP1205980 A2

Source: US4802896 A [EN] The invention provides a novel resin comprising the reaction product of reactive, curable phenolic resin such as resole phenolic resin with a thermally stable, aromatic ligand such as a phthalocyanine compound and **abrasive** products which include a bond system comprising a mixture or reaction product of a curable hard resin and thermally stable, aromatic ligand. The preferred **abrasive** products are coated and three-dimensional, low density **abrasive** products

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 238

Titel: Slipring
Patentnummer: [DE29600616U1](#)
Anmeldung: DE19962000616U
Priorität: DE19962000616U 19960118
Patentfamilie: [DE29600616U1](#)
Anmelder: BRUNO SCHMITZ SCHLEIFMITTELWER
Erfinder:

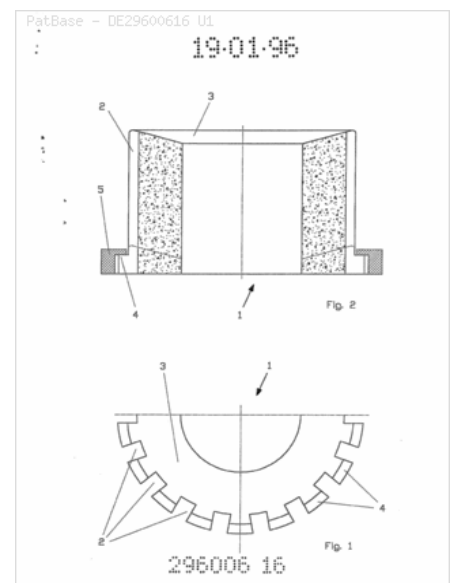


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0005-00
B24D0005-02

CPC-Notationen: B24D0003-28
B24D0005-02

Zusammenfassung:

Source: DE29600616 U1 [MT] (Claim 1) 1 Slip ring for **grinding** large objects, since marked containers, et that the **Schleifflaechedes** slip ring (1) with slots (2) provided that, starting from the radially inner and / or aeuusserenRand the Schlei ffl EXT (3) over a portion of the same erstrecken.20



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 239

Titel: METHODS FOR PRODUCING GRANULAR MOLDING MATERIALS FOR **ABRASIVE** ARTICLES

Patentnummer: [WO02092287A1](#)

Anmeldung: WO2002US02652
US20020334455
US20010855950
FR20020006001
AU20020237981
BE20020000320
CH20020000372
IT2002MI01006

Priorität: US20010855950 20010515
WO2002US02652 20020130
US20020334455 20021230

Patentfamilie: [WO02092287A1](#)
[US6514302B2](#)
[US2003099150A1](#)
[US2002184829A1](#)
[FR2824837B1](#)
[FR2824837A1](#)
[AU2002237981A1](#)
[BE1014832A4](#)
[CH695850A](#)
[ITMI20021006A1](#)
[ITMI20021006A0](#)

Anmelder: GOUTTE RENE
HOLDEN ROBERT L
LEMBERGER MICHAEL J
MCNAMARA JOHN P
PELLERIN RAYMOND J
SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

Erfinder: GOUTTE RENE
HOLDEN ROBERT L
LEMBERGER MICHAEL J
MCNAMARA JOHN P
NAMARA JOHN P MC
PELLERIN RAYMOND J

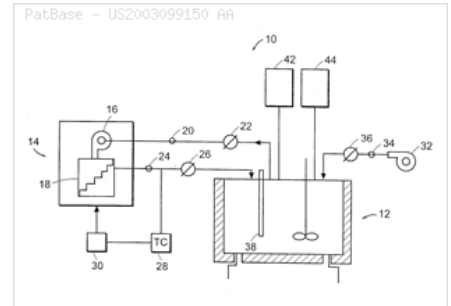
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B24D0005-02
B24D0007-00
B24D0007-02
B24D0018-00
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0005-02
B24D0007-02
B24D0018-0009



Zusammenfassung:

Source: US2002184829 AA [EN] Granular molding materials for fabricating **abrasive** articles, such as, for example, **grinding wheels**, are produced by mixing heated **abrasive** grains with a resin blend including two phenol-novolac resins. Preferably, the resin blend is added to the **abrasive** grains in the mixer apparatus of the invention, which can be a bowl type mixer. The mixer can be preheated by directing a heated gas, such as air, across the mixer. The granular molding material can also include a curing agent, **fillers** and other materials generally employed in fabricating **abrasive** articles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 240

Titel: COATED **ABRASIVE** ARTICLE

Patentnummer: [WO9956913A1](#)

Anmeldung: WO1999US04963
 EP19990911170
 DE19996022945T
 US20000564013
 US20000563584
 US20000563372
 US19980070976
 JP20000546915T
 CA19992330853
 CN19998008171
 KR20007012107
 BR1999PI10108

Priorität: US19980070976 19980501
 WO1999US04963 19990305
 US20000563372 20000503
 US20000563584 20000503
 US20000564013 20000503

Patentfamilie: **WO9956913A1**
EP1075354B1
EP1075354A1
DE69922945T2
DE69922945D1
US6372336B1
US6359027B1
US6258138B1
US6077601A
JP2002513684T2
CA2330853A
CN1308570A
CN1139461C
KR20010043184A
BRPI9910108A

Anmelder: 3M INNOVATIVE PROPERTIES CO
 MINNESOTA MINING AND MFG

Erfinder: CLAUSEN T M
 CLAUSEN THOMAS M
 DAHIKE GREGG D
 DAHLKE G D
 DAHLKE GREGG D
 DEVOE R J
 DEVOE ROBERT J
 GEORGE CLAYTON A
 KARIM NAIMUL
 MASMAR CRAIG A

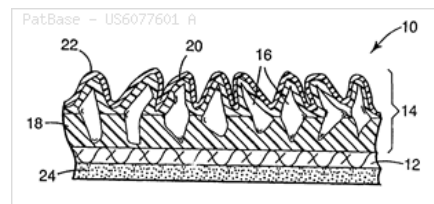


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0011-00
B24D0018-00
C08F0002-46
C08F0002-48
C08G0059-00
C08G0059-68
C09D0163-00
C09D0163-02

CPC-Notationen: B24D0003-28
B24D0018-00
C08G0059-68
C09D0163-00
Y10S0430-114
Y10S0430-115
Y10T0428-1452
Y10T0428-25
Y10T0428-254
Y10T0428-28
Y10T0428-2809
Y10T0428-2852
Y10T0428-31511

Zusammenfassung:

Source: US6077601 A [EN] A coated **abrasive** article comprises a backing, a first binder on the backing, and a plurality of **abrasive** particles in the first binder. The first binder precursor is an energy-curable preferably, melt-processable resin containing an epoxy resin, an ethylene-vinyl acetate copolymer, and a curing agent for crosslinking the epoxy resin that is cured to provide a crosslinked make coating. The above binder precursors of the invention are preferably free of homopolymers and copolymers of olefinic monomers. In another aspect, the invention also describes an energy curable first binder precursor containing an epoxy resin, an ethylene-vinyl acetate copolymer, a polyfunctional acrylate component and a curing agent for crosslinking the epoxy resin that is cured to provide a crosslinked make coating. The invention also relates to a method of producing such coated **abrasive** articles and a surface-treated backing material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 241

Titel: POLISHING SHEET

Patentnummer: [US6299521B1](#)

Anmeldung: US19960773304
JP19960355752
JP19960355747

Priorität: JP19950351565 19951226
JP19950351566 19951226
JP19960355747 19961224
JP19960355752 19961224

Patentfamilie: [US6299521B1](#)
[JP9235385A2](#)
[JP9235384A2](#)
[JP3633741B2](#)
[JP3633740B2](#)

Anmelder: BRIDGESTONE CORP

Erfinder: KOTSUBO HIDEFUMI
KOTSUBO HIDESHI
MORIMURA YASUHIRO

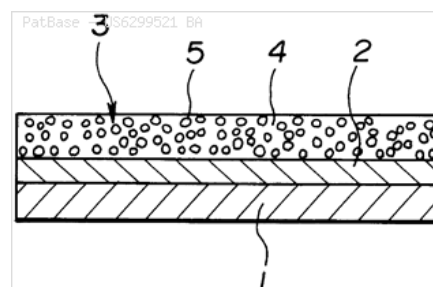
IPC-Notationen: B24D0003-20
B24D0003-28
B24D0011-00
B32B0027-28
[C08J0005-14](#)
C09J0123-00
C09J0123-08

CPC-Notationen: B24D0003-28
B24D0011-00



Zusammenfassung:

Source: US6299521 BA [EN] The invention provides a polishing sheet comprising a support and an **abrasive** layer formed thereon with an adhesive layer interposed therebetween, characterized in that the adhesive layer is formed by a cured layer of a thermosetting and/or photo-curable curable adhesive composition based on at least one resin selected from the group consisting of (A) an ethylene-vinyl acetate copolymer, (B) a copolymer of ethylene, vinyl acetate, and an acrylate and/or methacrylate monomer, (C) a copolymer of ethylene, vinyl acetate, and maleic acid and/or maleic anhydride, (D) a copolymer of ethylene, an acrylate and/or methacrylate monomer, and maleic acid and/or maleic anhydride, and (E) an ionomer resin in the form of an ethylene-methacrylic acid copolymer whose molecules are bonded by a metal ion



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 242

Titel: DIAMOND **ABRASIVE** ARTICLE
Patentnummer: [US2333429A](#)
Anmeldung: US19420437857
Priorität: US19420437857 19420406
Patentfamilie: **US2333429A**
Anmelder: J K SMIT AND SONS INC
Erfinder: KUZMICK PAUL L



IPC-Notationen: B24D0003-20
B24D0003-28
C08L0061-00
C08L0061-10
CPC-Notationen: B24D0003-285

Zusammenfassung:

Die Hauptaufgabe dieser Erfindung besteht darin, harzgebundene Diamantschleifscheiben herzustellen, die die kombinierten Eigenschaften von schneller Schneidfähigkeit und ungewöhnlicher Haltbarkeit aufweisen. Solche Räder besitzen auch die Fähigkeit, ein überlegenes Finish zu erzeugen.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 243



Titel: **Abrasive** article
Patentnummer: [DE1302479C2](#)
Anmeldung: DE1965C036450
US19640385068
GB19650030962
FR19650025869
AU19650061821
19650721
Priorität: US19640385068 19640724
Patentfamilie: **DE1302479C2**
DE1302479B
US3329488A
GB1071364A
FR1443608A
AU6182165B1
AU6182165A1
Anmelder: CARBORUNDUM CO
Erfinder: COFRAN LOUIS L
IPC-Notationen: B24D0003-20
B24D0003-32
B24D0018-00
CPC-Notationen: B24D0003-32
B24D0018-00

Zusammenfassung:

Source: GB1071364 A [EN] A raw batch mixture for the manufacture of a bonded **abrasive** article comprises **abrasive** grains, an organic bonding agent and a particulate, friable, pore-forming material, said poreforming material consisting essentially of olivine. Insert or active fibres and/or other modifying agents may be present. The mix may be subjected to pressure in a mould to form an **abrasive** body, heat-treated to mature the bond and dressed in accordance with conventional practice. The olivine may comprise 3-20 percent by volume of the moulded body and may have particle size from - 4 + 16 mesh (U.S. Standard Sieve) . The **abrasive** may be silicon carbide, aluminium oxide, zirconia, flint, garnet or bauxite or mixtures thereof. The bonding agent may be natural or synthetic resins, including the phenol-formaldehydes, urea-formaldehydes, melamine formaldehydes, epoxides, alkyds, polyesters, modified phenolics, natural and synthetic rubbers or shellac. The **filler** may be ergolite, iron sulphides, or fluospar in finely divided form

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 244

Titel: **ABRASIVE** ARTICLES INCLUDING A BLEND OF **ABRASIVE** PARTICLES AND METHOD OF FORMING AND USING THE SAME



Patentnummer: [US2019061107A1](#)

Anmeldung: US20180119522

Priorität: US20170553031P 20170831
US20180119522 20180831

Patentfamilie: [US2019061107A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

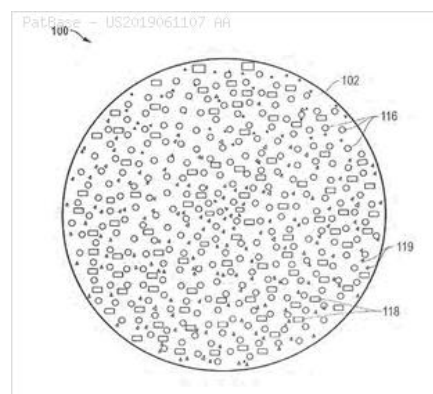
Erfinder: EVERTS DARRELL K
YENER DORUK O

IPC-Notationen: B24D0003-28
[B24D0003-34](#)
B24D0011-02
B24D0018-00

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
B24D0011-02
B24D0018-0018
B24D0018-0072

Zusammenfassung:

Source: US2019061107 AA [EN] An **abrasive** article including a substrate; and an **abrasive** layer overlying the substrate, where the **abrasive** layer includes a blend of **abrasive** particles including a first type of **abrasive** particle comprising a polycrystalline material and having a first average friability F1, and a second type of **abrasive** particle comprising a polycrystalline material and having a second average friability, F2, where the blend comprises an average friability difference, $\Delta F = |F1 - F2|$, within a range of at least 0.5 percent to not greater than 80 percent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 245

Titel: ROUGH **GRINDING WHEEL** COMPRISING A CORE

Patentnummer: [EP3081337A1](#)

Anmeldung: EP20160158947
US20190388088
US20160077064
CA20162924939

Priorität: DE201510004355 20150402
US20160077064 20160322
US20190388088 20190418

Patentfamilie: [EP3081337A1](#)
[US2019240809A1](#)
[US2016288295A1](#)
[CA2924939C](#)
[CA2924939A](#)

Anmelder: KLINGSPOR AG

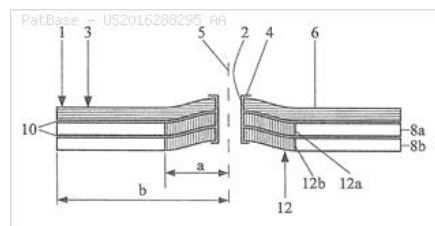
Erfinder: CONRADI BERND
MOOS MARKUS

IPC-Notationen: B24D0003-28
B24D0007-00
B24D0007-04
B24D0007-14
B24D0007-18

CPC-Notationen: B24D0003-28
B24D0007-04
B24D0007-14
B24D0007-18

Zusammenfassung:

Source: US2016288295 AA [EN] A rough **grinding wheel** for processing material surfaces includes a **wheel-shaped** base body having a central recess penetrated by an axis of rotation for direct or indirect connection to a drive shaft of a **tool**. The rough **grinding wheel** has a stabilizing core stabilizing the rough **grinding wheel**. The stabilizing core is associated with at least one **abrasive** layer circumferentially adjacent to the central recess. The stabilizing core has a higher strength than the at least one **abrasive** layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 246

Titel: COMPOSITE **ABRASIVE** BODIES

Patentnummer: [WO2005051599A1](#)

Anmeldung: WO2004EP53097
EP20040804572
EP20030027086
US20100923873
US20070896573

Priorität: EP20030027086 20031125
EP20040804572 20041125
US20040580531 20041125
WO2004EP53097 20041125
US20070896573 20070904
US20100923873 20101013

Patentfamilie: [WO2005051599A1](#)
[EP1689560A1](#)
[EP1535700A1](#)
[US2011023376A1](#)
[US2008200106A1](#)

Anmelder: LINNENBRINK MARTIN
SIKA TECHNOLOGY AG
SIKA TIVOLI GMBH

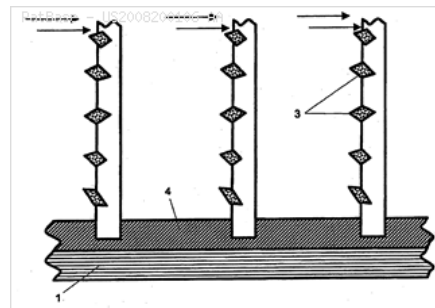
Erfinder: LINNENBRINK MARTIN

IPC-Notationen: B24D0003-28
B24D0007-18
B24D0011-00
B24D0013-04
B24D0013-06
B24D0018-00

CPC-Notationen: B24D0013-06
B24D0018-0072

Zusammenfassung:

Source: US2008200106 AA [EN] Composite **abrasive** bodies, which include **abrasive** product supports, **abrasive** particles and cured adhesives bonding the **abrasive** product supports and the **abrasive** products, are provided. The cured adhesives may be two-component polyurethane or (meth) acrylate adhesives. In addition, methods for preparing the composite **abrasive** bodies are also provided



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 247

Titel: COATED **ABRASIVE** ARTICLE AND METHOD OF MAKING SAME

Patentnummer: [WO9812021C1](#)

Anmeldung: WO1997US00911
EP19970903874
DE19976016285T
US19980145665
US19980046379
US19960710596
JP19980514627T
CA19972264779
AU19970018334
KR19997005799
BR1997PI11408

Priorität: US19960710596 19960920
WO1997US00911 19970123
US19980046379 19980323
US19980145665 19980902

Patentfamilie: **WO9812021C1**
WO9812021A1
EP0932477B1
EP0932477A1
DE69716285T2
DE69716285D1
US5922784A
US5863847A
US5766277A
JP2002500568T2
CA2264779C
CA2264779A
AU715923B2
AU199718334A1
KR20000069719A
KR100463617B1
BRPI9711408A

Anmelder: 3M CO
MINNESOTA MINING AND MFG CO

Erfinder: DAHIKE GREGG D
DAHLKE GREGG D
DEVOE J
HARMON KIMBERLY K
MASMAR CRAIG A
VOE ROBERT J DE

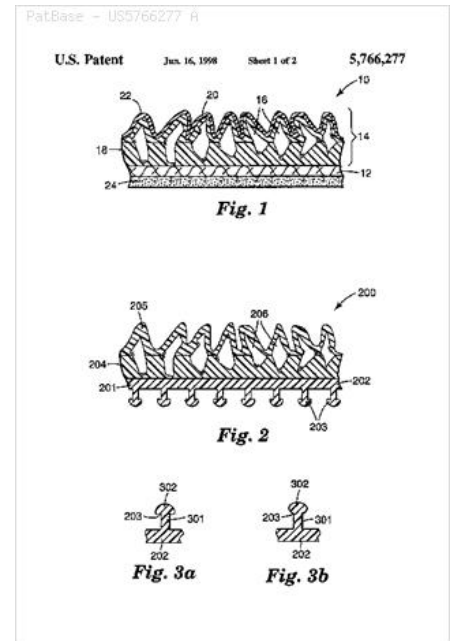
IPC-Notationen: B24D0003-28
B24D0011-00
C08J0005-14
C08L0063-00
C08L0067-02

CPC-Notationen: B24D0003-28
B24D0011-00
Y10T0442-2746
Y10T0442-2754



Zusammenfassung:

Source: US5766277 A [EN] A coated **abrasive** article comprises a backing, a first binder (i.e., a make coat) on the backing, and a plurality of **abrasive** particles in the first binder. The first binder precursor is an energy-curable melt-processable resin containing an epoxy resin, a polyester component, a polyfunctional acrylate component, and a curing agent for crosslinking the epoxy resin that is cured to provide a crosslinked make coating. The invention also relates to a method of producing such coated **abrasive** articles and a surface-treated porous cloth material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 248

Titel: Process of making **abrasive** phenolic resin mixes

Patentnummer: [DE937730A](#)

Anmeldung: DE1952D013101
US19510252391
GB19520023095
00000000

Priorität: US19510252391 19511020
GB19520023095 19520915

Patentfamilie: [DE937730A](#)
[US2708622A](#)
[GB748696A](#)
[FR1068950A](#)

Anmelder: CIE DES MEULES NORTON
DEUTSCHE NORTON GMBH
NORTON GES M B H DEUTSCHE
NORTON GRINDING WHEEL CO LTD

Erfinder: STONE HYMAN NATHAN

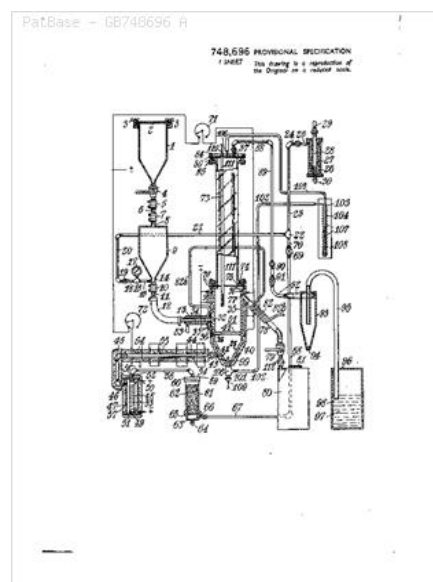
IPC-Notationen: B24D0003-28
[C08J0005-14](#)
C08L0061-10

CPC-Notationen: B24D0003-285



Zusammenfassung:

Source: GB748696 A [EN] Moulding powders for making shell moulds or **abrasive** articles, e.g. grinding-wheels, and comprising granules of sand c. wetted with a plasticizer and coated with a partially cured phenolic resin are prevented from sticking together by fluidizing the granules in a current of air or other gas at temperatures from 40-200 DEG C. In making the mixture sufficient plasticizer, e.g. furfural or liquid reactive phenolic resin is added to pick up nearly all the **abrasive** powder leaving 1 per cent free powder and the powdered phenolic resin is then added. In examples mixtures comprising 22.4 lbs. 24-grit size alumina, 0.52 lb. liquid resin and 1.78 lbs. solid resin are specified. This mixture is fed successively through hoppers 1, 9 and thence, by means of pressure supplied by air fed through line 21, through glass tube 12 and heater 13 to the upper chamber 31 of the fluidizing apparatus comprising a steel cylinder 35 divided into upper and lower chambers 31, 39 by a porous plate 41 and provided with electric heating coils 36. The lower chamber is cone-shaped and has an inlet pipe for the fluidizing gas while above the chamber 31 is provided a glass tube 73 in which the extent of the fluidizing action may be observed and from which passes a pipe 89 to a centrifugal separator 93 in which any powder carried over by the fluidizing gas is separated, the gas being vented through a receiver 98 containing water. Fluidizing gas is supplied under pressure from the mains 29, the pressure being sufficient to give the required differential pressure for the feed at points 14 and 43 respectively. The air is first dried by passage through a glass wool filled trap 26 and then passes to the T-piece 22 where the supply is divided to feed the lines 21 and 68. The latter supply passes through a cylinder 61 containing a dehydrator, e.g. calcium sulphate, and thence through a ceramic pipe 48 fitted with resistance heating wires into the base of a cylinder 47 from the top of which the dried air passes through an electrically heated tubular heater 55, 56 into the base of the cone-shaped chamber 39. A mercury pressure gauge 103 connected on the one side through pipes 105, 106 to the upper chamber 35 and on the other side through pipes 102, 101 and T-union 100 to the lower chamber 39 enables the pressure differential to be controlled in conjunction with the temperature limit specified read off at thermometers 111 and thermocouple 109 that the level of the fluidized mixture is controlled to rise to the level of the outlet 77 from which catalyst is continually withdrawn through line 78 to receiver 80



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 249

Titel: **GRINDING TOOL** HAVING A RIGID AND DIMENSIONALLY STABLE RESIN BINDER

Patentnummer: [US3850589A](#)

Anmeldung: US19630304002
GB19600016823
CH19600005553

Priorität: US19590813377 19590515
US19590829665 19590727
US19630304002 19630823

Patentfamilie: [US3850589A](#)
[GB951450A](#)
[CH364190A](#)

Anmelder: OSBORN MFG CO
SHERWIN WILLIAMS CO

Erfinder: CHARVAT V
VERNON KENNETH CHARVAT

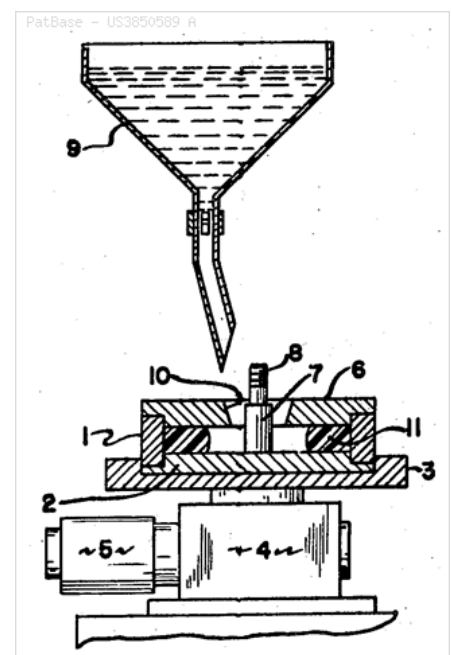
IPC-Notationen: B24D0003-32
B24D0013-00
B24D0013-02
B24D0018-00
[C08J0005-14](#)

CPC-Notationen: B24D0003-32
B24D0013-00
B24D0013-02
B24D0018-00



Zusammenfassung:

Source: US3850589 A [EN] A **grinding tool** useful for rapid **grinding** of a precision **cut** is described which comprises a high concentration of **abrasive** grains uniformly dispersed in a non-brittle resin binder body which is rigid and dimensionally stable under the required **grinding** pressure



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 250

Titel: METHOD OF MANUFACTURING **ABRASIVE** ARTICLES
Patentnummer: [US2249279A](#)
Anmeldung: US19370176294
Priorität: US19370176294 19371124
Patentfamilie: [US2249279A](#)
Anmelder: NORTON CO
Erfinder: KISTLER SAMUEL S



IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-344](#)

Zusammenfassung:

Source: US2249279 A [EN] 1. Method of making an **abrasive** body comprising **abrasive** grain bonded with 9. resin which is the polymerized product of phenol and its homologues with formaldehyde and its homologues which comprises adding to the mixture of the foregoing a quantity of non-acidic inorganic dehydrating agent capable of taking up water of reaction at a temperature substantially above 100° C., pressing the mixture, and curing the pressed product in an autoclave at a temperature substantially above 100° C. under 9. pressure sufficient to prevent any Water in the body from passing into steam, whereby swelling is avoided by preventing the generation of steam and water formed in the body is eventually taken up by the dehydrating agent

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 251

Titel: MANUFACTURE OF **ABRASIVE** PRODUCTS

Patentnummer: [US2258774A](#)

Anmeldung: US19390252547

Priorität: US19390252547 19390124

Patentfamilie: **US2258774A**

Anmelder: RAYBESTOS MANHATTAN INC

Erfinder: KUZMICK JOSEPH N



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**
Y10S0524-925

Zusammenfassung:

Source: US2258774 A [EN] 1. An **abrasive** product comprising **abrasive** particles bonded with a synthetic resin, the said synthetic resin having incorporated and distributed in situ therein metallic particles having a melting 'point in the range of **grinding** temperatures of the **abrasive** product whereby the metallic particles serve as a lubricant in the **grinding** action of the **abrasive** product

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 252

Titel: GRINDING WHEEL

Patentnummer: [US2327846A](#)

Anmeldung: US19410374706
US19390291008

Priorität: US19390291008 19390819
US19410374706 19410116

Patentfamilie: [US2327846A](#)
[US2243049A](#)

Anmelder: NORTON CO

Erfinder: BARNES CARL E
KISTLER SAMUEL S

IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-344](#)
Y10S0524-925



Zusammenfassung:

Source: US2243049 A [EN] 1. As a new article of manufacture, in abrasive body comprising **abrasive** grains, bond holding the **abrasive** grains together there being pore spaces in the; §: \eel,nndsl1nelyd.lvldehlolid compoundwhi lsstronglysdinreactlcn at **grinding** temperatures above 500° C. uncombined with the abrasive or bond and available for reaction with l. metal work piece UHX grinding when the **grinding** line glvu ol! sparks, vis. sparks above 500° C. In temperature, and selected from the group consisting of the mhydrldee md meld salts of sulphuric and phosphoric acids

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 253

Titel: VITRIFIED **GRINDING WHEELS**
Patentnummer: [US2377995A](#)
Anmeldung: US19440553111
Priorität: US19440553111 19440907
Patentfamilie: [US2377995A](#)
Anmelder: NORTON CO
Erfinder: COES JR LORING



IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-348](#)

Zusammenfassung:

Source: US2377995 A [EN] 1. An **abrasive** article comprising **abrasive** grains bonded as a porous body by means of vitrified ceramic material and a filler incorporated in the pores comprising furfuryl alcohol polymerized with lignin

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 254

Titel: **ABRASIVE MIX**
Patentnummer: [US2563774A](#)
Anmeldung: US19480021551
Priorität: US19480021551 19480416
Patentfamilie: **US2563774A**
Anmelder: MONSANTO CHEMICALS
Erfinder: DEBING LAWRENCE M



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2563774 A [EN] (Claim 1) 1. In a process for preparing an **abrasive** raix. 76 ture the steps which consist essentiauy of wetting the **abrasive** grains with a liquid ag from the group consisting of liquid phenol-aldehyde condensation products, liquid phenol-furC, fural condensation products, liquid urea-aldehyde condensation products, liquid melaminealdehyde condensation products, liquid thioureaaldehyd6 condensation produc , , cr ic acid and liquid furfuryl alcohol polymers and li) then mixing the product with a finelydivided, solid, potentially reactive resin taken from the group consisting of phenolformaldehyde condensation products, melamine-formaldehyde condensation products, ammeline - formaldehyde condensation products, urea-formaldehyde condensation products, dicyandiamide - formalde hyde condensation products and phenol-furfural condensation products and silica aerogel thereby enhancing the free-flowing qualities of the 'O **abrasive** mi'xture said silica aerogel being present in amounts ranging from 2 to parts by weight per 100 parts of liquid agent

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 255

Titel: **ABRASIVE BODIES**

Patentnummer: [US2806772A](#)

Anmeldung: US19540456202

Priorität: US19540456202 19540915

Patentfamilie: **US2806772A**

Anmelder: ELECTRO REFRACTORIES AND ABRASIV

Erfinder: ROBBIE NORMAN P

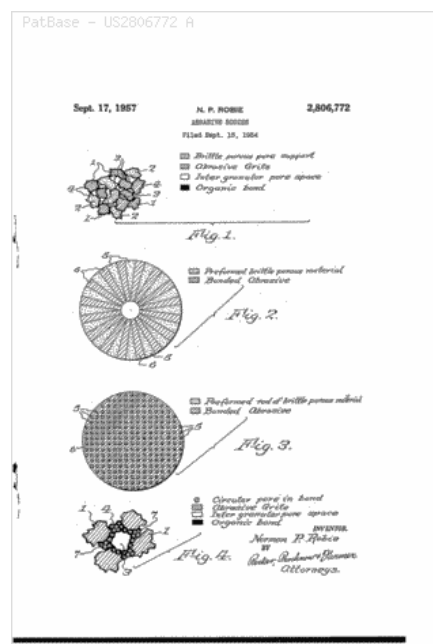


IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2806772 A [EN] (Claim 1) 1. An **abrasive** article consisting essentially of abrasil,,e granules, a phfnolic resin bond therefor and individual minute thin wahed hollow spheres less than 0.025 inch in diameter distributed throuf.,hout the resin bond and between the **abrasive** granules, said minute walled hohow spheres constituting from 1 to 30% of the volume of the article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 256

Titel: Improvements in or relating to resin bonded **abrasive** articles
Patentnummer: [GB789677A](#)
Anmeldung: GB19550005095
Priorität: GB19550005095 19550221
Patentfamilie: **GB789677A**
Anmelder: TITAN ABRASIVES COMPANY
Erfinder: ZALUD CHARLES ALBERT



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

Source: GB789677 A [EN] An **abrasive** article comprises 160 parts by weight of a granular **abrasive** and a bonding agent consisting of 7 to 14 parts by weight of a thermosetting resin and from 67 to 95 per cent of the weight of the bonding agent of an inorganic **filler**. If required, a wetting agent, e.g. furfural, furfuryl, alcohol, or acetone may be incorporated. Specified resins are phenolaldehyde and amine-aldehyde resins. **Abrasives** specified are aluminium oxide, silicon carbide, boron carbide, corundum, garnet or emery. Specified **fillers** are **cryolite**, **fluorspar**, magnesium oxide or silica. In the example, 800 parts by weight of fused aluminium oxide grains were mixed with 20 parts by weight of a liquid Bakelite resin, and 150 parts by weight of **cryolite** or 30 parts of a Bakelite resin were added ('Bakelite' is a Registered Trade Mark) , the whole thoroughly mixed and moulded and cured

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 257

Titel: DIAMOND **GRINDING WHEEL** AND COMPOSITIONS THEREFOR
Patentnummer: [US3087803A](#)
Anmeldung: US19600040565
Priorität: US19600040565 19600705
Patentfamilie: **US3087803A**
Anmelder: FEDERAL SCREW WORKS
Erfinder: BAKIAN JOHN P



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US3087803 A [EN] (Claim 1) 1. A resinoid bonded diamond **grinding wheel** composition consisting essentially of about 10% to about 30% diamonds, about 7 % to about 15 % of a phenol-aldehyde resinous bonding agent, about 10% to about 55% of a tough **filler** and about 5% to about 55% of a hard **abrasive** _selected from the group consisting of titanium carbide, silicon carbide, tantalum carbide, tungsten carbide, zirco-nium carbide, chromium carbide, boron carbide, titanium nitride and aluminum oxide, said tough **filler** comprising a partly reduced fused mixture of zirconia and titania in which the mol. ratio of titania to zirconia is within the range of 1: 9 to 9: 1, the sum of said tough **filler** and said bard **abrasive** not exceeding about 75

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 258

Titel: **ABRASIVE** COMPOSITION WITH LIMESTONE AS THE POROSITY-INDUCING AGENT
Patentnummer: [US3476537A](#)
Anmeldung: US19660551879
Priorität: US19660551879 19660523
Patentfamilie: **US3476537A**
Anmelder: ACME ABRASIVE CO
Erfinder: MARKOTAN ROBERT J



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US3476537 A [EN] ABSTRACT OF THE **DISCLOSURE** The **abrasive** composition contains granular **abrasive** material, granular limestone, a granular Aller and a binder. The **abrasive** and limestone grains are of the same order in size, while the Aller grains are much smaller size. The ratio by volume of **abrasive** and limestone in the composition approximates less than 50%: 10

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 259

Titel: With thermosetting resin bonded, HOT PRESSED **WHEEL** (Machine translation)
Patentnummer: [DE1281306B](#)
Anmeldung: DE1967C044044
Priorität: 19671202
Patentfamilie: [DE1281306B](#)
Anmelder: CARBORUNDUM WERKE G M B H
Erfinder: HALLEN DIETER



IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-344](#)

Zusammenfassung:

Die Erfindung bezieht sich auf eine mit duroplastischem Kunstharz gebundene, heißgepreßte Schleifscheibe, die neben vollem Schleifkom Hohlkugeln aus einem geschmolzenen Schleifmaterial, sowie 5 bis 15 Gewichtsprozent Füllstoff für das Bindemittel und 0 bis 3 Gewichtsprozent CaO enthält.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 260

Titel: **ABRASIVE** SHEET CONTAINING A GRAIN-SIZE BINDER WITH WAX PARTICLES

Patentnummer: [DE2312052A1](#)

Anmeldung: DE19732312052
US19740447789
GB19740010675
FR19740007688
BE19740141818
CH19740002954
IT19740012504
NL19740003140

Priorität: DE19732312052 19730310

Patentfamilie: [DE2312052A1](#)
[US3926585A](#)
[GB1468238A](#)
[FR2220349B1](#)
[FR2220349A1](#)
[BE812076A](#)
[CH576312A](#)
[IT1005632A](#)
[NL7403140A](#)

Anmelder: FELDMUEHLE ANLAGEN PROD

Erfinder: LUKOWSKI HEINZ DIPL CHEM DR

IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-346](#)

Zusammenfassung:

Source: US3926585 A [EN] The loading of an **abrasive** belt with particles of a soft metal during **grinding** or polishing of the latter is sharply reduced, the amount of metal removed per unit time greatly increased, and the useful **life** of the belt improved if the **abrasive** grains on the belt are covered with an intimate mixture of a solid binder with finely dispersed wax particles. 9 Claims, No Drawings

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 261



Titel: PRECISION **ABRASIVE GRINDING WHEELS** GIVING HIGH SURFACE FINISH - USING A BINDER CONTG. EPOXY! RESIN AND PHENOL! RESIN AS REPLACEMENT FOR SHELLAC

Patentnummer: [FR2385494B1](#)

Anmeldung: FR19770009471

Priorität: FR19770009471 19770330

Patentfamilie: **FR2385494B1**
FR2385494A1

Anmelder: NORTON CO

Erfinder:



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: FR2385494 A1 [EN] **Abrasive** bodies are made contg. 44-60 vol. percent **abrasive** particles, 56-2 vol. percent binder and opt. up to 38 vol. percent pores. The binder used is a reaction prod. of an epoxy prepolymer with a phenolic prepolymer. The binder may also contain up to 30 percent **filler**. The epoxy phenolic binders are useful replacements for natural shellac in the prodn. of precision grindstones for the prodn. of articles with a high surface finish, such as **disc** brake **discs**. The synthetic binders show less variation in properties than natural shellac and cure more rapidly. Pref. binders are made from 5-20 weight percent of a liq. epoxy prepolymer with an epoxy equiv. wt. of 70-200, 80-40 weight percent of a powdered epoxy prepolymer with an epoxy equiv. wt. of 230-4000 and 10-55 weight percent of a powdered phenol formaldehyde prepolymer without a cross linking agent

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 262

Titel: **ABRASIVE** ON DOCUMENT (Machine translation)

Patentnummer: [DE7720014U1](#)

Anmeldung: DE19770020014U

Priorität: DE19770020014U 19770625

Patentfamilie: **DE7720014U1**

Anmelder: FELDMUEHLE ANLAGEN PROD

Erfinder:



IPC-Notationen: **B24D0003-34**

CPC-Notationen:

Zusammenfassung:

Claim 1. Schleifmittel auf Unterlage, wie Papier, Vulkanfiber oder Gewebe, bei dem auf die Unterlage ein Grundbindemittel und darauf Schleifkorn aufgebracht ist, wobei das Schleifkorn durch eine mindestens einen Füllstoff enthaltende Deckschicht eingebunden ist, dadurch gekennzeichnet aus Aluminiumhydroxid besteht.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 263

Titel: **ABRASIVE DISC** CONTG. **ABRASIVE** AND BINDER - AND EMBEDDED FIBRE REINFORCEMENT HAVING HIGH MODULUS OF ELASTICITY AND LENGTH

Patentnummer: [DE2829609C2](#)

Anmeldung: DE19782829609

Priorität: DE19782829609 19780705

Patentfamilie: [DE2829609C2](#)
[DE2829609A1](#)

Anmelder: SWAROVSKI TYROLIT SCHLEIF

Erfinder: HELLETSBERGER HARALD DR
WAIZER WALTER DR



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: DE2829609 A1 [EN] High strength reinforcing fibres, (I) having length greater than or equal to 10 mm and modulus of elasticity greater than or equal to 1×10^4 kp/mm², are incorporated in **abrasive discs** contg. **abrasive** grains, resin-esp. thermosetting resin binder and **filler**. The fibre reinforcement may consist of mono-crystal whiskers and/or polycrystalline metal whiskers and/or B fibres, partic. synthetic, inorganic fibres. Fibre adhesion in binder matrix is improved by providing the fibres with a surface coating having a high chemical and/or physical affinity to binder, e.g. by oxidn. Thus, the fibres may be high-strength C fibres, oxidised on surface, or may consist of drawn metal wires, esp. of higher alloyed C steel coated with a primer. Working velocity can be increased without increasing vol. proportion of reinforcing material in **abrasive disc**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 264

Titel: **Cutting Wheel** for Dry **cutting** Hard materials (Machine translation)
Patentnummer: [DE20017092U1](#)
Anmeldung: DE20002017092U
Priorität: DE20002017092U 20001005
Patentfamilie: **DE20017092U1**
Anmelder: DRONCO AG
Erfinder:

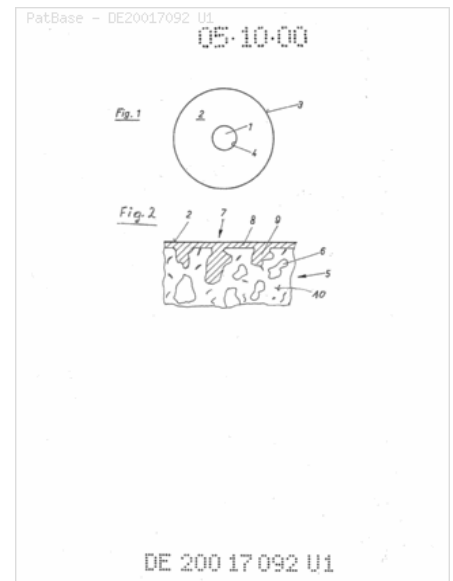


IPC-Notationen: **B24D0003-34**
B24D0005-00
B24D0005-12

CPC-Notationen: **B24D0003-348**
B24D0005-12

Zusammenfassung:

Source: DE20017092 U1 [MT] (Claim1) friction **disk** to drying **cuts** of hard materials, those as thin **disk** with a relationship diameter: Thickness by 2L 100 is arranged and their hardened Korpus granular **abrasive**, **filler**, reinforcement fabric, polymer as purifying area screen end bonding agent matrix and structure pores exhibits, in the fact characterized that it is sealed with a sealing substance (7) , water-free which can be processed, structure pores (6) and purifying area (10) closing



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 265

Titel: **ABRASIVE WHEELS**, RINGS, LEAVES OR **DISCS**

Patentnummer: [DE1906721A1](#)

Anmeldung: DE19691906721

Priorität: DE19691906721 19690206

Patentfamilie: **DE1906721A1**

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: LOUIS BARATTO EUGENE
TRYGVE FREERKS CONRAD

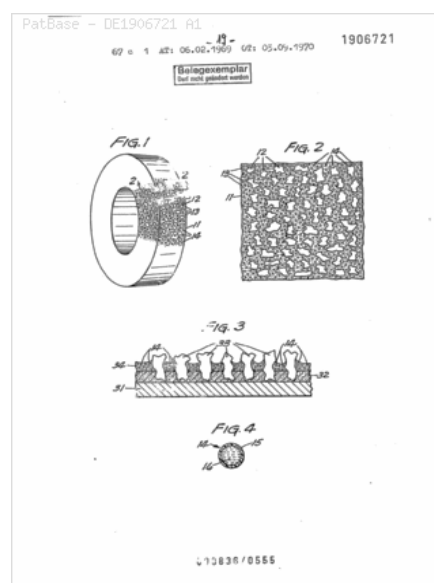


IPC-Notationen: **B24D0003-34**
B24D0007-00

CPC-Notationen: **B24D0003-344**
B24D0007-00

Zusammenfassung:

Source: DE1906721 A1 [EN] The **abrasive** powder and, opt. fine graphite, are held in the pores of the bonding material which is essentially a urea-formaldehyde resin, the remainder of the pores are filled with the **abrasive** catalyst, e.g. paraffin etc., the gradual wearing away of the bonding releasing the **abrasive** as required



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 266

Titel: GRINDING WHEEL
Patentnummer: [US2656654A](#)
Anmeldung: US19500137245
Priorität: US19500137245 19500106
Patentfamilie: [US2656654A](#)
Anmelder: NORTON CO
Erfinder: ERICKSON JOHN R

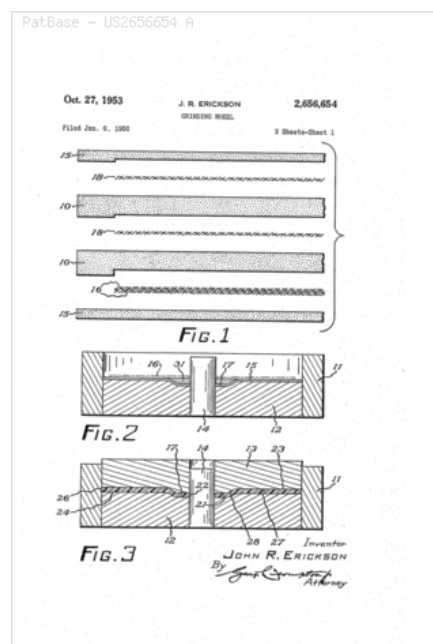


IPC-Notationen: [B24D0003-34](#)
 B24D0007-00
 B24D0007-04
 B24D0007-16
 B24D0018-00

CPC-Notationen: [B24D0003-344](#)
 B24D0007-04
 B24D0007-16
 B24D0018-0081

Zusammenfassung:

Source: US2656654 A [EN] (Claim 1) 1. A **grinding wheel** comprising a disc with an offset hub and a central hole centrally located in the **disc**, said disc being made of abrasive grains bonded with a matured phenolformaldehyd resinoid, and said disc containing a last one reinforcement of woven glass cloth and containing at last of reinforcement nylon leno cloth, the glass cloth and the nylon leno cloth extending from hub to close tot he periphery oft he disc and the nylon leno cloth being closely adjacent tot hat side of disc towards wich the hub is offset



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 267

Titel: **ABRASIVE** PRINTED WITH AN ELECTRICALLY CONDUCTIVE INK

Patentnummer: [WO9202336A1](#)



Anmeldung: WO1991US05136
EP19910917784
DE19916006133T
US19900592223
JP19910516597T
CA19912086750
AU19910087118
KR19937000341
KR19930700341
HK19960001532

Priorität: US19900564715 19900808
US19900592223 19901009
US19900692223 19901009
WO1991US05136 19910722

Patentfamilie: [WO9202336A1](#)
[EP0542921B1](#)
[EP0542921A1](#)
[DE69106133T2](#)
[DE69106133D1](#)
[US5137542A](#)
[JP6500271T2](#)
[CA2086750C](#)
[CA2086750A](#)
[AU644238B2](#)
[AU199187118A1](#)
[KR930701271A](#)
[KR19937001271A](#)
[KR19930701271A](#)
[HK153296A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

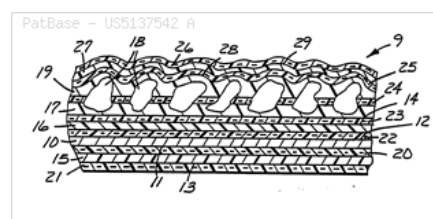
Erfinder: BUCHANAN SCOTT J
CHANG KWO DONG A

IPC-Notationen: [B24D0003-34](#)
B24D0011-00

CPC-Notationen: B24D0011-00

Zusammenfassung:

Source: US5137542 A [EN] A coated **abrasive** article having a printed coating of electrically conductive ink incorporated in the construction thereof, such that the buildup of static electricity during the use of the article is either reduced or eliminated. In another respect, a method to make the same is taught



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 268

Titel: Resilient **abrasive** article with hard anti-loading size coating

Patentnummer: [WO200003840A1](#)

Anmeldung: WO1999US03659
EP19990907160
DE19996013349T
US20000535782
US19980116038
JP20000559968T
CA19992337081
AU19990026885
CN19998008639
BR1999PI12069

Priorität: US19980116038 19980715
WO1999US03659 19990218
US20000535782 20000328

Patentfamilie: **WO200003840A1**
EP1097027B1
EP1097027A1
DE69913349T2
DE69913349D1
US6406504B1
US6059850A
JP2002520181T2
CA2337081C
CA2337081A
AU199926885A5
AU199926885A1
CN1309596A
CN1139463C
BRPI9912069B1
BRPI9912069A

Anmelder: 3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

Erfinder: LISE J M
LISE JONATHAN M
MINICK C A
MINICK CHRIS A
MINIK C A

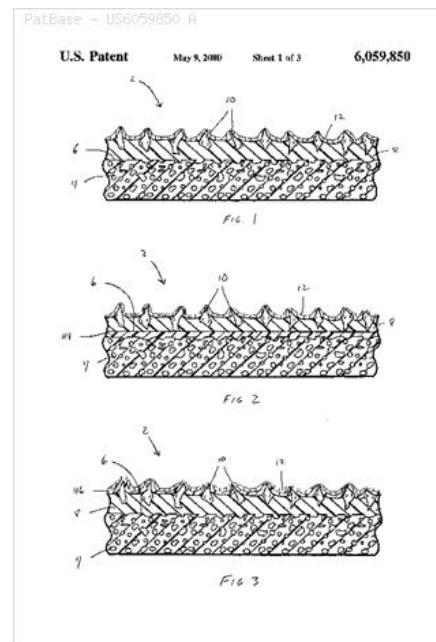
IPC-Notationen: **B24D0003-34**
B24D0011-00

CPC-Notationen: **B24D0003-34**
B24D0011-00



Zusammenfassung:

Source: US6059850 A [EN] A resilient **abrasive** article includes a resilient elongatable substrate, **abrasive** particles adhesively bonded to the substrate with a flexible make coat, and a hard size coat applied over the **abrasive** particles and flexible make coat. The size coat provides an anti-loading layer which is applied thinly enough to prevent the size coat from cracking and tearing the substrate during use



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 269

Titel: COATED **ABRASIVE** ARTICLE CONTAINING AN ELECTRICALLY CONDUCTIVE BACKING

Patentnummer: [WO9315879A1](#)

Anmeldung: WO1993US01252
EP19930905028
US19950469595
JP19930514293T
CA19932128089
AU19930036175
KR19947002758
KR19940702758
BR1993PI05871

Priorität: US19920834618 19920212
WO1993US01252 19930211
US19950469595 19950606

Patentfamilie: [WO9315879A1](#)
[EP0630310A1](#)
[US5560753A](#)
[JP8502695T2](#)
[CA2128089A](#)
[AU199336175A1](#)
[KR957000152A](#)
[KR19957000152A](#)
[KR19950700152A](#)
[BRPI9305871A](#)

Anmelder: CPG HOLDINGS INC
MINNESOTA MINING AND MFG

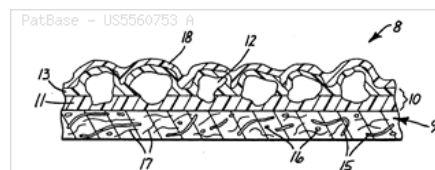
Erfinder: BUCHANAN SCOTT J
MCALLISTER RICHARD G
NETTLESHIP DAVID A
RUDE HAROLD E
SCHNABEL HERBERT W
SERCOMBE RICHARD C

IPC-Notationen: [B24D0003-34](#)
B24D0011-00
B24D0011-02

CPC-Notationen: [B24D0003-344](#)
B24D0011-02
Y10T0428-24355
Y10T0428-24372

Zusammenfassung:

Source: US5560753 A [EN] A coated **abrasive** article having a backing comprising a sufficient amount of an electrically conductive material therein to reduce the buildup of static electricity during the use of the article. In another aspect, a method of making the same is taught



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 270

Titel: **ABRASIVE** SUPPORT, **ABRASIVE** ARTICLE COMPRISING THE **ABRASIVE** SUPPORT, AND METHOD FOR THE PRODUCTION THEREOF

Patentnummer: [WO2015079021A1](#)

Anmeldung: WO2014EP75937
EP20140815261
DE201450011540T
DE201310224549
US20140039625

Priorität: DE201310224549 20131129
WO2014EP75937 20141118
EP20140815261 20141128
WO2014EP75937 20141128

Patentfamilie: **WO2015079021A1**
[EP3074182B1](#)
[EP3074182A1](#)
[DE102013224549A1](#)
[DE502014011540D1](#)
[US10124467B2](#)
[US2017028530A1](#)

Anmelder: NEENAH GESSNER GMBH

Erfinder: DOEGE CHRISTINE
KARL PETER
NIENTIEDT JUERGEN DR

IPC-Notationen: **B24D0003-34**
B24D0011-00
B24D0011-02
B24D0018-00

CPC-Notationen: **B24D0003-348**
B24D0011-001
B24D0011-02
B24D0018-0027



Zusammenfassung:

Source: US2017028530 AA [EN] The invention relates to an **abrasive** support, to an **abrasive** article comprising such a support, to the method for producing the same, and to the use of the **abrasive** article. According to at least one embodiment, the **abrasive** support comprises an impregnated support material based on synthetic fibers. The impregnated support material has at least on one side having a surface roughness R_z of 100 micro m to 500 micro m, and having an R_{max} of 250 micro m to 600 micro m. The support has an air permeability of at most 20 l/m²s

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 271

Titel: NONWOVEN **ABRASIVE** ARTICLES AND METHODS FOR MAKING AND USING THE SAME

Patentnummer: [WO2004048042A1](#)

Anmeldung: WO2003US33421
US20020304041
AU20030302424

Priorität: US20020304041 20021125
WO2003US33421 20031022

Patentfamilie: [WO2004048042A1](#)
[US2004098923A1](#)
[AU2003302424A1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: HOOD SHERRI D
VAN LOC X

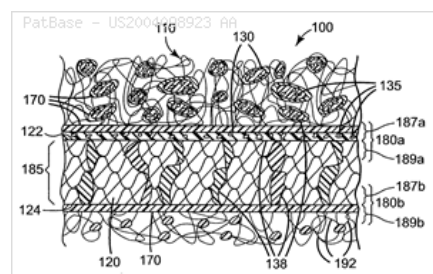
IPC-Notationen: [B24D0003-34](#)
B24D0011-00
B24D0018-00

CPC-Notationen: [B24D0003-348](#)
B24D0011-005
B24D0018-0027



Zusammenfassung:

Source: US2004098923 AA [EN] Nonwoven **abrasive** articles comprise a porous reinforcing material, a fiber web affixed to the porous reinforcing material, **abrasive** particles, and a non-elastomeric binder. Methods of making and using nonwoven **abrasive** articles are also [disclosed](#)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 272

Titel: COATED **ABRASIVE** ARTICLES AND METHODS OF MAKING COATED **ABRASIVE** ARTICLES
Patentnummer: [WO2020128708A1](#)
Anmeldung: WO2019IB60534
Priorität: US20180781064P 20181218
Patentfamilie: [WO2020128708A1](#)
Anmelder: 3M INNOVATIVE PROPERTIES CO
Erfinder: HAWKINS ANN M
 KOETHE BRIAN G
 LI JUNTING
 LIU YUYANG
 LUKOWSKI MARK A
 THURBER ERNEST L
 WILSON GEOFFREY I

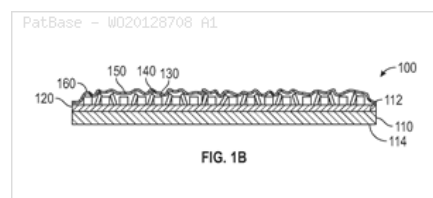


IPC-Notationen: [B24D0003-34](#)
 B24D0011-00
 B24D0018-00

CPC-Notationen: [B24D0003-342](#)
[B24D0003-346](#)
 B24D0011-005
 B24D0018-0072
 B24D2203-00

Zusammenfassung:

Source: WO20128708 A1 [EN] A coated **abrasive** article comprises a backing having first and second opposed major surfaces. A make layer is bonded to the first major surface. Agglomerate **grinding aid** particles are directly bonded to the make layer. At least a portion of the agglomerate **grinding aid** particles comprise **grinding aid** particles retained in a binder, and are arranged according to an open predetermined pattern. **Abrasive** particles are directly bonded to the make layer in spaces between the agglomerate **grinding aid** particles. A size layer is directly bonded to the make layer, agglomerate **grinding aid** particles, and **abrasive** particles. A method of making a coated **abrasive** article, in which the agglomerate **grinding aid** particles are deposited onto a curable make layer precursor prior to depositing **abrasive** particles onto the curable make layer precursor in spaces between the agglomerate **grinding aid** particles is also disclosed



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 273

Titel: Multilayered flexible **abrasive** containing a layer of electroconductive material

Patentnummer: [DE1814901A1](#)

Anmeldung: DE19681814901
US19730387748
19681216
19681219
19681220
AT19680012414
CH19680018533
ES19680361764
NL19680018221
SE19670017777

Priorität: SE19670017777 19671222
US19710162938 19710715
US19730387748 19730813

Patentfamilie: [DE1814901A1](#)
[US3942959A](#)
[GB1256520A](#)
[FR1596208A](#)
[AT306573B](#)
[BE725738A](#)
[CH490936A](#)
[ES361764A1](#)
[NL155208B](#)
[NL6818221A](#)
[SE374296B](#)

Anmelder: EKA FABRIKS AB
FABRIKSAKTIEBOLAGET EKA
MOREX A G

Erfinder: HENRY STRAND TORE GOESTA
LENNART MARKOE OE ERIC
MARKOO ERIC L
SANDELL THORSTEN W
STRAND TORE G H
WILHELM SANDELL TORSTEN

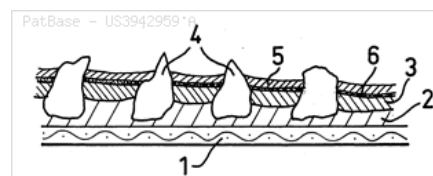
IPC-Notationen: [B24D0003-34](#)
B24D0011-00
B24D0018-00
[C08J0005-14](#)

CPC-Notationen: [B24D0003-344](#)
B24D0011-00
B24D0011-001
B24D0018-00



Zusammenfassung:

Source: US3942959 A [EN] The accumulation of electrostatic charges in an **abrasive** article having a flexible backing sheet, a layer of adhesive and **abrasive** grains embedded in the adhesive is prevented by incorporating an electroconductive metal pigment or ionizable salt in an inner layer of the article and sandwiching this layer between two layers of substantially lower electroconductance so as to insulate the inner layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 274

Titel: SUPERSIZE COMPOSITION, **ABRASIVE** ARTICLE AND METHOD OF MAKING AN **ABRASIVE** ARTICLE

Patentnummer: [WO2017180210A1](#)

Anmeldung: WO2016US69266
EP20160829050
US20160092415

Priorität: US20160321985P 20160413
US20160092415 20161229
WO2016US69266 20161229

Patentfamilie: **WO2017180210A1**
[EP3442749A1](#)
[US2020331118A1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: GORGAN ADRIANA C
JACOB CENI
JOHNSON JENNIFER L
YANG YUGEUN P



IPC-Notationen: **B24D0003-34**
B24D0011-00
C09D0125-08
C09D0125-14

CPC-Notationen: **B24D0003-346**
B24D0011-001
C08K0003-34
C08K0003-346
C08K0005-098
C08K2201-005
C09D0125-14

Zusammenfassung:

Source: US2020331118 AA [EN] **Abrasive** articles, along with related compositions and methods, are provided. The **abrasive** articles include a backing, **abrasive** layer, and supersize coat that includes calcium stearate and an ammonium salt of a modified styrene acrylic polymer. The supersize coat can be dried to a translucent film at temperatures well below the melting temperature of the binder without need for a surfactant. Advantageously, these **abrasive** articles can reduce swarf accumulation during an abrading **operation** and enhance **cut** performance while achieving a high degree of optical clarity



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 275

Titel: METHOD OF FORMING **GRINDING WHEELS**

Patentnummer: [US2584862A](#)

Anmeldung: US19470777279

Priorität: US19470777279 19471001

Patentfamilie: [US2584862A](#)

Anmelder: OLIVER INSTR COMPANY

Erfinder: GARRISON CLIFFORD L

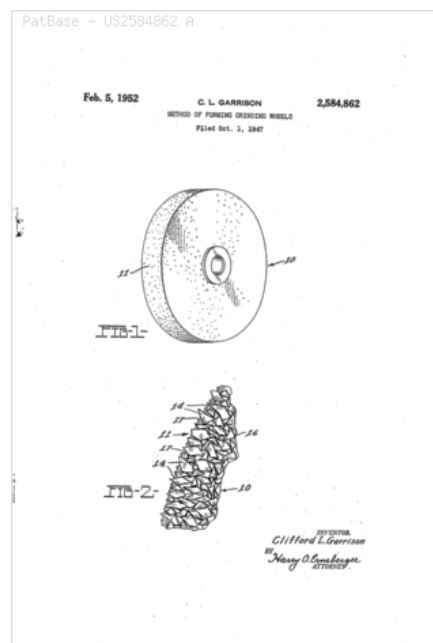


IPC-Notationen: [B24D0003-34](#)
B24D0018-00

CPC-Notationen: [B24D0003-348](#)
B24D0018-00

Zusammenfassung:

Source: US2584862 A [EN] (Claim 1) What I claim is: A method of reinforcing the surface particles of **abrasive** in a **grinding wheel** which consists in forcing a bar of Babbitt metal into engagement with the **abrasive** or **grinding** surface of said **grinding wheel** when the latter is in motion to remove metal from said bar and deposit a layer thereof upon said **abrasive** or **grinding** surface, whereby the surface particles of **abrasive** become partially surrounded with the Babbitt metal



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 276

Titel: **ABRASIVE** ARTICLES AND THEIR MANUFACTURE

Patentnummer: [US3081161A](#)

Anmeldung: US19600023226

Priorität: US19600023226 19600419

Patentfamilie: **US3081161A**

Anmelder: CARBORUNDUM CO

Erfinder: JOHN CANTRELL

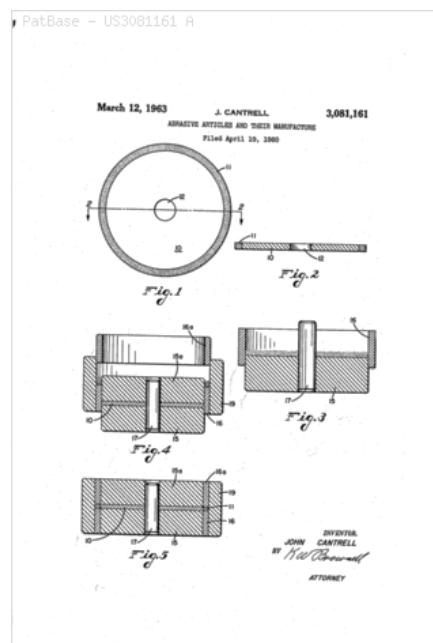
IPC-Notationen: **B24D0003-34**
B24D0018-00

CPC-Notationen: **B24D0003-342**
B24D0018-00



Zusammenfassung:

Source: US3081161 A [EN] (Claim 1) 1. In an **abrasive** article, an **abrasive** portion which consists essentially of diamond **abrasive** grains and a bond for said **abrasive** grains, said bond being selected from the class consisting of vitrified, thermoset resinoid, and metallic bonds and containing as an **additive** and essentially the sole nitride therein a small amount, from 1% up to about 5% by weight of the bond, of boron nitride distributed therein in finely divided form



Datum des Suchlaufs: 07.04.2021

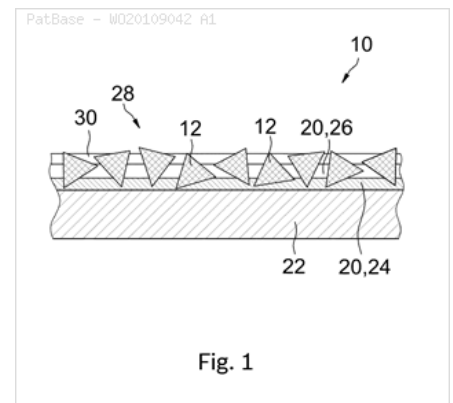
Dokument Nr.: 277

Titel: METHOD FOR TREATING AN **ABRASIVE** ARTICLE, AND **ABRASIVE** ARTICLE
Patentnummer: [WO2020109042A1](#)
Anmeldung: WO2019EP81588
 DE201810220672
Priorität: DE201810220672 20181130
Patentfamilie: [WO2020109042A1](#)
[DE102018220672A1](#)
Anmelder: BOSCH GMBH ROBERT
Erfinder: HUBER JOHANNES
IPC-Notationen: [B24D0003-34](#)
 B24D0018-00 **CPC-Notationen:** [B24D0003-34](#)



Zusammenfassung:

Source: WO20109042 A1 [EN] The invention relates to a method for treating an **abrasive** article (10), wherein a release agent dispersion is applied onto at least one surface (28), which is provided for abrading, of the **abrasive** article (10) in order to produce a cover layer (30), wherein the release agent dispersion comprises at least one anti-adhesion agent. According to the invention, the release agent dispersion further comprises at least one film-forming agent. The invention further relates to a correspondingly produced **abrasive** article (10)



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 278

Titel: Method for making machinable **abrasive** greenware
Patentnummer: [US5135545A](#)
Anmeldung: US19910673622
Priorität: US19910673622 19910322
Patentfamilie: **US5135545A**
Anmelder: DOW CHEMICAL CO
Erfinder: OTT JACK J
PYZIK ALEKSANDER J



IPC-Notationen: **B24D0003-34**
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-344**
B24D0018-0009
C09K0003-1427

Zusammenfassung:

Source: US5135545 A [EN] The present invention employs poly (ethyloxazoline) as a temporary binder and lubricant during the preparation of greenware articles. According to the present invention, molten poly (ethyloxazoline) promotes the compressibility of the powder used to form the greenware article, thus improving the density and strength of both the greenware and the **abrasive** article. The molten poly (ethyloxazoline) acts as a lubricant to permit a more efficient grain rearrangement under applied pressure and thereby increases the average density of the greenware article by 6 to 8 percent as compared to standard cold pressing

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 279

Titel: **GRINDING WHEELS** AND METHOD OF MAKING THEM

Patentnummer: [US2745728A](#)

Anmeldung: US19520301798
00000000
19530528

Priorität: US19520301798 19520730

Patentfamilie: [US2745728A](#)
[FR68251E](#)
[FR64301E](#)
[FR64300E](#)
[FR1077885A](#)

Anmelder: CIE DES MEULES NORTON
GEN MOTORS CORP
NORTON CO
VER DEUTSCHE METALLWERKE AG

Erfinder: BERGER RENE PAUL LOUIS
IRANY ERNEST P

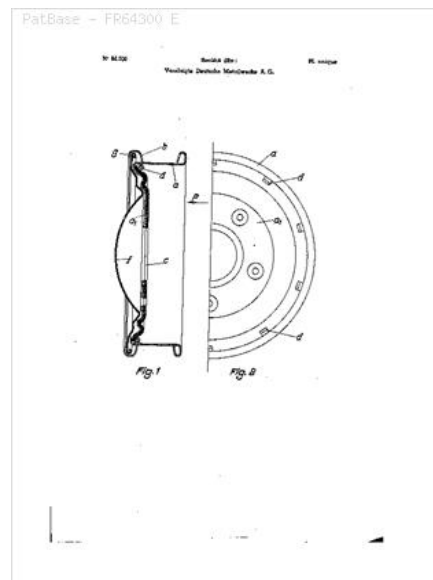
IPC-Notationen: **B24D0003-34**
B60B0003-00
B60B0003-02
B60B0003-08
C08L0061-00
C08L0061-10
F02B0019-00
F02B0019-12
F02B0023-08
H02K0033-00
H02K0033-12

CPC-Notationen: **B24D0003-344**
B60B0003-02
B60B0003-08
F02B0019-12
F02B0023-08
H02K0033-12
Y02T0010-12



Zusammenfassung:

Source: US2745728 A [EN] (Claim 1) 1. A process of making a phenol-formaldehyde bonded ringing **wheel** which comprises forming on sulphur particles a substantially continuous coating of a film forming substance in a state in which said substance is non-reactive to phenol-formaldehyde resins during the curing thereof, mixing the coated sulphur with **abrasive** grains and a reactive phenol-formaldehyde resin, molding a **grinding wheel** from the resultant mix, and curing the mix with heat to form a **grinding wheel** having a good bond strength containing sulphur due to prevention of the deterioration, during said curing, of the resin bond by means of the non-reactive coating on the sulphur particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 280

Titel: METHOD FOR PRODUCING **SCHLEIFKOERPERN** WITH RESIN BOND (Machine translation)
Patentnummer: [DE1001818B](#)
Anmeldung: DE1954N008340
Priorität: 19540120
Patentfamilie: **DE1001818B**
Anmelder: NAXOS UNION SCHLEIFMITTEL
Erfinder: SCHOLZ ANTON



IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)

CPC-Notationen: [B24D0003-344](#)

Zusammenfassung:

Claim 1. Verfahren zur Herstellung von Schleifkörpern mit Kunstharzbindung aus einem Gemenge von wärmehärtenden Kunstharzbindemitteln, Schleifkörnern und anorganischen Zusatzstoffen, gekennzeichnet, dass dem Ausgangsgemenge gemischtkörnige, voluminöse, anorganische Stoffe niedrigen Raumgewichtes unter 0,15 kg/dm³ und geringer Eigenfestigkeit, wie aufgeblähter Glimmer, zugesetzt und die Fertigstellung des Schleifkörpers durch Härtung im Hochfrequenzfeld durchgeführt wird.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 281

Titel: **ABRASIVE** ARTICLES
Patentnummer: [US2940842A](#)
Anmeldung: US19580722625
Priorität: US19580722625 19580318
Patentfamilie: **US2940842A**
Anmelder: PREC GRINDING WHEEL CO IN
PREC GRINDING WHEEL COMPANY IN
Erfinder: PHILLIPS DONALD G



IPC-Notationen: **B24D0003-34**
C08J0005-14

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2940842 A [EN] (Claim 1) 1. What is claimed is: i.. An **abrasive** article consisting essentially of **abrasive** grains, an organic bonding uniting the grains as an integral body and a metal silicon alloy dispersed throughout the bond mass, the metal silicon alloy containing from about 40% to about 80% silicon by weight and being from about 5% to about 50% by volume of the bond mass, the metal silicon alloy being an alloy of silicon with a member selected from the group consisting of iron, manganese, aluminum, chromium, nickel, vanadium, tungsten and zirconium, and the organic bond being a member selected from the group consisting of a phenolic resin, a melamine resin, an aniline resin and rubber

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 282

Titel: [Schleifkoerper](#)
Patentnummer: [DE1290718B](#)
Anmeldung: DE1955T010627
Priorität: 19550228
Patentfamilie: [DE1290718B](#)
Anmelder: TITAN ABRASIVES COMPANY
Erfinder: ALBERT ZALUD CHARLES



IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)
C08L0061-00
C08L0061-10

CPC-Notationen: [B24D0003-344](#)

Zusammenfassung:

Source: DE1290718 B [MT] (claim 1) Schleifkörper aus 160 Gewichtsteilen Körnern eines übereinstimmenden Schleifmaterials und einem mit den Körnern innig vereinten Verbundmaterial aus 7 bis 14 Gewichtsteilen übereinstimmend eines wärmegehärteten Harzbindemittels und für einen Schleifkörper gekennzeichnet dadurch, dass der anorganische Füllstoff in einer Menge von 2 bis 19 Gewichtsteilen je 1 Gewichtsteil Harzbindemittel liegt vor.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 283

Titel: **Abrasive** member of bonded aggregates in an elastomeric matrix

Patentnummer: [DE1752612C2](#)

Anmeldung: DE19681752612
US19750585465
FR19690020658
19690613
19690620
AT19680007794
CH19690009516
ES19690368558
NL19690009282
SE19690008288

Priorität: DE19681752612 19680621
US19730416830 19731119
US19750585465 19750610

Patentfamilie: [DE1752612C2](#)
[DE1752612A1](#)
[US3982359A](#)
[GB1228319A](#)
[FR2011399A1](#)
[AT282386B](#)
[BE734872A](#)
[CH533496A](#)
[ES368558A1](#)
[NL165676C](#)
[NL165676B](#)
[NL6909282A](#)
[SE351203B](#)

Anmelder: HCH LIPPERT
LIPPERT FIRMA HEINRICH
LIPPERT HEINRICH FA
ROC A G

Erfinder: ELBEL KARL
WOLFINGER KURT

IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: [B24D0003-342](#)
C09K0003-1436



Zusammenfassung:

Source: US3982359 A [EN] **Abrasive** grains rigidly bonded to each other form aggregates which are dispersed in a resilient matrix of an **abrasive wheel** so that the aggregates do not significantly interfere with each other's individual movement under **grinding** stresses against the resilient restraint of the matrix. The **wheels** remove metal from a workpiece much faster and lose less **abrasive** material than corresponding **wheels** in which the same **abrasive** particles are individually embedded in the same matrix

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 284

Titel: **ABRASIVE** BODY AND MANUFACTURE THEREOF

Patentnummer: [US2249278A](#)

Anmeldung: US19360082281

Priorität: US19360082281 19360528

Patentfamilie: **US2249278A**

Anmelder: NORTON CO

Erfinder: KISTLER SAMUEL S



IPC-Notationen: **B24D0003-34**

C08L0061-00

C08L0061-10

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Claim 2. The method of preventing swelling during the making of an abrasive article comprising the steps of mixing abrasive grains with a solid unconverted phenol-formaldehyde resin powder, a liquid plasticizer and dry calcium oxide, CaO, shaping an article therefrom and subsequently heating the same to a temperature above 100°C. at which temperature the resin is converted to an infusible condition, and the resin is dehydrated as it cures by combining H₂O with CaO.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 285

Titel: **ABRASIVE** ARTICLE
Patentnummer: [US2294239A](#)
Anmeldung: US19380201184
Priorität: US19380201184 19380409
Patentfamilie: **US2294239A**
Anmelder: DURITE PLASTICS INC
RAYBESTOS MANHATTAN INC
Erfinder: KUZMICK JOSEPH N
NOVOTNY EMIL E



IPC-Notationen: **B24D0003-34**
C08L0061-00
C08L0061-10

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Claim 1. An abrasive composition comprising abrasive grains, a potentially reactive phenolic resin and a reactive magnesium oxide in finely comminuted form.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 286

Titel: **ABRASIVE** ARTICLES
Patentnummer: [US2371700A](#)
Anmeldung: US19430505945
Priorität: US19430505945 19431012
Patentfamilie: **US2371700A**
Anmelder: CARBORUNDUM CO
Erfinder: MARTIN HARRY C
UPPER FREDERICK A



IPC-Notationen: **B24D0003-34**
C08L0061-00
C08L0061-10

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2371700 A [EN] 1. An **abrasive** article comprising **abrasive** grains and a bond therefor comprising a. phenol resinoid modified by a. metal selected from the group consisting of titanium, vanadium, chromium, manganese, iron, cobalt, and nickel, said metal constituent being so finely divided and incorporated into the resinoid bond as to have lost its physical identity as **discrete** particles to the extent that it is invisible at magnifications of 500 times

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 287

Titel: MULTICRYSTALLINE DIAMOND **ABRASIVE** COMPOSITION AND ARTICLE

Patentnummer: [US3385684A](#)

Anmeldung: US19660528328

Priorität: US19660528328 19660103

Patentfamilie: [US3385684A](#)

Anmelder: DU PONT

Erfinder: CONANT VOTER ROGER



IPC-Notationen: [B24D0003-34](#)

C08L0079-00

C08L0079-08

CPC-Notationen:

[B24D0003-34](#)

C08G0073-1071

C08L0061-06

C08L0079-08

Zusammenfassung:

Source: US3385684 A [EN] ABSTRACT OF THE **DISCLOSURE** Resin bonded **abrasive** articles such as **grinding wheels** utilizing diamonds as the **abrasive** wherein from 15 to 45 percent of the diamonds are multicrystalline in nature rather than being single crystal diamonds. This application is a continuation-in-part of my copending application Ser. No. 371,802, filed June 1, 1964 and now abandoned

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 288

Titel: SEMICONDUCTOR MATERIAL **CUTTING** APPARATUS AND METHOD OF MAKING THE SAME

Patentnummer: [DE2055230A1](#)

Anmeldung: DE19702055230
US19690876000
JP19700099781
GB19700052274
FR19700040462
NL19700016588

Priorität: US19690876000 19691112

Patentfamilie: [DE2055230A1](#)
[US3691707A](#)
[JP49010188B4](#)
[GB1330692A](#)
[FR2069266A5](#)
[NL7016588A](#)

Anmelder: SOLA BASIC IND
SOLA BASIE IND

Erfinder: ARX HENRY R VON
ZUEGER KARL J

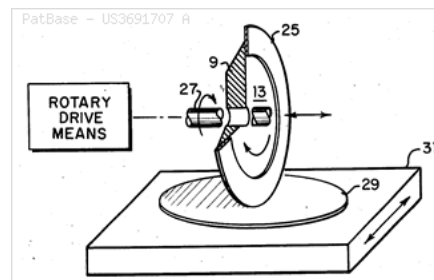


IPC-Notationen: B24D0005-00
B24D0005-12
B24D0018-00
B26D0001-01
B26D0001-14
B28D0005-00
B28D0005-02
H01L0021-02
H01L0021-30
H01L0021-301
H01L0021-304

CPC-Notationen: B24D0018-0018
B28D0005-022
H01L0021-3043
Y10T0029-4994
Y10T0083-04

Zusammenfassung:

Source: US3691707 A [EN] Improved rotary **cutting** apparatus and method of making the same incorporates a thin deposited layer of diamond particles in nickel disposed about the periphery of a rotatably body. The deposited layer is exposed beyond the periphery of the body during the fabrication process to provide high-speed **cutting** apparatus for use on semiconductor materials



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 289

Titel: GRINDING WHEEL
Patentnummer: [US2488276A](#)
Anmeldung: US19430515907
Priorität: US19430515907 19431228
Patentfamilie: [US2488276A](#)
Anmelder: NORTON CO
Erfinder: ERICKSON JOHN R

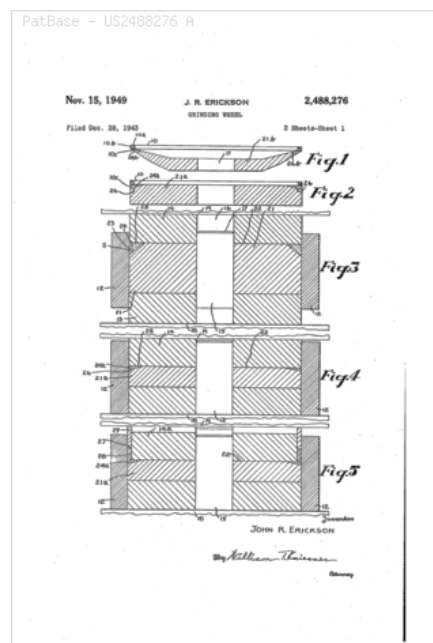


IPC-Notationen: B24D0007-00
 B24D0007-02

CPC-Notationen: B24D0007-02

Zusammenfassung:

Source: US2488276 A [EN] 1. A **grinding wheel** comprising a resinoid back presenting a ring-shaped securing face and a resin-bonded **abrasive** annulus spaced a short distance from the aforesaid securing face and having a ring-shaped securing face that is of lesser width than the width of the securing face of said resinoid back and a resinoid stress-distributing annulus interposed in the space between said first-mentioned securing face and said **abrasive** annulus and presenting annular faces respectively matching in width the different widths of said two securing faces and being joined thereto and integrally united therewith and having a cross-section that varies substantially progressively from the lesser width of said one of its securing faces to the greater width of the other securing face thereby to transmit the substantial **grinding** stresses exerted upon the **abrasive** annulus to said back and distribute them throughout the larger area of the securing face between the resinoid back and said resinoid annulus, and said resinoid annulus being cured to a porosity between about 4 % and 15



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 290

Titel: **ABRASIVE MEDIUM**

Patentnummer: [DE2025204C3](#)

Anmeldung: DE19712123126
 DE19702025204
 US19710174655
 US19710115164
 GB19710033315
 GB19700060238
 FR19710032576
 FR19700045628
 AT19700011112
 AT19710005728
 CH19700018881
 CH19710010290
 ES19710195054U
 ES19710207685U
 IT19710007446
 NL19710000262
 NL19710010302

Priorität: DE19702025204 19700523
 DE19712123126 19710511

Patentfamilie: [DE2025204C3](#)
[DE2123126A1](#)
[DE2025204A1](#)
[US3785094A](#)
[US3762894A](#)
[GB1310649A](#)
[GB1263889A](#)
[FR2137407B2](#)
[FR2092296A5](#)
[FR2137407A2](#)
[AT307912B](#)
[AT316344B](#)
[CH541392A](#)
[CH558236A](#)
[ES195054Y](#)
[ES207685Y](#)
[ES195054U](#)
[ES207685U](#)
[IT997022A](#)
[NL152189B](#)
[NL7100262A](#)
[NL7110302A](#)

Anmelder: ALFRED RUGGEBERG
 HANS RUGGEBERG
 JAN RUGGEBERG
 RUEGGERBERG A FA
 RUEGGERBERG A RUEGGERBERG H RUEG
 RUEGGERBERG AUGUST FA
 RUEGGERBERT T AUGUST RUEGGERBERG
 RUGGERBERG A
 TOM RUGGERBERG

Erfinder: DR HOLZHAUER RUDOLF ING

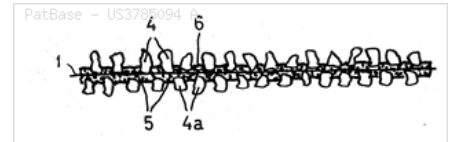
IPC-Notationen: B24D0007-00
 B24D0007-02
 B24D0011-00



CPC-Notationen: B24D0007-02
 B24D0011-00

Zusammenfassung:

Source: US3785094 A [EN] A flexible **grinding tool** made up a synthetic resin impregnated fiberglass mat with a layer of **abrasive** grains attached to both surfaces of the mat by a synthetic resin binder containing short fibers of glass, asbestos, ceramic material or graphite therein



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 291

Titel: **Cutting** master and method of making **cutting** master for erosion machining

Patentnummer: [US4132038A](#)

Anmeldung: US19770770243

Priorität: US19750612894 19750912

Patentfamilie: **US4132038A**

Anmelder: EASCO SPARCATRON INC

Erfinder: O CONNOR THOMAS J

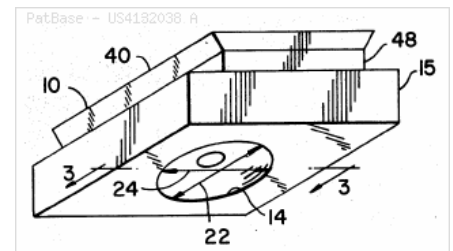


IPC-Notationen: B24D0007-00
B24D0007-18
B24D0018-00

CPC-Notationen: B24D0007-18
B24D0018-00

Zusammenfassung:

Source: US4132038 A [EN] A **cutting** master for total form abrasion machining a predetermined shape in a friable material including a body having a surface which is substantially the mirror image of a shape to be machined by abrasion, which surface is **abrasive**, is different in size from the shape to be abrasion machined by a predetermined amount, and includes a flat portion having a dimension related to the difference in size between the predetermined shape and the **abrasive** surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 292

Titel: **ABRASIVE** OR REFRACTORY ARTICLES AND METHOD OF MAKING THE SAME
Patentnummer: [US1785102A](#)
Anmeldung: US19280274352
Priorität: US19280274352 19280501
Patentfamilie: **US1785102A**
Anmelder: CARBORUNDUM CO
Erfinder: KENYON SHERMAN S
WALKER PRESCOTT H



IPC-Notationen: B24D0007-00
B24D0018-00
CPC-Notationen: B24D0007-00
B24D0018-00

Zusammenfassung:

Source: US1785102 A [EN] 1. An **abrasive** article comprised of granular material and a binder, and having a filler in the pore space thereof substantially throughout the mass and having a permeability less than fifty cubic centimeters

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 293

Titel: METHOD FOR depositing METAL HOLDING AND / OR SKINS ON A Grundkoerper AND BY THIS METHOD PRODUCED DIAMANTWERKZUG (Machine translation)

Patentnummer: [DE1900787A1](#)

Anmeldung: DE19691900787

Priorität: US19680396633 19680109

Patentfamilie: [DE1900787A1](#)

Anmelder: DENTISTS SUPPLY CO

Erfinder: ANDREW KRODER ERNEST

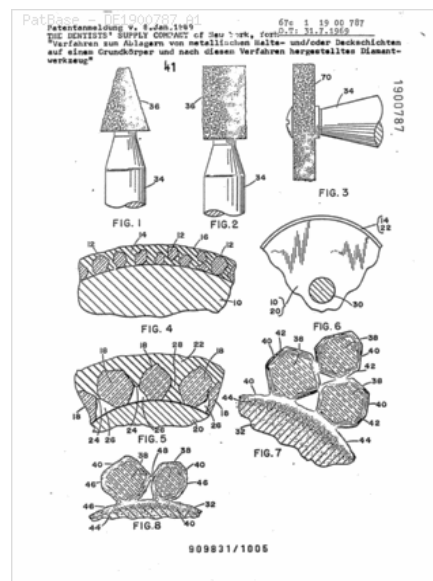


IPC-Notationen: B24D0007-00
B24D0018-00

CPC-Notationen: B24D0007-00
B24D0018-00

Zusammenfassung:

Source: DE1900787 A1 [MT] Process for depositing metal holding and / or cover layers on a basic body, in particular for fixing diamond particles in the basic body of a diamond-Sohleif or **cutting tool**, in which the prepared according to their size diamond particles initially on the well-prepared Aufnahme-flaeche the basic body before recorded over continuous and then embedded in the formation of the holding layer in them and they must be connected to the basic body, wherein the formation of the holding layer of metal of high tensile strength of this in the vapor state in a vacuum teilohen on the diamond and on the Aufnahme-flaeche the basic body completed superimposed and lattice-like Oberflächenstruktur of deposition between adjacent diamond or at least part of them depressions on the surface of the holding and / or outer layer and are formed by the chip space, where is the **grinding** or **cutting** a workpieces resulting chip material collected temporarily until dropping



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 294

Titel: ROUGHING **DISK** WITH A CORE COMPRISING AT LEAST ONE **GRINDING ADDITIVE**
Patentnummer: [WO2018130237A1](#)
Anmeldung: WO2017DE100692
Priorität: DE201710100728 20170116
Patentfamilie: **WO2018130237A1**
Anmelder: KLINGSPOR AG
Erfinder: CONRADI BERND
 KAMPS DR
 MOOS MARKUS

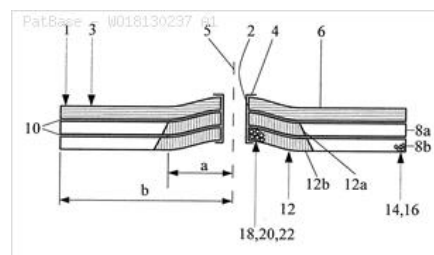


IPC-Notationen: B24D0007-04
 B24D0007-14

CPC-Notationen: B24D0007-04
 B24D0007-14

Zusammenfassung:

Source: WO18130237 A1 [EN] The invention relates to a roughing **disk** for machining material surfaces, comprising a **disk-shaped** main body which comprises a central opening, through which an axis of rotation passes, for the direct or indirect connection of a driveshaft of a **tool**, at least one **grinding** layer which comprises a first material mixture including at least one first **grinding additive**, and a stabilizing core for stabilizing the roughing **disk**, said stabilizing core being associated with the at least one **grinding** layer and being disposed peripherally adjacent to the central opening. The stabilizing core comprises a second material mixture, which comprises at least one second **grinding additive** different from the first **grinding additive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 295

Titel: **GRINDING WHEEL** COMPSN - WITH SUBSTRATE HAVING VARYING BONDING THICKNE
Patentnummer: [DE2226744A1](#)
Anmeldung: DE19722226744
Priorität: DE19722226744 19720602
Patentfamilie: **DE2226744A1**
Anmelder: VER SCHMIRGEL AND MASCHF
Erfinder: ELLERKAMP JOACHIM
KRETSCHMAR KLAUS



IPC-Notationen: B24D0011-00

CPC-Notationen: B24D0011-00

Zusammenfassung:

Source: DE2226744 A1 [EN] The **disc** comprises flexible paper, vulcanised fibre or textile substrate and sprinkled with corundum or SiC secured to the substrate with the **aid** of animal glue or a thermoset resin (eg PF); and also comprising one or more coating of thermosets (the top coating contg. abrasive material) , specifically the top coating consists of alternating zones of varying bonding thickness. The difference between zones of low and those of high bonding thickness is of the order of one-half the av. grain size of the **abrasive** used, pref. 0.02-0.5mm, and the width of the zones of high bonding thickness is 2.50mm. Used for **grinding** steels, Ti- and Al-alloys. High **grinding** efficiency is obtained

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 296

Titel: ELASTIC **GRINDING ELEMENT** AND METHOD FOR PRODUCING IT

Patentnummer: [EP0095055B1](#)

Anmeldung: EP19830104209
DE19833376055T
DE19823219567
US19830496955
AT19830104209T

Priorität: DE19823219567 19820525
DE19833376055T 19830429
EP19830104209 19830429

Patentfamilie: [EP0095055B1](#)
[EP0095055A3](#)
[EP0095055A2](#)
[DE3219567A1](#)
[DE3376055D1](#)
[US4539017A](#)
[AT33106E](#)

Anmelder: ELBEL SCHLEIFMITTEL GMBH DR
SEA SCHLEIFM ENTW ANWEND
SEA SCHLEIFMITTEL ENTWICKLUNG

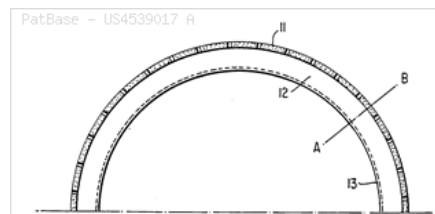
Erfinder: AUGUSTIN RAINER

IPC-Notationen: B24D0011-00
B24D0013-00
B24D0013-02
B24D0018-00

CPC-Notationen: B24D0013-02
B24D0018-00

Zusammenfassung:

Source: US4539017 A [EN] An elastic **grinding element** for form-true **grinding** including a supporting layer of elastomer material and an adhesive grit layer bound to the supporting layer and having an active **grinding** surface made of a hardened mixture of binder and **abrasive** grit. The process for making the **grinding element** includes providing a mold having a shape constructed to produce a desired shape for the **grinding element**, putting the mixture of binder and **abrasive** grit and the elastomer material in the mold, and accelerating the mixture of binder and **abrasive** grit and the elastomer material while in the mold



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 297

Titel: METHOD OF MANUFACTURING ELASTIC **GRINDING** BODIES

Patentnummer: [EP0147633B1](#)

Anmeldung: EP19840114193
DE19843470009T
DE19833346916
AT19840114193T

Priorität: DE19833346916 19831224
DE19843470009T 19841123
EP19840114193 19841123

Patentfamilie: [EP0147633B1](#)
[EP0147633A3](#)
[EP0147633A2](#)
[DE3346916A1](#)
[DE3470009D1](#)
[AT33107E](#)

Anmelder: ELBEL RABERAIN ANNE MARIE
ELBEL SCHLEIFMITTEL GMBH DR

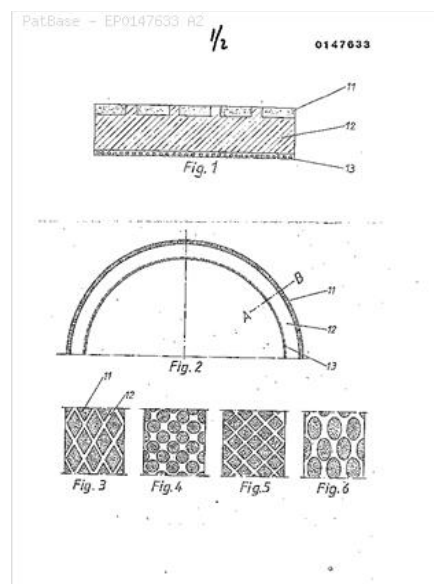
Erfinder: ELBEL KARL DR
ELBEL RABERAIN ANNE MARIE

IPC-Notationen: B24D0011-00
B24D0018-00

CPC-Notationen: B24D0011-005
B24D0018-00

Zusammenfassung:

Source: EP0147633 A2 [EN] 1. Method of manufacturing resilient **grinding** bodies for **grinding** subsequent to moulding, utilising a negative mould, which **grinding** bodies, in their surface region, contain **abrasive** grain clusters which are anchored in an elastomeric base body, characterised in that the elastomeric base body (12) is initially manufactured with recesses in its surface by means of the negative mould, and then these recesses are filled with a mixture of **abrasive** grain and binding agents which, in their hardened state, form the **abrasive** grain clusters (11), so that the **grinding** body is provided with a continuous surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 298

Titel: COATED **ABRASIVE**
Patentnummer: [US2322156A](#)
Anmeldung: US19410424998
19460704
Priorität: US19410424998 19411230
Patentfamilie: **US2322156A**
FR941695A
Anmelder: BEHR MANNING CORP
Erfinder: OGLESBY NICHOLAS E

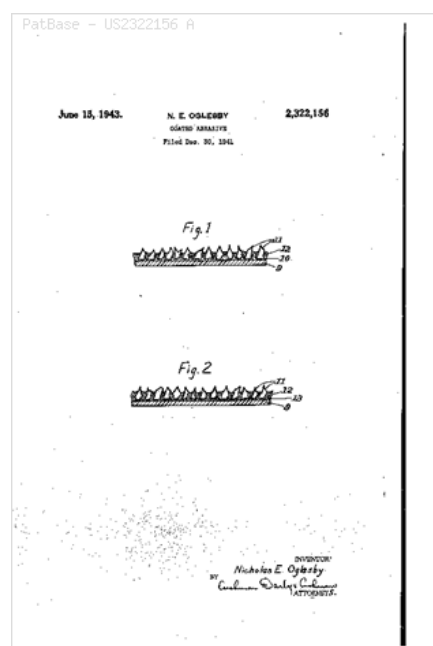


IPC-Notationen: B24D0011-00
C08J0005-14
C08L0075-00
C08L0075-04
F16D0069-00

CPC-Notationen: B24D0011-00
C08J2375-04
C08L0075-04
F16D0069-00

Zusammenfassung:

Claim 1. A coated abrasive comprising a flexible backing element, a coating of abrasive grains anchored thereon by an abrasive grit-bonding organic adhesive selected from a group consisting of synthetic resins and animal glues, said adhesive bond comprising layers. one of which anchors the abrasive grain coating to the backing and another of which is superimposed on and among the grains as a sizing coat. at least one of the layers of the organic adhesive being modified by a substantial percent by volume of an Inert, relatively non-absorbent, relatively non-fibrous filler, said filler being in a comminuted state and not more than substantially 35 percent by weight of said filler remaining on a 270 mesh screen having a mesh opening of 53 microns and the finer not less than substantially 65 percent by weight of said filler which passes the said screen having an average surface diameter in the range of substantially 5.5 to 40 microns.



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 299

Titel: STABILIZED PILE ARTICLE, PRODUCTION AND USE THEREOF FOR THE TREATMENT OF SURFACES

Patentnummer: [EP0105423A1](#)

Anmeldung: EP19830109463
DE19823236518
US19830534329
JP19830180950

Priorität: DE19823236518 19821002

Patentfamilie: [EP0105423A1](#)
[DE3236518A1](#)
[US4525403A](#)
[JP59081064A2](#)

Anmelder: BAYER AG
GIRMES VERTRIEBSGESELLSCHAFT F
GIRUMESU FUERUTORIIPU G FUYUUA IND MBH

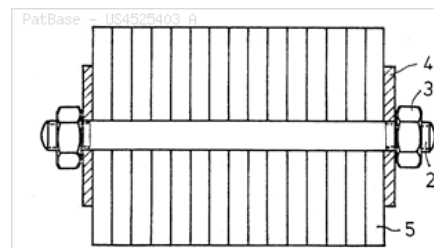
Erfinder: BERUNTO HIYUNOKU
GERUHARUTO TOREPUTAU
GIZERUHAA FUARUKU
HYNEK BERND
TREPTAU GERHARD
VALK GISELHER PROF DIPL CHEM D
VALK GISELHER PROF DR

IPC-Notationen: B24D0011-00
[C08J0005-14](#)
D06N0003-00
D06N0007-00
D06N0007-04

CPC-Notationen: D06N0003-004
Y10T0428-23921
Y10T0428-23986

Zusammenfassung:

Source: US4525403 A [EN] Stabilized pile articles, characterized in that the stabilizing has been carried out on the upper surface by means of latices, dispersions and/or resins or by a heat treatment, a process for its production characterized in that an unstabilized pile article is stabilized, and its use for the treatment of surfaces



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 300

Titel: Method of making abrading **tools**

Patentnummer: [DE19650393B4](#)

Anmeldung: DE19961050393
US19980115471
US19960585286
GB19960026830
IT1996TO01100

Priorität: US19960585286 19960111
US19980115471 19980715

Patentfamilie: [DE19650393B4](#)
[DE19650393A1](#)
[US6312323B1](#)
[US5895612A](#)
[GB2308997B2](#)
[GB2308997A1](#)
[GB9626830A0](#)
[IT1289820B1](#)
[ITTO961100A1](#)

Anmelder: GASER JOSEPH P
JASON INC UNA SOCIETA DE L WIS
JASON INC UNA SOCIETA DEL WISCONSIN
WARNER RUEBEN BROWN

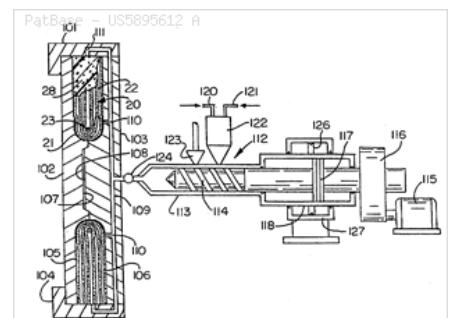
Erfinder: GASER JOSEPH PETER
WARNER REUBEN BROWN
WARNER RUEBEN BROWN



IPC-Notationen:	B24D0013-00 B24D0013-02 B24D0013-18 B24D0018-00 B29C0044-02 B29C0044-12 C08J0005-14	CPC-Notationen:	B24D0013-02 B24D0018-00 B29C0044-12
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Zusammenfassung:

Source: US5895612 A [EN] An **abrasive tool** includes a rotatable hub from which extends a bundle of plastic **abrasive** monofilaments. The bundle has a high filament count and each filament includes a substantial amount of **abrasive** uniformly entrained therein. After the bundle is secured to the hub, the **tool** is placed in a mold completely enclosing at least the projecting bundle and a foamable elastomer is injected into the mold to produce a light density cellular matrix bond encapsulating the filaments. The preferred plastic for the plastic monofilaments is nylon 6-12 and the preferred elastomer is a low density (2-20 lbs/cu/ft) polyurethane. The cellular matrix bond for the preferred applications upon wear does not produce a liquid phase at even high **tool** pressures. Radially extending enlarged **coolant** passages may be formed during the encapsulation and injection process step. The **tool** may be in **disk**, cup or twisted stem form



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 301

Titel: CUSHIONED **ABRASIVE** ARTICLES, AND METHOD OF MANUFACTURE
Patentnummer: [US4588420A](#)
Anmeldung: US19820431103
US19820399592
Priorität: US19820399592 19820722
US19820431103 19820930
Patentfamilie: [US4588420A](#)
[US4504283A](#)
Anmelder: SUPERIOR FINISHERS INC
Erfinder: CHARVAT VERNON K

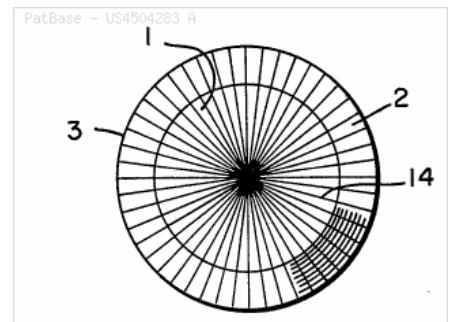


IPC-Notationen: B24D0013-00
B24D0018-00
B29C0039-02
B29C0039-10
B29C0067-24
B29C0070-00
B29C0070-64
[C08J0005-14](#)
C08K0003-00

CPC-Notationen: B24D0013-00
B24D0018-0009
B29C0039-025
B29C0039-10
B29C0067-244
B29C0070-64
B29K2063-00
B29L2031-736
C08K0003-013

Zusammenfassung:

Source: US4504283 A [EN] Extremely fine **abrasive** particles are incorporated in an elastomeric resin body or coating to produce **abrasive** articles exhibiting cushioned or resilient yielding qualities having a dual response to in-service conditions. These performance characteristics are accomplished by a structure whose working surface and underlying supporting means produce two distinct and complementary abrading actions, one hard enough to sharpen a hardened **cutting tool** and to smooth the adjacent surface, and a second of being virtually simultaneously micro-deformable, via the mechanisms of cold flow, at or near maximum or optimum sharpening pressure. Such **abrasive** articles allow limited local displacement of a volume of the **abrasive** surface layer in a continuous wave to lift the surface at the **tool edge** to a height slightly beyond the plane of the **edge** being sharpened to 'wipe' and so refine the extreme **edge** of the **cutting tool** and to remove the 'wire-edge' as only a three-dimensional form of contact will accomplish. The articles of this invention are particularly suited to the performance of honing, stropping and lapping operations



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 302

Titel: Method of **grinding** a surface of a workpiece and a **tool** for carrying out the method
Patentnummer: [US3918220A](#)
Anmeldung: US19740446918
Priorität: GB19730037809 19730809
Patentfamilie: [US3918220A](#)
Anmelder: RYTON MACH TOOLS COVENTRY LTD
Erfinder: JURY KENNETH JAMES
MOTTRAM BRIAN JOHN

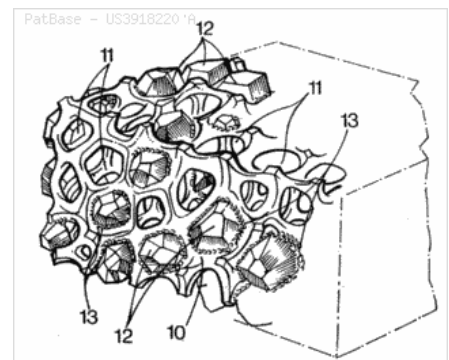


IPC-Notationen: B24D0015-00
B24D0099-00
[C08J0005-14](#)

CPC-Notationen: B24D0015-00
B24D0099-00

Zusammenfassung:

Source: US3918220 A [EN] **Grinding** a surface of a workpiece with **abrasive** particles by impregnating a pad of reticulated foam-like material with the **abrasive** particles, whereby the **abrasive** particles occupy interstices in the foam-like material, the **abrasive** particles and the foam-like material respectively having hardnesses greater and less than that of the workpiece surface; effecting relative rubbing movement between the pad and the workpiece, whereby the foam-like material will be worn away during the rubbing movement to expose fresh **abrasive** particles in the rubbing surface of the pad and to open interstices in the foam-like material of the pad to the rubbing surface thereof, and applying a liquid to the rubbing surface of the pad, whereby material worn away from the pad and the workpiece during the rubbing action will be washed from the rubbing surface of the pad, through the opened interstices in the pad of foam-like material. Only some of the interstices in the pad are occupied by **abrasive** particles and those interstices which are not occupied by abrasive particles intercommunicate to define a continuous throughway extending between the rubbing surface of the pad and a face thereof remote from said rubbing surface, thereby to define a path through which said washing liquid can flow to or from the rubbing surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 303

Titel: GRINDING WHEEL MANUFACTURE

Patentnummer: [US2825638A](#)

Anmeldung: US19550524683

Priorität: US19550524683 19550727

Patentfamilie: [US2825638A](#)

Anmelder: US RUBBER CO

Erfinder: BOOTH ARTHUR C

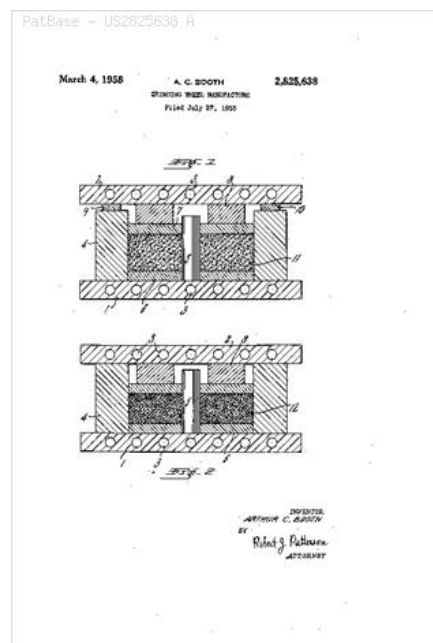


IPC-Notationen: B24D0018-00
C08J0005-14

CPC-Notationen: B24D0018-00

Zusammenfassung:

Source: US2825638 A [EN] (Claim 1) 1. The method of making a grinding wheel having grinding characteristics similar to those of a hard rubberbonded grinding wheel which comprises uniformly mixing and coating abrasive grains with a powdered vulcanizing agent, wetting the resulting coated abrasive grains with a solution of a liquid butadiene-acrylonitrile copolymer in furfural, incorporating the resulting wetted abrasive grains with a dry powdered blend of a powdered thermosetting phenol-aldehyde resin, lime and filler in such a way as to coat the wetted grains with said blend and form a free-flowing pourable granular mix, filling a pre-heated mold with said free-flowing pourable granular mix, heating the mix at relatively low pressure in said mold at a temperature of at least 300° F. until the bond solidifies by gelling and partial setup, confining the resulting shape under positive mechanical pressure of at least 1,000 lbs. per square inch, and heating it while so confined at a temperature of at least 300° F. until curing of the bond is completed, the temperature at no time being so high as to cause heat deterioration of the bond to occur



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 304

Titel: **ABRASIVE WHEEL** COMPOSITION

Patentnummer: [US2943926A](#)

Anmeldung: US19580749328

Priorität: US19580749328 19580718

Patentfamilie: **US2943926A**

Anmelder: CINCINNATI MILLING MACHINE CO

Erfinder: GOEPFERT GEORGE J

IPC-Notationen: B24D0018-00
C08J0005-14

CPC-Notationen: B24D0018-00



Zusammenfassung:

Source: US2943926 A [EN] (Claim 1) 1. The method of making **abrasive** granules coated with a filled condensation resin and adapted to be molded to form a resin-bonded grinding **wheel** having a relatively high ratio of bond. to **abrasive** and a relatively low volatile content which comprises,. Wetting the surfaces of the granules of an abrasive material with a bond-adhesion-promoting agent selected from the group consisting of: said condensation resin in liquid form, an organic solvent having an appreciable solvent power for said condensation resin and a mixture of said liquid resin and solvent mixing with the wetted granules a first portion...

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 305

Titel: REINFORCED **ABRASIVE** ARTICLES AND INTERMEDIATE PRODUCTS

Patentnummer: [US2880080A](#)

Anmeldung: US19550545193

Priorität: US19550545193 19551107

Patentfamilie: [US2880080A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: JAMES RANKIN WALTER
TUNGSETH BARRY F



IPC-Notationen: [C08J0005-14](#)

C08K0007-00

C08K0007-14

C08L0067-00

C08L0067-06

CPC-Notationen:

C08K0007-14

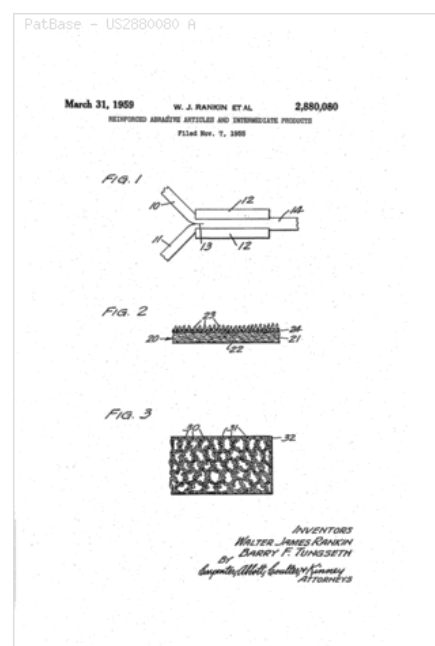
C08L0067-06

Y10T0428-31511

Y10T0442-2992

Zusammenfassung:

Source: US2880080 A [EN] (Claim 1) 1. A self-supporting felted mat suitable for impregnation with a hardenable liquid resinous matrix resin in providing a strong reinforced warp-resistant resinous sheet material, said mat comprising - a randomly oriented uniform mixture of 20-80 percent by weight of short bundles of aligned glass fibers substantially completely encased in a sheaf of flexible film-forming polymer and correspondingly 80-20 percent by weight of short moisture-swelling impregnation resistant cotton thread segments



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 306

Titel: [SCHLEIFKOERPER](#) WITH ORGANIC BINDING (Machine translation)

Patentnummer: [DE975627A](#)

Anmeldung: DE1951D009802

Priorität: 19510714

Patentfamilie: [DE975627A](#)

Anmelder: DEUTSCHE NORTON GMBH
NORTON GES M B H DEUTSCHE

Erfinder: POLCH FRANK J



IPC-Notationen: [C08J0005-14](#)

C08L0061-00

C08L0061-06

C08L0061-10

C08L0061-20

CPC-Notationen:

B24D0003-28

C08L0061-06

C08L0061-20

Zusammenfassung:

Claim 1. Schleifkörper mit organischer Bindung, dadurch gekennzeichnet, daß er als Schleifmittel kristalline geschmolzene Zirkonerde und als Bindemittel ein oder ein Gemisch von mindestens zwei organischen polymeren Bindemitteln bzw. Kondensationskunstharzen enthält, und zwar hitzehärtbares Anilinformaldehydharz, hitzehärtbares Phenolformaldehydharz, vulkanisierten Naturkautschuk, der mit mindestens einem Drittel seines Gewichtes Schwefel vulkanisiert ist, vulkanisiertes Butadien-Styrol-Mischpolymerisat, das mit mindestens einem Gewichtsdrittel vulkanisiert ist, or vulkanrylnit Butadien mit mindestens einem Gewichtsdrittel Schwefel vulkanisiert ist.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 307

Titel: RESIN BONDED **ABRASIVE** ARTICLE AND METHOD OF MANUFACTURING THE SAME

Patentnummer: [US2559664A](#)

Anmeldung: US19470727932

Priorität: US19470727932 19470211

Patentfamilie: [US2559664A](#)

Anmelder: CARBORUNDUM CO

Erfinder: RIES KERNELL G
ROBIE NORMAN P
VON DOENHOFF PHYLLIS

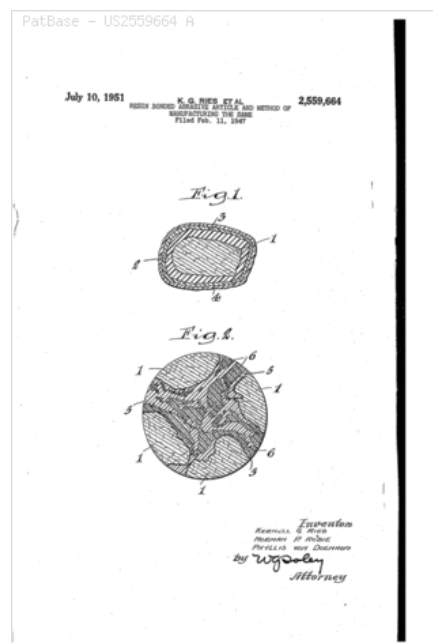


IPC-Notationen: [C08J0005-14](#)
C08L0069-00
C08L0075-00
C08L0075-04

CPC-Notationen: C08J2375-04
C08L0069-00
C08L0075-04

Zusammenfassung:

Source: US2559664 A [EN] (Claim 1) 1. The method of making an **abrasive** article which comprises coating **abrasive** grains, in the order named, with a solvent for a heat-hardenable resin, a powdered heat-hardenable resin, an aqueous dispersion of a thermoplastic resin selected from the group consisting of polymers and copolymers of vinyl compounds, and finally with a second layer of the powdered heat-hardenable resin, drying the thus coated grains to remove substantially all of the water therefrom, forming an article from a mass of such resin coated **abrasive** grains, and heating the thus formed article at such temperatures and for such times as to heat-harden the heat-hardenable resin and cause the finely divided particles of thermoplastic resin to soften and aggregate into larger particles and become distributed through the mass of the heat-hardened resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 308

Titel: GRINDING WHEELS

Patentnummer: [US2814554A](#)

Anmeldung: US19540479245

Priorität: US19540479245 19541231

Patentfamilie: [US2814554A](#)

Anmelder: NORTON CO

Erfinder: ROWSE ROBERT A



IPC-Notationen: [C08J0005-14](#)
C09K0003-14

CPC-Notationen: C09K0003-1436

Zusammenfassung:

Source: US2814554 A [EN] (Claim 1) 1. Method of making organic bonded **grinding Wheels** which comprises, preparing a mix of **abrasive** grains and rubber composition by first thoroughly coating all of the individual grains with liquid rubber and thereafter adding thereto solid components of rubber composition in finely divided form, said solid components of rubber composition containing at least 10% by weight of sulphur on the rubber molecule of the rubber composition, and thoroughly mixing said solid components with the **abrasive** grains individually coated with liquid rubber until each grain is substantially completely covered with the said solid components, preparing a mix of **abrasive** grains and phenol-formaldehyde resin composition by first thoroughly coating all of the individual grains with : 1 solvent for reactive solid finely divided phenol-formaldehyde resin composition, then adding said solid finely divided phenol-formaldehyde resin composition thereto and thoroughly mixing it with said grains coated with resin solvent until each grain is substantially completely covered with the said reactive solid phenol-formaldehyde resin composition, then thoroughly mixing from 10% to 90% by weight of the mix of abrasive grains and unvulcanized rubber composition with its complement of the mix of abrasive grains and reactive phenol-formaldehyde resin composition to make a thorough mixture of the two mixes, then charging a mold with said mixture and forming a grinding wheel by pressure and heat to compact the mixture and to vulcanize the rubber and to react the resin to thermo-irreversible stage

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 309

Titel: Microcrystalline sintered bauxite **abrasive** grain

Patentnummer: [US3387957A](#)

Anmeldung: US19660554606

Priorität: US19660554606 19660404

Patentfamilie: [US3387957A](#)

Anmelder: CARBORUNDUM CO

Erfinder: HOWARD ELMER E

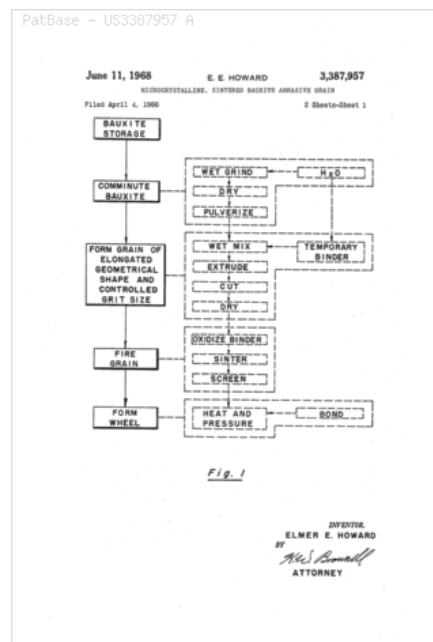


IPC-Notationen: C09K0003-14

CPC-Notationen: C09K0003-1418

Zusammenfassung:

Source: US3387957 A [EN] (Claim 1) 1. Microcrystalline, sintered bauxite **abrasive** grain of controlled grit size having a longitudinal to transverse dimensional ratio substantially greater than 1: 1 and a uniform cross section normal to the length thereof



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 310