Titel: MICRONIZED WOOD PRESERVATIVE FORMULATIONS

Patentnummer: WO2007095610A3

Anmeldung: WO2007US62200
WO2006US61795
WO2005US37303
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Priorität: US20030461457P 20030409
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IPC-Notationen:

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F26B0007-00

Zusammenfassung:

Source: US2004258767 AA [EN] The present invention provides wood preservative compositions comprising micronized particles. In one embodiment, the composition comprises dispersions of micronized metal or metal compounds. In another embodiment, the wood preservative composition comprises an inorganic component comprising a metal or metal compound and organic biocide. When the composition comprises an inorganic component and an organic biocide, the inorganic component or the organic biocide or both are present as micronized particles. When compositions of the present invention are used for preservation of wood, there is minimal leaching of the metal and biocide from the wood

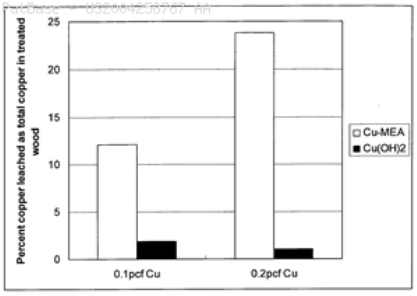

Figure 1A

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 1

Titel: SUPERABRASIVE **ELEMENTS**, METHODS OF MANUFACTURING, AND DRILL BITS INCLUDING SAME

Patentnummer: US9951566B1

Anmeldung:
US20150633041
US20150621019
US20140570506
US20130917952
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US20120690397
US20110171735
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Priorität:
US20060545929 20061010
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Patentfamilie:
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MUKHOPADHYAY DEBKUMAR
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IPC-Notationen:
B01J0003-06
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B24D0003-00

CPC-Notationen:
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B22F0007-04
B24D0003-007

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B24D0003-06	**B24D0003-06**
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C09K0003-14	C22C0030-02
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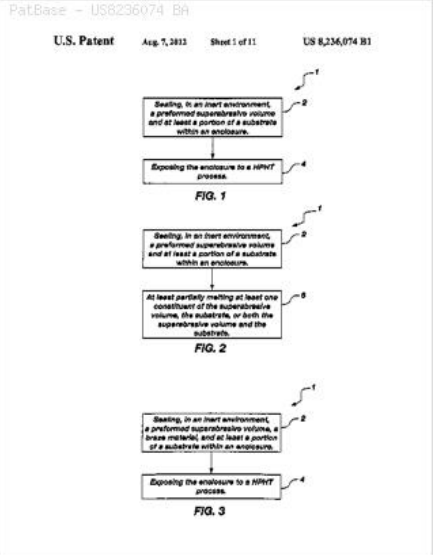
E21B0010-46	E21B0010-56
E21B0010-55	E21B0010-567
E21B0010-56	E21B0010-5676
E21B0010-567	E21B0010-5735
E21B0010-573	

Zusammenfassung:

Source: US8236074 BA [EN] Methods of manufacturing a superabrasive **element** are **disclosed**. In one embodiment, a substrate and a preformed superabrasive volume may be at least partially surrounded by an enclosure and the enclosure may be sealed in an inert environment. Further, the enclosure may be exposed to an elevated pressure and preformed superabrasive volume may be affixed to the substrate. Polycrystalline diamond **elements** are **disclosed**. In one embodiment, a polycrystalline diamond **element** may comprise a preformed polycrystalline diamond volume bonded to a substrate by a braze material. Optionally, such a polycrystalline diamond **element** may exhibit a compressive stress. Rotary drill bit for drilling a subterranean formation and including at least one superabrasive **element** are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 2

Titel: METHOD FOR PRODUCING A COATED **GRINDING** MEANS, COATING **GRINDING** MEANS, AND USE OF A COATED **GRINDING** MEANS

Patentnummer: WO2013014116A1

Anmeldung:
WO2012EP64376
EP20110175222
DE201150008612T
US20160376820
US20120234917
CN201280036977
KR20147002018
TW20120126416
BR20141101627

Priorität:
EP20110017522 20110725
EP20110175222 20110725
WO2012EP64376 20120723
US20140234917 20140124
US20160376820 20161213

Patentfamilie:
WO2013014116A1
EP2551057B1
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IPC-Notationen:
B05D0001-12
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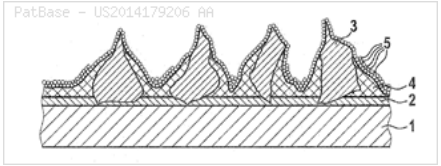
B24D0003-34
B24D0011-00

CPC-Notationen:
B24D0003-00
B24D0003-004
B24D0003-34
B24D0011-001
B24D0011-005

Zusammenfassung:

Source: US2014179206 AA [EN] A method for producing a coated **abrasive** includes producing or providing an intermediate **abrasive** product that comprises a substrate, a plurality of **abrasive** grains that are bonded to the substrate, and at least one layer of an uncured size coat that at least partially covers the **abrasive** grains with the uppermost size coat being uncured. The method further includes applying at least one **grinding additive** to the uppermost, uncured size coat with the **grinding additive** applied to the size coat in dry form. The method also includes curing the uppermost size coat. A coated **abrasive** is produced by the method and the coated **abrasive** is used to process a surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 3

Titel: Method and apparatus for knurling a workpiece, method of molding an article with such workpiece, and such molded article

Patentnummer: WO9712727A1

Anmeldung:
WO1995US13074
EP19990117866
EP19950937423
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BR1995PI10649
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Priorität:
BR1995PI10649 19951005
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CN20011017135 19951005
EP19950937423 19951005
EP19990117866 19951005
WO1995US13074 19951005
US19970894978 19970903

Patentfamilie:
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BRPI9510649A
ES2152434T3

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SERVATIUS JAMES A

Erfinder: COLLINS STANLEY B
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HUPMAN TIMOTHY L
KOLINS STINILI B
SERVATIUS JAMES A
SEVITUS JAMMES A

IPC-Notationen:
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CPC-Notationen:
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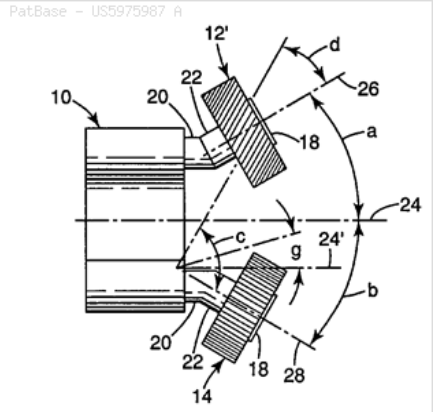
B24D0018-0036
B30B0003-005

Zusammenfassung:

Source: US5975987 A [EN] PCT No. PCT/US95/13074 Sec. 371 Date Sep. 3, 1997 Sec. 102 (e) Date Sep. 3, 1997 PCT Filed Oct. 5, 1995 PCT Pub. No. WO97/12727 PCT Pub. Date Apr. 10, 1997A method and apparatus for knurling a workpiece in which the knurl pattern has an oblique helix angle relative to the longitudinal axis of the cylindrical workpiece. Also **disclosed** is a method of molding a molded article with the knurled workpiece to impart the inverse of the knurl pattern onto the molded article, such a molded article, a method of forming a structured **abrasive** article with the molded article, and such an **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 4

Titel: METHODS OF MAKING METAL BOND AND VITREOUS BOND **ABRASIVE** ARTICLES, AND **ABRASIVE** ARTICLE PRECURSORS

Patentnummer: WO2017173009A1

Anmeldung:
WO2017US24882
WO2017US14181
WO2017US14174
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WO2017US13867
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Priorität:
US20160281349P 20160121
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FRANKE CARSTEN
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GOERS BRIAN D
GOTTSCHALK GAUDIG GABRIELE HEIDI
HINTZER KLAUS
JIANG XUAN
MAIKEN GIVOT
MALTE KORTEN
MICHAEL C HARPER
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NEUMANN WOLFGANG
PLOTNIKOV ELIZAVETA Y
SCHECHNER GALLUS
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WRIGHT ROBIN EDGAR

ZEHENTMAIER SEBASTIAN FRANZ
ZENTIS FEE

IPC-Notationen:

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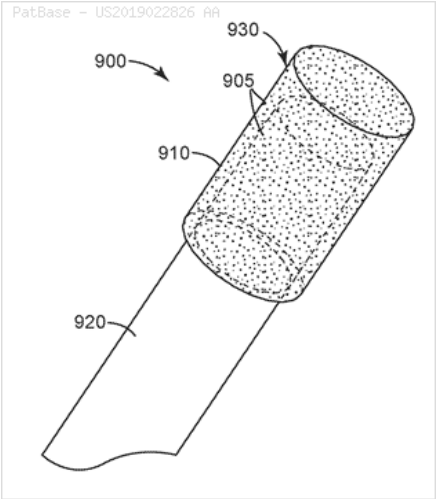
C22C0032-001
Y02P0010-25

Zusammenfassung:

Source: US2019022826 AA [EN] The present **disclosure** provides methods of making a vitreous bond **abrasive** article and a metal bond **abrasive** article. The methods include sequential steps. Step a) includes a subprocess including sequentially: i) depositing a layer of loose powder particles in a confined region; and ii) selectively applying heat via conduction or irradiation, to heat treat an area of the layer of loose powder particles. The loose powder particles include **abrasive** particles and organic compound particles, as well as vitreous bond precursor particles or metal particles. The layer of loose powder particles has substantially uniform thickness. Step b) includes independently carrying out step a) a number of times to generate an **abrasive** article preform comprising the bonded powder particles and remaining loose powder particles. Step c) includes separating remaining loose powder particles from the **abrasive** article preform. Step d) includes heating the **abrasive** article preform to provide the vitreous bond abrasive article comprising the abrasive particles retained in a vitreous bond material, or to provide the metal bond abrasive article. A method of making a metal bond abrasive optionally includes infusing an abrasive article preform with a molten lower melting metal and solidifying the molten lower melting metal to provide the metal bond abrasive article. The present disclosure further provides a vitreous bond abrasive article precursor and a metal bond abrasive article precursor



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 5

Titel: METHOD AND JIG ASSEMBLY FOR MANUFACTURING OUTER BLADE **CUTTING WHEEL**

Patentnummer: EP2260963B1

Anmeldung:
EP20100250867
DE201060009984T
US20120617855
US20100770263
JP20090111762
CN201010241662
KR20100040930
TW20100113893
MY20100001872
PH20100000133
SG20100029726
TH20101000676

Priorität:
JP20090111762 20090501
US20100770263 20100429
EP20100250867 20100504
US20120617855 20120914

Patentfamilie:
EP2260963B1
EP2260963A1
DE602010009984D1
US9156098B2
US8753412B2
US2013009353A1
US2010275522A1
JP2010260124A2
JP5051399B2
CN101905447A
CN101905447B
KR20100119730A
KR101641387B1
TW201105474A
TWI503213B
MY155363A
PH2010000133A
SG166086A1
TH43991B
TH120133A

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Erfinder:
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MAEGAWA HARUKAZU
MAEKAWA NAOKAZU
MASAKI KASASHIMA
TAKEHISA MINOWA
YUHITO DOI

IPC-Notationen:	B23D0061-02	**CPC-Notationen:**	B23D0061-028
	B23D0065-00		B23D0065-00
	B24D0003-00		**B24D0003-06**
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	B24D0005-12		B24D0018-00
	B24D0018-00		B24D0018-0018
	B24D0099-00		B25B0011-002
	B25B0011-00		C23C0018-1608
	B26D0001-24		C23C0018-1662
	B28D0001-24		C23C0018-1673
	B28D0005-02		C23C0018-1882
	C23C0018-16		C23C0018-1896
	C23C0018-18		C23C0018-32
	C23C0018-31		C25D0005-024
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	C25D0005-02		C25D0015-02
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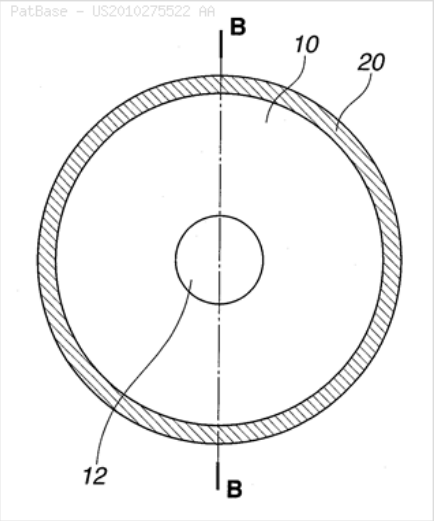
	C25D0007-00		
	C25D0015-00		
	C25D0015-02		
	C25D0017-00		
	C25D0017-06		

Zusammenfassung:

Source: US2010275522 AA [EN] An outer blade **cutting wheel** comprising an annular thin **disc** base of cemented carbide and a blade section is manufactured by disposing permanent magnet pieces on the side surfaces and inward of the outer periphery of the base to produce a magnetic field, providing magnetic coated diamond and/or CBN **abrasive** grains such that the magnetic field may act on the grains, causing the grains to be magnetically attracted to the base outer periphery, and electroplating or electroless plating whereby the **abrasive** grains are bound to the base outer periphery to form the blade section



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 6

Titel: OUTER BLADE **CUTTING** **WHEEL** AND MAKING METHOD

Patentnummer: EP2735404B1

Anmeldung:
EP20140155822
EP20080254151
DE200860042563T
US20140227491
US20120493539
US20080342941
JP20130025065
JP20080321712
CN201610214798
CN201410128989
CN200810107465
KR20170022953
KR20160051633
KR20080134387
TW20080151056
MY20080005110
PH20080000469
PH20140000115
PH20190000495
SG20080093916
TH20081006636

Priorität:
JP20070339212 20071228
JP20080321712 20081218
US20080342941 20081223
EP20080254151 20081224
EP20140155822 20081224
CN200810107465 20081226
US20120493539 20120611
JP20130025065 20130213
US20140227491 20140327
PH20140000115 20140415
KR20160051633 20160427
KR20170022953 20170221

Patentfamilie:
EP2735404B1
EP2075092B1
EP2735404A3
EP2075092A3
EP2735404A2
EP2075092A2
DE602008042563D1
US8733336B2
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US2014208663A1
US2012252330A1
US2009165768A1
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CN103862395B
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KR20160055735A
KR20090073019A

KR101758562B1
TW200940262A
TWI458596B
MY151755A
PH2008000469A
PH2014000115A
PH2019000495A
SG153773A1
TH68595B
TH123720A

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SATO KOJI
TAKEHISA MINOWA
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IPC-Notationen:
B23D0061-02
B24D0003-00
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B24D0003-06
B24D0005-00
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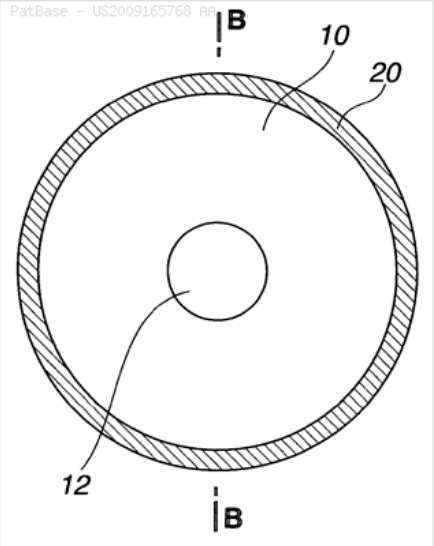
B24D0005-12
B24D0011-00
B24D0018-00
B28D0001-04
B28D0001-22
B28D0001-24
B28D0005-02

CPC-Notationen:
B23D0061-028
B24D0003-00
B24D0003-06
B24D0005-12
B24D0018-00
B24D0018-0018
B28D0005-022

Zusammenfassung:

Source: US2009165768 AA [EN] In an outer blade **cutting wheel** comprising an annular thin **disc** base of cemented carbide having an outer diameter of 80-200 mm, an inner diameter of 30-80 mm, and a thickness of 0.1-1.0 mm, and a blade section disposed on an outer periphery of the base, the blade section comprises diamond grains and/or CBN grains bound with a metal bond having a Young's modulus of 0.7-4.0x1011 Pa and has a thickness which is greater than the thickness of the base by at least 0.01 mm. The outer blade **cutting wheel** is capable of **cutting** a workpiece at a high accuracy and a reduced allowance, improves machining yields, and reduces machining costs



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 7

Titel: INFRARED CURED **ABRASIVE** ARTICLES AND METHOD OF MANUFACTURE

Patentnummer: WO2007120469A3

Anmeldung:
WO2007US08094
EP20070754594
US20070732514
CA20072647881
TW20070111811
AR2007P101398
BR2007PI09736
CL20070000933
MX20080012939
TH20071001610

Priorität:
US20060788902P 20060404
US20060874311P 20061212
US20070732514 20070403
WO2007US08094 20070403

Patentfamilie:
WO2007120469A3
WO2007120469A2
EP2010796B1
EP2010796A2
US8262757B2
US2007240365A1
CA2647881C
CA2647881A
TW200800495A
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AR060347AA
BRPI0709736A2
CL2007000933A1
MX2008012939A1
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SAINT GOBAIN ABRASIFS TECH
SAINT GOBAIN ABRASIVES INC
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Erfinder: YOU XIAORONG

IPC-Notationen:
B23F0021-00
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B24B0007-20
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B24D0003-00
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C08J0005-14
C09K0003-14
F16D0069-02

CPC-Notationen:
B24D0003-28
B24D0003-34
B24D0011-001

Zusammenfassung:

Source: US2007240365 AA [EN] An **abrasive** article includes a polymer binder, an infrared radiation absorbing dye, and **abrasive** grains. In particular embodiments, the **abrasive** articles have been at least partially cured using infrared radiation. The **abrasive** articles of the present invention can include, for example, coated **abrasives**, structured **abrasives**, and bonded **abrasives**. Methods for manufacturing **abrasive** articles include at least partially curing an article that includes a polymer binder precursor, an infrared radiation absorbing dye, and **abrasive** grains using infrared radiation

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 8

Titel: METHOD OF ABRADING A WORKPIECE

Patentnummer: WO2013036402A1

Anmeldung:
WO2012US52677
EP20120830108
DE201260023375T
US20120343237
JP20140529763T
CA20122847807
CN201280043010
KR20147008717
BR20141105244
IN2014CN01764
MX20140002680
RU20140108739

Priorität:
US20110531668P 20110907
EP20120830108 20120828
US20120343237 20120828
WO2012US52677 20120828

Patentfamilie:
WO2013036402A1
EP2753457B1
EP2753457A1
EP2753457A4
DE602012023375D1
US9662766B2
US2014287654A1
JP6049727B2
JP2014528846T2
CA2847807C
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CN103764348A
CN103764348B
KR20140071403A
KR101951506B1
BR112014005244A2
IN01764CN2014A
MX350058B
MX2014002680A1
RU2586181C2
RU2014108739A

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Erfinder:
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SCHWABEL MARK G
SHVABEL MARK DZH

IPC-Notationen:

B24B0001-00
B24B0007-00
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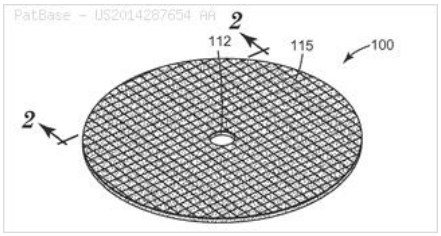
B24D0018-00
C09C0001-68
C09K0003-14

CPC-Notationen:

B24B0027-0675
B24D0003-20
B24D0003-344
B24D0005-12
C09K0003-14

Zusammenfassung:

Source: US2014287654 AA [EN] A method of abrading a workpiece includes: contacting a metallic workpiece, having a bulk temperature of less than 500 degrees Celsius, with a stationary rotating bonded **abrasive wheel** having a diameter of at least 150 millimeters, wherein the bonded **abrasive wheel** comprises ceramic shaped **abrasive** particles retained in a binder, and wherein metallic swarf is formed, and at least 20 percent by weight of the metallic swarf is filamentary metallic swarf having a length of at least 3 mm



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 9

Titel: **ABRASIVE** ARTICLE AND METHODS FOR **GRINDING** GLASS

Patentnummer: WO200183166A1

Anmeldung:
WO2000US27131
EP20000967239
DE20006022099T
US20020284692
JP20010580030T
AU20000277465
AU20000077465D
AU20000077465
CN200710141362
CN20008019473
KR20027014465
AT20000967239T

Priorität:
US20000560596 20000428
WO2000US27131 20001002
KR20027014465 20021026
WO2000US27131 20021026
US20020284692 20021031

Patentfamilie:
WO200183166A1
EP1276593B1
EP1276593A1
DE60022099T2
DE60022099D1
US7044835B2
US2003181144A1
JP2003534137T2
AU200077465A5
AU200077465A1
AU2000277465A1
CN1452535A
CN101092024A
CN100343019C
KR20030001457A
KR100733948B1
AT302092E

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3M INNOVATIVE PROPERTIES CO

Erfinder:
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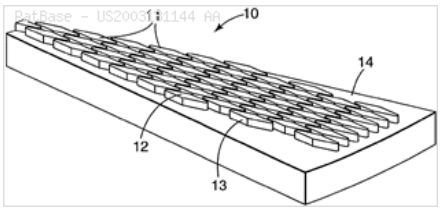
CHRISTIANSON TODD J
MUJUMDAR ASHUTOS N
MUJUMDAR ASHUTOSH N
SCHWABEL A N MUJUMDAR T J CHRI
SCHWABEL M G
SCHWABEL MARK G

IPC-Notationen:	B24B0001-00 B24B0007-20 B24B0007-24 B24B0013-00 B24B0013-01 B24B0013-015 **B24D0003-00** B24D0003-20 B24D0003-28 **B24D0003-34** B24D0007-00 B24D0007-06 B24D0011-00	**CPC-Notationen:**	B24B0007-241 B24D0003-28 **B24D0003-344** B24D0007-06

Zusammenfassung:



Source: US2003181144 AA [EN] The present invention is a fixed **abrasive** article for **grinding** or polishing the surface of a glass workpiece. The **abrasive** article for **grinding** glass has **abrasive** composites containing agglomerates having diamond particles, and optionally other **abrasive** particles. The **abrasive** composites are integrally molded to a backing. The **abrasive** articles, when used to grind glass, provides a high stock removal rate but provides a smooth surface finish. Lubricant can be used to improve the **grinding** characteristics of the **abrasive** article

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 10

Titel: **ABRASIVE** ARTICLE SUITABLE FOR ABRADING GLASS AND GLASS CERAMIC WORKPIECES

Patentnummer: WO200064633A3

Anmeldung:
WO2000US10702
EP20000923549
DE20006034225T
US20010941971
US19990298341
JP20000613612T
JP20000613612
CA20002369617
AU20000043651D
AU20000043651
CN20008006615
KR20017013467
MX2001PA10619

Priorität:
US19990298341 19990423
WO2000US10702 20000420
US20010941971 20010829
WO2000US10702 20011022

Patentfamilie:
WO200064633A3
WO200064633A2
EP1173307B1
EP1173307A2
DE60034225T2
DE60034225D1
US6722952B2
US6458018B1
US2002037683A1
US2002019199A1
JP4618896B2
JP2002542057T2
CA2369617C
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AU200043651A5
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CN1348404A
CN100522489C
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KR100674052B1
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Anmelder:
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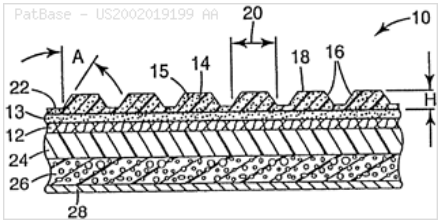
3M INNOVATIVE PROPERTIES COMPANY
GOERS

Erfinder:
GOERS B D
GOERS BRAIN D
GOERS BRIAN D
PETERSON S W
PETERSON SCOTT W
WOO E J
WOO EDWARD J

IPC-Notationen:	B24B0001-00 B24B0007-20 B24B0007-24 **B24D0003-00** **B24D0003-02** B24D0003-20 B24D0003-28 **B24D0003-34** B24D0007-00 B24D0007-06 B24D0011-00 C09K0003-14 G11B0005-84	**CPC-Notationen:**	B24B0007-241 B24D0003-28 **B24D0003-344** Y10S0451-921

Zusammenfassung:

Source: US2002019199 AA [EN] An **abrasive** article is provided which comprises a backing and at least one three-dimensional **abrasive** coating bonded to a surface of the backing. The **abrasive** coating comprises a binder formed from a cured binder precursor having dispersed therein a plurality of diamond bead **abrasive** particles and a **filler** which comprises from about 40 to about 60 percent weight of the **abrasive** coating. The **abrasive** article is particularly suitable for abrading a glass or a glass ceramic workpiece in the presence of a lubricant



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 11

Titel: Method and article for the production of optical quality surfaces on glass

Patentnummer: WO9829217A1

Anmeldung:
WO1997US23795
EP19970952613
DE19976028791T
US19990400005
US19980197656
US19970778501
JP19980530180T
AU19980056184
KR19997006039
TW19970119801
MY19980000016
TH19971005438

Priorität:
US19970778501 19970103
WO1997US23795 19971222
US19980197656 19981123
US19990400005 19990920

Patentfamilie:
WO9829217A1
EP0949986B1
EP0949986A1
DE69728791T2
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US5989111A
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TW404878B
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TH36425A

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KRANZ HEATHER KRISTINE
KRANZ K
LAMPHERE CRAIG FREDERICK
LAMPHERE F
WILLAMS JULIA PHELIND
WILLIAMS JULIA PHELINDA
WILLIAMS P

IPC-Notationen:
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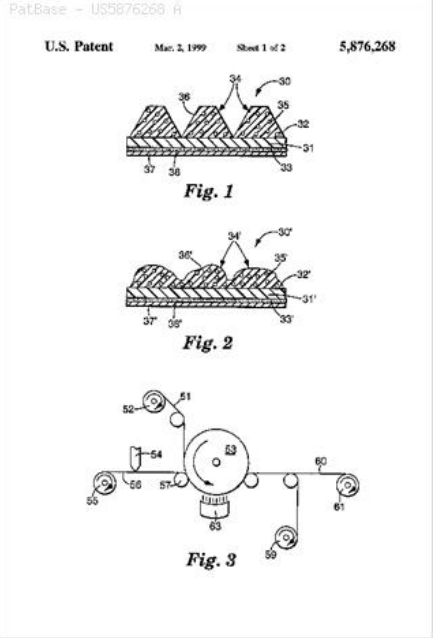
CPC-Notationen:
B24B0007-24
B24D0003-28
B24D0003-344
B24D0011-00
B24D0013-02
B24D0018-00

Zusammenfassung:

Source: US5876268 A [EN] The present invention relates to a method and an article for rapidly polishing a glass workpiece surface using a structured **abrasive** article including cerium oxide particles dispersed in a binder. The **abrasive** article for rapid polishing of a glass workpiece comprising a backing and at least one polishing layer. The polishing layer comprises cerium oxide particles dispersed within a binder. The binder provides the attachment means of the at least one polishing layer to the backing. The **abrasive** article is capable of reducing an initial Rtm of about 0.8 mu m or greater on a glass test blank to a final Rtm of about 0.3 mu m or less in about one minute using an RPE procedure defined herein. The present invention is also directed to a method of polishing a glass workpiece using the present **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 12

Titel: **ABRASIVE** ARTICLE

Patentnummer: WO2017117356A1

Anmeldung: WO2016US69127
EP20160829040
DE201660051820T
US20160066493
JP20180534615T
CN201680077240
IN201847024556

Priorität: US20150273024P 20151230
EP20160829040 20161229
US20160066493 20161229
WO2016US69127 20161229

Patentfamilie: WO2017117356A1
EP3397425B1
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IN201847024556A

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: GRAHAM PAUL D
HILL PHILIP S
MEULER ADAM J
NETTLESHIP DAVID A
SCHMIDT DANIEL J
YANG YUGEUN P

IPC-Notationen: B24B0001-00
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B32B0027-06
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C09K0003-14

CPC-Notationen: **B24D0003-004**
B24D0003-14
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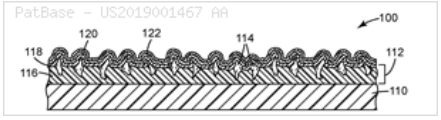
B32B2250-04
B32B2255-04
B32B2260-025
B32B2260-046
B32B2264-107
B32B2475-00

Zusammenfassung:

Source: US2019001467 AA [EN] An **abrasive** article is provided which comprises a plurality of layers in the following order: a backing; an **abrasive** layer; a primer layer comprising clay particles, wherein the clay particles are agglomerated and form a layer; and a supersize coat comprising a metal salt of a long-chain fatty acid. The addition of the aforementioned primer layer can significantly reduce loading of swarf and improve both the **cut** and expected **lifetime** of the **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 13

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

Patentnummer: WO2010008940A1

Anmeldung: WO2009US49478
EP20090790040
DE200960023972T
US20080173923
JP20110518785T
CN200980127601

Priorität: US20080173923 20080716
EP20090790040 20090702
WO2009US49478 20090702

Patentfamilie: WO2010008940A1
EP2326460B1
EP2326460A1
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CN102099156A
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Anmelder: 3M INNOVATIVE PROPERTIES CO
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KINCAID DON H
THURBER ERNEST L

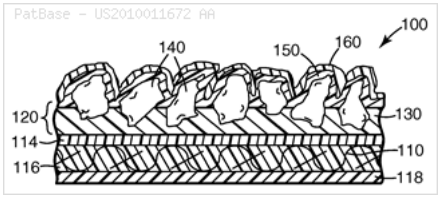
Erfinder: KEIPERT STEVEN J
KINCAID DON H
THURBER ERNEST L

IPC-Notationen: B24B0001-00
B24D0011-00
C08J0005-14

CPC-Notationen: B24D0011-001

Zusammenfassung:

Source: US2010011672 AA [EN] A coated **abrasive** article comprises a fabric backing having a presize layer thereon, and an **abrasive** layer secured to and contacting the presize layer. The **abrasive** layer comprises a make layer and **abrasive** particles. The presize layer comprises, based on a total weight of components a) through **f**) , a reaction product of components comprising: a) from 60 to 90 percent by weight of epoxy resin preparable by reaction of epichlorohydrin with bisphenol A; b) from 5 to 25 percent by weight of polyfunctional (meth) acrylate; c) from 10 percent by weight of aromatic acid-functional free-radically polymerizable material having an acid number up to 300; d) from 5 to 15 percent by weight of dicyandiamide; e) an effective amount of photoinitiator; and **f**) optionally, an effective amount of epoxy cure catalyst. Methods of making and using the same are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 14

Titel: METHOD FOR **GRINDING** GLASS

Patentnummer: WO200064631A1

Anmeldung: WO2000US10915
EP20000926285
DE20006005168T
US20000553295
JP20000613611T
AU20000044842D
AU20000044842
KR20017013463

Priorität: US19990130813P 19990423
US20000553295 20000420
WO2000US10915 20000421
WO2000US10915 20011022

Patentfamilie: WO200064631A1
EP1173306B1
EP1173306A1
DE60005168T2
DE60005168D1
US6634929B1
JP2002542056T2
AU200044842A5
AU200044842A1
KR20010112447A
KR100810205B1

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

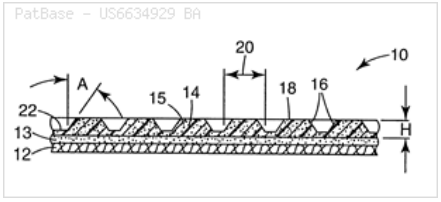
Erfinder: VISSER ROBERT G

IPC-Notationen: B24B0007-20
B24B0007-24
B24B0021-00
B24D0003-20
B24D0003-32
B24D0003-34
B24D0011-00

CPC-Notationen: B24B0007-241
B24D0003-32
B24D0003-346
B24D0011-001

Zusammenfassung:

Source: US6634929 BA [EN] A method of **grinding** a glass or other workpiece is described comprising the steps of: contacting a **grinding** layer of a flexible **abrasive** article with the surface of a glass workpiece, the **grinding** layer comprising **abrasive** grit dispersed in a bonding matrix, the matrix attached to a flexible backing; and moving the **grinding** layer of the flexible **abrasive** article and the surface of the glass workpiece relative to one another at a velocity of at least about 16.5 meters per second to provide a final surface roughness Ra less than about 0.030 micrometer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 15

Titel: METAL BOND **ABRASIVE** ARTICLE COMPRISING POROUS CERAMIC **ABRASIVE** COMPOSITES AND METHOD OF USING SAME TO ABRADE A WORKPIECE

Patentnummer: WO200104227A3

Anmeldung:
WO2000US18522
EP20000945195
US19990350580
JP20010509433T
AU20000059174
CN20008009857
KR20027000261
TW20000113535
TH20001002491

Priorität:
US19990350580 19990709
WO2000US18522 20000706

Patentfamilie:
WO200104227A3
WO200104227A2
EP1198529A2
US6319108B1
JP4582980B2
JP2003504218T2
AU200059174A5
AU200059174A1
CN1359322A
KR20020029075A
TW533229B
TH46378A

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

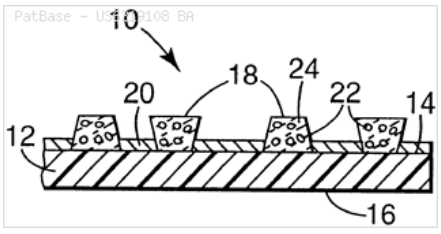
Erfinder:
ADEFRIS N B
ADEFRIS NEGUS B
ADERRIS NEGUS BELIHU
ERICKSON C P
ERICKSON CARL PHILLIP

IPC-Notationen:
B24B0007-20
B24B0007-24
B24D0003-00
B24D0003-04
B24D0003-06
B24D0003-10
B24D0003-18
B24D0007-00
B24D0007-06
B24D0011-00
C09G0001-00
C09K0003-14

CPC-Notationen:
B24B0007-20
B24D0003-06
B24D0003-10
B24D0011-001
C09K0003-1409

Zusammenfassung:

Source: US6319108 BA [EN] An **abrasive** article is provided comprising a rigid backing having a first major surface and a second major surface; a plurality of ceramic **abrasive** composites each comprising a plurality of **abrasive** particles distributed throughout a porous ceramic matrix; and at least one metal coating which affixes the ceramic **abrasive** composites to at least one major surface of the backing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 16

Titel: POLYURETHANE FOR POLISHING LAYER, POLISHING LAYER INCLUDING POLYURETHANE AND MODIFICATION METHOD OF THE POLISHING LAYER, POLISHING PAD, AND POLISHING METHOD

Patentnummer: WO2018207670A1

Anmeldung:
WO2018JP17200
EP20180798868
US20200107016
US20180608050
JP20190517573T
CN201880024840
KR20197030871
TW20180116034
HK20206005049

Priorität:
JP20170095378 20170512
WO2018JP17200 20180427
US20190608050 20191024
US20200107016 20201130

Patentfamilie:
WO2018207670A1
EP3623402A1
US2021087325A1
US2020190247A1
JP2018207670A1
CN110573547A
KR20200003793A
TW201902969A
TWI719307B
HK40015388A1

Anmelder:
KURARAY CO LTD
KURRAY CO LTD

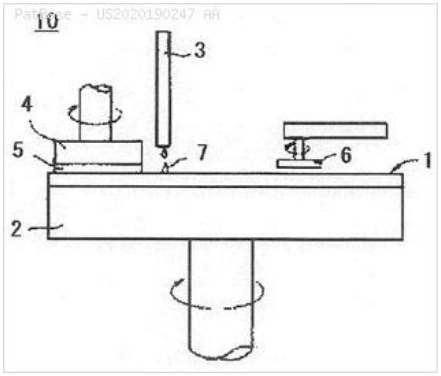
Erfinder:
KATO MITSURU
KATO SHINYA
OKAMOTO CHIHIRO
OSHITA AZUSA
TAKEGOSHI MINORI

IPC-Notationen:
B24B0037-12
B24B0037-20
B24B0037-24
B24D0003-00
B24D0003-34
C08G0018-08
C08G0018-32
C08G0018-38
C08G0018-65
C08G0018-66
C08G0018-76
C08G0018-83
H01L0021-304
H01L0021-3105
H01L0021-321

CPC-Notationen:
B24B0037-24
B24D0003-00
B24D0003-002
B24D0003-346
C08G0018-0895
C08G0018-3206
C08G0018-3819
C08G0018-4854
C08G0018-65
C08G0018-6511
C08G0018-6529
C08G0018-6607
C08G0018-6674
C08G0018-7671
C08G0018-83
H01L0021-304
H01L0021-31053
H01L0021-3212

Zusammenfassung:

Source: US2020190247 AA [EN] **Disclosed** herein are polyurethanes useful for polishing layers, where the polyurethane is a polyurethane having a Schiff base. Also **disclosed** herein are polishing layers containing the polyurethanes, polishing methods that use the polishing layers, and a modification method including a step of converting the Schiff base into at least one functional group selected from an aldehyde group, a carboxylic acid group, a hydroxyl group, and an amino group



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 17

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

Patentnummer: WO2018080765A1

Anmeldung: WO2017US55602
EP20170865908
US20170344297
CN201780065265

Priorität: US20160412427P 20161025
US20170344297 20171006
WO2017US55602 20171006

Patentfamilie: WO2018080765A1
EP3532249A1
EP3532249A4
US2019270183A1
CN109843509A

Anmelder: 3M INNOVATIVE PROPERTIES CO

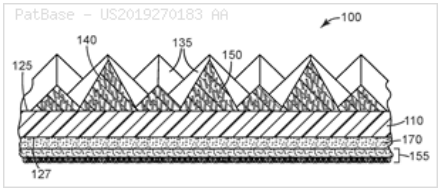
Erfinder: ECKEL JOSEPH B
JANSEN VINCENT R
NELSON THOMAS J
NIENABER AARON K
PETERSON SCOTT W

IPC-Notationen: B24B0037-22
B24D0003-06
B24D0003-28
B24D0011-00
B24D0011-02
B24D0018-00
C09K0003-14

CPC-Notationen: **B24D0003-06**
B24D0003-28
B24D0011-001
B24D0011-02
B24D0018-009
C09K0003-1409

Zusammenfassung:

Source: US2019270183 AA [EN] A structured **abrasive** article comprises a plurality of shaped **abrasive** composites disposed on and secured to a major surface of a backing. The shaped **abrasive** composites comprise magnetizable **abrasive** particles retained in an organic binder. On a respective basis, each of the magnetizable **abrasive** particles has a ceramic body with a magnetizable layer disposed on at least a portion thereof. Methods of making and using the structured **abrasive** articles are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 18

Titel: BONDED **ABRASIVE** ARTICLES INCLUDING ORIENTED **ABRASIVE** PARTICLES, AND METHODS OF MAKING SAME

Patentnummer: WO2018080778A1

Anmeldung:
WO2017US55822
EP20170863607
US20170335402
JP20190521372T
CN201780065852
KR20197014820
BR20191108286

Priorität:
US20160412366P 20161025
US20170550126P 20170825
US20170335402 20171010
WO2017US55822 20171010

Patentfamilie:
WO2018080778A1
EP3532251A1
EP3532251A4
US2020016725A1
JP2019531913T2
CN109890568A
KR20190062601A
BR112019008286A2

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

Erfinder:
FRANKE CARSTEN
GOERS BRIAN D
MAIKEN GIVOT
MARIA CELESTE CASTILLO
NEGUS B ADEFRIS
SMITHSON ROBERT L W

IPC-Notationen:
B24D0003-00
B24D0003-02
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B24D0003-28
B24D0011-00
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B28B0001-00
B28B0011-24
B29C0064-165
B29C0064-35
B33Y0010-00
B33Y0040-00
B33Y0070-00
B33Y0080-00
C09K0003-14

CPC-Notationen:
B24D0003-02
B24D0003-06
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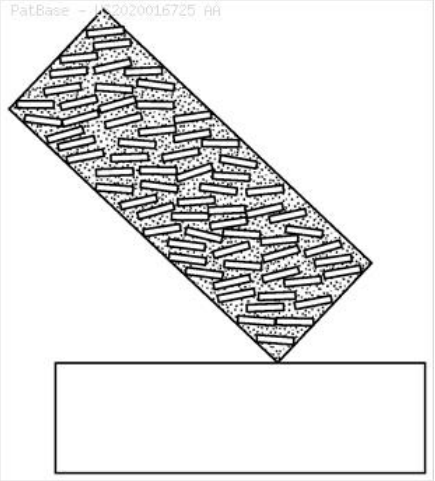
B29C0064-35
B29C0064-393
B29K2077-00
B29K2509-02
B29K2509-08
B29L2031-736
B33Y0010-00
B33Y0040-00
B33Y0050-02
B33Y0070-00

B33Y0080-00
C09K0003-1409
C09K0003-1436
C09K0003-1481



Zusammenfassung:

Source: US2020016725 AA [EN] The present **disclosure** provides bonded **abrasive** articles including **abrasive** particles retained in a binder. The **abrasive** particles are oriented at a predetermined angle greater than 0 degrees and less than 90 degrees with respect to a longitudinal axis of the bonded **abrasive** article. Fifty percent or more of the **abrasive** particles are oriented within 15 degrees above or below the angle, as measured using microscopy image analysis under magnification. The present **disclosure** further provides a method of making a bonded **abrasive** article, the method comprising sequential steps. The steps include (a) a sub-process comprising sequentially: i) depositing a layer of loose powder particles in a confined region, wherein the loose powder particles comprise matrix particles and **abrasive** particles; ii) spreading the layer of loose powder particles with a spreading bar or roller to provide a substantially uniform thickness, wherein a gap between the spreading bar or roller and a base plane of the confined region is selected to be shorter than an average length of the abrasive particles; and iii) selectively treating an area of the layer of loose powder particles to bond powder particles together. Step b) includes independently carrying out step a) a number of times to generate a bonded abrasive article preform including the bonded powder particles and remaining loose powder particles. Step c) includes separating remaining loose powder particles from the bonded abrasive article preform. Step d) includes heating the bonded abrasive article preform to provide the bonded abrasive article. Further, methods are provided, including receiving, by a manufacturing device having one or more processors, a digital object comprising data specifying a bonded abrasive article; and generating, with the manufacturing device by an additive manufacturing process, a bonded abrasive article preform based on the digital object. A system is also provided, including a display that displays a 3D model of a bonded abrasive article; and one or more processors that, in response to the 3D model selected by a user, cause a 3D printer to create a physical object of a bonded abrasive article preform

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 19

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

Patentnummer: WO2016109728A1

Anmeldung:
WO2015US68154
EP20150876300
US20150984274
JP20170534304T
CN201580073427
KR20177018883
TW20150144548
BR20171114083
IN201717023683
MX20170008307

Priorität:
US20140097892P 20141230
US20150984274 20151230
WO2015US68154 20151230

Patentfamilie:
WO2016109728A1
EP3240655A1
EP3240655A4
US9790411B2
US2016186026A1
JP6703992B2
JP2018508368T2
CN107107314A
KR20170094328A
KR101953091B1
TW201627408A
TWI568780B
BR112017014083A2
IN201717023683A
MX2017008307A1

Anmelder:
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

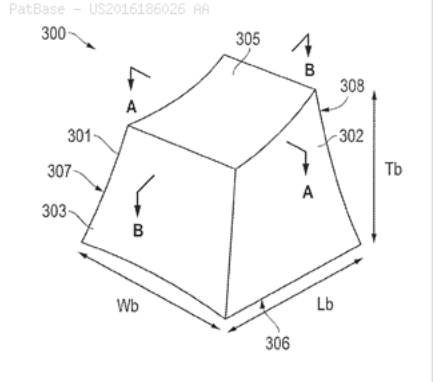
Erfinder:
RALPH BAUER
SARANGI NILANJAN
VUJCIC STEFAN
YANG SHU
ZHONG YANG

IPC-Notationen:
B24D0003-00
B24D0003-02
B24D0003-06
B24D0003-20
B24D0003-28
B24D0003-34
B24D0018-00
C08J0005-14
C08K0003-22
C08L0101-00
C09C0001-68
C09K0003-14
C30B0029-20

CPC-Notationen:
B24D0003-20
B24D0003-28
B24D0003-34
B24D0018-00
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2016186026 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 organic material. In an embodiment, the nanocrystalline alumina may have an average crystallite size of not greater than 1.5 microns. In another embodiment, the bond material and the **abrasive** particles may be mixed and the mixture may cure to form the **abrasive** article of embodiments herein



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 20

Titel: **ABRASIVE GRINDING TOOLS** WITH HYDRATED AND NONHALOGENATED INORGANIC **GRINDING** AIDS

Patentnummer: WO9958299A1

Anmeldung:
WO1998US26603
EP20030010276
EP19980963923
DE19986033702T
DE19986016132T
US19980075294
JP20040220578
JP20000548128T
CA19982328448
AU19990019151
CN19988014027
KR20007012509
TW19980120539
AT19980010276T
AT19980963923T
BR1998PI15846
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DK20030010276T
ES19980963923T
ES20030010276T
ID20000002269
NZ19980507323
PT19980963923T
PT20030010276T
TH19981004997
ZA19990000058

Priorität:
US19980075294 19980508
EP19980963923 19981215
JP20000548128 19981215
JP20000548128T 19981215
WO1998US26603 19981215

Patentfamilie:
WO9958299A1
EP1342537B1
EP1075355B1
EP1342537A1
EP1075355A1
DE69833702T2
DE69816132T2
DE69833702D1
DE69816132D1
US6251149B1
JP2005001108A2
JP4437061B2
JP2002514518T2
CA2328448C
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AU750397B2
AU199919151A1
CN1292742A
CN1291815C
KR20010043461A
KR100417941B1
TW396203B
AT244107E
AT319533E
BRPI9815846A

DK1075355T3
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ES2260540T3
ID27005A
NZ507323A
PT1075355T
PT1342537T
TH26804B
TH35113A
ZA9900058A

Anmelder: NORTON CO
SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA

Erfinder: JOHNSON G W MEYER P E
JOHNSON PAUL E
MEYER GERALD W

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-28
B24D0003-32
B24D0003-34
B24D0011-00
C09K0003-14

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

Zusammenfassung:

Source: US6251149 BA [EN] A bonded-abrasive **tool** includes a matrix of an organic bond, **abrasive** grains dispersed in the organic bond and a **grinding aid** in the form of either an inorganic nonhalogenated **filler** or a hydrated **filler**. The inorganic nonhalogenated **filler** can react with free radicals released from the organic bond during **grinding**. The hydrated **filler** endothermically releases water. A coated-abrasive **tool** includes a flexible substrate, **abrasive** grains bonded to the flexible substrate, and an organic bond containing a **grinding aid** including an inorganic nonhalogenated **filler** or a hydrated **filler** coated on the substrate

---

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 21

Titel: Shaped **abrasive** particles and method of making same

Patentnummer: WO9402559A1

Anmeldung:
WO1993US05778
EP19930916576
EP19930120333
DE19936026427T
DE19936018409T
US19980061262
US19950513219
US19920991996
US19920919180
US19920919179
JP19940503993T
JP19930314747
CA19932137667
CA19932110535
AU19930046379
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KR19950700193
TW19930100929
AT19930120333T
AT19930916576T
BR1993PI05091
BR1993PI06765
MX19930004282
NO19950000233
RU19950105160
TR19930000655

Priorität:
US19920918360 19920723
US19920919179 19920723
US19920919180 19920723
US19920991996 19921217
WO1993US05778 19930616
CA19932110535 19931202
US19950513219 19950810
US19980061262 19980417

Patentfamilie:
WO9402559A1
EP0651778B1
EP0605823B1
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DE69326427T2
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US5984988A
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US5201916A
USRE35570E
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CN1081948A
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RU95105160A
TR27357A

Anmelder: 3M CO
MINNESOTA MINING AND MFG
MINNESOTA MINNING AND MANUFACTUR

Erfinder: BERG JAMES G
BROBERG DAVID E
DONARUDO REIMONDO UINBAAGU
DONLI D ROUNKHORST
DONRII DEIRU ROOUENHOOSUTO
DZHEJMS G BERG
JIERARUDO ARUBAATO SUKERUGAA
LEONARD WILLIAM K C O MINNESOT
ROWENHORST DONLEY D C O MINNES
SCHERGER JERALD A C O MINNESOT
TODD A BERG
UIRIAMU KIISU REONAADO
VIL JAM K LEONARD
WINBERG DONALD R C O MINNESOTA

IPC-Notationen:
B24D0003-00
B24D0003-04
B24D0003-06
B24D0003-14
B24D0003-28
B24D0011-00
B24D0018-00
B28B0003-20
B29C0047-00
B29C0047-14
B29C0048-305
C04B0035-10
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C04B0035-626
C09C0001-68
C09K0003-14
H04B0007-005
H04L0012-16
H04L0012-20
H04L0027-26

CPC-Notationen:
B24D0003-06
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B24D0003-28
B24D0011-00
B24D0018-0009
B29C0048-08
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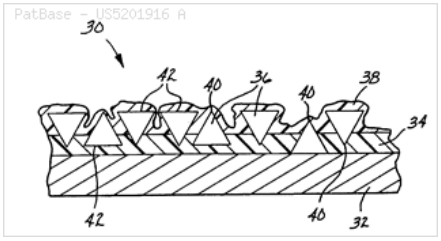
B29C0048-53
B29C0048-54
B29C0048-55
B29K2105-0061
B29K2105-007
B29K2503-08
B29K2709-02
C04B0035-1115
C04B0035-626
C09K0003-1409
C09K0003-1418

Zusammenfassung:



Source: US5201916 A [EN] A method of making **abrasive** particles having a specified shape and **abrasive** articles containing **abrasive** particles having a specified shape. The method for preparing such an **abrasive** particle comprises the steps of: (a) providing a dispersion of comprising particles that can be converted into alpha alumina, preferably particles of alpha alumina monohydrate, in a liquid, which liquid comprises a volatile component, preferably water; (b) providing a mold having a first generally planar surface and a second surface opposed to said first surface, said first surface having an opening to a mold cavity having a specified shape; (c) introducing the dispersion into the mold cavity in such a way that no exposed surface of the dispersion that has been introduced into the mold will extend substantially beyond the plane formed by the first surface of the mold; (d) removing a sufficient portion of the volatile component from the dispersion while the dispersion is in the mold cavity, thereby forming a precursor of an abrasive particle having a shape approximately corresponding to the shape of the mold cavity; (e) removing the precursor of the abrasive particle from the mold cavity; (f) calcining the removed precursor of the abrasive particle; and (g) sintering the calcined precursor to form the desired abrasive particle

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 22

Titel: BONDED **ABRASIVE** PRODUCTS CONTAINING SINTERED SOL GEL ALUMINA **ABRASIVE** FILAMENTS

Patentnummer: EP0395087B2

Anmeldung:
EP19900108067
DE19906021923T
US19890345153
JP19900111868
CA19902015320
AU19900053902
CN19901004114
KR19900005964
AT19900108067T
BR1990PI02014
DD19900341987
DK19900108067T
ES19900108067T
GR19950403361T
MX19900020515
NO19900001917
ZA19900003147

Priorität:
US19890345153 19890428
CA19902015320 19900425

Patentfamilie:
EP0395087B2
EP0395087B1
EP0395087A3
EP0395087A2
DE69021923T3
DE69021923T2
DE69021923D1
US5035723A
JP3068679A2
JP7091533B4
JP2140918C3
CA2015320C
CA2015320A
AU620981B2
AU199053902A1
CN1046924A
CN1036207C
KR0138994B1
AT127059E
BRPI9002014A
DD297994A5
DK0395087T4
DK0395087T3
ES2076250T5
ES2076250T3
GR3018240T3
MX166943B
NO901917L
NO175972B1
NO175972B
NO901917A
NO901917A0
ZA9003147A

Anmelder:
NORTON CO
SAINT GOBAIN ABRASIVES INC

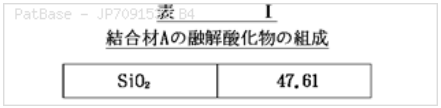
Erfinder:
BURAIAN II SUWANSON
CHIYAARUZU BUI RUU
DEIBITSUDO EE SHIERUDON
MIYUNI ESU RAMAKURISHIYUNAN
PAUL W KALINOWSKI
POORU DABURIYU KARINOUSUKI
RAMAKRISHMAN MUNI S
RAMAKRISHNAN KUNI S
RAMAKRISHNAN MUNI S
RNE CHARLES V
RUE CHARLES V
SHELDON DAVID A
SWANSON BRAIN E
SWANSON BRIAN E
SWANSON BRIAN W

IPC-Notationen:
B24D0003-00
B24D0003-04
B24D0003-06
B24D0003-20
B24D0003-28
B24D0003-34
C04B0035-10
C08J0005-14
C09K0003-14

CPC-Notationen:
B24D0003-06
B24D0003-28
B24D0003-34

Zusammenfassung:

Source: US5035723 A [EN] Resinoid and vitrified bonded **abrasive** products containing filament shaped sintered alumina based **abrasive** made up predominantly of fine alpha alumina crystals


PatBase - JP70915 表 B4 1
結合材Aの融解酸化物の組成

SiO_2	47.61

Titel: SHAPED VITRIFIED **ABRASIVE** AGGLOMERATE, **ABRASIVE** ARTICLES, AND METHOD OF ABRADING

Patentnummer: WO2018017695A1

Anmeldung: WO2017US42825
EP20170745944
US20170318655
JP20190502640T
CN201780044819

Priorität: US20160364495P 20160720
US20170318655 20170719
WO2017US42825 20170719

Patentfamilie: WO2018017695A1
EP3487664A1
US2019283216A1
JP2019527148T2
CN109475998A

Anmelder: 3M INNOVATIVE PROPERTIES CO

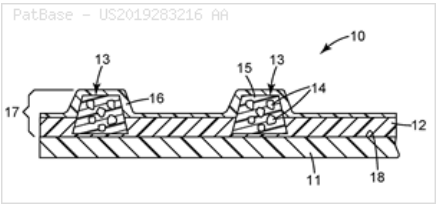
Erfinder: ADEFRIS NEGUS B
GOERS BRIAN D
LUKOWSKI MARK A
PETERSON SCOTT W

IPC-Notationen:
B24D0003-00
B24D0003-14
B24D0003-18
B24D0003-28
B24D0003-32
B24D0003-34
B24D0011-00
C09K0003-14

CPC-Notationen:
B24D0003-002
B24D0003-18
B24D0003-28
B24D0003-32
B24D0003-346
B24D0011-00
B24D0011-001

Zusammenfassung:

Source: US2019283216 AA [EN] An **abrasive** agglomerate particle includes fused aluminum oxide mineral bonded in a vitreous matrix. The fused aluminum oxide mineral is present in a range from 70 percent by weight to 95 percent by weight and the vitreous matrix is present at least at five percent by weight, based on the weight of the **abrasive** agglomerate particle. The fused aluminum oxide mineral has an average particle size of up to 300 micrometers, and the **abrasive** agglomerate particle has a frusto-pyramidal shape with side walls having a taper angle in a range from 2 to 15 degrees and a dimension of at least 400 micrometers. The **abrasive** agglomerate particles are useful in **abrasive** articles. The method includes contacting the workpiece with an **abrasive** article and moving the workpiece and the **abrasive** article relative to each other to abrade the workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 24

Titel: DUAL CURED **ABRASIVE** ARTICLES

Patentnummer: WO02078907A3

Anmeldung: WO2002US06816
EP20020713775
DE20026004297T
US20030427005
US20010819233
AU20020245604
TW20020105061
AT20020713775T
MY20020001108

Priorität: US20010819233 20010328
WO2002US06816 20020306
US20030427005 20030430

Patentfamilie: WO02078907A3
WO02078907A2
EP1372910B1
EP1372910A2
DE60204297T2
DE60204297D1
US6848986B2
US2003194961A1
US2003017797A1
AU2002245604A1
TW526126B
AT296187E
MY134873A

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY
BRUXVOORT WESLEY J
CULLER SCOTT R
KENDALL PHILIP E
PARK SOON C
WILLIAMS JERRY W

Erfinder: BRUXVOORT WESLEY JAY
CULLER SCOTT RICHARD
KENDALL PHILIP EDWARD
PARK SOON C
WILLIAMS JERRY WAYNE

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28

CPC-Notationen: B24D0003-28

Zusammenfassung:

Source: US2003017797 AA [EN] The present invention is directed to a method of making a three-dimensional fixed **abrasive** article, and a three dimensional fixed **abrasive** made thereby. The method comprises providing an **abrasive** composition comprising a plurality of **abrasive** particles and a binder precursor. The binder precursor comprises a polymerizable material consisting essentially of an ethylenically unsaturated material having one or more terminal functional groups of the same type of reactive functionality, a photoinitiator, and a thermal initiator. The **abrasive** composition is then applied onto a backing. The method then comprises at least partially curing the binder precursor by activating the photoinitiator, and further curing the binder precursor by activating the thermal initiator to provide a three-dimensional fixed **abrasive**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 25

Titel: COATED **ABRASIVE** ARTICLE, METHOD FOR PREPARING THE SAME, AND METHOD OF USING A COATED **ABRASIVE** ARTICLE TO ABRADE A HARD WORKPIECE

Patentnummer: WO9610471A1

Anmeldung:
WO1995US09216
EP19950927335
DE19956030780T
US19980198864
US19970908122
JP19960511721T
CA19952201156
AU19950031394
KR19977001937
KR19970701937
AT19950927335T
BR1995PI09116
MX19970002267
ZA19950007039

Priorität:
US19940316259 19940930
WO1995US09216 19950721
US19970908122 19970811
US19980198864 19981124

Patentfamilie:
WO9610471A1
EP0783394B1
EP0783394A1
DE69530780T2
DE69530780D1
US6217413B1
US5975988A
JP10506579T2
CA2201156A
AU687598B2
AU199531394A1
KR19977006104A
KR19970706104A
KR100372592B1
AT240188E
BRPI9509116A
MX9702267A1
ZA9507039A

Anmelder:
3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

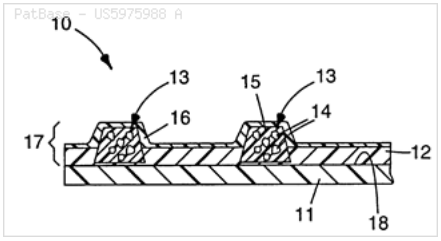
Erfinder: CHRISTIANSON TODD JON

IPC-Notationen:
B24D0003-00
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen:
B24D0003-002
B24D0003-20
B24D0003-28
B24D0003-344
B24D0011-00
B24D0011-001

Zusammenfassung:

Source: US5975988 A [EN] A coated **abrasive** having a backing and an **abrasive** layer coated on the first major of the backing, wherein a cross-section of the **abrasive** layer normal to the thickness and at a center point of the thickness has a total cross-sectional area of **abrasive** agglomerates which is substantially the same as that at a point along the thickness which is 75 percent of a distance the same as that at a point and the contact side; a coated **abrasive** article having a bond system with a Knoop hardness number of at least 70; a coated **abrasive** article comprising **abrasive** agglomerates in the shape of a truncated four-sided pyramid; a method of making the coated **abrasive** article; and a method of abrading a hard workpiece using a coated **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 26

Titel: **ABRASIVE** ARTICLE, A PROCESS FOR ITS MANUFACTURE, AND A METHOD OF USING IT TO REDUCE A WORKPIECE SURFACE

Patentnummer: EP0650807B1

Anmeldung:
EP19940115309
DE19946016241T
US19950441075
US19930145412
JP19940284024
CA19942133264
AU19940075896
CN19941017212
KR19940027065
BR1994PI04181

Priorität:
US19930145412 19931029
CA19942133264 19940929
US19950441075 19950515

Patentfamilie:
EP0650807B1
EP0650807A1
DE69416241T2
DE69416241D1
US5549961A
US5453312A
JP7188429A2
CA2133264A
AU674612B2
AU199475896A1
CN1102800A
CN1070754C
KR950011584A
KR19950011584A
BRPI9404181A

Anmelder:
3M CO
MINNESOTA MINING AND MFG

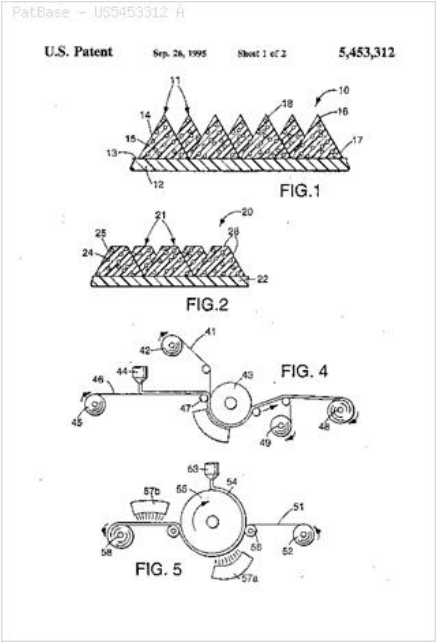
Erfinder:
BRUXVOORT W J
BRUXVOORT WESLEY JAY
BURXVOORT WESLEY J
CHRISTIANSON T J
CHRISTIANSON TODD J C O MINNES
CHRISTIANSON TODD JOHN
CHRISTIANSON TODD JON
HAAS J D
HAAS JOHN D C O MINNESOTA MINI
HAAS JOHN DONALD
JIYON DONARUDO HAASU
TOTSUDO JIYON KURISUCHIYANSON
UEZURII JIEI BURUTSUKUSUBOORUT

IPC-Notationen:
B24D0003-00
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0011-02
B32B0027-06
C08J0005-14
C08K0003-00
C08L0101-00

CPC-Notationen:
B24D0003-28
B24D0003-34
B24D0011-02
Y10S0428-932
Y10T0428-24372
Y10T0428-256
Y10T0428-257
Y10T0428-259

Zusammenfassung:

Source: US5453312 A [EN] An **abrasive** article having a sheet-like structure having at least one major surface having deployed thereon a plurality of individual **abrasive** composites, each **abrasive** composite comprising a plasticizer and a plurality of **abrasive** particles dispersed in a binder, wherein said binder is formed by polymerizing a binder precursor and said plasticizer being combined with said binder precursor prior to said polymerizing in an amount of 30 to 70 parts plasticizer per 100 parts by weight of the combined binder precursor and plasticizer. There is also a method of using such as **abrasive** article to reduce the surface finish of a workpiece and a process of making the **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 27

Titel: **Abrasive** article, a process of making same, and a method of using same to finish a workpiece surface

Patentnummer: WO9511773A1

Anmeldung:
WO1994US10470
EP19940929817
DE19946029362T
US19930145404
JP20040211604
JP19950512621T
CA19942173853
AU19940078745
CN19941093939
KR20027015393
KR19967002096
KR19960702096
BR1994PI07904
ES19940929817T

Priorität:
US19930145404 19931029
JP19950512621 19940919
WO1994US10470 19940919
KR19960702096 19960424

Patentfamilie:
WO9511773A1
EP0725706B1
EP0725706A1
DE69429362T2
DE69429362D1
US5454844A
JP2004338088A2
JP9504235T2
CA2173853C
CA2173853A
AU693481B2
AU199478745A1
CN1133575A
CN1099940C
KR960705657A
KR19967005657A
KR100384828B1
KR100384568B1
BRPI9407904A
ES2164715T3

Anmelder:
MINNESOTA MINING AND MANUFACTURING CO
MINNESOTA MINING AND MFG CO 3M

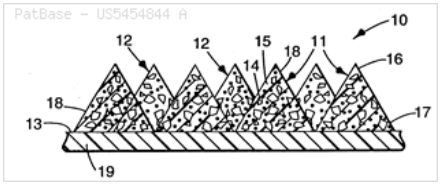
Erfinder:
COLLINS S B
COLLINS STANLEY B
HAAS J D
HAAS JOHN DONALD
HIBBARD L D
HIBBARD LOUIS D

IPC-Notationen:
B24D0003-00
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0011-06
C08J0005-14

CPC-Notationen:
B24D0003-28
B24D0003-344
B24D0011-00

Zusammenfassung:

Source: US5454844 A [EN] An **abrasive** article having a sheet-like structure having a major surface and having deployed in a fixed position thereon a plurality of abutting **abrasive** composites in an area spacing of at least 1,200 composites/cm2, each of the composites comprising a plurality of **abrasive** particles dispersed in a binder. The invention also relates to a method for reducing a surface finish of a workpiece surface using the **abrasive** article and a process for making the **abrasive** article of the invention



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 28

Titel: **ABRASIVE** ARTICLE AND METHODS OF MAKING THE SAME

Patentnummer: WO2005035198A1

Anmeldung: WO2004US24543
EP20040779557
US20030668735
JP20060527980T
CN200480034364
KR20067005791
BR2004PI14610

Priorität: US20030668735 20030923
WO2004US24543 20040729

Patentfamilie: WO2005035198A1
EP1663579A1
US2005060941A1
JP2007505758T2
CN1882418A
KR20060087582A
BRPI0414610A

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

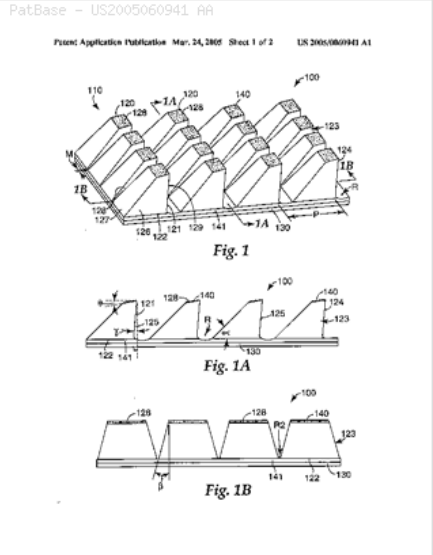
Erfinder: PROVOW RONALD D HAAS JOHN D

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0011-00

CPC-Notationen: B24D0003-28
B24D0011-00
B24D2203-00

Zusammenfassung:

Source: US2005060941 AA [EN] An **abrasive** article and methods of making the same are **disclosed**. The **abrasive** article includes a backing and an array of features on the backing. Each feature includes a base and a body. The body includes a face having an undercut. In one embodiment, the feature also includes a planar top portion having **abrasive** particles disposed thereon. In another embodiment, the feature also includes a radiused portion on the undercut sidewall adjacent the base



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 29

Titel: METHOD OF MAKING A STRUCTURED **ABRASIVE** ARTICLE

Patentnummer: WO2007041538A1

Anmeldung: WO2006US38529
EP20060816065
DE200660036094T
US20050243757
JP20080534611T
CN200680036524
KR20087007971
IN2008CN01650

Priorität: US20050243757 20051005
EP20060816065 20061002
WO2006US38529 20061002

Patentfamilie: WO2007041538A1
EP1960157B1
EP1960157A1
EP1960157A4
DE602006036094D1
US7491251B2
US2007074455A1
JP5118643B2
JP2009511281T2
CN101277789A
CN101277789B
KR20080052638A
KR101300849B1
IN01650CN2008A

Anmelder: 3M INNOVATION CO LTD
3M INNOVATIVE PROPERTIES CO

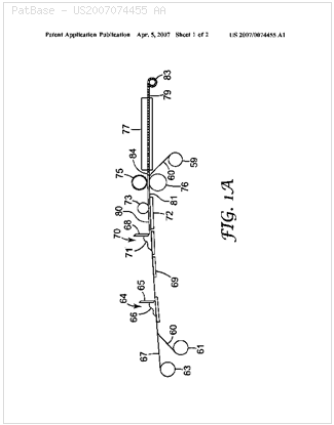
Erfinder: KYONGCHEOL LEE
LEE KYONG CHEOL
MOREN LOUIS S
WELYGAN DENNIS G

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0011-001
B24D2203-00

Zusammenfassung:

Source: US2007074455 AA [EN] A method of making an **abrasive** product includes compacting a cohesive layer of **abrasive** particles and particulate curable binder precursor prior to forming curable shaped structures, and then at least partially curing the curable binder precursor



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 30

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

Patentnummer: WO2014160578A1

Anmeldung:
WO2014US31248
EP20140774036
US20190523419
US20140780913
JP20160505499T
CN201480019284
MX20150013566

Priorität:
US20130806630P 20130329
US20140780913 20140319
WO2014EP31248 20140319
WO2014US31248 20140319
US20190523419 20190726

Patentfamilie:
WO2014160578A1
EP2978567A1
EP2978567A4
US10850368B2
US10414023B2
US2019345897A1
US2016052106A1
JP6591397B2
JP2016514627T2
CN105121096A
CN105121096B
MX2015013566A1

Anmelder: 3M INNOVATIVE PROPERTIES CO

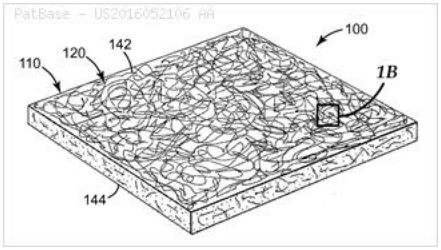
Erfinder:
BAUM SCOTT A
FEDOROVA NATALIYA V
MARTINEZ JAIME A
WOO EDWARD J

IPC-Notationen:
B24D0003-00
B24D0003-28
B24D0003-32
B24D0003-34
B24D0011-00
B24D0018-00
F02B0029-04
F02B0037-16
F02D0019-02
F02D0019-10
F02D0041-00
F02D0041-14
F02M0021-04
F02M0026-04
F02M0043-00

CPC-Notationen:
B24D0003-32
B24D0003-346
B24D0011-001
B24D0018-0027
F02B0029-0418
F02B0037-16
F02D0019-023
F02D0019-105
F02D0041-0027
F02D2041-1433
F02D2041-1434
F02D2200-0402
F02M0021-04
F02M0021-047
F02M0026-04
F02M0043-00
Y02T0010-10
Y02T0010-12
Y02T0010-144
Y02T0010-146
Y02T0010-30
Y02T0010-32
Y02T0010-36

Zusammenfassung:

Source: US2016052106 AA [EN] Nonwoven **abrasive** articles comprise a nonwoven **abrasive** member having an overlayer composition comprising a fatty acid metal salt disposed thereon adjacent to a working surface. The nonwoven **abrasive** member comprises **abrasive** particles adhered to a fiber web by a binder. The **abrasive** particles may be exposed and/or the nonwoven **abrasive** member may have suitable frictional properties. Methods of making the same are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 31

Titel: BACKFILL TO SECURE ORIENTATION FOR **ABRASIVE** STRUCTURE

Patentnummer: WO2020128854A1

Anmeldung: WO2019IB60950

Priorität: US20180781100P 20181218
US20190825938P 20190329

Patentfamilie: WO2020128854A1

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: ECKEL JOSEPH B
HAWKINS ANN M
KOENIG AMELIA W
LI JUNTING
NELSON THOMAS J
NIENABER AARON K

IPC-Notationen:
B24D0003-00
B24D0003-28
B24D0003-34
B24D0011-00
C09K0003-14

CPC-Notationen:
B24D0003-28
B24D0003-342
B24D0011-001
B24D0018-0072
B24D2203-00
C09K0003-1409

Zusammenfassung:

Source: WO20128854 A1 [EN] Various embodiments **disclosed** relate to an **abrasive** article and method of forming **abrasive** articles using backfill to secure orientation of shaped **abrasive** particles. An example method includes aligning a plurality of shaped **abrasive** particles into a pattern, and transferring the pattern to a backing substrate containing a layer of adhesive. Prior to curing the adhesive, a plurality of backfill particles are transferred to the backing substrate, where at least some of the plurality of backfill particles are disposed between the plurality of shaped **abrasive** particles

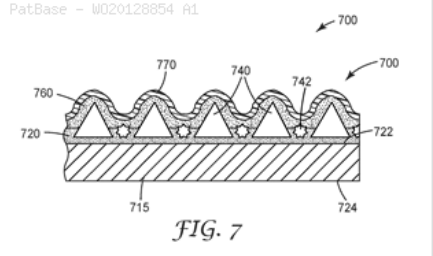


FIG. 7

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 32

Titel: **ABRASIVE** ARTICLE CONTAINING AN INORGANIC METAL ORTHOPHOSPHATE

Patentnummer: WO9714535A1

Anmeldung: WO1996US14391
EP19960932185
DE19966022734T
US19990344760
US19970942731
JP19970515812T
KR19980702799

Priorität: US19950545871 19951020
WO1996US14391 19960906
US19970942731 19971002
US19990344760 19990625

Patentfamilie: WO9714535A1
EP0855948B1
EP0855948A1
DE69622734T2
DE69622734D1
US6270543B1
US5961674A
JP11513620T2
KR19990064304A

Anmelder: 3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

Erfinder: GAGLIARDI JOHN J
HOUCK CHARLES H

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

CPC-Notationen: **B24D0003-004**
B24D0003-344
B24D0011-001
B24D0011-04
Y10T0428-258
Y10T0428-31511
Y10T0428-31942
Y10T0428-31946

Zusammenfassung:

Source: US5961674 A [EN] An **abrasive** article, and methods of making and using same, containing an inorganic metal orthophosphate salt. The **abrasive** article including a coated **abrasive** article having a size or supersize coating layer containing an alkali metal or alkaline earth metal orthophosphate salt devoid of hydrogen. The inventive **abrasive** article reduces the **grinding** energy required while improving abrading efficiency in some cases

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 33

Titel: COATED **ABRASIVE** ARTICLE

Patentnummer: WO03080294A1

Anmeldung: WO2003US01274
EP20030707409
DE20036004845T
US20020100693
JP20030578106T
AU20030209260
AT20030707409T
BR2003PI07728

Priorität: US20020100693 20020318
WO2003US01274 20030116

Patentfamilie: WO03080294A1
EP1487612B1
EP1487612A1
DE60304845T2
DE60304845D1
US6758734B2
US2003176156A1
JP4411083B2
JP2005520698T2
AU2003209260A1
AT324226E
BRPI0307728A

Anmelder: 3M INNOVATIVE PROPERIES COMPAN
3M INNOVATIVE PROPERTIES CO

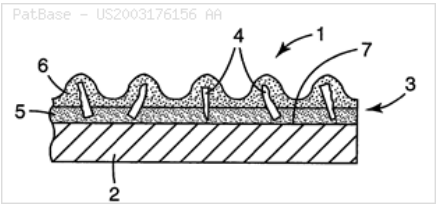
Erfinder: BRAUNSCHWEIG EHRICH J
SYVERSON DAIDRE L
WOO EDWARD J

IPC-Notationen: **B24D0003-02**
B24D0003-20
B24D0003-28
B24D0011-00

CPC-Notationen: B24D0003-28

Zusammenfassung:

Source: US2003176156 AA [EN] Coated **abrasive** articles comprise a backing and an **abrasive** layer, wherein at the **abrasive** layer comprises a reaction product of components comprising polyfunctional acrylate, alicyclic polyepoxide, and aromatic polyepoxide having an average epoxy functionality of at least 2.5



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 34

Titel: LAYERED ALUMINA-BASED **ABRASIVE** GRIT, **ABRASIVE** PRODUCTS, AND METHODS

Patentnummer: WO9954424A1

Anmeldung: WO1999US05745
EP19990911431
DE19996017772T
US20000566204
US19980064491
JP20000544758T

Priorität: US19980064491 19980422
WO1999US05745 19990316
US20000566204 20000505

Patentfamilie: WO9954424A1
EP1080159B1
EP1080159A1
DE69917772T2
DE69917772D1
US6264710B1
US6080216A
JP2002512297T2

Anmelder: 3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

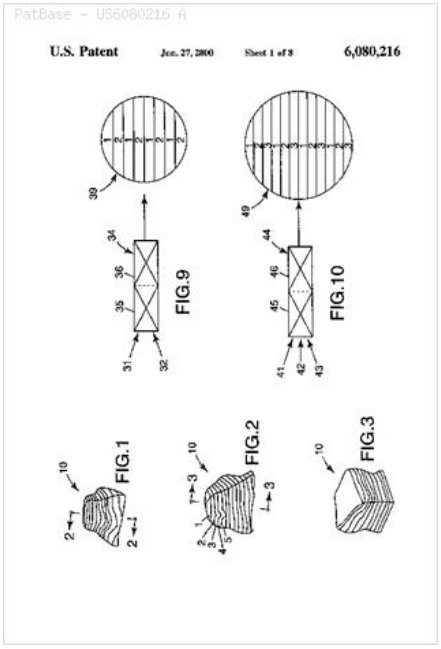
Erfinder: ERICKSON DWIGHT D

IPC-Notationen: **B24D0003-04**
B24D0003-06
B24D0003-14
B24D0003-20
B24D0011-00
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-06**
B24D0003-14
B24D0003-20
B24D0011-001
C09K0003-1409
C09K0003-1418
Y10T0428-2991
Y10T0428-2993

Zusammenfassung:

Source: US6080216 A [EN] Alumina-based **abrasive** material having at least an internal layer is provided. Preferably, the **abrasive** material results from co-extrusion of at least two different sols. In some preferred processing, steps to provide multiple internal layers are conducted



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 35

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

Patentnummer: WO2019207416A1

Anmeldung: WO2019IB53145
EP20190727068
US20200049521
CN201980028132

Priorität: US20180661762P 20180424
US20190049521 20190416
WO2019IB53145 20190416

Patentfamilie: WO2019207416A1
EP3784434A1
US2021046614A1
CN112020407A

Anmelder: 3M INNOVATIVE PROPERTIES CO

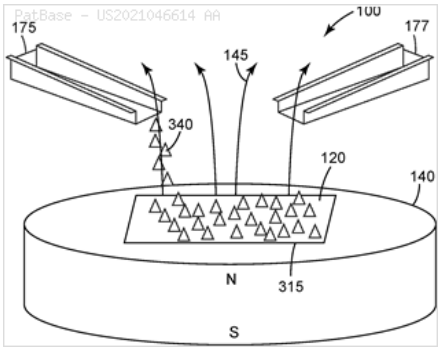
Erfinder: ECKEL JOSEPH B
NIENABER AARON K

IPC-Notationen: **B24D0003-04**
B24D0003-20
B24D0003-34
B24D0011-00
B24D0011-02
B24D0018-00

CPC-Notationen: **B24D0003-04**
B24D0003-20
B24D0003-344
B24D0011-001
B24D0011-02
B24D0018-0054
B24D0018-0072
B24D2203-00

Zusammenfassung:

Source: US2021046614 AA [EN] A method of making a coated **abrasive** article is **disclosed**. A backing has first and second opposed major surfaces. A make layer precursor is disposed on at least a portion of the first major surface. Magnetizable **abrasive** particles are disposed onto the make layer precursor while under the influence of an applied magnetic field. At least a majority the magnetizable **abrasive** particles extend away from the make layer precursor in an orientation substantially aligned with the applied magnetic field. Non-magnetizable particles are then disposed onto the make layer precursor while under the influence of the applied magnetic field. At least some of the non-magnetizable particles are disposed between the magnetizable **abrasive** particles. Then, the make layer precursor is at least partially cured to provide a make layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 36

Titel: BONDED **ABRASIVE WHEEL** AND METHOD OF MAKING THE SAME

Patentnummer: WO2018080784A1

Anmeldung: WO2017US55940
EP20170866261
US20170343813
CN201780065264

Priorität: US20160412440P 20161025
US20170343813 20171010
WO2017US55940 20171010

Patentfamilie: WO2018080784A1
EP3532250A1
EP3532250A4
US2019270182A1
CN109862999A

Anmelder: 3M INNOVATIVE PROPERTIES CO

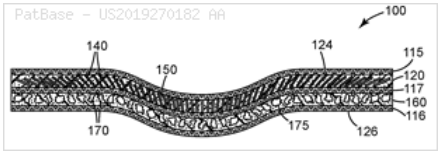
Erfinder: ADEFRIS NEGUS B
ECKEL JOSEPH B
JESME RONALD D
NEINABER AARON K
NELSON THOMAS J
NIENABER AARON K
WEST DON V

IPC-Notationen: **B24D0003-06**
B24D0003-28
B24D0003-34
B24D0005-12
B24D0005-14
B24D0007-08
B24D0018-00

CPC-Notationen: **B24D0003-06**
B24D0003-28
B24D0003-346
B24D0005-12
B24D0005-14
B24D0007-08
B24D0018-0009

Zusammenfassung:

Source: US2019270182 AA [EN] A bonded **abrasive wheel** comprises magnetizable **abrasive** particles retained in an organic binder. The bonded **abrasive wheel** has a central portion adjacent to a central hub, an outer circumference and a rotational axis extending through the central hub. The magnetizable **abrasive** particles adjacent to the central hub are aligned at an average angle of less than 35 degrees with respect to the rotational axis, and the magnetizable **abrasive** particles adjacent to the outer circumference of the bonded **abrasive wheel** are aligned at an average angle that is from 35 and 90 degrees, inclusive, with respect to the rotational axis. Methods of making a bonded **abrasive wheel** are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 37

Titel: BONDED **ABRASIVE WHEEL** AND METHOD OF MAKING THE SAME

Patentnummer: WO2018080704A1

Anmeldung: WO2017US53695
EP20170864183
US20170343816
CN201780065866

Priorität: US20160412411P 20161025
US20170343816 20170927
WO2017US53695 20170927

Patentfamilie: WO2018080704A1
EP3532248A1
EP3532248A4
US2019262973A1
CN109890566A

Anmelder: 3M INNOVATIVE PROPERTIES CO

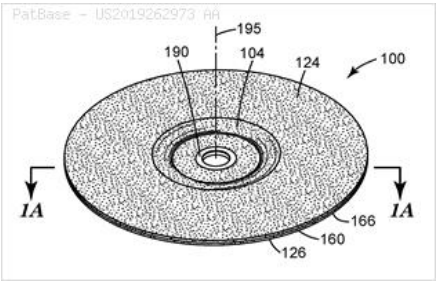
Erfinder: ECKEL JOSEPH B
JESME RONALD D
NELSON THOMAS J
NIENABER AARON K
VEERARAGHAVAN BADRI

IPC-Notationen: B24D0003-14
B24D0003-28
B24D0003-34
B24D0005-12
B24D0005-14
B24D0018-00

CPC-Notationen: B24D0003-14
B24D0003-28
B24D0003-346
B24D0005-12
B24D0005-14
B24D0018-00
B24D0018-0009

Zusammenfassung:

Source: US2019262973 AA [EN] A bonded **abrasive wheel** comprises magnetizable **abrasive** particles retained in a first organic binder. The bonded **abrasive wheel** has a central portion adjacent to a central hub, an outer circumference, and a rotational axis extending through the central hub. A majority of the magnetizable **abrasive** particles are substantially parallel to the rotational axis. A method of making the bonded **abrasive wheel** is also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 38

Titel: COMPOSITION FOR **CUTTING WHEEL** AND **CUTTING WHEEL** BY USING THE SAME

Patentnummer: WO2011028561A3

Anmeldung:
WO2010US46581
EP20100814270
DE201060027961T
US20100386527
CN201080037759
KR20090082535
TW20100129533
IN2012CN01956
TH20121000895

Priorität:
KR20090082535 20090902
EP20100814270 20100825
US20100386527 20100825
WO2010US46581 20100825

Patentfamilie:
WO2011028561A3
WO2011028561A2
EP2473319B1
EP2473319A4
EP2473319A2
DE602010027961D1
US8956429B2
US2012149289A1
CN102481682A
CN102481682B
KR20110024506A
KR101659078B1
TW201125916A
TWI487739B
IN01956CN2012A
TH131447A

Anmelder:
3M CO MINNESOTA MINING AND MFG COMPANY
3M INNOVATIVE PROPERTIES CO
LEE DOO HYUN
LEE SOO WON
NOH BAEK NAM

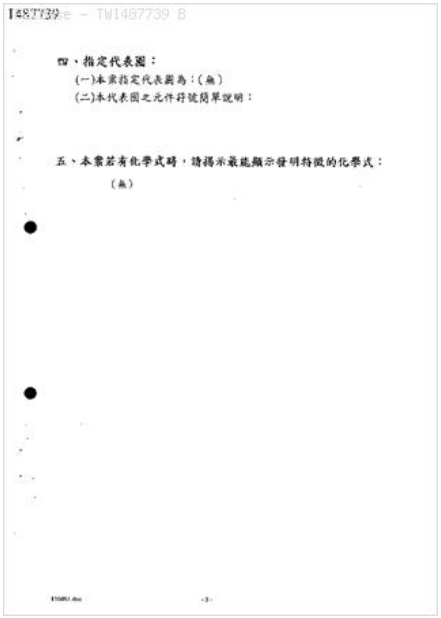
Erfinder:
LEE DOO HYUN
NOH BAEK NAM
SOO WON LEE

IPC-Notationen:
B24D0003-20
B24D0003-28
B24D0003-30
B24D0003-34
B24D0005-12
B24D0018-00
B26D0001-14
C08L0025-18
C08L0075-04
C08L0079-08
C09K0003-14

CPC-Notationen:
B24D0003-30
B24D0003-34
B24D0003-346
B24D0005-12
C08J0005-04
C09K0003-14

Zusammenfassung:

Source: US2012149289 AA [EN] **Disclosed** are a **cutting wheel** composition, and a **cutting wheel** using the **cutting wheel** composition. The **disclosed** composition includes 50 to 85 wt percent of **abrasive** particles, 10 to 25 wt percent of binder resin, and balance **filler**, wherein the binder resin includes a phenolic resin as a first binder resin; and at least one of a (bis) maleimide resin and a cyanate ester resin as a second binder resin. The composition includes at least one of the (bis) maleimide resin and the cyanate ester resin, as well the phenolic resin, as the binder resin, and thereby makes it possible to fabricate a **cutting wheel** having improved **life** characteristics through the improvement of heat-resistance and scratch-resistance



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 39

Titel: ORGANIC COMPOUNDS SUITABLE AS REACTIVE DILUENTS, AND BINDER PRECURSOR COMPOSITIONS INCLUDING SAME

Patentnummer: WO9511774A1

Anmeldung:
WO1994US10900
EP19940929893
US19960606512
US19960606325
US19960605987
US19960605986
US19950522610
US19950474289
US19940334817
CA19942174113
AU19940079202
ES19940929893T

Priorität:
US19930143824 19931027
US19930144199 19931220
WO1994US10900 19940927
US19940334817 19941104
US19950474289 19950607
US19950522610 19950901
US19960605986 19960223
US19960605987 19960223
US19960606325 19960223
US19960606512 19960223

Patentfamilie:
WO9511774A1
EP0724503B1
EP0724503A1
US5736747A
US5733648A
US5710281A
US5709935A
US5667842A
US5580647A
US5523152A
CA2174113A
AU677446B2
AU199479202A1
ES2123159T3

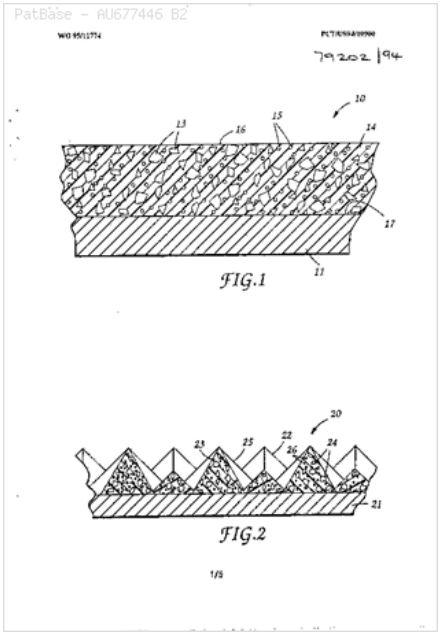
Anmelder: MINNESOTA MINING AND MFG

Erfinder:
DAHLKE GREGG D
EDBLOM ELIZABETH C
KINCAID DON H
KIRK ALAN R
LARSON ERIC G
THURBER ERNEST L

IPC-Notationen:	B24D0003-20 B24D0003-28 **B24D0003-34** B24D0011-00 C07C0069-00 C07C0069-017 C07C0069-54 C07D0209-00 C07D0209-48 C07D0261-00 C07D0261-14 C07D0263-00 C07D0263-14 C07D0277-00 C07D0277-24 C07D0307-00 C07D0307-68 C07D0333-00 C07D0333-38	**CPC-Notationen:**	B24D0003-28 **B24D0003-344** B24D0011-00 C07C0069-017 C07C0069-54 C07D0209-48 C07D0261-14 C07D0263-14 C07D0277-24 C07D0307-68 C07D0333-38 Y10T0428-25 Y10T0428-252 Y10T0428-257 Y10T0428-259 Y10T0442-2115 Y10T0442-699

Zusammenfassung:

Source: US5523152 A [EN] Organic compounds having at least one ethylenically-unsaturated group are described, the organic compounds being suitable for use in coatable compositions as reactive diluents; compounds of the invention preferably have a divalent organic linking moiety devoid of reactive groups other than optional ethylenically-unsaturated groups, and a polar organic moiety and are particularly adept in solubilizing aminoplast resins having radiation-curable pendant groups



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 40

Titel: **Abrasive** articles including a polymeric **additive**

Patentnummer: WO9915315A1

Anmeldung: WO1998US00051
EP19980902387
US19970933392
JP20000512669T
CA19982301553
AU19980059067
BR1998PI12230

Priorität: US19970933392 19970919
WO1998US00051 19980108

Patentfamilie: WO9915315A1
EP1015178A1
US5914299A
JP2001517713T2
CA2301553A
AU199859067A1
BRPI9812230A

Anmelder: 3M CO
MINNESOTA MINING AND MFG

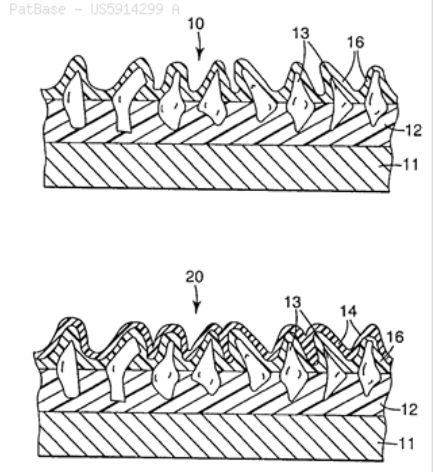
Erfinder: DIZIO JAMES P
DIZO JAMESPATRICK
HARMER WALTER LEE
KIRK ALAN RAYMOND

IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
C09K0003-14

CPC-Notationen: B24D0003-285
B24D0003-34
B24D0011-001

Zusammenfassung:

Source: US5914299 A [EN] An **abrasive** article is provided that includes at least one binder system formed from a polymeric **additive** and a thermosetting resin. The polymeric **additive** includes a polymeric backbone having substituents attached thereto, wherein the substituents include at least one urethane linked nitrogen bonded side chain having about 5 carbon atoms or more and a terminal methyl group and at least one oxygen linked water solubilizing group. An **abrasive** article that includes the binder system exhibits an increase of workpiece surface abraded in a Woodsanding Normal Force Test as compared to an **abrasive** article including a binder system formed from a composition containing substantially no polymeric **additive**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 41

Titel: METHOD OF MAKING A COATED **ABRASIVE**

Patentnummer: WO2005035193A3

Anmeldung: WO2004US24090
EP20040757311
US20030668410
JP20060527969T
CN200480034363
KR20067007715
BR2004PI14646

Priorität: US20030668410 20030923
WO2004US24090 20040727

Patentfamilie: WO2005035193A3
WO2005035193A2
EP1680259A2
US2005060944A1
JP2007505754T2
CN1882416A
KR20060093116A
BRPI0414646A

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

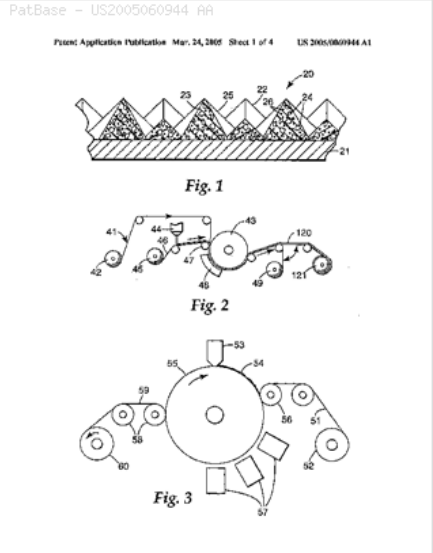
Erfinder: CULLER SCOTT R HAAS JOHN D SIM
CULLER SCOTT R M
HAAS JOHN D M
SIMONS JEFFREY R M CENTER P O

IPC-Notationen: B24D0003-20
B24D0003-28
B24D0011-00
B24D0011-04

CPC-Notationen: B24D0003-28
B24D0011-04

Zusammenfassung:

Source: US2005060944 AA [EN] An **abrasive** article includes an array of protruding **abrasive** units. Each unit has a base and a distal apex that is off-center from the base when projected on to a plane that is coplanar with the base. The **abrasive** article includes a backing bonded to an **abrasive** coating formed to include the aforementioned **abrasive** units. Methods for making the **abrasive** article include nipping a production **tool**, an **abrasive** slurry, and the backing. A binder within the slurry is cured during fabrication. The **abrasive** article may be used to abrade a workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 42

Titel: Radiation curable **abrasive** article with tie coat and method

Patentnummer: WO9733719A1

Anmeldung: WO1997US01322
EP19970904025
DE19976029937T
US19970996354
US19960616544
JP20070260012
JP19970532588T
CA19972247273
AU19970018437

Priorität: US19960616544 19960315
JP19970532588 19970130
WO1997US01322 19970130
US19970996354 19971222

Patentfamilie: WO9733719A1
EP0886558B1
EP0886558A1
DE69729937T2
DE69729937D1
US5855632A
US5700302A
JP2008012670A2
JP2000506452T2
CA2247273A
AU199718437A1

Anmelder: MINNESOTA MINING AND MFG

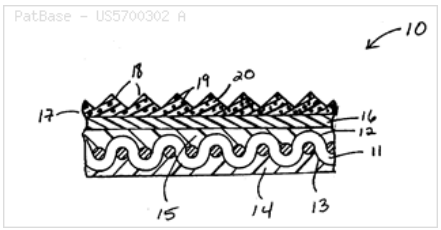
Erfinder: CULLER SCOTT R
STOETZEL WILLIAM L

IPC-Notationen: B24D0003-20
B24D0003-28
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0011-00
B24D0018-0072

Zusammenfassung:

Source: US5700302 A [EN] A method of preparing an **abrasive** article, and the article produced therefrom is provided. The method includes the steps of: providing a backing having a first major surface; coating the first major surface of the backing with a tie coat precursor, wherein the tie coat precursor comprises a first radiation curable component; applying an **abrasive** slurry to the first major surface of the backing after coating the tie coat precursor thereon, wherein the **abrasive** slurry comprises a plurality of **abrasive** particles and a binder precursor, and further wherein the binder precursor comprises a second radiation curable component; at least partially curing the tie coat precursor; and at least partially curing the binder precursor to form an **abrasive** article, wherein the **abrasive** article comprises a backing, an **abrasive** layer, and a tie coat disposed between the backing and the **abrasive** layer. Preferably, the method provides a structured **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 43

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

Patentnummer: WO2020212779A1

Anmeldung: WO2020IB52812

Priorität: US20190834745P 20190416

Patentfamilie: WO2020212779A1

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: GORODISHER ILYA
NELSON THOMAS J
SORENSON GREGORY P
THURBER ERNEST L

IPC-Notationen: B24D0003-28
B24D0003-34
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0018-0072

Zusammenfassung:

Source: WO20212779 A1 [EN] An **abrasive** article comprises **abrasive** particles adhered to a substrate by a binder material. The binder material comprises an at least partially cured resole phenolic resin and an organic polymeric rheology modifier. The amount of the at least partially cured resole phenolic resin comprises from 75 to 99.99 weight percent of the combined weight of the at least partially cured resole phenolic resin and the organic polymeric rheology modifier. Methods of making the **abrasive** article are also **disclosed**

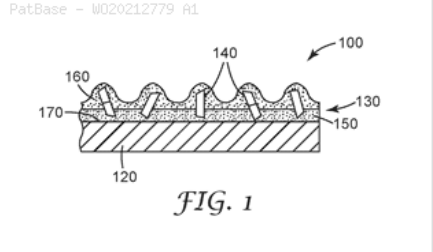


FIG. 1

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 44

Titel: **ABRASIVE DISKS**

Patentnummer: US2018369992A1

Anmeldung: US20180014382

Priorität: US20170522799P 20170621
US20180014382 20180621

Patentfamilie: US2018369992A1

Anmelder: FLEXOVIT USA INC

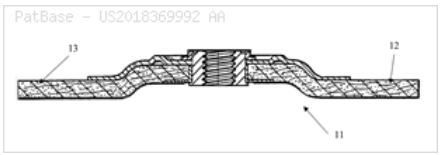
Erfinder: CALABRESE THOMAS
LAPORTE CHRISTINE
RIEHLE ROBERT

IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-342**
B24D0003-346
B24D0003-348
B24D0005-12
B24D0013-14

Zusammenfassung:

Source: US2018369992 AA [EN] The present invention relates to a **grinding disk** or **wheel**, flap **disk** or **cut-off disk** which will increase the effectiveness of each battery charge during **tool** use



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 45

Titel: Method FOR APPLYING AT LEAST ONE OF **GRINDING** **ADDITIVE** ON AT LEAST A **GRINDING** GRAIN **ELEMENT** (Machine translation)

Patentnummer: DE102018201663A1

Anmeldung: DE201810201663

Priorität: DE201810201663 20180205

Patentfamilie: DE102018201663A1

Anmelder: BOSCH GMBH ROBERT

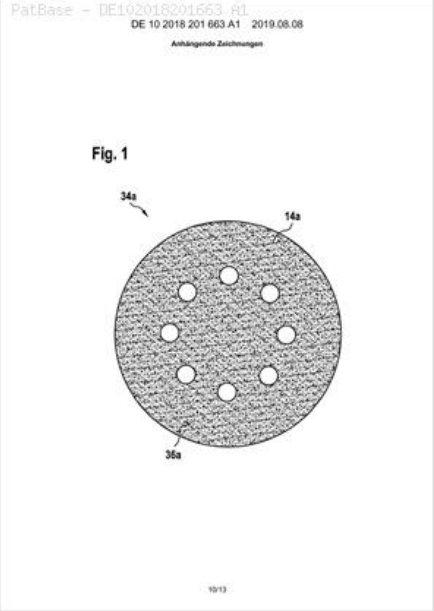
Erfinder: FUENFSCHILLING STEFAN
MISAK JIRI

IPC-Notationen: **B24D0003-34**
C09K0003-14

CPC-Notationen: **B24D0003-346**
B24D0011-00
B24D0018-0072
C09K0003-1409

Zusammenfassung:

Source: DE102018201663 A1 [MT] The invention proceeds from a process for applying at least one of **grinding** **additive** (12a; 12b; 12C) onto at least a **grinding** grain **element** (14a, 14b, 14c) , and in particular a loose **abrasive** grain **element** (14a, 14b, 14c) .It is proposed that, in at least one process step the **abrasive** **additive** (12a; 12b; 12c) , an **aid** of at least one fluid or at least an electrostatic charge on the **abrasive** grain **element** (14a, 14b, 14c) is applied



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 46

Titel: METHOD OF MAKING A COATED **ABRASIVE**

Patentnummer: WO2005035197A1

Anmeldung: WO2004US24137
EP20040779270
US20030668411
JP20060527971T
CN200480034377
KR20067007730
BR2004PI14640

Priorität: US20030668411 20030923
WO2004US24137 20040727

Patentfamilie: WO2005035197A1
EP1667817A1
US2005060945A1
JP2007505756T2
CN1882421A
KR20060061387A
BRPI0414640A

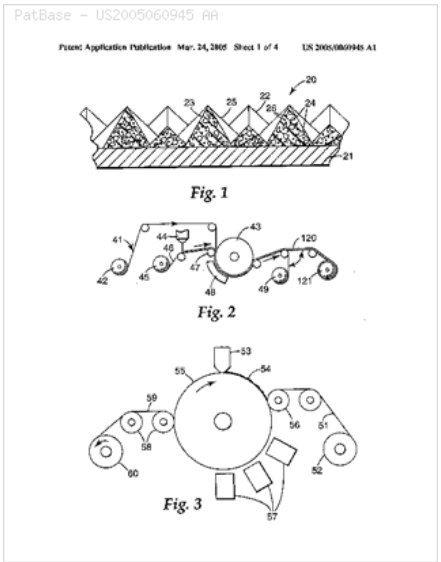
Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

Erfinder: CULLER SCOTT R HAAS JOHN D SIM
SIMONS JEFFREY R

IPC-Notationen: B24D0011-00 **CPC-Notationen:** B24D0011-005

Zusammenfassung:

Source: US2005060945 AA [EN] An **abrasive** article includes an array of protruding **abrasive** units. Each unit has a base and a distal apex that is off-center from the base when projected on to a plane that is coplanar with the base. The **abrasive** article includes a backing bonded to an **abrasive** coating formed to include the aforementioned **abrasive** units. Methods for making the **abrasive** article include nipping a production **tool**, an **abrasive** slurry, and the backing. A binder within the slurry is cured during fabrication. The **abrasive** article may be used to abrade a workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 47

Titel: STRUCTURED **ABRASIVE** ARTICLE

Patentnummer: WO2005035199A1

Anmeldung: WO2004US24829
EP20040779781
US20030668799
JP20060527982T
CN200480034362
KR20067007701
BR2004PI14642

Priorität: US20030668799 20030923
WO2004US24829 20040803

Patentfamilie: WO2005035199A1
EP1663580A1
US2005064805A1
JP2007505759T2
CN1882417A
KR20060069880A
BRPI0414642A

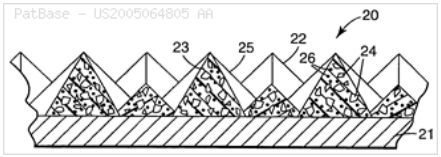
Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

Erfinder: CULLER SCOTT R HAAS JOHN D SIM
SIMONS JEFFREY R

IPC-Notationen: B24D0011-00
B24D0011-04

CPC-Notationen: B24D0011-00
B24D2203-00

Zusammenfassung:



Source: US2005064805 AA [EN] An **abrasive** article includes an array of protruding **abrasive** units. Each unit has a base and a distal apex that is off-center from the base when projected on to a plane that is coplanar with the base. The **abrasive** article includes a backing bonded to an **abrasive** coating formed to include the aforementioned **abrasive** units. Methods for making the **abrasive** article include nipping a production **tool**, an **abrasive** slurry, and the backing. A binder within the slurry is cured during fabrication. The **abrasive** article may be used to abrade a workpiece

---

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 48

Titel: STRUCTURED **ABRASIVE** ARTICLE

Patentnummer: WO2005035200A1

Anmeldung: WO2004US24492
EP20040786137
DE200460009950T
US20030668754
JP20060527978T
CN200480034378
KR20067007702
AT20040786137T
BR2004PI14638

Priorität: US20030668754 20030923
WO2004US24492 20040729

Patentfamilie: WO2005035200A1
EP1670617B1
EP1670617A1
DE602004009950T2
DE602004009950D1
US2005060942A1
JP2007505757T2
CN1882423A
KR20060093114A
AT377482E
BRPI0414638A

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY

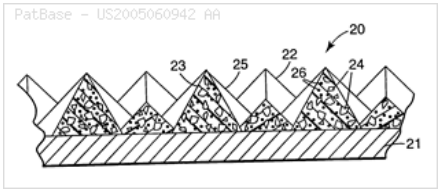
Erfinder: CULLER SCOTT R HAAS JOHN D SIM
SIMONS JEFFREY R

IPC-Notationen: B24D0011-00
B24D0018-00

CPC-Notationen: B24D0011-001
B24D0018-0009
B24D2203-00

Zusammenfassung:

Source: US2005060942 AA [EN] An **abrasive** article includes an array of protruding **abrasive** units. Each unit has a base and a distal apex that is off-center from the base when projected on to a plane that is coplanar with the base. The **abrasive** article includes a backing bonded to an **abrasive** coating formed to include the aforementioned **abrasive** units. Methods for making the **abrasive** article include nipping a production **tool**, an **abrasive** slurry, and the backing. A binder within the slurry is cured during fabrication. The **abrasive** article may be used to abrade a workpiece



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 49

Titel: Rubber modified phenolic friction particles

Patentnummer: EP0038688B1

Anmeldung: EP19810301696
DE19813175325T
US19800141140
JP19810056364
CA19810374362

Priorität: US19800141140 19800417
CA19810374362 19810401

Patentfamilie: EP0038688B1
EP0038688A3
EP0038688A2
DE3175325D1
US4316827A
JP56163145A2
JP61017845B4
CA1169182A1

Anmelder: UNION CARBIDE CORP

Erfinder: BLICKENSDERFER JOHN RAYMOND
JIYON REIMONDO BURITSUKENSUDAA
PACALA LUBA ANNE
RUBA ANNE PAKARA

IPC-Notationen: C08G0008-00
C08G0008-04
C08G0008-24
C08G0008-38
C08J0003-12
C08J0005-14
C08L0007-00
C08L0021-00
C08L0033-00
C08L0033-02
C08L0061-00
C08L0061-04
C08L0061-06
C08L0061-14
F16D0069-02

CPC-Notationen: C08G0008-04
C08G0008-24
C08G0008-38
C08J0003-12
C08J2361-06
C08L0061-06
F16D0069-025

Zusammenfassung:

Source: US4316827 A [EN] Compositions useful as frictions particles comprised of tri- and/or tetrafunctional phenol, rubber, aldehyde, protective colloid and a reaction promoting compound. The friction particles are formulated into friction **elements**. A process for producing the friction particles in particulate form

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 50

Titel: COPPER-FREE FRICTION MATERIAL COMPOSITION FOR BRAKE PADS

Patentnummer: WO2012159286A1

Anmeldung: WO2011CN76138
US20110118875
CA20112835326
CN201110132151

Priorität: CN201110132151 20110521
WO2011CN076138 20110622
WO2011CN76138 20110622

Patentfamilie: WO2012159286A1
US8962711B2
US2014357758A1
CA2835326A
CN102191016A
CN102191016B

Anmelder: RUIYANG AUTOMOBILE COMPONENTS XIANTAO CO LTD
RUIYANG AUTOMOTIVE MATERIALS XIANTAO CO LTD
ZHANG JIM ZEWEI

Erfinder: ZHANG JIM ZEWEI

IPC-Notationen:
A01H0005-00
A63B0037-00
C04B0026-06
C04B0026-12
C08G0065-48
C08G0073-10
C08J0005-14
C08K0003-00
C08L0021-00
C08L0061-10
C08L0077-10
C09K0003-14
F16D0069-02

CPC-Notationen:
F16D0069-02
F16D0069-026
F16D0069-028
F16D2200-0034
F16D2200-0065
F16D2200-0086

Zusammenfassung:

Source: US2014357758 AA [EN] A copper-free friction material composition for brake pads consists of the following components by weight parts: 0.43 parts of aramid fiber, 1.9 parts of tyre powder, 6 parts of heavy magnesia, 2.55 parts of calcined petroleum coke, 8 parts of ceramic fiber, 6.5 parts of phenolic resin, 14 parts of aluminium silicate fiber, 22 parts of **potassium** hexatitanate crystal whisker, 25 parts of barite powder, 5 parts of granular graphite, 2 parts of **antimony** sulfide, 2.8 parts of friction powder of cashew nut oil, 0.9 part of boron nitride, 5 parts of flake aluminum powder, and 0.6 parts of tantalum carbide. The friction material of the present invention is environment-friendly material and contains little heavy metals; hence the friction material is highly environment friendly. And trials show that it has satisfactory high temperature and thermal decay resistant performance, long **service life**, good abrasion resistance and stable friction coefficient. With the friction material of the present invention used, the brake pad of vehicles is sensitive and stable during braking, produces no screech, is comfortable and has no damage on coupling plate

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 51

Titel: **ABRASIVE** WIPING ARTICLES AND A PROCESS FOR PREPARING SUCH ARTICLES

Patentnummer: WO9315179A1

Anmeldung:
WO1993US00738
EP19930904679
DE19936009040T
US19920868386
JP19930513411T
JP19930513411
CA19932129244
AU19930035957
AT19930904679T
DK19930904679T
ES19930904679T
FI19940003607
GR19970400437T

Priorität:
US19920830811 19920204
US19920868386 19920414
WO1993US00738 19930127

Patentfamilie:
WO9315179A1
EP0625186B1
EP0625186A1
DE69309040T2
DE69309040D1
US5213588A
JP3253620B2
JP7503280T2
CA2129244C
CA2129244A
AU671098B2
AU199335957A1
AT150484E
DK0625186T3
ES2099425T3
FI109919B
FI943607A
FI943607A0
GR3022876T3

Anmelder: PROCTER AND GAMBLE CO

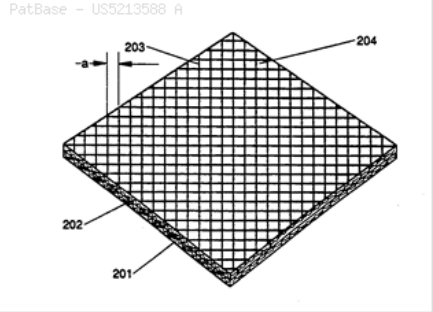
Erfinder:
BURCHNALL JOHN BILLINGS
FRANXMAN JAMES JOSEPH
MACKEY LARRY NEIL
WONG ARTHUR

IPC-Notationen:
A47L0013-16
A47L0013-17
B24D0003-20
B24D0003-28
C11D0011-04
C11D0017-04

CPC-Notationen:
A47L0013-17
B24D0003-28
C11D0017-049

Zusammenfassung:

Source: US5213588 A [EN] **Disclosed** are **abrasive** wiping articles, e.g., nonwoven, preferably paper towels, which comprise an absorbant nonwoven substrate having printed thereon a cured scrubbing bead mixture which comprises a) certain carboxylated, ionically-charged polymeric **abrasive** particles, b) a carboxyl group-containing polymeric adhesive material, and c) an amino-epichlorohydrin, e.g., Kymene TM, cross-linking agent. The polymeric **abrasive** particles range in size from about 20 to 400 microns and have a Knoop hardness of from about 4 to 25. The polymeric adhesive material, upon curing, has a Knoop hardness of from about 0.5 to 17. Preferred wiping articles of the foregoing type have a pattern of the scrubbing bead mixture printed onto from about 20 percent to 70 percent of the surface area of a paper substrate with the **abrasive** particles affixed to the substrate in such a manner that their exposed portion extends for a distance of from about 40 to 300 microns above the surface of the paper substrate. Wiping articles of this type are especially useful for removing soil and stain from hard surfaces with the polymeric scrubbing particles thereon being especially resistant to removal during use. Also disclosed is a process for preparing abrasive wiping articles as hereinbefore described. Such a process involves printing a pattern of the scrubbing bead mixture onto the paper substrate, drying the printed substrate and then curing the solid components of the scrubbing bead mixture to affix the abrasive scrubbing particles to the substrate. Curing of the particular scrubbing bead mixture employed can take place at room temperature



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 52

Titel: METAL-RICH SILICEOUS COMPOSITIONS AND METHODS OF PRODUCING SAME

Patentnummer: WO2008058240A3

Anmeldung:
WO2007US84095
EP20070864119
US20090628472
US20060557548
JP20090535512T
CA20072669471
CN200780041110

Priorität:
US20060557548 20061108
WO2007US84095 20071108
US20090628472 20091201

Patentfamilie:
WO2008058240A3
WO2008058240A2
EP2079546B1
EP2079546A4
EP2079546A2
US8003707B2
US2010074974A1
US2008108497A1
JP5389660B2
JP2010509496T2
CA2669471C
CA2669471A
CN101534944A
CN101534944B

Anmelder:
HOLLAND BRIAN T
NALCO CO

Erfinder:
HOLLAND BRIAN T

IPC-Notationen:
A61K0008-00
A61K0008-04
A61K0008-19
A61K0008-25
B01F0003-12
B01J0020-10
B01J0021-00
B01J0021-08
B01J0023-44
B01J0023-54
B01J0023-56
B01J0023-76
B01J0023-847
B01J0029-04
B22F0001-00
B22F0009-00
B22F0009-16
B22F0009-24
B24D0003-34
C01B0017-00
C01B0033-00
C01B0033-14
C01B0033-141
C01B0033-151
C04B0035-14
C07K0001-00
C07K0001-14
C09D0001-00

CPC-Notationen:
B01J0020-103
B01J0020-16
B01J0020-3236
B01J0023-44
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B01J0023-70
B01J0027-13
B01J0029-049
B01J0035-0013
B01J0037-031
B01J0037-04
B82Y0030-00
C01B0033-141
C01B0033-151
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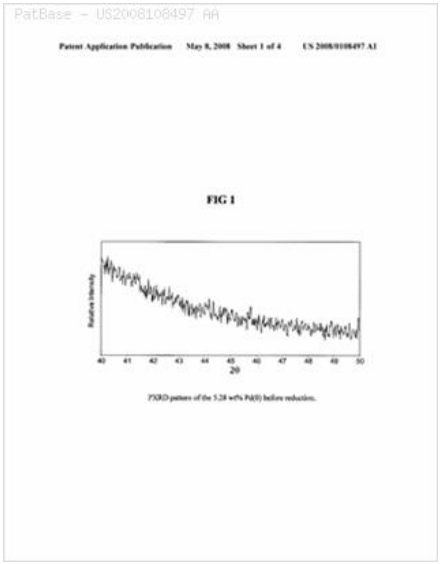
C01P2002-72
C01P2004-64
C01P2006-12
C01P2006-14

C09K0008-60
C09K0008-74
C09K0013-00
C09K0013-04
C12H0001-00
C12H0001-048
D21H0021-00
H01L0021-02
H01L0021-461

Zusammenfassung:

Source: US2008108497 AA [EN] A modified sol-gel method to create metal-rich siliceous material, such as colloidal silica or aluminosilicate particles is **disclosed**. Initially, the metal salt of choice is added to a silicic acid solution or a silicic acid solution containing aluminum salt. The aluminum is added to vary the metal-support interaction as it forms Al-O-Si linkages within the silica matrix. Besides aluminum, other metals can be added that form M-O-Si (M=Ti, B, etc.) linkages, which do not become reduced when treated with a reducing agent. Once the metal, silicic acid and/or aluminum salt is generated, it is subjected to colloidal growth by addition to a basic heel. Upon colloidal synthesis, the metal salt containing colloidal particle is left as is to maximize colloidal stability or is reduced with hydrazine to produce the zero valence metal-containing colloidal particle. Keeping a particle colloidal before use may be an effective method of forming a catalyst material as it can be easily spray-dried or mixed with other materials for extruded catalyst particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 53

Titel: SUBSTRATE POLISHING ARTICLE

Patentnummer: WO03002299A3

Anmeldung:
WO2002US20885
EP20010300412
US20020187643
US20020141316
US20020087502
US20020044894
US20000484867
JP20010010529
KR20010002944
TW20020114460
TW20000123641

Priorität:
US20000484867 20000118
US20000484868 20000118
US20010302314P 20010629
US20020044894 20020109
US20020087502 20020228
US20020141316 20020507
US20020187643 20020627

Patentfamilie:
WO03002299A3
WO03002299A2
EP1118432A3
EP1118432A2
US6702651B2
US6688957B2
US6623341B2
US6607428B2
US6533645B2
US2003003846A1
US2002164928A1
US2002132569A1
US2002086619A1
US2002077034A1
JP2002001651A2
KR20010076351A
TW581716B
TW486407B

Anmelder:
APPLIED MATERIALS INC
T0LLES
TOLLES ROBERT D

Erfinder:
ROBERT D TOORUZU
TOLLES ROBERT D

IPC-Notationen:
A61N0001-362
A61N0001-39
B24B0007-20
B24B0007-24
B24B0037-00
B24B0037-04
B24B0037-24
B24B0037-26
B24B0037-32
B24B0041-06
B24B0053-007
B24B0053-017
B24D0003-20
B24D0003-32

CPC-Notationen:
A61N0001-362
A61N0001-3956
B24B0037-24
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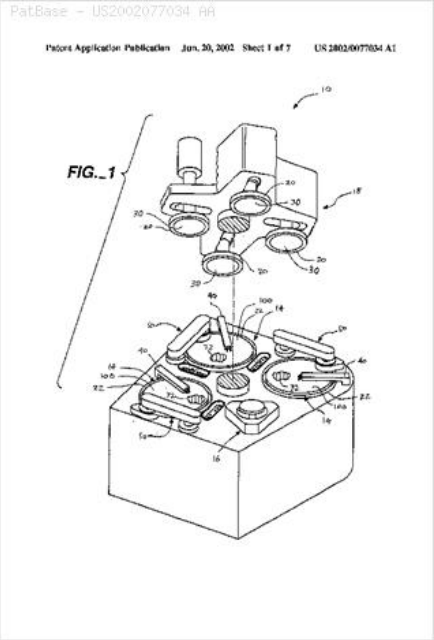
B24D0009-08

B24D0003-34
B24D0009-08
B24D0013-00
B24D0013-14
H01L0021-02
H01L0021-304

Zusammenfassung:

Source: US2002077034 AA [EN] A polishing material for chemical **mechanical** polishing has a mesh of fibers and a binder material holding the fibers in the mesh. The binder material coalesced among the fibers to leave pores in the interstices between the fibers of the mesh. The fibers and binder material provide the polishing material with a brittle texture. The fibers can be cellulose, and the binder material can be a phenolic resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 54

Titel: SULFATE DISPERSION CHROMATE REDUCER

Patentnummer: WO2005076858A3

Anmeldung:
WO2005US03072
WO2004US22430
EP20090012216
EP20050722640
EP20040257177
DE200460047208T
US20060388435
US20050048600
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JP20060541118T
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CA20042546266
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CN200580004190
CN200480034449
KR20067015551
KR20067009781
BR2004PI16622
BR2005PI07332
HK20070103326
HK20070106545
IN2006DN02509
RU20060121974

Priorität:
US20030524125 20031121
US20030524125P 20031121
US20040541842P 20040204
US20040890476 20040713
WO2004US22430 20040713
EP20040257177 20041119
WO2005US03072 20050131
US20050048600 20050201
US20060388435 20060324

Patentfamilie:
WO2005076858A3
WO2005056860A3
WO2005076858A2
WO2005056860A2
EP1533287B1
EP2143698A1
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EP1713739A2
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CA2546266A
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AU2004297504A1
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CN100441533C
CN100441531C
KR20070000400A
KR20060127116A
KR101168878B1
KR101135941B1
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BRPI0507332A
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HK1101570A3
HK1097510A1
HK1101570A1
IN02509DN2006A
RU2351559C2
RU2006121974A

Anmelder:
CHUN BYONG WA
CORNMAN CHARLES R
GEARY DAVID T
GRACE W R AND CO
GUPTA VIJAY
JARDINE LESLIE A

Erfinder:
BYONG WA JARDINE LESLIE A CORN
CHUN BIONG VA
CORNMAN CHARLES R
DZHARDIN LESLI A
GEARY DAVID T
GIARI DEHVID T
GUPTA VIDZHAJ
KORNMAN CHARL Z R
VIJAY CHUN BYONG WA JARDINE LE
VIJAY GUPTA

IPC-Notationen:
A62D0003-00
A62D0003-37
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C04B
C04B0007-00
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C04B0007-52
C04B0007-60
C04B0016-00
C04B0022-00
C04B0022-08
C04B0022-12
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C04B0024-00
C04B0024-02
C04B0024-10
C04B0024-12
C04B0024-24
C04B0024-26

CPC-Notationen:
C04B0007-52
C04B0022-12
C04B0022-142
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C04B2103-44
C04B2103-52
C04B2111-1075
C04B2111-1081

C04B0024-28
C04B0024-38
C04B0026-28
C04B0028-02
C04B0028-04
C04B0035-547
C04B0040-00
C09K0003-00

Zusammenfassung:

Source: US2005109243 AA [EN] A chromium VI reducing composition comprising particles of solid material selected from the group consisting of iron (II) sulfate and tin sulfate, the particles being substantially uniformly dispersed within a liquid carrier. Methods for modifying hydratable cementitious materials using the chromium reducing composition are also **disclosed** and provide advantages over dry powder or dissolved forms of sulfate compositions when used in cement manufacturing

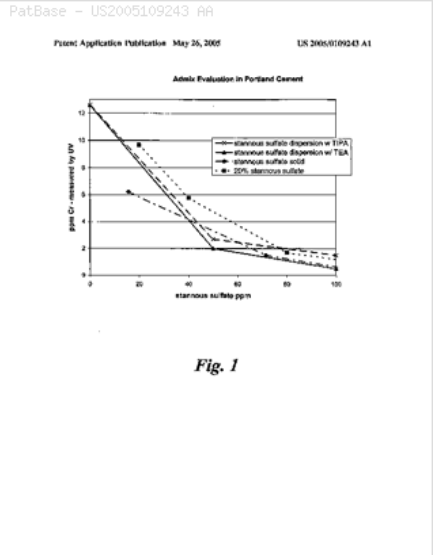

Fig. 1

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 55

Titel: **COOLANT** FOR THE TREATMENT AND PRODUCTION OF WAFERS

Patentnummer: EP1842899A1

Anmeldung: EP20070005527
DE200610015539
US20070731241
JP20070092874
CA20072576788
CN200710091989
KR20070031359
TW20070110906
IN2007KO00164
NO20070001672
PH20070000113

Priorität: DE200610015539 20060331
CA20072576788 20070131

Patentfamilie: EP1842899A1
DE102006015539A1
US2007228321A1
JP2007281464A2
CA2576788A
CN101070464A
KR20070098705A
TW200736385A
IN00164KO2007A
NO20071672L
NO20071672A
PH2007000113A

Anmelder: GOLDSCHMIDT GMBH

Erfinder: BERND HENNISSEN LOUIS WEYERSHA
HENNISSEN LOUIS DR
WEYERSHAUSEN BERND DR

IPC-Notationen:
B01F0017-00
B24B0037-00
B24B0055-00
B24B0055-02
C09K0005-00
C09K0005-08
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C10M0173-02
C10N0040-20
C11D0001-02
C11D0001-04
C11D0001-12
C11D0001-34
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C11D0001-40
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C30B0033-00
H01L0021-00
H01L0021-02
H01L0021-30
H01L0021-304

CPC-Notationen:
C10M0173-02
C10M2227-02
C10M2227-04
C10N2020-097
C10N2030-04
C10N2040-22
C10N2220-30
C10N2230-04
C10N2240-401

Zusammenfassung:

Source: US2007228321 AA [EN] The invention relates to a **coolant** for use in the production and/or treatment of ingots and/or wafers, the **coolant** containing a surfactant in order to improve the quality of the production or treatment

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 56

Titel: TOUGHNESS OF POLYCRYSTALLINE DIAMOND BY INCORPORATION OF BULK METAL FOILS

Patentnummer: WO2012088012A9

Anmeldung:
WO2011US65981
EP20110827784
DE201160041994T
US20140547867
US20110330805
CA20112816043
CN201180062184
KR20137015941
IN2013KN01356
ZA20130004288

Priorität:
US20100425324P 20101221
EP20110827784 20111220
US20110330805 20111220
WO2011US65981 20111220
US20140547867 20141119

Patentfamilie:
WO2012088012A9
WO2012088012A3
WO2012088012A2
EP2656380B1
EP2656380A2
DE602011041994D1
US9555519B2
US8968436B2
US2015202741A1
US2012151848A1
CA2816043C
CA2816043A
CN103269816A
CN103269816B
KR20130130754A
KR101918910B1
IN01356KN2013A
ZA201304288A

Anmelder:
DIAMOND INNOVATIONS INC
SURYAVANSHI ABHIJIT PRABHAKAR

Erfinder:
SURYAVANSHI ABHIJIT PRABHAKAR

IPC-Notationen:
B01J0003-06
B01J0019-12
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B24D0003-10
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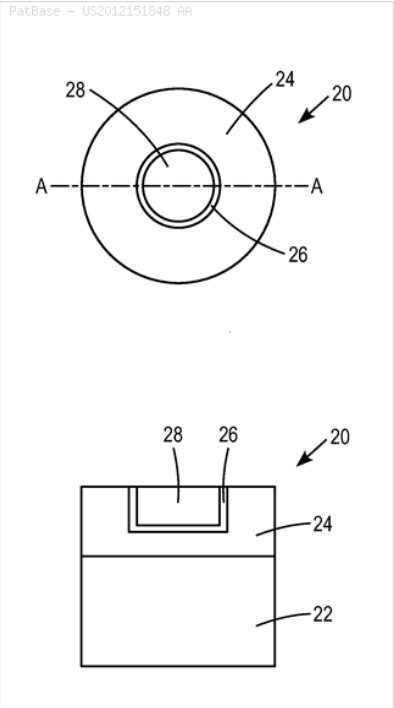
B24D0099-00
C04B0035-00
C22C
C22C0026-00
E21B0010-46
E21B0010-567
E21B0010-573
H01L0021-268
H01L0021-306

CPC-Notationen:
B01J0003-062
B01J2203-062
B01J2203-063
B01J2203-0655
B01J2203-0685
B22F0005-00
B22F0007-06
B24D0003-06
B24D0018-0009
B24D0099-005
C22C0026-00
E21B0010-567
E21B0010-573

Zusammenfassung:

Source: US2012151848 AA [EN] A **cutting element** include a substrate and a diamond compact including at least two polycrystalline diamond portions separated by at least one metal carbide foil portion. The **cutting element** is made by placing diamond powder in a reaction container, placing a thin metal layer in the reaction container above or around the diamond powder and binder, placing additional diamond powder in the reaction container above or around the thin metal layer, and placing a pre-sintered substrate containing binder into the reaction container above all diamond powder and thin metal layer components. The assembled reaction container is put into a reactor and is subjected to a high-temperature high-pressure sintering process. The binder in the pre-sintered substrate sweeps through to sinter the first diamond portion, and then reacts with the thin metal layer to form a metal carbide, and then the binder continues to sweep through to sinter the second diamond portion



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 57

Titel: METHOD FOR PRODUCING SINTERED CUBIC BORON NITRIDE COMPACT

Patentnummer: EP2354110B1

Anmeldung: EP20110153477
DE201160007865T
US20110022834
JP20110023662
CN201110036037

Priorität: JP20100026539 20100209
EP20110153477 20110207
JP20110023662 20110207

Patentfamilie: EP2354110B1
EP2354110A3
EP2354110A2
DE602011007865D1
US8657893B2
US2011192093A1
JP2011184290A2
JP5057193B2
CN102190496A
CN102190496B

Anmelder: AKAISHI MINORU
MITSUBISHI MATERIALS CORP
TAJIMA ITSUROU
WARDOYO AKHMADI EKO

Erfinder: MINORU AKAISHI
TAJIMA ITSUROU
WARDOYO AKHMADI EKO

IPC-Notationen:
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B23B0027-20
B24D0003-00
B24D0003-06
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C04B0035-5831
C04B0035-622
C04B0035-626
C04B0035-634
C04B0035-645
C10G0009-00

CPC-Notationen:
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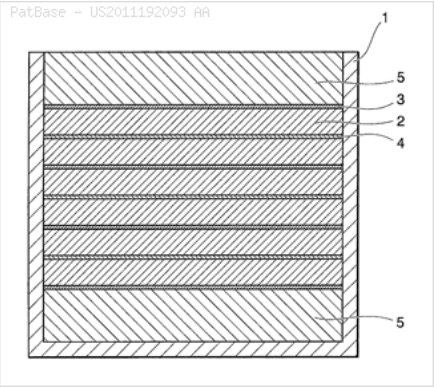
C04B2235-447
C04B2235-656
C04B2235-6581
C04B2235-661
C04B2235-724
C04B2235-96

Zusammenfassung:

Source: US2011192093 AA [EN] A method for producing a highly uniform and highly dense sintered cubic boron nitride compact having high hardness by sintering at a milder condition without a binder, is provided. The method includes deflocculating secondary particles in cubic boron nitride starting powders by dispersing the starting powders in a solution of a deflocculant; molding the green compact after removing the solution of the deflocculant from the starting powders; and then sintering the green compact in the presence of a supercritical fluid source in a supercritical state by pressing and heating the green compact together with the supercritical fluid source. The supercritical fluid source can be one or more selected from a group consisted of polyvinylidene **chloride**, polyvinyl **chloride**, polyethylene, polypropylene, polystyrene, a polyester and an ABS resin. In the sintering, the pressure is 5 GPa or higher, and the temperature is 1400 degrees centigrade or higher. According to the method, a highly uniform and highly dense sintered cubic boron nitride sintered compact having high hardness, can be obtained



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 58

Titel: POLYCRYSTALLINE COMPACTS HAVING MATERIAL DISPOSED IN INTERSTITIAL SPACES THEREIN, **CUTTING ELEMENTS** AND EARTH-BORING **TOOLS** INCLUDING SUCH COMPACTS, AND METHODS OF FORMING SUCH COMPACTS

Patentnummer: WO2011046838A4

Anmeldung:
WO2011US50534
WO2010US52062
WO2010US48343
EP20110839292
EP20100823876
EP20100816117
DE201160056977T
DE201060058952T
US20160153337
US20150858392
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US20090558184
CA20102777110
CA20102773500
SA20100310766
ZA20120001748
ZA20120002614
ZA20130003927

Priorität:
US20090232265P 20090807
US20090558184 20090911
US20090252049P 20091015
US20100852313 20100806
WO2010US48343 20100910
EP20100823876 20101008
US20100901253 20101008
WO2010US52062 20101008
US20100411355P 20101108
EP20110839292 20110906
US20110226127 20110906
WO2011US50534 20110906
US20120852313 20120806
US20120619931 20120914
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US20130030820 20130918
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US20140444515 20140728
US20150858392 20150918
US20160153337 20160512

Patentfamilie:
WO2011046838A4
WO2011031912A4
WO2011046838A3
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WO2011046838A2
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CA2773500A
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ZA201202614A
ZA201303927A

Anmelder: BAKER HUGHES A GE CO LLC
BAKER HUGHES INC
DIGIOVANNI ANTHONY A
SCOTT DANNY E

Erfinder: DIGIOVANNI ANTHONY A
SCOTT DANNY E

IPC-Notationen:
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B22F0007-06
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C01B0032-25
C01C0003-06
C04B0035-52
C04B0035-63

CPC-Notationen:
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B22F0007-08
B22F2005-001
B22F2998-10
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B24D0003-10
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C04B2235-3886
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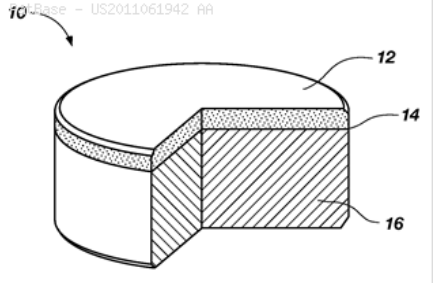
E21B0010-573
E21B0010-62

E21B0010-54
E21B0010-55
E21B0010-56
E21B0010-567
E21B0010-5735
Y10T0428-25

Zusammenfassung:

Source: US2011061942 AA [EN] Polycrystalline compacts include smaller and larger hard grains that are interbonded to form a polycrystalline hard material. The larger grains may be at least about 150 times larger than the smaller grains. An interstitial material comprising one or more of a boride, a carbide, a nitride, a metal carbonate, a metal bicarbonate, and a non-catalytic metal may be disposed between the grains. The compacts may be used as **cutting elements** for earth-boring **tools** such as drill bits, and may be disposed on a substrate. Methods of making polycrystalline compacts include coating smaller hard particles with a coating material, mixing the smaller particles with larger hard particles, and sintering the mixture to form a polycrystalline hard material including interbonded smaller and larger grains. The sizes of the smaller and larger particles may be selected to cause the larger grains to be at least about 150 times larger than the smaller grains



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 59

Titel: SUPERABRASIVE **ELEMENTS**, METHODS OF MANUFACTURING, AND DRILL BITS INCLUDING SAME

Patentnummer: US9951566B1

Anmeldung:
US20150633041
US20150621019
US20140570506
US20130917952
US20130067831
US20120690397
US20110171735
US20110100388
US20110027954
US20090548584
US20090397969
US20060545929

Priorität:
US20060545929 20061010
US20080068120P 20080303
US20090394356 20090227
US20090397969 20090304
US20090548584 20090827
US20110027954 20110215
US20110100388 20110504
US20110171735 20110629
US20120690397 20121130
US20130917952 20130614
US20130067831 20131030
US20140570506 20141215
US20150621019 20150212
US20150633041 20150226

Patentfamilie:
US9951566B1
US9623542B1
US9027675B1
US9017438B1
US8814966B1
US8790430B1
US8778040B1
US8764864B1
US8323367B1
US8236074B1
US10155301B1
US2016263725A1

Anmelder:
BERTAGNOLLI KENNETH E
JONES PAUL DOUGLAS
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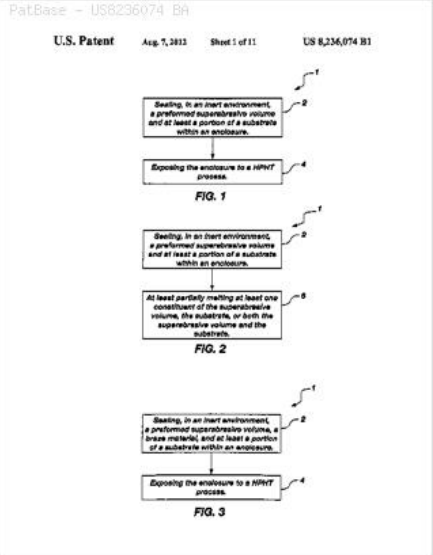
MIESS DAVID P
MUKHOPADHYAY DEBKUMAR
US SYNTHETIC CORP
VAIL MICHAEL A

Erfinder:
BERTAGNOLLI KENNETH E
JONES PAUL DOUGLAS
MCMURRAY C EUGENE
MIESS DAVID P
MUKHOPADHYAY DEBKUMAR
VAIL MICHAEL A

IPC-Notationen:	B01J0003-06	**CPC-Notationen:**	B22F0003-14
	B24B0001-00		B22F0007-04
	B24D0003-00		**B24D0003-007**
	B24D0003-02		**B24D0003-02**
	B24D0003-06		**B24D0003-06**
	B24D0003-10		B24D0003-10
	B24D0011-00		B24D0018-0009
	B24D0018-00		B24D0099-005
	B24D0099-00		C22C0001-02
	B32B0009-00		C22C0005-08
	B32B0019-00		C22C0019-07
	C09C0001-68		C22C0026-00
	C09K0003-14		C22C0030-02
	E21B0010-00		E21B0010-46
	E21B0010-36		E21B0010-55
	E21B0010-46		E21B0010-56
	E21B0010-55		E21B0010-567
	E21B0010-56		E21B0010-5676
	E21B0010-567		E21B0010-5735
	E21B0010-573		

Zusammenfassung:

Source: US8236074 BA [EN] Methods of manufacturing a superabrasive **element** are **disclosed**. In one embodiment, a substrate and a preformed superabrasive volume may be at least partially surrounded by an enclosure and the enclosure may be sealed in an inert environment. Further, the enclosure may be exposed to an elevated pressure and preformed superabrasive volume may be affixed to the substrate. Polycrystalline diamond **elements** are **disclosed**. In one embodiment, a polycrystalline diamond **element** may comprise a preformed polycrystalline diamond volume bonded to a substrate by a braze material. Optionally, such a polycrystalline diamond **element** may exhibit a compressive stress. Rotary drill bit for drilling a subterranean formation and including at least one superabrasive **element** are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 60

Titel: DIAMOND POLISHING PARTICLES AND METHOD OF PRODUCING SAME

Patentnummer: US2010203809A1

Anmeldung: US20100707904
US20040974867
JP20030366851
TW20040132622

Priorität: JP20030366851 20031028
US20040974867 20041026
US20100707904 20100218

Patentfamilie: US2010203809A1
US2005086870A1
JP2005131711A2
TW200516135A
TWI357438B

Anmelder: NIHON MICROCOATING CO LTD
NIPPON MICRO COATING KK

Erfinder: KUMASAKA NORIYUKI
KUMASAKA TAKAYUKI

IPC-Notationen: B01J0003-08
B24B0001-00
B24B0037-00
C01B0031-06
C09K0003-14

CPC-Notationen: B01J0003-08
C01B0032-28
C09K0003-1409

Zusammenfassung:

Source: US2005086870 AA [EN] Polishing particles are made of artificial diamond produced by a shock method, having density of 3.0-3.35 g/cm3 and including secondary particles with average particle diameter of 30 nm-500 nm. Such polishing particles are produced by firstly obtaining a product containing artificial diamond by a shock method, then subjecting this product to an acid treatment by using one or more strong acids such as concentrated sulfuric acid, concentrated nitric acid and concentrated hydrochloric acid to thereby remove impurities from and wash the product, thereafter subjecting the product to a classification process to thereby separate artificial diamond of a first kind having secondary particles with particle diameters of 30 nm-500 nm and artificial diamond of a second kind having secondary particles with particle diameters in excess of 500 nm and selecting artificial diamond of a third kind having density of 3.0-3.35 g/cm3 out of the artificial diamond of the first kind. It is the artificial diamond of the third kind that is to be used as the diamond polishing particles

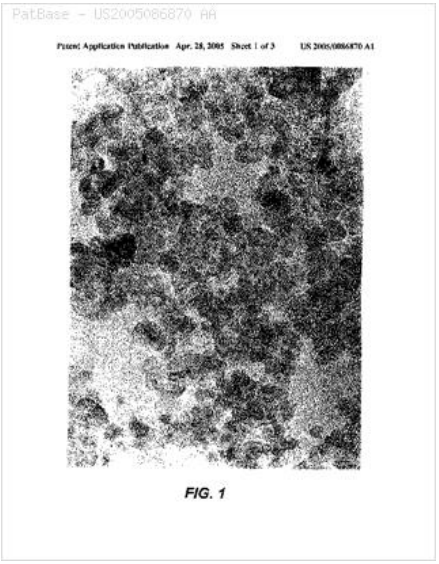


FIG. 1

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 61

Titel: LAYERED PARTICLE ELECTROSTATIC DEPOSITION PROCESS FOR MAKING A COATED **ABRASIVE** ARTICLE

Patentnummer: WO2011149625A3

Anmeldung: WO2011US35088
EP20110787081
US20130016368
US20100786622
JP20130512631T
CN201180024510

Priorität: US20100786622 20100525
WO2011US35088 20110504
US20130016368 20130903

Patentfamilie: WO2011149625A3
WO2011149625A2
EP2576143A4
EP2576143A2
US8869740B2
US8551577B2
US2014000176A1
US2011289854A1
JP5719432B2
JP2013530055T2
CN102892554A
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Anmelder: 3M INNOVATIVE PROPERTIES CO
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MOREN LOUIS S
THURBER ERNEST L

Erfinder: KOETHE BRIAN G
MOREN LOUIS S
THURBER ERNEST L

IPC-Notationen:
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C09K0003-14

CPC-Notationen:
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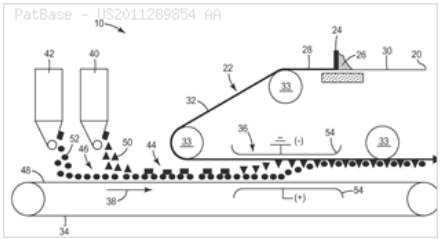
Zusammenfassung:



Source: US2011289854 AA [EN] **Disclosed** is a method of applying particles to a coated backing. A first layer of particles is created over a second layer of particles on a support surface and the first layer of particles is different in at least one property from the second layer of particles. A coated backing is positioned above the first and second layer of particles. An electrostatic field is applied simultaneously to the first and second layer of particles such that the first layer of particles closer to the coated backing are preferentially attracted to the coated backing first before the second layer of particles

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 62

Titel: SUPERABRASIVE WIRE SAW AND ASSOCIATED METHODS OF MANUFACTURE

Patentnummer: WO2006063136A3

Anmeldung:
WO2005US44427
WO2004US25428
WO2003US29958
EP20050853369
EP20030759439
US20060351283
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JP20070545624T
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KR20057003744
TW20050143119
BR2005PI18976
ZA20050001013
ZA20070005460

Priorität:
US20020254057 20020924
US20030627441 20030725
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WO2003US29958 20030924
WO2004US25428 20040722
US20040009370 20041209
US20050223790 20050908
WO2005US44427 20051207
KR20060000048 20060102
US20060351283 20060208

Patentfamilie:
WO2006063136A3
WO2005011914A3
WO2004029310A3
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Anmelder: CHO HONG JUN
CHUNJEE CONTECH CO LTD
SONG JIAN MIN
SUNG CHIEN MIN

Erfinder: CHO HONG JUN
SONG JIAN MIN
SUNG CHIEN MIN

IPC-Notationen:
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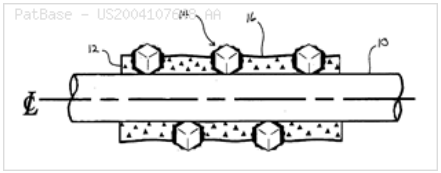
Zusammenfassung:



Source: US2004107648 AA [EN] A superabrasive wire saw having a plurality of individual coated superabrasive particles attached to a wire with an organic binder is **disclosed** and described. The superabrasive particle can be coated with a solidified coating of a molten braze alloy that is chemically bonded to the superabrasive particle. The organic binder can optionally contain **filler** materials and/or an organometallic coupling agent to improve the retention of coated superabrasive particles. The resulting superabrasive wire saws can be produced having diameters of less than 0.5 mm which significantly reduce kerf loss. Various methods for making and using such a superabrasive wire saw are additionally **disclosed** and described

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 63

Titel: POLYMERIC POLISHING PAD CONTAINING HOLLOW POLYMERIC MICROELEMENTS

Patentnummer: WO9924218A1

Anmeldung:
WO1998US23575
WO1993US07256
EP19980957602
EP19970120317
EP19930918581
DE19936032490T
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US20020061783
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US20010776279
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US20000521042
US20000498267
US19990384607
US19990366581
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SG19960008436

Priorität:
US19920932161 19920819
EP19930918581 19930802
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US19940274134 19940712
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Patentfamilie:

WO9924218A1
WO9404599A1
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Anmelder:
BUDINGER WILLIAM D
JENSEN ELMER W
MCCLAIN HARRY G
MELBOURNE LEE
REINHARDT HEINZ F
ROBERTS JOHN V H
RODEL HOLDINGS INC
ROHM AND HAAS ELECT MATERIALS
ROHM AND HAAS ELECTRONIC MATER

Erfinder:
BADINGER WILLIAM D
BUDINGER W D
BUDINGER WILIAM D
BUDINGER WILLIAM B
BUDINGER WILLIAM D
CHECHIK NINA G
COOK LEE MELBOURNE
JAMES D B
JAMES DAVID B
JENSEN ELMER WILLIAM
JENSEN ELMIEL WILLIAM
LEVERING RICHARD M JR
MACLAINE HARRY GEORGE
MCCLAIN H G
MCCLAIN HARRY GEORGE
OLIVER MICHAEL R
REINHARD H F
REINHARDT HEINZ F
ROBERTS J V H
ROBERTS JOHN V H
URBANAVAGE WALTER J

IPC-Notationen:
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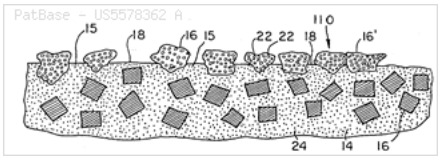
Y10T0428-31591

Zusammenfassung:

Source: US5578362 A [EN] The present invention relates to an article of manufacture or polishing pad for altering a surface of a workpiece, such as polishing or planarizing a semiconductor device. The article includes a polymeric matrix impregnated with a plurality of polymeric microelements, each polymeric microelement having a void space therein. The article has a work surface and a subsurface proximate to the work surface. When the article is in contact with a working environment, polymeric microelements at the work surface of the article are less rigid than polymeric **elements** embedded in the subsurface. As the work surface of the article is abraded during use, the work surface of the pad may be continuously regenerated. In alternative preferred embodiments, the work surface may further include a minitexture and/or a macrotexture. Preferably, the minitexture is formed by fractal patterning at least a portion of the work surface. The present invention also includes methods for decreasing the effective rigidity of polymeric microelements at the work surface of the article, regenerating the work surface of the article and planarizing a surface of a semiconductor device utilizing the article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 64

Titel: AQUEOUS COATING COMPOSITION AND METHOD OF USE

Patentnummer: WO9640819A1

Anmeldung:
WO1996US09466
WO1990US02005
EP20010115440
EP19960918316
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Priorität:
US19890340845 19890420
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WO1990US02005 19900418
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Patentfamilie:
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BRPI9608486A
MX171850B
MX9709611A1

Anmelder:
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LINE PRODUCTS CORP A

Erfinder:
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FRISCH KURT C
LAURA ALGER E
XIAO HAN X

IPC-Notationen:	B05D0007-24	**CPC-Notationen:**	B32B0005-16
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	C08J0003-02		C08G0059-50
	C08J0003-03		C08J0003-03
	C08J0005-12		C08J0005-124
	C08J0007-00		C08J0007-0427
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	C09D0007-61		C09D0005-02
	C09D0007-80		C09D0005-028
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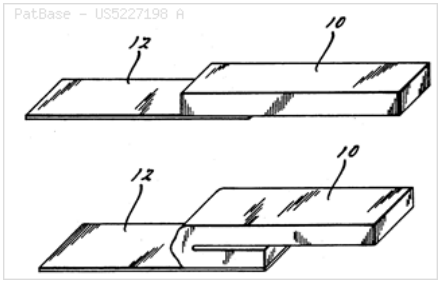
	C09D0201-02		Y10T0428-31917
	C09D0201-06		Y10T0428-3192

Zusammenfassung:

Source: US5227198 A [EN] A water-based coating composition and methods of making and using the same are **disclosed**. The composition includes a **halogenated** resin, a polyol, a surfactant, and an amine. It is suitable for coating a variety of substrates including polyolefinic substrates such as polypropylene, and **operates** without aromatic organic solvents



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 65

Titel: POLYCRYSTALLINE DIAMOND **CUTTERS** HAVING NON-CATALYTIC MATERIAL ADDITION AND METHODS OF MAKING THE SAME

Patentnummer: WO2017106442A1

Anmeldung: WO2016US66827
EP20160829352
US20160379883
CA20163007093
CN201680073467
KR20187020084
RU20180125628
ZA20180003642

Priorität: US20150267979P 20151216
RU20180125628 20161215
US20160379883 20161215
WO2016US66827 20161215

Patentfamilie: WO2017106442A1
EP3389901A1
US10337256B2
US2017175453A1
CA3007093A
CN108367355A
KR20180095596A
RU2018125628A3
RU2018125628A
ZA201803642A

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: ZHANG KAI

IPC-Notationen: B22F
B22F0003-14
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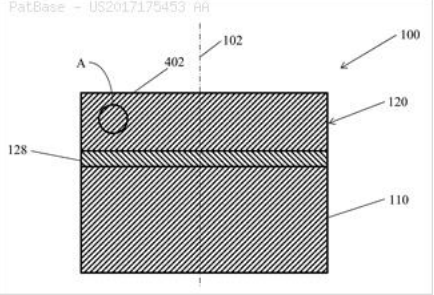
C22C0026-00
E21B0010-55
E21B0010-5735

Zusammenfassung:

Source: US2017175453 AA [EN] Polycrystalline diamond **cutters** for rotary drill bits and methods of making the same are **disclosed**. A polycrystalline diamond compact includes a polycrystalline diamond body having a working surface, an interface surface, and a perimeter surface. The polycrystalline diamond compact also includes a substrate bonded to the polycrystalline diamond body along the interface surface. A non-diamond volume fraction of the polycrystalline diamond body is greater at the interface surface than at the working surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 66

Titel: SUPERHARD CONSTRUCTIONS AND METHODS OF MAKING SAME

Patentnummer: WO2015101638A1

Anmeldung: WO2014EP79474
US20190407902
US20140107778
GB20140023357
GB20130023169

Priorität: GB20130023169 20131231
WO2014EP79474 20141230
US20160107778 20160623
US20190407902 20190509

Patentfamilie: WO2015101638A1
US2019263723A1
US2016318808A1
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Anmelder: ELEMENT SIX ABRASIVES SA

Erfinder: MAWEJA KASONDE
TERESA RODRIGUEZ SUAREZ
VALENTINE KANYANTA

IPC-Notationen:

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E21B0010-567
E21B0010-573

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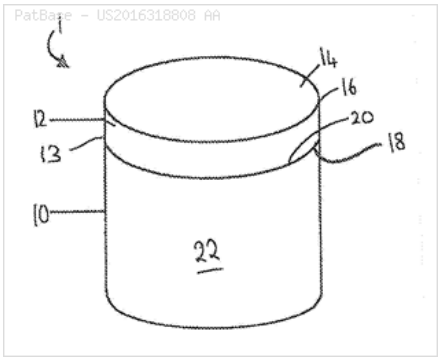
E21B0010-567
E21B0010-573
E21B0010-5735

Zusammenfassung:

Source: US2016318808 AA [EN] A polycrystalline super hard construction comprises a body of polycrystalline super hard material and a substrate bonded to the body along an interface. The substrate a first end surface forming the interface, the first end surface comprising a projection extending from the body of the substrate into the body of super hard material towards the **cutting** face, the body of polycrystalline material extending around the projection. The body of polycrystalline material comprises a first region more thermally stable than a second region, the first region comprising an annular portion located around the projection, the second region extending between and bonding the first region to the substrate. The first region has a thickness from the **cutting** face along the peripheral side **edge** to the interface of at least around 3 mm and a portion of the projection has a thickness measured in a plane extending along the longitudinal axis of at least around 3 mm



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 67

Titel: DISPERSION OF HARDPHASE PARTICLES IN AN INFILTRANT

Patentnummer: WO2013055753A4

Anmeldung:
WO2012US59490
US20110271415
GB20140006380
CA20122852007
BR20141108910
RU20140134921
SG20141101420

Priorität:
US20110271415 20111012
WO2012US59490 20121010

Patentfamilie:
WO2013055753A4
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WO2013055753A2
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Anmelder:
NAT OILWELL DHT L P
NESHNL OJLVEL DIEJCHTI L P
SRESHTA HAROLD A

Erfinder:
SRESHTA GAROLD A
SRESHTA HAROLD A

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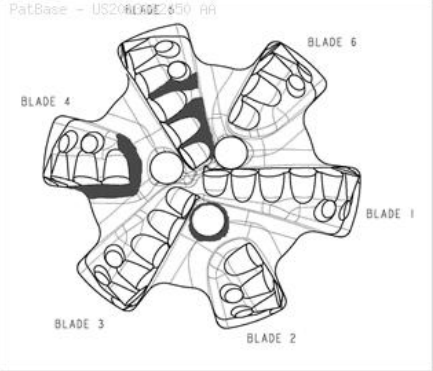
E21B0010-36
E21B0010-43

Zusammenfassung:

Source: US2013092450 AA [EN] Composite materials for use with a drill bit for drilling a borehole in earthen formations. The composite material comprises a first pre-infiltrated hardphase constituent and a second pre-infiltrated hardphase constituent. The second pre-infiltrated hardphase constituent is a carbide which comprises at least 0.5 weight percent of a binder and at least about 1 percent porosity. The composite material further comprises an infiltrant



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 68

Titel: POLYCRYSTALLINE DIAMOND **CUTTING ELEMENTS** HAVING **LEAD** OR **LEAD** ALLOY ADDITIONS

Patentnummer: WO2016182865A1

Anmeldung: WO2016US31084
EP20160729655
US20180167902
US20150707278

Priorität: US20150707278 20150508
WO2016US31084 20160506
US20180167902 20181023

Patentfamilie: WO2016182865A1
EP3294481A1
US10167675B2
US2019055788A1
US2016326809A1

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: GLEDHILL ANDREW
LONG CHRISTOPHER ALLEN

IPC-Notationen:
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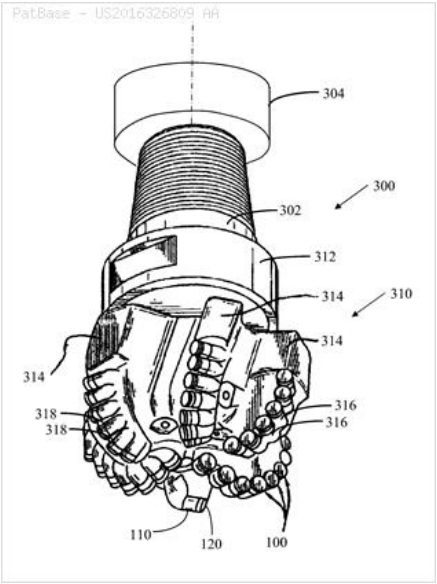
E21B0010-567
E21B0010-5735

Zusammenfassung:

Source: US2016326809 AA [EN] Polycrystalline diamond **cutting elements** having enhanced thermal stability, drill bits incorporating the same, and methods of making the same are **disclosed** herein. In one embodiment, a **cutting element** includes a substrate having a metal carbide and a polycrystalline diamond body bonded to the substrate. The polycrystalline diamond body includes a plurality of diamond grains bonded to adjacent diamond grains by diamond-to-diamond bonds and a plurality of interstitial regions positioned between adjacent diamond grains. At least a portion of the plurality of interstitial regions comprise **lead** or **lead** alloy, a catalyst material, metal carbide, or combinations thereof. At least a portion of the plurality of interstitial regions comprise **lead** or **lead** alloy that coat portions of the adjacent diamond grains such that the **lead** or **lead** alloy reduces contact between the diamond and the catalyst



Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	69

Titel: POLYCRYSTALLINE DIAMOND **CUTTING ELEMENTS** HAVING NON-CATALYST MATERIAL ADDITIONS

Patentnummer: WO2016182866A1

Anmeldung: WO2016US31085
EP20160729656
US20150707289

Priorität: US20150707289 20150508
WO2016US31085 20160506

Patentfamilie: WO2016182866A1
EP3294479A1
US10232493B2
US2016325404A1

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: GLEDHILL ANDREW
LONG CHRISTOPHER ALLEN

IPC-Notationen:
B22F0003-14
B22F0005-00
B22F0007-06
B24D0003-06
B24D0018-00
C22C0026-00
E21B0010-54
E21B0010-55
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E21B0010-62

CPC-Notationen:
B22F0003-1035
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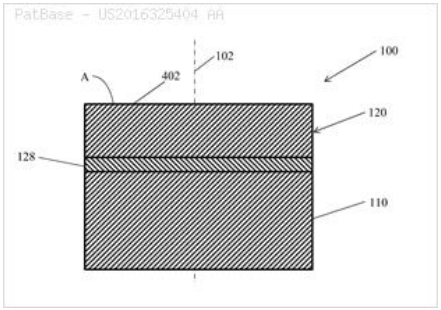
B22F2005-001
B22F2999-00
B24D0003-06
B24D0018-0009
C22C0026-00
E21B0010-55
E21B0010-567
E21B0010-5735
E21B2010-545

Zusammenfassung:

Source: US2016325404 AA [EN] Polycrystalline diamond **cutting elements** having enhanced thermal stability, drill bits incorporating the same, and methods of making the same are **disclosed** herein. In one embodiment, a **cutting element** includes a substrate having a metal carbide and a polycrystalline diamond body bonded to the substrate. The polycrystalline diamond body includes a plurality of diamond grains bonded to adjacent diamond grains by diamond-to-diamond bonds and a plurality of interstitial regions positioned between adjacent diamond grains. At least a portion of the plurality of interstitial regions comprise a non-catalyst material, a catalyst material, metal carbide, or combinations thereof. At least a portion of the plurality of interstitial regions comprise non-catalyst material that coats portions of the adjacent diamond grains such that the non-catalyst material reduces contact between the diamond and the catalyst



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 70

Titel: **CUTTING ELEMENTS** HAVING ACCELERATED LEACHING RATES AND METHODS OF MAKING THE SAME

Patentnummer: WO2016182864A1

Anmeldung: WO2016US31083
EP20160729654
US20160571618

Priorität: US20150158599P 20150508
US20160571618 20160506
WO2016US31083 20160506

Patentfamilie: WO2016182864A1
EP3294480A1
US2018142522A1

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: GLEDHILL ANDREW
KONOVALOV VALERIY
LONG CHRISTOPHER
SURYAVANSHI ABHIJIT
ZHANG KAI

IPC-Notationen:
B22F0003-15
B22F0003-24
B22F0005-00
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C22C0026-00
C22C0029-02
C22C0029-08
E21B0010-46
E21B0010-573

CPC-Notationen:
B22F0003-14
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B22F0005-00
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B22F0007-08
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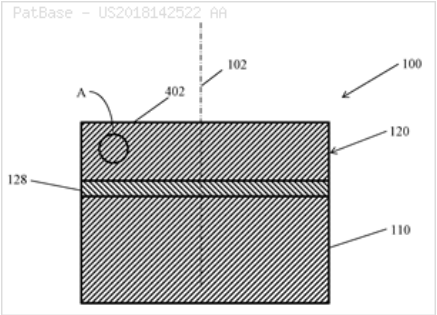
B22F2303-405
B22F2998-10
B22F2999-00
B24D0003-08
B24D0018-0009
B24D0099-005
C22C0011-00
C22C0012-00
C22C0019-07
C22C0026-00
C22C0029-08
C22C2026-006
C23F0001-02
E21B0010-54
E21B0010-5735

Zusammenfassung:

Source: US2018142522 AA [EN] **Cutting elements** having accelerated leaching rates and methods of making the same are **disclosed** herein. In one embodiment, a method of forming a **cutting element** includes assembling a reaction cell having diamond particles, a non-catalyst material, a catalyst material, and a substrate within a refractory metal container, where the non-catalyst material is generally immiscible in the catalyst material at a sintering temperature and pressure. The method also includes subjecting the reaction cell and its contents to a high pressure high temperature sintering process to form a polycrystalline diamond body that is attached to the substrate. The method further includes contacting at least a portion of the polycrystalline diamond body with a leaching agent to remove catalyst material and non-catalyst material from the diamond body, where a leaching rate of the catalyst material and the non-catalyst material exceeds a conventional leaching rate profile by at least about 30 percent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 71

Titel: **CUTTING ELEMENTS** AND METHODS FOR FABRICATING DIAMOND COMPACTS AND **CUTTING ELEMENTS** WITH FUNCTIONALIZED NANOPARTICLES

Patentnummer: WO2017132108A1

Anmeldung: WO2017US14652
US20180905075
US20160005212

Priorität: US20160005212 20160125
US20180905075 20180226

Patentfamilie: WO2017132108A1
US9931735B2
US2018185987A1
US2017209984A1

Anmelder: BAKER HUGHES A GE CO LLC
BAKER HUGHES INC

Erfinder: FILONENKO VLADIMIR P
KHABASHESKU VALERY N

IPC-Notationen:
B22F0003-15
B22F0005-00
B24D0003-02
B24D0003-06
B24D0018-00
B82Y0030-00
C04B0035-52
C04B0035-626
C04B0035-645
C09C0001-68
C09K0003-14
E21B0010-42
E21B0010-46
E21B0010-54

CPC-Notationen:
B24D0003-06
B24D0018-0009
B82Y0030-00
C04B0035-52
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C04B0035-62685
C04B0035-62802
C04B0035-62884
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C04B0035-645
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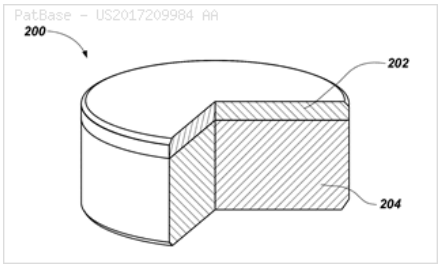
C04B2235-401
C04B2235-402
C04B2235-407
C04B2235-408
C04B2235-427
C04B2235-445
C04B2235-5436
C04B2235-5454
C04B2235-5472
C04B2235-66
C04B2235-80
E21B0010-46
Y10S0977-773

Zusammenfassung:

Source: US2017209984 AA [EN] A method of fabricating a diamond compact includes functionalizing surfaces of diamond nanoparticles with **fluorine**; combining the functionalized diamond nanoparticles with a non-group-VIII metal to form a particle mixture; and subjecting the particle mixture to high pressure and high temperature (HPHT) conditions to form inter-granular bonds between the diamond nanoparticles. A **cutting element** for an earth-boring **tool** includes a plurality of grains of diamond material; a plurality of diamond nanoparticles bonded to the plurality of grains of diamond material; and a non-group-VIII metal **fluoride** disposed within interstitial spaces between the grains of diamond material and the plurality of diamond nanoparticles. The **cutting element** is substantially free of a metal-solvent catalyst



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 72

Titel: DRILLING **TOOLS** HAVING MATRICES WITH CARBIDE-FORMING ALLOYS, AND METHODS OF MAKING AND USING SAME

Patentnummer: WO2016115079A1

Anmeldung:
WO2016US12967
EP20160737699
DE201660052573T
US20200899236
US20160993550
CA20162973407
AU20200273324
AU20160206947
CN201680007488
CL20170001811
PE20170001207

Priorität:
US20150102221P 20150112
US20150102240P 20150112
US20150115930P 20150213
AU20160206947 20160112
EP20160737699 20160112
US20160993550 20160112
WO2016US12967 20160112
US20200899236 20200611
AU20200273324 20201119

Patentfamilie:
WO2016115079A1
EP3245377B1
EP3245377A1
EP3245377A4
DE602016052573D1
US10702975B2
US2020298375A1
US2016201398A1
CA2973407A
AU2016206947B2
AU2020273324A1
AU2016206947A1
CN107208459A
CN107208459B
CL60389B
CL2017001811A1
PE14622017A1
PE20171462A1

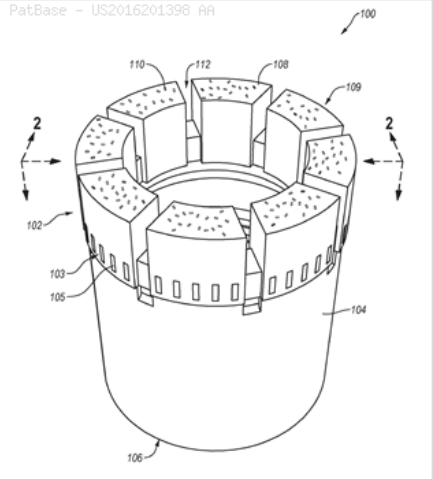
Anmelder: LONGYEAR TM INC

Erfinder:
LAMBERT CHRISTIAN M
PEARCE CODY A
RUPP MICHAEL D

IPC-Notationen:	B22F0003-26 B22F0005-00 B22F0007-06 B22F0007-08 **B24D0003-06** B24D0018-00 C04B0035-52 C04B0035-56 C22C0001-05 C22C0026-00 C22C0029-00 C22C0029-02 C22C0049-00 E21B0010-46 E21B0010-48 E21B0010-54 E21B0010-573
CPC-Notationen:	B22F0003-26 B22F0007-08 B22F2005-001 B22F2007-068 B22F2998-10 B22F2999-00 **B24D0003-06** B24D0018-0027 C04B0035-5607 C04B0035-5611 C04B0035-5626 C04B2235-3217 C04B2235-3821 C04B2235-3826 C04B2235-3847 C04B2235-3873 C04B2235-40 C04B2235-402 C04B2235-404 C04B2235-405 C04B2235-408 C04B2235-427 C04B2235-428 C22C0001-051 C22C0001-053 C22C0026-00 C22C0029-00 C22C0049-00 E21B0010-48

Zusammenfassung:

Source: US2016201398 AA [EN] Drilling **tools**, such as drill bits, having a shank, a crown, and a plurality of **abrasive cutting elements**. In the case of impregnated drilling **tools**, the **abrasive cutting elements** are dispersed throughout at least a portion of the crown. In the case of surface-set drilling **tools**, the **abrasive cutting** media is secured to and projects from a **cutting** face of the crown. The matrix of the crown of the drilling **tools** includes a carbide-forming alloy that forms a direct carbide bond with at least one **cutting element** of the plurality of **abrasive cutting elements**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 73

Titel: SUPERHARD CONSTRUCTIONS AND METHODS OF MAKING SAME

Patentnummer: WO2014086721A1

Anmeldung: WO2013EP75261
US20130648984
GB20130021220

Priorität: GB20120021800 20121204
US20120733174P 20121204
US20130648984 20131202
WO2013EP75261 20131202

Patentfamilie: WO2014086721A1
US10328550B2
US2016016291A1
GB2510465A1
GB201321220A0

Anmelder: ELEMENT SIX ABRASIVES SA

Erfinder: WESTRAADT JOHAN EWALD

IPC-Notationen:
B22F0005-00
B22F0007-06
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B24D0018-00
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C04B0035-52
C22C0026-00
E21B0010-26
E21B0010-46
E21B0010-50
E21B0010-55
E21B0010-567

CPC-Notationen:
B22F0007-06
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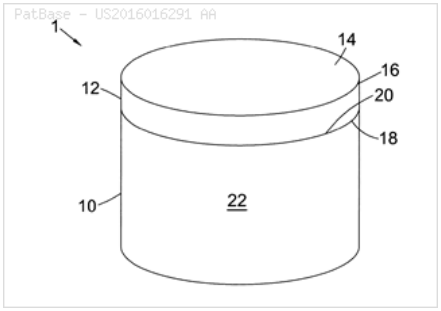
B24D0003-10
B24D0018-0009
B24D0099-005
C04B0035-52
C04B2235-427
C22C0026-00
E21B0010-26
E21B0010-46
E21B0010-50
E21B0010-55
E21B0010-567

Zusammenfassung:

Source: US2016016291 AA [EN] A method of forming a super hard PCD construction comprises forming an aggregated mass comprising a catalyst/solvent material for diamond, and one or more of W, Mo, Cr, V, Ti, Zr, Nb, Hf, Ta, Sc, and/or Y, forming a pre-sinter assembly comprising the aggregated mass and a plurality of diamond grains and treating the pre-sinter assembly at UHPT to form a PCD construction. Residual catalyst/solvent and one or more of W, Mo, Cr, V, Ti, Zr, Nb, Hf, Ta, Sc, and/or Y, in non-carbide form at least partially fill a plurality of interstitial regions in the PCD. There is also **disclosed** a superhard PCD construction comprising a body of PCD material formed of a mass of diamond grains and a non-superhard phase at least partially filling a plurality of interstitial regions, wherein the non-superhard phase comprises one or more of W, Mo, Cr, V, Ti, Zr, Nb, Hf, Ta, Sc, and/or Y, in the non-carbide form



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 74

Titel: **ABRASIVE** BLADE TIPS FOR CAST SINGLE CRYSTAL GAS TURBINE BLADES

Patentnummer: US5264011A

Anmeldung: US19920941618

Priorität: US19920941618 19920908

Patentfamilie: US5264011A

Anmelder: GEN MOTORS CORP

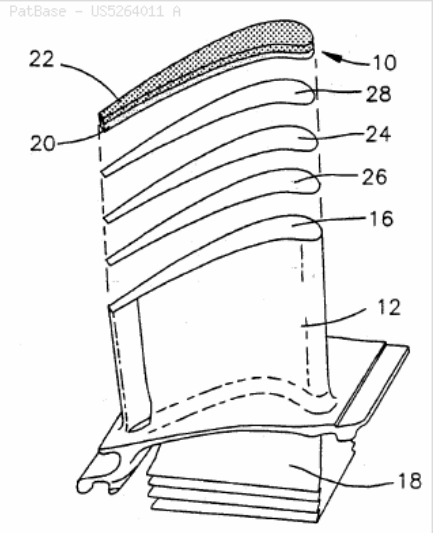
Erfinder: BARBER MICHAEL J
BROWN LAWRENCE E
CLINGMAN DAVID L
CROSS KENNETH R

IPC-Notationen:
B22F0005-04
B23K0035-24
B23K0035-32
B24D0003-04
B24D0003-06
B24D0018-00
C09K0003-14
C22C0032-00
F01D0005-14
F01D0005-20

CPC-Notationen:
B22F0005-04
B23K0035-327
B24D0003-06
C09K0003-1436
C22C0014-00
C22C0032-0026
F01D0005-20
F01D0025-246
Y10T0029-4932

Zusammenfassung:

Source: US5264011 A [EN] An **abrasive** system and a processing procedure is provided which permits the direct installation of a thick **abrasive** blade tip cap onto a cast single crystal turbine rotor blade during a single heating schedule requiring only one furnace **operation**. The composition of the **abrasive** blade tip cap advantageously utilizes the high temperature performance capabilities of the single crystal alloy without significantly affecting its **mechanical** properties as a consequence of the processing necessary to permanently bond the **abrasive** blade tip cap to the rotor blade. A semi-rigid blade tip cap preform is first formed and positioned on the tip of the rotor blade. The preform and rotor blade are then heated in a vacuum furnace according to a temperature schedule entailing heating rates, holding temperatures and durations which are sufficient to bond and consolidate the preform. The rotor blade is then rapidly **cooled** in the vacuum furnace to retain the single crystal structure of the rotor blade



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 75

Titel: SUPERABRASIVE MATERIAL WITH PROTECTIVE ADHESIVE COATING AND METHOD FOR PRODUCING SAID COATING

Patentnummer: WO2014155109A1

Anmeldung:
WO2014GB50960
EP20140716632
DE201460014793T
US20130864984
JP20160504750T
GB20130005637
CA20142905675
CN201480019086
KR20157030720
RU20150145216

Priorität:
GB20130005637 20130327
US20130864984 20130417
EP20140716632 20140326
RU20150145216 20140326
WO2014GB50960 20140326

Patentfamilie:
WO2014155109A1
EP2978872B1
EP2978872A1
DE602014014793D1
US9346148B2
US2014290145A1
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GB201305637A0
CA2905675C
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CN105121696B
KR20150135477A
RU2666390C2
RU2015145216A3
RU2015145216A

Anmelder:
HARDIDE PLC
KHARDAJD PIELSI

Erfinder:
LAKHOTKIN YURIJ
LAKHOTKIN YURY
ZHUK YURIJ

IPC-Notationen:
B23B0027-14
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C23C0012-02
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C23C0016-14
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C30B0029-04

C04B0041-90
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C23C0016-56
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C23C0028-321
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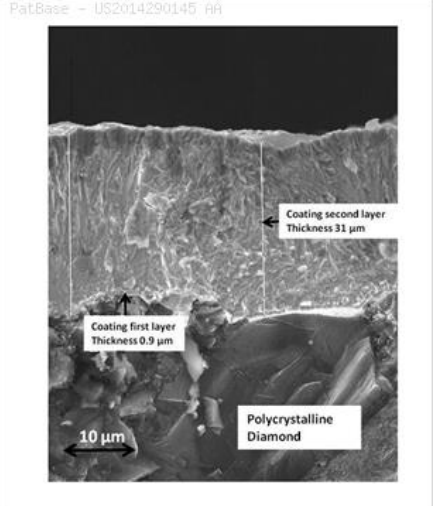
C23C0028-325
C23C0028-341
C23C0028-347
C23C0028-36
C23C0028-42
C23C0030-005

Zusammenfassung:

Source: US2014290145 AA [EN] A coating on mono- or poly-crystalline diamond or diamond-containing material includes a first adhesive layer formed directly on the diamond or diamond-containing material, the first layer including tungsten and tungsten carbide alloyed with **fluorine** in an amount of 0.001 to 0.12 wt percent calculated on the total weight of the first layer. The coating further includes a second protective layer formed on the first layer, the second layer including at least tungsten alloyed with **fluorine** in an amount of 0.001 to 0.12 wt percent calculated on the total weight of the second layer. The adhesive layer provides excellent bond strength to diamond, while the protective layer provides good protection against oxidation and molten metals used for attaching the coated diamonds to **tools**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 76

Titel: DRILL HAVING A **GRINDING** PARTICLE GRADIENT

Patentnummer: WO2012084357A1

Anmeldung: WO2011EP70307
EP20110782628
DE201150015377T
DE201010063836
CN201180061302
KR20137016109
ES20110782628T

Priorität: DE201010063836 20101222
EP20110782628 20111117
WO2011EP70307 20111117

Patentfamilie: WO2012084357A1
EP2654997B1
EP2654997A1
DE102010063836A1
DE502011015377D1
CN103534052A
CN103534052B
KR20130132870A
KR101914462B1
ES2727026T3

Anmelder: BOSCH GMBH ROBERT
KIEFER MATTHIAS
MULONE ROBERTO

Erfinder: KIEFER MATTHIAS
MULONE ROBERTO

IPC-Notationen: B23B0051-00
B24D0003-34
B24D0007-14
B24D0099-00
B28D0001-14

CPC-Notationen: B24D0007-14
B24D0099-005
B28D0001-146

Zusammenfassung:

Source: WO12084357 A1 [EN] The invention relates to a **cutting element** for a drill, designed for rotating about a rotary axis (R) when drilling and comprising at least one first **grinding** particle type (1) . In order to increase the effectiveness and **service life** of the **cutting element**, in particular when drilling reinforced concrete and similar materials, as well as user comfort, in particular by reducing vibration and noise, the content of **grinding** particles of the first type (1) increases continuously and/or incrementally from the rotary axis (R) of the **cutting element** to the periphery (P) of the **cutting element**

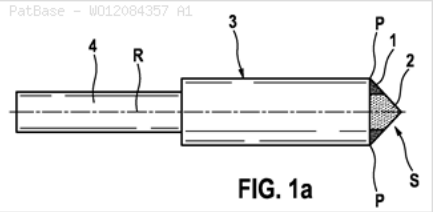


FIG. 1a

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 77

Titel: ALUMINUM DIAMOND **CUTTING TOOL**

Patentnummer: WO2016033080A1

Anmeldung: WO2015US46750
US20150503058
JP20170511301T

Priorität: US20140041789P 20140826
US20150503058 20150825
WO2015US46750 20150825

Patentfamilie: WO2016033080A1
US2017232579A1
JP2017532208T2

Anmelder: LOUTFY KEVIN
LOUTFY RAOUF
NANO MAT INT CORP
NANO MATERIALS INT CORP
SONUPARLAK BIROL

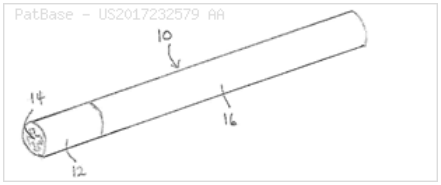
Erfinder: LOUTFY OMAR KEVIN
LOUTFY RAOUF
SONUPARLAK BIROL

IPC-Notationen: B23C0003-00
B23C0005-10
B23C0005-16
B24D0003-00
B24D0003-06
B24D0003-08
B24D0005-02
E21B0010-48

CPC-Notationen: B24D0003-08
B24D0099-005

Zusammenfassung:

Source: US2017232579 AA [EN] A novel diamond **cutting tool** and its use in **cutting** and **grinding** applications. The **cutting** surface of the **tool** is composed of an aluminum/diamond metal matrix composite comprising diamond particles dispersed in a matrix of aluminum or an aluminum alloy, and wherein the diamond particles have thin layers of beta-SiC chemically bonded to the surfaces thereof



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 78

Titel: Stone **cutting** wire saw

Patentnummer: EP0256619A3

Anmeldung: EP19870304040
US19860866035

Priorität: US19860866035 19860806
US19860919093 19861015

Patentfamilie: EP0256619A3
EP0256619A2
US4674474A

Anmelder: ENGELHARD CORP

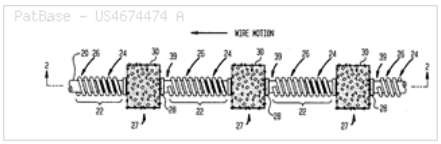
Erfinder: BARIL GERALD J
BARIL GERARD J

IPC-Notationen: B23D0061-18
B23D0065-00
B24D0099-00

CPC-Notationen: B23D0061-185
B23D0065-00
B24D0099-00

Zusammenfassung:

Source: US4674474 A [EN] A wire saw for **cutting** of stone is **disclosed**. **Abrasive cutter elements** are borne on slidable rotatable carriers encompassing a single filament metallic wire. The longitudinal motion of the slidable carrier **elements** is limited by helical spring restraining **elements** which are joined to the wire by a non-embrittling process leaving the rear end of the helical spring restraining **element** fixed to the wire but letting the front portion compress along the axis of the wire thereby absorbing shock imparted to the **abrasive cutter elements** upon impact with the stone



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 79

Titel: FINISHING METHOD FOR SEMICONDUCTOR WAFERS USING A LUBRICATING BOUNDARY LAYER

Patentnummer: US8353738B2

Anmeldung: US20130741256
US20110136437
US20070978367
US20070978347
US20070801031
US20060593307
US20060368295
US20040822515
US20030730631
US20030724535
US20020261113
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Priorität: US19980107297P 19981106
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Anmelder:
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SEMCON TECH LLC

Erfinder:
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MOLNAR CHARLES J

IPC-Notationen:
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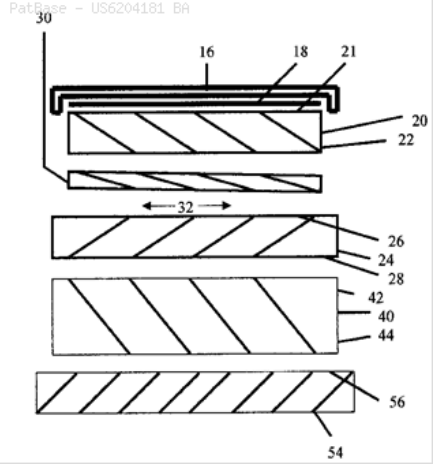
Y10S0451-921
Y10S0977-775
Y10S0977-788

Zusammenfassung:

Source: US6204181 BA [EN] A method of using lubricating boundary layers for finishing semiconductor wafers is described. The lubricating boundary layer thickness is controlled to improve finishing and reduce unwanted surface defects. Differential lubricating boundary layer methods are described to differentially finish semiconductor wafers. Planarization and localized finishing can be improved using differential lubricating boundary layer methods of finishing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 80

Titel: ACTIVE METAL BRAZE JOINT WITH STRESS RELIEVING LAYER

Patentnummer: WO2015157113A3

Anmeldung: WO2015US24281
EP20150732076
DE201560047282T
US20150301115
ES20150732076T

Priorität: US20140975906P 20140406
EP20150732076 20150403
US20150301115 20150403
WO2015US24281 20150403

Patentfamilie: WO2015157113A3
WO2015157113A2
EP3129182B1
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DE602015047282D1
US10363624B2
US2017014930A1
ES2784847T3

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: EASLEY THOMAS

IPC-Notationen:
B23K0001-00
B23K0001-19
B23K0031-02
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C04B0037-00
C04B0037-02
E21B0010-573
E21C0035-18
E21C0035-183

CPC-Notationen:
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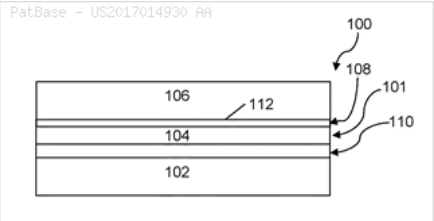
C04B2237-567
C04B2237-60
C04B2237-72
E21B0010-5735
E21C0035-183

Zusammenfassung:

Source: US2017014930 AA [EN] The present **disclosure** relates to a brazed superabrasive assemblies and method of producing brazed superabrasive assemblies. The brazed superabrasive assemblies may include a plurality of braze alloy layers that are positioned opposite a stress relieving layer. The stress relieving layer may have a solidus temperature that is greater than a solidus temperature of the plurality of braze alloy layers



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 81

Titel: ARC HARDFACING ROD

Patentnummer: WO9311932A1

Anmeldung:
WO1992US10325
EP19930900729
DE19930900729T
DE19926028942T
US19910808837
JP19930510947T
CA19922120332
AU19930032307
KR19947002105
KR19940702105
AT19920900729T
MX19920007172
RU19940030818
ZA19920009270

Priorität:
US19910808837 19911217
WO1992US10325 19921201

Patentfamilie:
WO9311932A1
EP0617661B1
EP0617661A1
EP0617661A4
DE69228942T2
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DE69228942D1
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JP3125102B2
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CA2120332C
CA2120332A
AU654227B2
AU199332307A1
KR19947003747A
KR19940703747A
AT178837E
MX9207172A1
RU94030818A
ZA9209270A

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KENNAMETAL INK

Erfinder:
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KHEHROLD I KELLI
KHEHROLD S N JUMEHN
NEWMAN HAROLD C

IPC-Notationen:
B23K0009-04
B23K0035-02
B23K0035-16
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B23K0035-368
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B32B0009-00
C08J0005-14
D02G0003-00

CPC-Notationen:
B23K0035-0272
B23K0035-327
B23K0035-365
B23K0035-368
Y10T0428-2918
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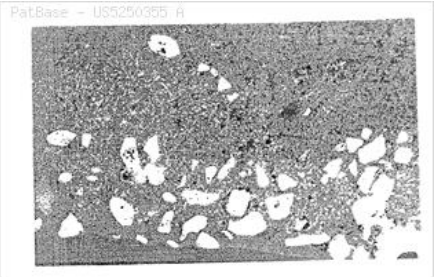
Y10T0428-2949
Y10T0428-2955

Zusammenfassung:



Source: US5250355 A [EN] An arc hardfacing rod including a tubular member, a **filler** material, an insulating coating and a plurality of **discrete** metal carbide particles set within the insulating coating such that a surface of a portion of the metal carbide particles is uncovered. The **filler** carbide particles include tungsten carbide particles, titanium carbide particles, tantalum carbide particles, niobium carbide particles, zirconium carbide particles, vanadium carbide particles, hafnium carbide particles, **molybdenum** carbide particles, chromium carbide particles, silicon carbide particles and boron carbide particles, cemented composites and mixtures thereof. Adhered to the exterior surface of the tubular member is an insulating coating including a coating flux and a coating bonding agent. A plurality of **discrete** metal carbide particles are set within the insulating coating such that a surface of a portion of the metal carbide particles is uncovered. The metal carbide particles may be of the same composition as the filler carbide particles forming the filler material or the metal carbide particles may be macrocrystalline tungsten carbide particles, cast tungsten carbide particles, crushed sintered cemented tungsten carbide particles or pelletized cemented tungsten carbide particles, and mixtures thereof

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 82

Titel: CMP CONDITIONER, METHOD FOR ARRANGING RIGID GRAINS USED FOR CMP CONDITIONER, AND METHOD FOR MANUFACTURING CMP CONDITIONER

Patentnummer: WO200249807A1

Anmeldung:
WO2001JP11209
EP20010271276
DE20016024424T
US20060385297
US20030451644
JP20010262167
JP20000388994
CN20018021022
KR20037007698
TW20010131889
HK20040107147

Priorität:
JP20000388994 20001221
JP20010262167 20010830
US20010451644 20011220
WO2001JP11209 20011220
US20030451644 20030619
US20060385297 20060320

Patentfamilie:
WO200249807A1
EP1346797B1
EP1346797A1
EP1346797A4
DE60124424T2
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HK1064324A1

Anmelder:
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YUTAKA ELECTRIC MFG

Erfinder:
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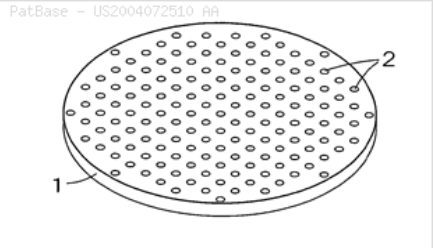
HASHINO EIJI
HASHINO HIDEJI
SETSUO SATO
TOSHIYA KINOSHITA

IPC-Notationen:	B24B B24B0001-00 B24B0021-00 B24B0021-18 B24B0029-00 B24B0037-04 B24B0053-017 B24B0053-12 B24D **B24D0003-00** **B24D0003-04** **B24D0003-06** B24D0003-14 B24D0007-00 B24D0007-14 B24D0007-18 B24D0018-00 H01L0021-02 H01L0021-304	**CPC-Notationen:**	B24B0053-017 B24B0053-12 **B24D0003-06** B24D0003-14 B24D0007-14 B24D0018-00

Zusammenfassung:

Source: US2004072510 AA [EN] **Disclosed** are CMP conditioners which can suppress microscratching of the surface of a semiconductor substrate and can realize stable CMP conditioner properties. The CMP conditioner according to the first aspect of the present invention comprises a support member and a plurality of hard **abrasive** grains provided on a surface of the support member, wherein the plurality of hard **abrasive** grains are regularly arranged on the surface of the support member. The CMP conditioner according to the second aspect of the present invention comprises a support member and a plurality of hard **abrasive** grains provided on the surface of the support member, wherein the plurality of hard **abrasive** grains are arranged on the surface of the support member regularly and so as for the density of the hard **abrasive** grains to decrease from the inner side of the support member toward the outer side of the support member



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 83

Titel: SELECTIVE CHEMICAL-MECHANICAL POLISHING PROPERTIES OF A CROSS-LINKED POLYMER AND SPECIFIC APPLICATIONS THEREFOR

Patentnummer: WO2006041727A1

Anmeldung:
WO2005US35264
WO2003US32691
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HK20050110370
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Priorität:
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Anmelder:
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PSILO QUEST
PSILOQUEST INC
YOKLEY EDWARD M

Erfinder:
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OBENG Y S
OBENG YAW S
THOMAS PETER A
YOKLEY E M
YOKLEY EDWARD M

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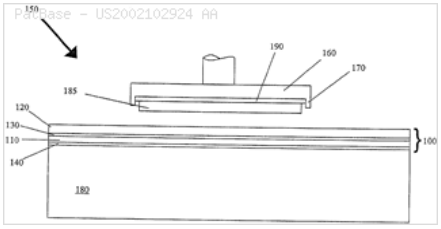
Zusammenfassung:

Source: US2002102924 AA [EN] The present invention is directed, in general, to a method of polishing a surface on substrates, such as semiconductor wafers and, more specifically, to a polishing pad suitable for this purpose. The polishing pad comprises a polishing body that includes a cross-linked polymer material, and may be incorporated into a polishing apparatus. Polishing includes positioning the substrate containing at least one layer against the polishing body and polishing the layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 84

Titel: SELF-LEVELING PADS AND METHODS RELATING THERETO

Patentnummer: WO200145900A1

Anmeldung: WO2000US34679
EP20000984510
US20000742953
TW20000127726

Priorität: US19990171907P 19991223
US20000226998P 20000822
US20000742953 20001221
WO2000US34679 20001221

Patentfamilie: WO200145900A1
EP1212171A1
US6626740B2
US2002004357A1
TW486404B

Anmelder: RODEL HOLDINGS INC
WALLS RUSSELL A

Erfinder: BAKER III ARTHUR RICHARD
CARTER STEPHEN P
HENDRON JEFFREY J
WALLS RUSSELL A JR

IPC-Notationen:
B24B0001-00
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CPC-Notationen:
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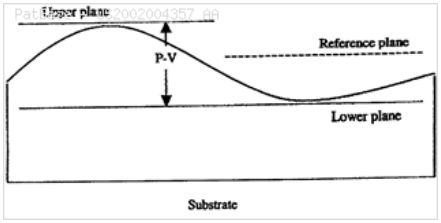
B24D0013-14

Zusammenfassung:

Source: US2002004357 AA [EN] A polishing pad having a soft layer with a porous structure impregnated with a relatively hard material that locally deforms irreversibly under polishing pressure to a substantially flat polishing pad surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 85

Titel: APPARATUS AND METHOD FOR REDUCING REMOVAL FORCES FOR CMP PADS

Patentnummer: US8308528B2

Anmeldung:
US20090535445
US20060339784
US20040852547
US20020160528
US20000478692
US19980124329

Priorität:
US19980124329 19980729
US20000478692 20000106
US20020160528 20020531
US20040852547 20040524
US20060339784 20060125
US20090535445 20090804

Patentfamilie:
US8308528B2
US7585425B2
US6991740B2
US6814834B2
US6398905B1
US2009298395A1
US2006118525A1
US2005000941A1
US2002144780A1
US6036586A

Anmelder:
MICRON TECHNOLOGY INC
ROUND ROCK RES LLC
WARD TRENT T

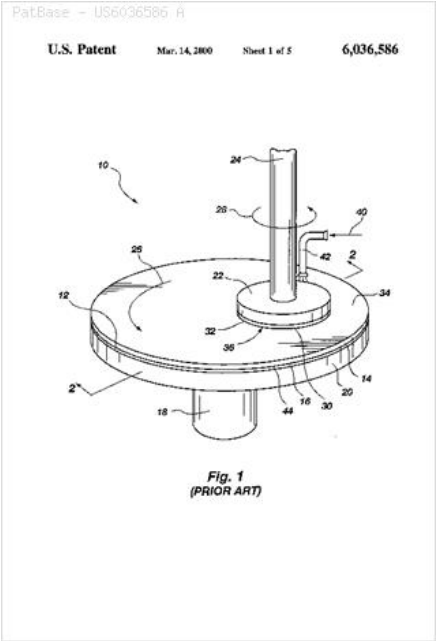
Erfinder:
WARD TRENT T

IPC-Notationen:
B24B0001-00
B24B0007-20
B24B0037-04
B24B0037-11
B24B0037-14
B24B0037-16
B24B0037-24
B24B0037-26
B24B0045-00
B24D0003-00
B24D0003-34
B24D0011-00
B24D0011-02
B44C0001-22
C03C0015-00
C03C0025-68
C23F0001-00
H01L0021-306

CPC-Notationen:
B24B0037-11
B24B0037-14
B24B0037-16
B24B0037-24
B24B0037-26
B24B0045-00
B24D0003-34
B24D0011-02

Zusammenfassung:

Source: US6036586 A [EN] An improvement in a polishing apparatus for planarizing substrates comprises a tenacious coating of a low-adhesion material to the platen surface. An expendable polishing pad is adhesively attached to the low-adhesion material, and may be removed for periodic replacement at much reduced expenditure of force. Polishing pads joined to low-adhesion materials such as polytetrafluoroethylene (PTFE) by conventional adhesives resist distortion during polishing but are readily removed for replacement



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 86

Titel: SAW BLADE AND METHOD FOR MULTIPLE SAWING OF RARE EARTH MAGNET

Patentnummer: EP2596929B1

Anmeldung:
EP20120194492
DE201260028886T
US20120687039
JP20120257024
CN201210599241
KR20120135244
TW20120144219
PH20120000376
SG20120087334
TH20121006145

Priorität:
JP20110259157 20111128
JP20120257024 20121126
EP20120194492 20121127

Patentfamilie:
EP2596929B1
EP2596929A1
DE602012028886D1
US2013137343A1
JP2013136143A2
JP5900298B2
CN103170922A
KR20130059295A
TW201341110A
PH2012000376A
SG190555A1
TH78609B
TH128547A

Anmelder:
SHIN ETSU CHEM CO LTD
SHIN ETSU CHEMICAL CO LTD
SHINETSU CHEMICAL CO

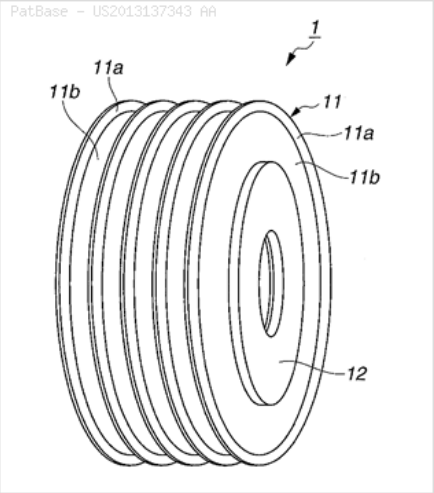
Erfinder:
SATO KOJI
URASHIRO YASUNORI
YASUNORI URAKI

IPC-Notationen:
B24B0001-00
B24B0027-06
B24D0003-00
B24D0003-02
B24D0003-28
B24D0003-32
B24D0003-34
B24D0005-12
B26D0001-14
B28D0001-24
B28D0005-02
C04B0026-10
F16D0069-02

CPC-Notationen:
B24B0001-00
B24D0003-34
B24D0003-346
B24D0005-12
B28D0005-029

Zusammenfassung:

Source: US2013137343 AA [EN] A multiple blade assembly comprising a plurality of spaced apart saw blades mounted on a rotating shaft is used for sawing a rare earth magnet block into multiple pieces by rotating the plurality of saw blades. The saw blade comprises a core in the form of a thin doughnut **disk** and a peripheral **cutting** part on an outer peripheral rim of the core. The **cutting** part is made of a composition comprising an **abrasive**, a resin binder, and a lubricant



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 87

Titel: POLISHING PAD AND METHOD OF MAKING THE SAME

Patentnummer: WO2011087737A3

Anmeldung:
WO2010US61199
US20100518475
JP20120546101T
CN201080063912
KR20127019080
TW20100145034
SG20120046546

Priorität:
US20090288982P 20091222
US20100422442P 20101213
US20100518475 20101220
WO2010US61199 20101220

Patentfamilie:
WO2011087737A3
WO2011087737A2
US2013012108A1
JP5728026B2
JP2013515379T2
CN102762340A
CN102762340B
KR20120120247A
KR101855073B1
TW201130656A
TWI517975B
SG181890A1

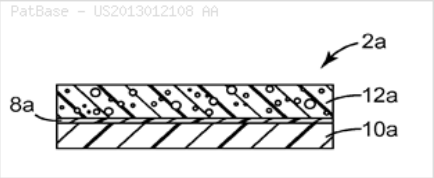
Anmelder:
3M INNOVATIVE PROPERTIES CO
JOSEPH WILLIAM D
LI NAICHAO

Erfinder:
JOSEPH WILLIAM DALE
LI NAI CHAO
NAICHAO LI

IPC-Notationen:
B24B0001-00
B24B0037-00
B24B0037-11
B24B0037-20
B24B0037-22
B24B0037-24
B24D0003-00
B24D0003-28
B24D0003-32
B24D0003-34
B24D0011-00
B24D0018-00
B32B0003-24
C08J0003-28
H01L0021-304

CPC-Notationen:
B24D0003-28
B24D0003-344
H01L0021-304

Zusammenfassung:



Source: US2013012108 AA [EN] The **disclosure** is directed to polishing pads with porous polishing layers, methods of making such polishing pads, and methods of using such pads in a polishing process. The polishing pad includes a compliant layer having first and second opposing sides and a porous polishing layer disposed on the first side of the compliant layer. The porous polishing layer includes a crosslinked network comprising a thermally cured component and a radiation cured component, wherein the radiation cured component and the thermally cured component are covalently bonded in the crosslinked network. The porous polishing layer also includes polymer particles dispersed within the crosslinked network, wherein the polymer particles comprise at least one of thermoplastic polymers or thermoset polymers. The porous polishing layer typically also includes closed cell pores dispersed within the crosslinked network

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 88

Titel: AQUEOUS **ABRASIVES** DISPERSION MEDIUM COMPOSITION

Patentnummer: EP1752521A1

Anmeldung:
EP20060253826
US20090486949
US20060488507
JP20050213868
CN200610099284
KR20060068981
TW20060126730

Priorität:
JP20050213868 20050725
US20060488507 20060718
US20090486949 20090618

Patentfamilie:
EP1752521A1
US2009258580A1
US2007169422A1
JP2007031502A2
JP4481898B2
CN1903968A
CN1903968B
KR20070013221A
KR101254339B1
TW200708605A
TWI395807B

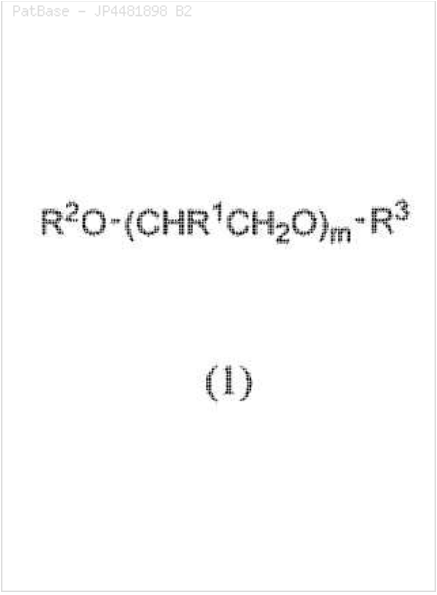
Anmelder:
KIKUCHI SHINGO
NAKADA HIDETO
OHASHI YASUMASA
YUSHIRO CHEM IND
YUSHIRO CHEMICAL INDUSTRY CO LTD

Erfinder:
NAKADA HIDETO
YASUMASA KIKUCHI SHINGO NAKADA
YASUMASA OHASHI

IPC-Notationen:	B24B0001-00	**CPC-Notationen:**	B28D0001-025
	B24B0037-00		B28D0005-007
	B24D0003-02		C10M0111-04
	B24D0017-00		C10M0173-02
	B24D0099-00		C10M2201-062
	B28D0001-02		C10M2207-02
	C09G0001-00		C10M2207-022
	C09K0003-14		C10M2207-0225
	C10M0105-00		C10M2207-04
	C10M0105-14		C10M2207-0406
	C10M0105-18		C10M2207-046
	C10M0107-00		C10M2207-128
	C10M0107-34		C10M2209-104
	C10M0111-00		C10M2209-1045
	C10M0111-04		C10M2209-105
	C10M0125-00		C10M2209-1055
	C10M0125-26		C10M2209-108
	C10M0129-00		C10M2209-1085
	C10M0129-16		C10N2010-02
	C10M0129-34		C10N2020-055
	C10M0173-02		Y02P0070-10
	C10N0010-02		
	C10N0020-06		
	C10N0030-00		
	C10N0040-00		
	C10N0040-22		
	C10N0070-00		

Zusammenfassung:

Source: US2007169422 AA [EN] [Problems to be Solved by the Invention] An object of the present invention is to provide an aqueous **abrasives** dispersion medium composition which does not have a problem of inflammability and which is excellent in dispersion stability of **abrasives** and viscosity stability over the time of usage, and aqueous slurry for processing using the aqueous **abrasives** dispersion medium composition. [Means for Solving the Problems] An aqueous **abrasives** dispersion medium composition comprising: glycols; glycolethers represented by a general formula (1) : R2O- (CHR1CH2O) m -R3 (1); and water. (In the general formula (1) , R1 represents a hydrogen atom or a methyl group, R2 represents an alkyl group or an alkenyl group of carbon number 1 to 18, R3 represents a hydrogen atom, an alkyl group or an alkenyl group of carbon number 1 to 18, and m represents number 1 to 20.)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 89

Titel: CHEMICAL-MECHANICAL PLANARIZATION OF POLYMER FILMS

Patentnummer: WO2015047970A1

Anmeldung:
WO2014US56867
EP20140849695
DE201460061653T
US20130035037
JP20160516571T
CN201480052757
KR20167010321
TW20140132754

Priorität:
US20130035037 20130924
EP20140849695 20140923
WO2014US56867 20140923

Patentfamilie:
WO2015047970A1
EP3049216B1
EP3049216A1
EP3049216A4
DE602014061653D1
US9434859B2
US2015083689A1
JP6542760B2
JP2016537438T2
CN105579196A
CN105579196B
KR20160060117A
TW201512385A
TWI513807B

Anmelder: CABOT MICROELECTRONICS CORP

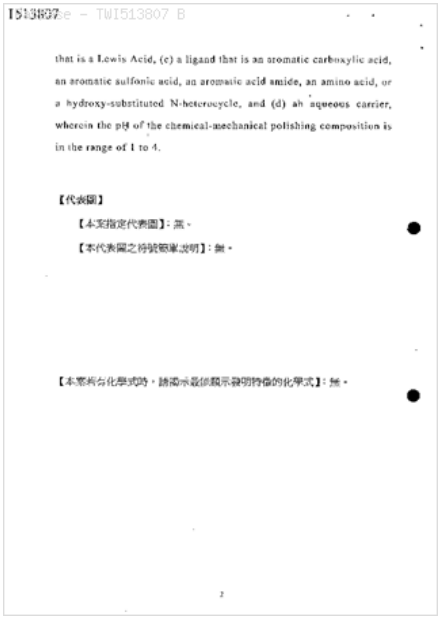
Erfinder:
DYSARD JEFFREY
JIA REN HE
PALLIKKARA KUTTIATOOR SUDEEP

IPC-Notationen:
B24B0001-00
B24B0037-00
B24D0003-06
C09D0005-00
C09G0001-02
C09G0001-04
C09K0003-14
H01L0021-304
H01L0021-306

CPC-Notationen:
C09D0005-00
C09G0001-02
C09K0003-1409
C09K0003-1463
H01L0021-304
H01L0021-30625

Zusammenfassung:

Source: US2015083689 AA [EN] The invention provides a chemical-mechanical polishing composition and a method of chemically-mechanically polishing a substrate with the chemical-mechanical polishing composition. The polishing composition comprises (a) **abrasive** particles that comprise ceria, zirconia, silica, alumina, or a combination thereof, (b) a metal ion that is a Lewis Acid, (c) a ligand that is an aromatic carboxylic acid, an aromatic sulfonic acid, an aromatic acid amide, an amino acid, or a hydroxy-substituted N-heterocycle, and (d) an aqueous carrier, wherein the pH of the chemical-mechanical polishing composition is in the range of about 1 to about 4


TI513807 - TWI513807 B

that is a Lewis Acid, (c) a ligand that is an aromatic carboxylic acid, an aromatic sulfonic acid, an aromatic acid amide, an amino acid, or a hydroxy-substituted N-heterocycle, and (d) an aqueous carrier, wherein the pH of the chemical-mechanical polishing composition is in the range of 1 to 4.

【代表圖】

【本案指定代表圖】：無。

【本代表圖之符號簡單說明】：無。

【本案有化學式時，請揭示最能顯示發明特徵的化學式】：無。

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 90

Titel: CMP PADS AND METHOD OF CREATING VOIDS IN-SITU THEREIN

Patentnummer: US8398462B2

Anmeldung: US20090389922
TW20090105591

Priorität: US20080030501P 20080221
US20090389922 20090220

Patentfamilie: US8398462B2
US2009215363A1
TW200940256A
TWI388396B

Anmelder: SONG JIAN MIN
SUNG CHIEN MIN

Erfinder: SONG JIAN MIN
SUNG CHIEN MIN

IPC-Notationen: B24B0001-00
B24B0037-04
B24B0037-24
B24B0037-26
B24B0053-017
B24D0003-20
B24D0003-32
B24D0003-34
C09K0003-14
H01L0021-304

CPC-Notationen: B24B0037-24

Zusammenfassung:

Source: US2009215363 AA [EN] A method of creating pores in a CMP pad in-situ includes impregnating a first material with a second material to form a CMP pad. The second material can have a resistance to frictional erosion that is less than that of the first material. The CMP pad thus has two materials with differing frictional erosion resistances. The working surface of the CMP pad can be contacted to a wafer to be polished wherein the second material can be frictionally eroded during polishing

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 91

Titel: LOW FRICTION PLANARIZING/POLISHING PADS AND USE THEREOF

Patentnummer: US2008014841A1

Anmeldung: US20070860643
US20030645493

Priorität: US20030645493 20030822
US20070860643 20070925

Patentfamilie: US2008014841A1
US2005042976A1

Anmelder: IBM

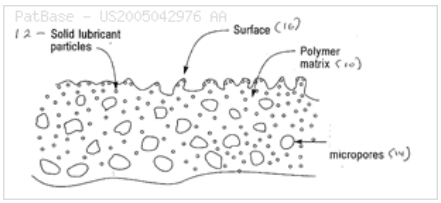
Erfinder: RONAY MARIA

IPC-Notationen: B24B0001-00
B24B0037-04
B24D0003-20
B24D0003-32
B24D0003-34

CPC-Notationen: B24B0037-24
B24D0003-32
B24D0003-346

Zusammenfassung:

Source: US2005042976 AA [EN] A polishing pad comprising a polymeric matrix and solid lubricant particles is useful for planarizing surfaces, and preventing delamination and scratches



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 92

Titel: DRESSER FOR POLISHING CLOTH AND METHOD FOR PRODUCING THE SAME

Patentnummer: US2005202762A1

Anmeldung: US20050073619
JP20090132037
JP20050062594
CN200510053721
KR20050019924
TW20050106842

Priorität: JP20040068135 20040310
JP20050062594 20050307
JP20090132037 20090601

Patentfamilie: US2005202762A1
JP2009190170A2
JP2005288685A2
JP5295868B2
CN1666844A
KR20060043812A
KR100686605B1
TW200533467A
TWI286963B

Anmelder: READ CO LTD

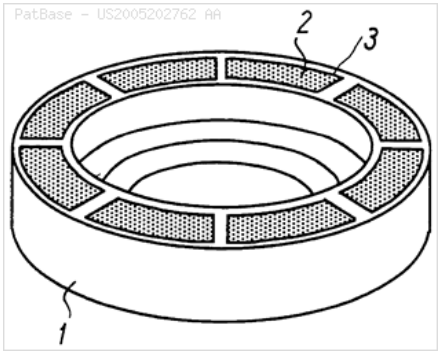
Erfinder: TADAKATSU NABEYA

IPC-Notationen:
B24B0001-00
B24B0053-02
B24B0053-12
B24D0003-00
B24D0003-04
B24D0003-06
B24D0003-14
B24D0007-00
B24D0007-06
B32B0009-04
H01L0021-02
H01L0021-304

CPC-Notationen:
A61F0007-007
A61F2007-0045
A61F2007-0086
A61F2007-0088
A61F2007-0094
A61F2007-0228
A61H0039-04
A61H2205-12
A61L0002-00
A61N0005-06
A61N2005-066
B24B0001-00
B24B0053-017
B24B0053-02
B24B0053-12
B24D0003-00
B24D0003-06
B24D0003-14
B24D0018-00
B32B0009-04
B82Y0030-00
G05D0023-19
H01L0021-304
H05K0009-00

Zusammenfassung:

Source: US2005202762 AA [EN] To provide a dresser for a polishing cloth in which a stable dressing performance is maintained, a uniformly polished surface is provided on the surface of the polishing cloth, and in particular, a scratch on a wafer caused by the dissociation of **abrasive** grains is prevented, and a method for producing the same A dresser for a polishing cloth includes a base 1 and a dressing part disposed on the surface of the base. The dressing part includes a plurality of **abrasive** grains 2 and a plate-shaped holding component 3 that holds the **abrasive** grains 2. The holding component 3 is composed of cemented carbide, cermet, or ceramic. Alternatively, the holding component 3 may be composed of a material containing silicon to which silicon dioxide is added. A method for producing the dresser for a polishing cloth includes a step of forming adhesive portions having almost the same diameter as that of the **abrasive** grains at positions corresponding to holding positions of the **abrasive** grains 2 to be arrayed with regularity, the positions being disposed on the surface of the holding component or a sheet disposed on the holding component; adhering the abrasive grains 2 on the adhesive portions; and sintering the holding component 3 to fix the abrasive grains 2



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 93

Titel: STRUCTURED **ABRASIVE** WITH OVERLAYER, AND METHOD OF MAKING AND USING THE SAME

Patentnummer: WO2009011973A1

Anmeldung:
WO2008US64066
EP20080755832
DE200860012687T
US20070777701
JP20100516088T
CN200880023826
KR20107002465
AT20080755832T
BR2008PI14033
IN2010CN00209
RU20100100771

Priorität:
US20070777701 20070713
EP20080755832 20080519
WO2008US64066 20080519

Patentfamilie:
WO2009011973A1
EP2176031B1
EP2176031A1
DE602008012687D1
US8038750B2
US2009017727A1
JP5133409B2
JP2010533592T2
CN101687309A
CN101687309B
KR20100057592A
KR101506052B1
AT540781E
BRPI0814033A8
BRPI0814033A2
IN00209CN2010A
RU2471609C2
RU2010100771A

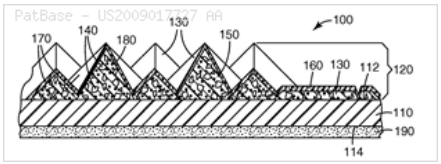
Anmelder:
3M INNOVATION CO LTD
3M INNOVATIVE PROPERTIES CO

Erfinder:
ALAKHAPPERUMA KARUNASENA
KARUNASENA ALAHAPPERUMA
LAMFERE KREJG F
LAMPHERE CRAIG F
LAMPHERE GRAIG F
PRIBIL DZHOZEF DZH
PRIBYL JOSEPH G
VU EHDVARD DZH
WOO EDWARD J

IPC-Notationen:
B24B0001-00
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0018-00
C09C0001-68
C09K0003-14

CPC-Notationen:
B24D0003-28
B24D0003-34
B24D0018-00

Zusammenfassung:



Source: US2009017727 AA [EN] A structured **abrasive** article comprises a backing with a topographically structured **abrasive** layer secured thereto. The topographically structured **abrasive** layer comprises precisely-shaped **abrasive** composites. A solid overlayer comprising eroding particles with a Mohs scale hardness of at least 4 and a water-soluble polymer is disposed on at least a portion of the topographically structured **abrasive** layer. Methods of making and using the structured **abrasive** articles are also **disclosed**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 94

Titel: LUBRICATING COMPOSITION APPLIED TO BORON NITRIDE **GRINDING WHEELS**

Patentnummer: DE1924247C3

Anmeldung: DE19691924247
US19680729395
JP19770008189
JP19690036947
GB19690022252
FR19690015753
19690512
CH19690007359
NL19690007251
SE19690006726

Priorität: US19680729395 19680515

Patentfamilie: DE1924247C3
DE1924247B2
DE1924247A1
US3528789A
JP53046515B4
JP52009785B4
GB1277481A
FR2008603A1
BE732930A
CH541391A
NL166202C
NL166202B
NL6907251A
SE339184B

Anmelder: GEN ELECTRIC

Erfinder: FAIRBANKS MATHEWSON JUN WILFRE
FAIRBANKS MATHEWSON WILFRED JR
MATHEWSON WILFRED F JR
OWENS ROBERT S
STEPHEN OWENS ROBERT

IPC-Notationen:	B24B0001-00 **B24D0003-02** **B24D0003-34** C09K0003-14 C10M0169-00 C10M0169-04 C10N0040-02 C10N0040-22	**CPC-Notationen:**	B24B0001-00 **B24D0003-34** **B24D0003-344** **B24D0003-346** C10M0007-00 C10M2201-00 C10M2201-043 C10M2201-061 C10M2201-065 C10M2201-066 C10M2201-08 C10M2201-081 C10M2201-082 C10M2201-084 C10M2201-10 C10M2201-16 C10M2201-18 C10M2207-021 C10M2209-04 C10M2209-06 C10M2209-062 C10M2209-084 C10M2209-101 C10M2215-042 C10M2227-04 C10N2040-20 C10N2050-08 C10N2050-10

Zusammenfassung:

Source: US3528789 A [EN] ABSTRACT OF THE **DISCLOSURE** Greatly improved **grinding** is accomplished by effecting relative motion between the workpiece and a cubic crystal boron nitride grain **abrasive tool** in contact with the 15 workpiece while simultaneously supplying to the working surface of the **abrasive tool** a solid dry lubricant from the group consisting of hexagonal boron nitride, lubricants having the general lamellar crystal structure of cadmium iodide, **molybdenum** disulfide, and mixtures thereof. In the 20 preferred embodiment the solid dry lubricant is supplied by contacting the working surface of the **abrasive tool** with a rod or other shaped body containing the solid dry lubricant such that the lubricant is rubbed onto the **abrasive tool** as the **grinding** proceeds. The preferred composi- 25 tion for the shaped lubricant body is a mixture of **molybdenum** disulfide, an active diluent such as sulphur, an adhesive material to provide better transfer of the lubricant to the working surface of the **abrasive tool**, and a resin binder

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 95

Titel: **ABRASIVE** MATERIAL PRODUCT, ITS PRODUCTION METHOD AND USE METHOD

Patentnummer: WO2010011801A3

Anmeldung: WO2009US51480
EP20090800981
US20090995479
JP20090167903
CN200980132149

Priorität: JP20080191232 20080724
JP20090167903 20090716
US20090995479 20090723
WO2009US51480 20090723

Patentfamilie: WO2010011801A3
WO2010011801A2
EP2328719B1
EP2328719A4
EP2328719A2
US9919406B2
US2011092137A1
JP2010046791A2
JP5555453B2
CN102123830A
CN102123830B

Anmelder: 3M INNOVATIVE PROPERTIES CO
NAGANO YASUHIKO
OHISHI MICHIHIRO
THREE M INNOVATIVE PROPERTIES
TOGASHI YOKO

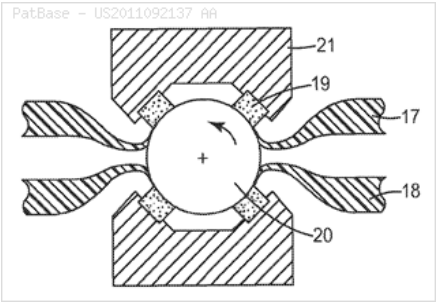
Erfinder: OHISHI MICHIHIRO
OISHI MICHIHIRO
YASUHIKO NAGANO
YOKO TOGASHI

IPC-Notationen: B24B0001-00
B24D0003-20
B24D0003-28
B24D0003-30
B24D0003-34
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0011-001
B24D0018-0009

Zusammenfassung:

Source: US2011092137 AA [EN] To provide an **abrasive** material with improved adhesion strength of an **abrasive** part to a substrate and durable to a severe **abrasive** work with applying high load and a long time abrading work. The **abrasive** material product comprises a substrate and an **abrasive** part having a plurality of shaped structures projecting from the substrate and is characterized in that the **abrasive** part comprises (1) an upper layer composed of a cured material of a mixture containing **abrasive** particles dispersed in a resin and (2) a lower layer composed of a cured material of a binder agent containing a radiation-curable monomer and/or oligomer and a thermosetting resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 96

Titel: COATED **ABRASIVE** AGGREGATES AND PRODUCTS CONTAING SAME

Patentnummer: WO2013003699A3

Anmeldung: WO2012US44882
EP20120804297
US20120537927
CN201280029026
KR20147001353
IN2013DN10655

Priorität: US20110503462P 20110630
US20120537927 20120629
WO2012US44882 20120629

Patentfamilie: WO2013003699A3
WO2013003699A2
EP2726569A4
EP2726569A2
US8974560B2
US2013014445A1
CN103608424A
CN103608424B
KR20140027476A
KR101630218B1
IN328009B
IN10655DN2013A

Anmelder: HERBERT CHARLES G
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
WANG JIANNA

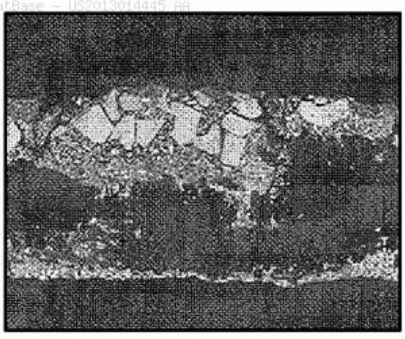
Erfinder: HERBERT CHARLES G
WANG JIANNA

IPC-Notationen: B24B0001-00
B24D0003-20
B24D0003-28
B24D0003-34
C09K0003-14

CPC-Notationen: B24D0003-20
B24D0003-344
C09K0003-14
C09K0003-1436

Zusammenfassung:

Source: US2013014445 AA [EN] **Abrasive** aggregates and fixed **abrasive** articles comprising formaldehyde-free polymer binder and a plurality of **abrasive** grains are provided that are particularly suitable for machining **operations**, in which abrasion is carried out to remove material and improve surface quality. Certain embodiments combine an **abrasive** grain, which can be in the form of microparticles, and a formaldehyde-free polymer binder, which can be in the form of a polymer resin and cross-linking agent. Optionally, the **abrasive** aggregate can contain a secondary cross-linking agent, or a functional **filler**, such as a **grinding aid**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 97

Titel: SINTERED POLYCRYSTALLINE DIAMOND COMPACT CONSTRUCTION WITH INTEGRAL HEAT SINK

Patentnummer: US4605343A

Anmeldung: US19840652242
CA19850489718

Priorität: US19840652242 19840920
CA19850489718 19850829

Patentfamilie: US4605343A
CA1242587A1

Anmelder: GEN ELECTRIC

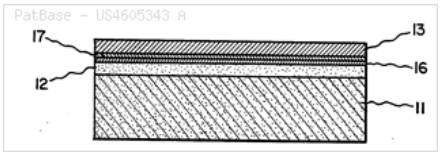
Erfinder: HIBBS LOUIS E JR
SOGOIAN GEORGE C

IPC-Notationen:
B24B0001-00
B24D0017-00
B24D0099-00
B28D0001-02
B28D0001-12
B28D0001-18
C23C0028-00
C23C0030-00

CPC-Notationen:
B24D0099-00
B28D0001-121
B28D0001-188
C23C0028-00
C23C0030-005
Y10S0076-12
Y10T0407-26
Y10T0407-27
Y10T0428-12625
Y10T0428-12826

Zusammenfassung:

Source: US4605343 A [EN] A sintered polycrystalline diamond compact having an integral metallic heat sink bonded to and covering at least the outer diamond surface is used to increase compact **life** when the compact is used for material removal without a fluid **coolant**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 98

Titel: **GRINDING** COMPOSITION USING **ABRASIVE** PARTICLES ON BUBBLES

Patentnummer: US5885312A

Anmeldung: US19970877154

Priorität: US19970877154 19970617

Patentfamilie: US5885312A

Anmelder: SPEEDFAM CORP

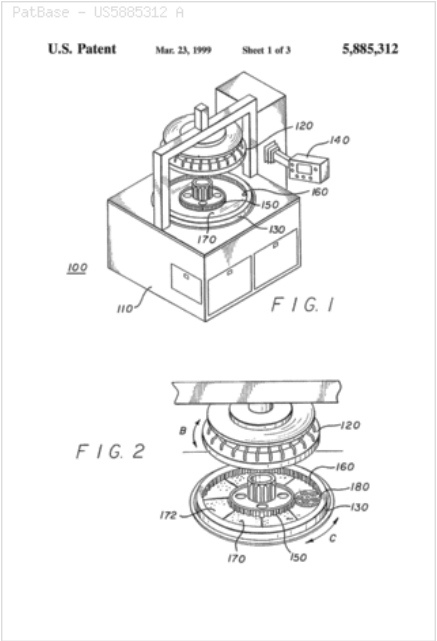
Erfinder: FRUITMAN CLINTON O

IPC-Notationen: B24B0003-00
B24B0003-32
B24D0003-34
B24D0018-00

CPC-Notationen: B24B0037-245
B24D0003-344
B24D0018-0009

Zusammenfassung:

Source: US5885312 A [EN] The instant invention relates generally to **abrasive** stones for use in processing workpiece surfaces. The **abrasive** stones generally are produced by combining an epoxy novalac resin mixture with microballoons and a catalyst. The mixture is put into a mold, cold pressed, and then cured, creating **abrasive** stones having a uniform surface and bulk structure with a uniform hardness, suitable for workpiece processing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 99

Titel: Ceramic-bonded **abrasive grinding tools**

Patentnummer: US5366524A

Anmeldung: US19930152629

Priorität: US19930152629 19931112

Patentfamilie: US5366524A

Anmelder: MARTIN MARIETTA ENERGY SYSTEMS

Erfinder: GORIN ANDREW H
HOLCOMBE JR CRESSIE E
SEALS ROLAND D

IPC-Notationen:
B24B0007-20
B24B0007-22
B24B0009-06
B24D0003-04
B24D0007-00
B24D0007-02

CPC-Notationen:
B24B0007-22
B24B0009-06
B24D0003-04
B24D0007-02

Zusammenfassung:

Source: US5366524 A [EN] **Abrasive** grains such as boron carbide, silicon carbide, alumina, diamond, cubic boron nitride, and mullite are combined with a cement primarily comprised of zinc oxide and a reactive liquid setting agent and solidified into **abrasive grinding tools**. Such **grinding tools** are particularly suitable for **grinding** and polishing stone, such as marble and granite

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 100

Titel: POLISHING PAD WITH REDUCED MOISTURE ABSORPTION

Patentnummer: WO9962673A1

Anmeldung: WO1999GB01515
EP19990955238
US20000596842
JP20000551920T
AU19990042724
KR20007013658
TW19990109099

Priorität: US19980087742P 19980602
US19990317974 19990525
WO1999GB01515 19990601
US20000596842 20000619

Patentfamilie: WO9962673A1
EP1091831A1
US6585574B1
JP2002516764T2
AU199942724A1
KR20010071381A
KR100563172B1
TW449528B

Anmelder: BAJAJ RAJEEV
LAM RES CORP
LOMBARDO BRIAN
PERIPHERAL PRODUCTS INC
SCAPA GROUP PLC

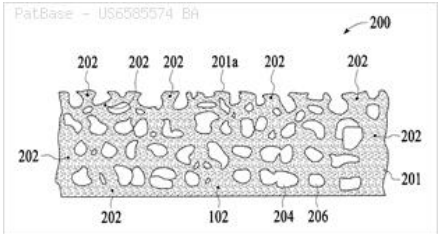
Erfinder: BAJAJ RAJEEV
LOMBARDO BRIAN

IPC-Notationen: B24B0013-00
B24B0037-00
B24B0037-04
B24B0037-24
B24D0003-20
B24D0003-26
B24D0003-34
B24D0011-00
H01L0021-02
H01L0021-304

CPC-Notationen: B24B0037-24
B24D0003-26
B24D0003-34
B24D0011-001

Zusammenfassung:

Source: US6585574 BA [EN] A polishing pad for use in chemical **mechanical** polishing (CMP) is **disclosed**. The polishing pad has a pad surface for polishing wafer surfaces. The pad surface is composed of a polymeric matrix material. The polishing pad also contains a polymeric **additive** which is defined in the polymeric matrix of the pad surface and in cells of the pad surface. The polymeric **additive** may include one of a polyurethane, a polyamide, a polyester, a polyacrylonitrile, a polyacrylate, a polymethacrylate, a polyvinylchloride, and a polyvinylidene **chloride**. The polymeric **additive** is configured to be hydrophilic so that the pad surface is wettable to enable improved slurry distribution over the pad surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 101

Titel: **ABRASIVE** FILM IN WHICH WATER-SOLUBLE **ADDITIVES** ARE ADDED TO BINDER

Patentnummer: US6755728B2

Anmeldung: US20020105455
JP20010281577
JP20010097054

Priorität: JP20010097054 20010329
JP20010281577 20010917

Patentfamilie: US6755728B2
US2002142705A1
JP2003089066A2
JP2002292572A2
JP3739298B2

Anmelder: NORITAKE CO LTD
NORITAKE COATED ABRASIVE KK

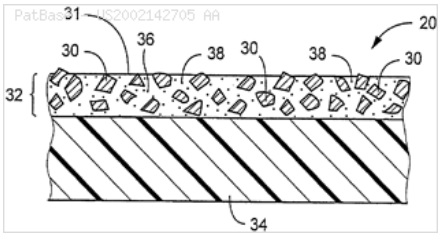
Erfinder: SUGIURA ETSUO
SUGIURA TOSHIO

IPC-Notationen: B24B0019-00
B24B0019-22
B24B0021-00
B24B0037-20
B24B0037-24
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: B24B0019-226
B24D0003-28
B24D0003-344

Zusammenfassung:

Source: US2002142705 AA [EN] An **abrasive** film for polishing a workpiece, including: (a) a substrate; (b) a binder; (c) a multiplicity of **abrasive** grains which are fixed to a surface of the substrate by the binder; and (d) a water-soluble inorganic compound or a water-soluble organic acid alkali metal salt which is added to the binder. The water-soluble inorganic compound preferably consists of a weak-alkali metal salt or a weak-acid metal salt. The water-soluble organic acid alkali metal salt preferably consists of an anionic surface-active agent or a carboxylic acid alkali metal salt



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 102

Titel: SLEEVE ASSEMBLY

Patentnummer: US4220674A

Anmeldung: US19780920785
US19770865708
US19770859471
US19770858640
US19770850654
US19760721984
CA19770281060

Priorität: US19760721984 19760910
US19770858640 19771208
US19770859471 19771212
US19770865708 19771229
US19780920785 19780630

Patentfamilie: US4220674A
US4216846A
US4198789A
US4179856A
US4123990A
US4089137A
CA1068484A1

Anmelder: TEXACONE CO
WHEELER JOHN H

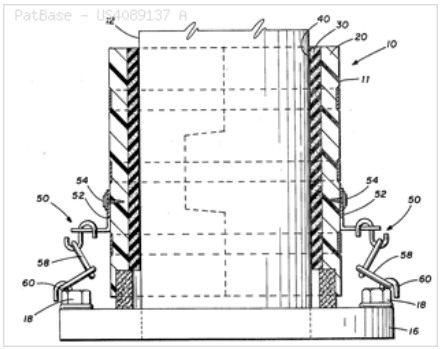
Erfinder: WHEELER JOHN H

IPC-Notationen: B24B0019-00
B24D0017-00
B24D0099-00
B66B0007-12

CPC-Notationen: B24D0099-00
B66B0007-12
B66B0007-1292
Y10T0029-4506

Zusammenfassung:

Source: US4089137 A [EN] A sleeve assembly for **sanding**, rust removing, and pit filling on a piston rod of a hydraulic cylinder or the like includes a **sanding** component, a rust removing component and a pit filling component. The **sanding** component comprises a rigid annular outer member, a resilient annular intermediate member adhesively secured to the inner surface of the outer member, and an **abrasive** annular inner member adhesively secured to the inner surface of the intermediate member and in interference contact with the piston rod. The rust removing component comprises an annular upper ring member composed of a rigid material and an elastomeric annular lower C-ring member having brass or bronze particles embedded therein. The pit filling component comprises an annular upper ring member composed of a rigid material and an elastomeric annular lower C-ring member having **lead** particles imbedded therein. Clamp means releasably engages the members of each of the components about the piston rod



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 103

Titel: LAPPING TAPE

Patentnummer: EP0873821A3

Anmeldung: EP19980107426
US19980064312
JP19970123198
CN19981015036
KR19980013057
TW19980104473

Priorität: JP19970123198 19970425

Patentfamilie: EP0873821A3
EP0873821A2
US6040034A
JP10296642A2
CN1200319A
KR19980081351A
TW400269B

Anmelder: TDK CORP

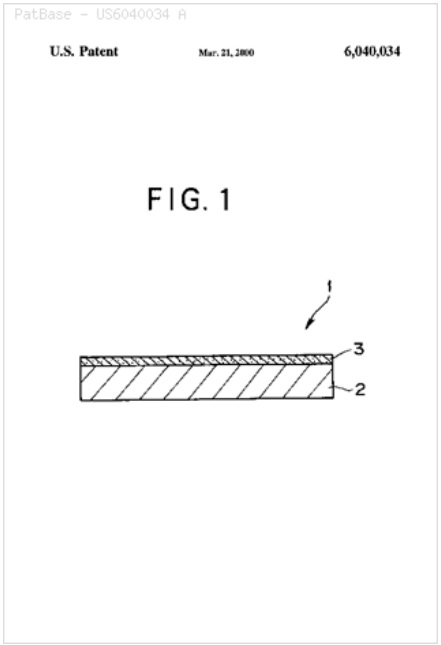
Erfinder: KUROSE SHIGEO
OKADA KEASO
OKADA KESAO

IPC-Notationen: B24B0021-00
B24D0003-00
B24D0003-34
B24D0011-00
G11B0005-187
G11B0005-41
G11B0005-84

CPC-Notationen: B24B0021-00
B24D0003-34
B24D0011-005
G11B0005-1871
G11B0005-41
G11B0005-84
Y10T0428-24372
Y10T0428-24405
Y10T0428-24421

Zusammenfassung:

Source: US6040034 A [EN] Described is a lapping tape having, on a flexible substrate, a lapping layer formed by coating a paint for the formation of a lapping layer which contains inorganic powders, a binder and solvents, and then drying. In the lapping tape according to the present invention, the solvents in the paint contain an organic solvent having a boiling point of 120 DEG C. or higher in an amount of 20 to 60 weight percent based on the total amount of organic solvents; the lapping layer has a thickness of 3 to 25 mu m; and the remaining amount of the solvents in the lapping layer is 500 g/m3. The present invention therefore brings about excellent advantages that the lapping scratches on the surface to the lapped can be prevented to the utmost; peeling of the lapping layer from the lapping tape can be suppressed; and the lapping tape has excellent lapping ability



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 104

Titel: PLASTIC SOFT COMPOSITION FOR POLISHING AND FOR SURFACE PROTECTIVE MATERIAL APPLICATION

Patentnummer: EP2236247B1

Anmeldung:
EP20100290137
DE201060000288T
US20090636481
JP20090089001
CN201010140462
AT20100290137T

Priorität:
JP20090089001 20090401
EP20100290137 20100316

Patentfamilie:
EP2236247B1
EP2236247A1
DE602010000288D1
US8992644B2
US2010251624A1
JP2010240751A2
JP4782214B2
CN101857773A
CN101857773B
AT529222E

Anmelder:
JOIBONDO KK
JOY BOND CO LTD
KODATE TADAO

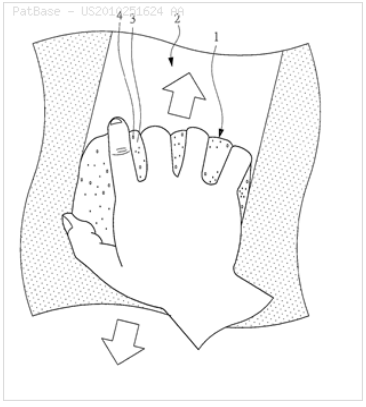
Erfinder:
KODATE TADAO
KOYAKATA TADAO
TADAO KODATA

IPC-Notationen:
B24B0029-00
B24B0037-00
B24D0003-00
B24D0003-28
B24D0003-34
B24D0011-00
B24D0013-12
B24D0013-14
B24D0015-04
C09G0001-02
C09K0003-14

CPC-Notationen:
B24D0003-28
B24D0003-346
B24D0011-00
B24D0013-12
B24D0013-147
B24D0015-04

Zusammenfassung:

Source: US2010251624 AA [EN] A plastic soft composition is formed of soft base material constantly provided with plasticity, porous fine particles for polishing contained in the base material, and the like, and a polishing process and a coating process are performed to a painted surface and the like using the plastic soft composition. The fine particles for polishing are impregnated with a coating agent (a surface protective agent) added with an activator which is emulsified by contact with water, and the coating agent is held in concave portions formed in the fine particles. Both polishing work and coating work are achieved by sliding the plastic soft composition on a painted surface by a palm pressure of a user



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 105

Titel: PASSIVATING VIBRATORY **GRINDING**, IN PARTICULAR FOR ALUMINUM, MAGNESIUM AND ZINC

Patentnummer: WO2009068366A1

Anmeldung: WO2008EP63945
EP20080853742
DE200850003633T
DE200710057352
AT20080853742T
ES20080853742T

Priorität: DE200710057352 20071127
EP20080853742 20081016
WO2008EP63945 20081016

Patentfamilie: WO2009068366A1
EP2217742B1
EP2217742A1
DE102007057352A1
DE502008003633D1
AT510045E
ES2364799T3

Anmelder: HENKEL AG AND CO KGAA
MASLOWSKI ANDREAS

Erfinder: MASLOWSKI ANDREAS

IPC-Notationen: B24B0031-00
B24B0031-14
C09G0001-00
C09G0001-02
C23C0022-05
C23C0022-34
C23C0022-73
C23F0003-00

CPC-Notationen: B24B0031-14
C23C0022-34
C23C0022-73
C23F0003-03

Zusammenfassung:

Source: WO09068366 A1 [EN] The invention relates to a method for the vibratory **grinding** and adhesion-promoting passivating of metal components, which at least partially comprise metals and/or alloys selected from aluminum, magnesium and/or zinc, in one **operation** employing an aqueous composition having a pH value between 0.3 and 3.5, containing complex **fluorides** of the **elements** of boron, silicon, titanium, zircon or hafnium individually or mixed together in concentrations of the **fluoro** anions of between 100 and 4000 ppm in total as a vibratory **grinding** medium, and to a component produced directly using this method, and to the use thereof for structural adhesion or for applying other corrosion-protecting coatings. The present invention further relates to the use of a concentrate in order to produce the vibratory **grinding** medium in the method according to the invention

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 106

Titel: CMP **ABRASIVE**, LIQUID **ADDITIVE** FOR CMP **ABRASIVE** AND METHOD FOR POLISHING SUBSTRATE

Patentnummer: WO200039843A1

Anmeldung:
WO1999JP07209
EP20050075862
EP19990961311
DE19996045240
US20060407196
US20060407195
US20050177352
US20040990427
US20040759163
US20010856491
JP20050007242
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JP20040096773
JP20000591656T
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KR20077004271
KR20047021176
KR20047019184
KR20017008089
TW19990122949

Priorität:
JP19980368355 19981225
EP19990961311 19991222
EP20050075862 19991222
JP20000591656 19991222
JP20040096773 19991222
WO1999JP07209 19991222
US20010856491 20010619
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KR20047019184 20041126
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US20050177352 20050711
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KR20077004271 20070223
WO1999JP07209 20070223
WO1999JP07209 20070712
WO1999JP07209 20080204

Patentfamilie:
WO200039843A1
EP1566421B1
EP1148538A1
EP1566421A3
EP1148538A4
EP1566421A2
DE69945240D1
US7163644B2
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US2006197054A1
US2006186372A1
US2005269295A1
US2005118820A1

US2004147206A1
JP2005167271A2
JP2005123650A2
JP2004247748A2
JP2000039843A1
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JP4501694B2
JP3649279B2
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KR20070034640A
KR20050006299A
KR20050005499A
KR20010108048A
KR100851451B1
KR100822116B1
KR100797218B1
KR100754103B1
KR100475976B1
TW492095B

Anmelder:
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ASHIZAWA TORANOSUKE
HIRAI KEIZO
HITACHI CHEMICAL CO LTD
KURATA YASUSHI
KURIHARA MIHO
YOSHIDA MASATO

Erfinder:
AKAHORI SATOHIKO
AKAHORI TOSHIHIKO
ASHIZAWA TORANOSUKE
HIRAI KEIZO
KURATA YASUSHI
KURIHARA MIHO
KURIHARA YOSHIO
YOSHIDA MASATO

IPC-Notationen:
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B24B0037-04
B24D0003-34
B44C0001-22
C01F0017-00
C09C0001-68
C09G0001-02
C09K0003-14
C09K0013-00
C09K0013-06
H01L0021-02
H01L0021-302
H01L0021-304
H01L0021-3105

CPC-Notationen:
B24B0037-04
B24D0003-34
C09G0001-02
C09K0003-1463
H01L0021-31053

Zusammenfassung:

Source: US2004147206 AA [EN] A CMP **abrasive** comprising a cerium oxide slurry containing cerium oxide particles, a dispersant and water, and a liquid **additive** containing a dispersant and water; and a liquid **additive** for the CMP **abrasive**. A method for polishing a substrate which comprises holding a substrate having, formed thereon, a film to be polished against a polishing pad of a polishing platen, followed by pressing, and moving the substrate and the polishing platen while supplying the above CMP **abrasive** in between the film to be polished and the polishing pad to thereby polish the film to be polished. The CMP **abrasive** and the method for polishing can be used for polishing a surface to be polished such as a silicone oxide film or a silicon nitride film without contaminating the surface to be polished with an alkali metal such as sodium ions and with no flaws, and the CMP **abrasive** is excellent in storage stability

PatBase - TW492095 B

中華民國專利公報 [19] [12]

[11]公告編號：492095
[44]中華民國 91年 (2002) 06月21日
發明 全2頁

[51] Int.Cl[6]： H01L21/304
C09C1/68
C01F17/00

[54]名 稱：CMP研磨劑、CMP研磨劑用添加液及基板之研磨方法
[21]申請案號： 088122949 [22]申請日期：中華民國 88年 (1999) 12月24日
[30]優 先 權： [31]10-368355 [32]1998/12/25 [33]日本
[72]發 明 人：
[71]申 請 人：
日立化成工業股份有限公司 日本
[74]代 理 人： 林志剛 先生

[57]申請專利範圍：

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 107

Titel: POLISHING PAD FOR SEMICONDUCTOR WAFER AND LAMINATED BODY FOR POLISHING OF SEMICONDUCTOR WAFER EQUIPPED WITH THE SAME AS WELL AS METHOD FOR POLISHING OF SEMICONDUCTOR WAFER

Patentnummer: EP1252973B1

Anmeldung: EP20020009155
DE20026028784T
US20020128282
JP20010128483
JP20010128482
KR20020022405

Priorität: JP20010128482 20010425
JP20010128483 20010425

Patentfamilie: EP1252973B1
EP1252973A1
DE60228784D1
US6855034B2
US2002173231A1
JP2002324770A2
JP2002324769A2
JP3826729B2
JP3826728B2
KR20020083136A
KR100858392B1

Anmelder: JSR CORP

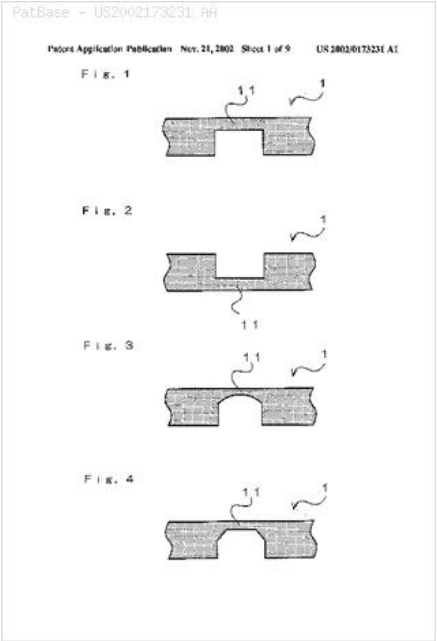
Erfinder: HASEGAWA TORU
KOU HASEGAWA

IPC-Notationen:
B24B0037-013
B24B0037-04
B24B0037-20
B24B0037-24
B24B0037-26
B24B0049-12
B24D0003-34
B24D0007-00
B24D0007-12
B24D0013-00
B24D0013-12
B24D0013-14
H01L0021-02
H01L0021-304

CPC-Notationen:
B24B0037-013
B24B0037-205
B24D0003-344
B24D0013-12

Zusammenfassung:

Source: US2002173231 AA [EN] An objective of the present invention is to provide a polishing pad for a semiconductor wafer and a laminated body for polishing of a semiconductor wafer equipped with the same which can perform optical endpoint detection without lowering the polishing performance as well as methods for polishing of a semiconductor wafer using them. The polishing pad of the invention comprises a water-insoluble matrix material such as crosslinked 1,2-polybutadiene, and a water-soluble particle such as beta-cyclodextrin dispersed in this water-insoluble matrix material, and has a light transmitting properties so that a polishing endpoint can be detected with a light



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 108

Titel: POLISHING PAD, POLISHING APPARATUS AND METHOD FOR MANUFACTURING POLISHING PAD

Patentnummer: US2018036861A1

Anmeldung: US20170666335
TW20160125047

Priorität: TW20160125047 20160805

Patentfamilie: US2018036861A1
TW201809087A
TWI604001B

Anmelder: SAN FANG CHEMICAL IND CO LTD

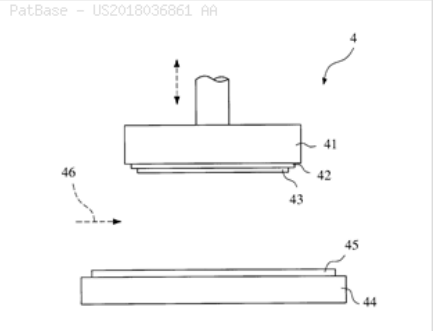
Erfinder: CHEN CHIN WEI
FENG CHUNG CHIH
HUNG YUNG CHANG
SUNG PIN HSIEN
WU WEN CHIEH
YAO I PENG

IPC-Notationen:
B24B0037-22
B24B0037-24
B24D0003-22
B24D0018-00
C08J0005-14
C08K0003-22
C08K0007-04
C08L0021-02
H01L0021-304

CPC-Notationen:
B24B0037-22
B24B0037-24
B24B0037-245
B24D0003-344
B24D0003-346
B24D0018-0009

Zusammenfassung:

Source: US2018036861 AA [EN] The present invention relates to a polishing pad with improved slurry retention capacity, which includes a polishing layer. The polishing layer includes an elastomer main body and a plurality of titanium dioxide nanowires. Each of the titanium dioxide nanowires is independent and is distributed evenly and randomly in the elastomer main body. The present invention further provides a polishing apparatus and a method for manufacturing the polishing pad



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 109

Titel: POLISHING PADS FORMED USING AN **ADDITIVE** MANUFACTURING PROCESS AND METHODS RELATED THERETO

Patentnummer: WO2020153979A1

Anmeldung: WO2019US24999
EP20190911608
US20190291647
CN201980044800
KR20217003948
TW20190111915
SG20201112350

Priorität: US20190795642P 20190123
US20190291647 20190304
WO2019US24999 20190329

Patentfamilie: WO2020153979A1
EP3797015A1
US2020230781A1
CN112384330A
KR20210019120A
TW202027912A
SG11202012350RA1

Anmelder: APPLIED MATERIALS INC

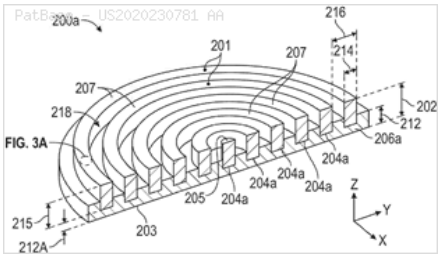
Erfinder: BAJAJ RAJEEV
CHOCKALINGAM ASHWIN
FUNG JASON G
GANAPATHIAPPAN SIVAPACKIA
REDFIELD DANIEL

IPC-Notationen:
B24B0037-24
B24B0037-26
B24D0003-20
B24D0003-28
B24D0003-34
B29C0064-112
B29C0064-393
B33Y0010-00
B33Y0030-00
B33Y0050-02
B33Y0070-00
B33Y0080-00

CPC-Notationen:
B24B0037-26
B24D0003-28
B24D0003-344
B29C0064-112
B29C0064-336
B29C0064-393
B29L2031-736
B33Y0010-00
B33Y0030-00
B33Y0050-02
B33Y0070-00
B33Y0080-00

Zusammenfassung:

Source: US2020230781 AA [EN] Embodiments of the present **disclosure** generally relate to polishing pads, and methods for manufacturing polishing pads, which may be used in a chemical **mechanical** polishing (CMP) process in the manufacture of semiconductor devices. The polishing pads described herein feature a continuous polymer phase of polishing pad material comprising one or more first material domains and a plurality of second material domains. The one or more first material domains are formed of a polymerized reaction product of a first pre-polymer composition, the plurality of second material domains are formed of a polymerized reaction product of a second pre-polymer composition, the second pre-polymer composition is different from the first pre-polymer composition, and interfacial regions between the one or more first material domains and the plurality of second material are formed of a co-polymerized reaction product of the first pre-polymer composition and the second pre-polymer composition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 110

Titel: POLISHING/LAPPING FILM WITH MICRO-ENCAPSULATED CHEMISTRIES PREVENTING DEBRIS ENTRAINMENT

Patentnummer: WO2018222857A1

Anmeldung: WO2018US35370

Priorität: US20170513728P 20170601

Patentfamilie: WO2018222857A1

Anmelder: CORNING INC
CORNING RES AND DEV CORP
CORNING RES AND DEVELOPMENT CORP

Erfinder: BOOKBINDER DANA CRAIG
EKWEJUNOR ETCHIE OGBEMI JOSEPH
HAMILTON KAREN ANN
HUZINEC GARY MICHAEL

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

CPC-Notationen: B24B0037-245
C09K0003-1481

Zusammenfassung:

Source: WO18222857 A1 [EN] Embodiments of a polishing film are provided. The polishing film includes a substrate having a surface. **Abrasive** particles are attached to the surface of the substrate, and microcapsules are attached to the surface of the substrate at locations between the **abrasive** particles. Each of the microcapsules comprises at least one of a lubricant, a surfactant, a silane, a silicon-containing cationic ammonium compound, or a siloxane. Further, methods of forming the polishing film and using the polishing film to polish an optical fiber connector are provided

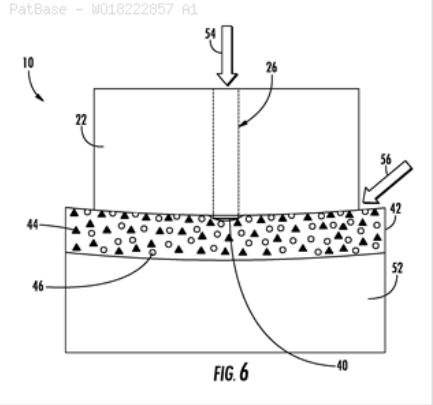


FIG. 6

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 111

Titel: HYDROPHILIC AND HYDROPHOBIC SILANE SURFACE MODIFICATION OF **ABRASIVE** GRAINS

Patentnummer: WO2009129384A8

Anmeldung:
WO2009US40797
EP20090733600
JP20140101588
JP20110505201T
CA20092721688
AU20090236192
CN200980120139
KR20107025295
TW20090127439
BR2009PI11453
CO20100140662
IL20090208737
IN2010MN02394
MX20100011369
NZ20090589349
RU20100145018
UA20100013717

Priorität:
US20080124618P 20080418
JP20110505201 20090416
JP20110505201T 20090416
WO2009US40797 20090416

Patentfamilie:
WO2009129384A8
WO2009129384A3
WO2009129384A2
EP2364241A4
EP2364241A2
JP2014195865A2
JP5842031B2
JP5580289B2
JP2011518051T2
CA2721688C
CA2721688A
AU2009236192B2
AU2009236192A1
CN102046332A
CN102046332B
KR20110000578A
KR101245545B1
TW201346019A
BRPI0911453A2
CO6311092A2
IL208737A0
IN271711B
IN02394MN2010A
MX2010011369A1
NZ589349A
RU2469837C2
RU2010145018A
UA100413C2

Anmelder:
CAI YING
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SEHN GOBEHN ABRAZIF
SEHNT GOBEHN EHBREJZIVS INK
SETH ANUJ

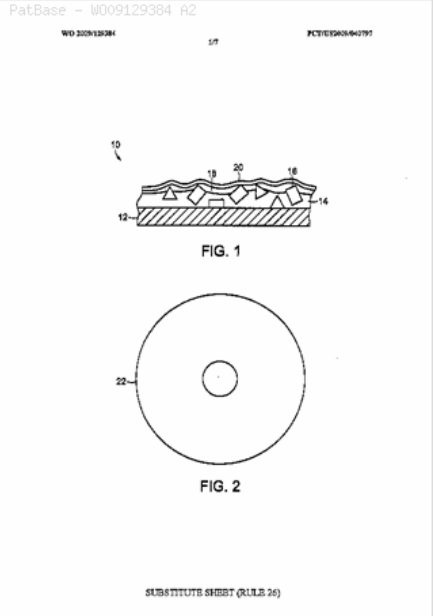
Erfinder: SET ANUDZH
SETH ANUJ
TSAJ IN
YING CAI

IPC-Notationen:
B24D
B24D0003-00
B24D0003-02
B24D0003-20
B24D0011-00
B24D0011-02
C09C0001-68
C09K0003-14

CPC-Notationen:
B24D0003-00
C09K0003-1409
C09K0003-1436
F21V0007-04
G02B0006-0036
G02B0006-0038
G02B0006-0053
G02B0006-0061

Zusammenfassung:

Source: WO09129384 A2 [EN] A surface-modified **abrasive** grain includes an **abrasive** grain as a substrate, and a film on the grain that includes a relatively hydrophilic silane component and a relatively hydrophobic silane component. The film can be a single film layer or multiple film layers, wherein a film layer most proximal to the **abrasive** grain has a predominately hydrophilic silane component, and a film layer more distal to the **abrasive** grain includes predominately a relatively hydrophobic silane component. Coated **abrasive** products and bonded **abrasive** products include the surface-modified **abrasive** grains



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 112

Titel: **ABRASIVE** ARTICLE HAVING REACTION ACTIVATED CHROMOPHORE

Patentnummer: WO2006110517A1

Anmeldung: WO2006US12991
EP20060749490
US20060398848
CA20062602891
CN200680016294
TW20060112165
BR2006PI08938
HK20080107619
MX20070012389

Priorität: US20050669413P 20050408
US20060398848 20060406
WO2006US12991 20060406

Patentfamilie: WO2006110517A1
EP1877224A1
US2006242910A1
CA2602891A
CN101175607A
TW200706368A
TWI321099B
BRPI0608938A2
HK1112601A3
HK1112601A1
MX2007012389A1

Anmelder: SAINT GOBAIN ABRASIVES INC
SAINT GOBAIN SA
YOU XIAORONG

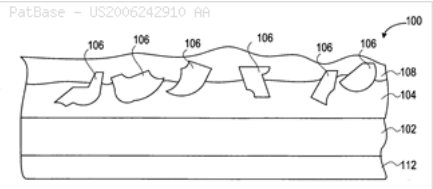
Erfinder: XIAORONG YOU
YOU XIAO RONG

IPC-Notationen: B24D
B24D0003-02
B24D0011-00
B32B0027-18
B32B0027-38
C08F0002-50
C09K0003-14
G01N
G01N0021-25

CPC-Notationen: **B24D0003-02**
B24D0003-344
B24D0011-00
C09K0003-14

Zusammenfassung:

Source: US2006242910 AA [EN] An **abrasive** article has a layer including an epoxy constituent, a cationic photointiator within the epoxy constituent, and a latent colorant configured to change color in response to activation of the cationic photoinitiator



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 113

Titel: BONDED **ABRASIVE** ARTICLES FILLED WITH OIL/WAX MIXTURE

Patentnummer: WO9951400A1

Anmeldung:
WO1998US26692
EP19980963227
DE19986017224T
US19980056475
JP20000542151T
CA19982325491
AU19990018294
CN19988013953
KR20007011150
TW19980119910
AT19980963227T
BR1998PI15800
DK19980963227T
ES19980963227T
ID20000002013
NZ19980507008
PT19980963227T
TH19981004996
ZA19990000057

Priorität:
US19980056475 19980407
WO1998US26692 19981215

Patentfamilie:
WO9951400A1
EP1069973B1
EP1069973A1
DE69817224T2
DE69817224D1
US6086648A
JP3851086B2
JP2002510560T2
CA2325491C
CA2325491A
AU734039B2
AU199918294A1
CN1291125A
CN1128044C
KR20010042517A
KR100422601B1
TW482820B
AT246980E
BRPI9815800A
DK1069973T3
ES2205591T3
ID26877A
NZ507008A
PT1069973T
TH34420A
ZA9900057A

Anmelder:
NORTON COMPANY
SAINT GOBAIN ABRASIVES INC

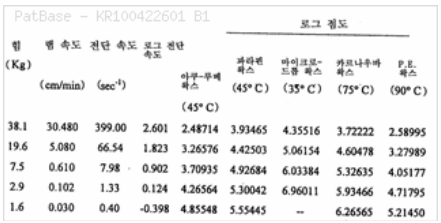
Erfinder:
FOX STEPHEN E
ROSSETTI GEORGE A JR
ROSSETTI STEPHEN E
TRICARD MARC J M

IPC-Notationen: B24D0003-00
B24D0003-02
B24D0003-04
B24D0003-18
B24D0003-34
C10M0103-00

CPC-Notationen: B24D0003-18
B24D0003-346
B24D0003-348

Zusammenfassung:

Source: US6086648 A [EN] An **abrasive** article is provided for precision **grinding** purposes, and the article comprises 3 to 25 volume percent vitreous bond, 3 to 56 volume percent MCA **abrasive** grain, and 28 to 63 volume percent open porosity. Substantially all porosity in the **abrasive** article is impregnated with a lubricant component consisting of an oil and wax mixture having an oil: wax weight ratio of about 3: 1 to about 1: 4



PatBase - KR100422601 B1

힘 (Kg)	휠 속도 (cm/min)	전단 속도 (sec^{-1})	로그 전단 속도	이루-무베 왁스 (45° C)	로그 점도 파라핀 왁스 (45° C)	마이크로-드림 왁스 (35° C)	카르나우바 왁스 (75° C)	P.E. 왁스 (90° C)
38.1	30.480	399.00	2.601	2.48714	3.93465	4.35516	3.72222	2.58995
19.6	5.080	66.54	1.823	3.26576	4.42503	5.06154	4.60478	3.27989
7.5	0.610	7.98	0.902	3.70935	4.92684	6.03384	5.32635	4.05177
2.9	0.102	1.33	0.124	4.26564	5.30042	6.96011	5.93466	4.71795
1.6	0.030	0.40	-0.398	4.85548	5.55445	--	6.26565	5.21450

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 114

Titel: COATED **ABRASIVES** HAVING AGGREGATES

Patentnummer: WO2019133502A1

Anmeldung: WO2018US67196
EP20180895649
US20180230084
JP20200536169T
CA20183087057
CN201880083982
KR20207018519
BR20201113728
IN202027024604

Priorität: US20170610707P 20171227
US20180230084 20181221
WO2018US67196 20181221

Patentfamilie: WO2019133502A1
EP3732266A1
US2019202031A1
JP2021508609T2
CA3087057A
CN111527176A
KR20200083635A
BR112020013728A2
IN202027024604A

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

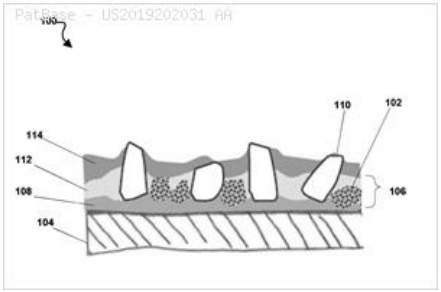
Erfinder: EVERTS DARRELL K
SHIH CHIEH KUNG
SUJATHA K IYENGAR
WANG JIANNA
YENER DORUK O

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-28
B24D0003-30
B24D0003-34
B24D0011-00
C09D0131-04
C09K0003-14

CPC-Notationen: **B24D0003-004**
B24D0003-28
B24D0003-285
B24D0003-30
B24D0003-342
B24D0003-346
C09D0131-04
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2019202031 AA [EN] The present **disclosure** relates generally to coated **abrasive** articles that include a **grinding aid** aggregates in a make coat, a size coat, a supersize coat, or combinations thereof, as well as methods of making coated **abrasive** articles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 115

Titel: DRILL BITS AND METHOD OF PRODUCING DRILL BITS

Patentnummer: DE2302595C3

Anmeldung:
DE19732302595
DE19732302574
DE19732302571
US19720283475
US19720283474
US19720220351
US19720219973
JP19770149154
JP19730004894
JP19720124454
JP19720110190
FR19720042483
FR19720042482
FR19720041531

Priorität:
US19720219973 19720124
US19720220351 19720124
US19720220352 19720124
US19720283474 19720824
US19720283475 19720824

Patentfamilie:
DE2302595C3
DE2302574C3
DE2302595B2
DE2302574B2
DE2302595A1
DE2302574A1
DE2302571A1
US3871840A
US3841852A
US3757879A
US3757878A
JP54108994A2
JP48086190A2
JP48086189A2
JP48083486A2
JP53037599B4
JP53018755B4
JP938327C3
FR2169577A5
FR2169576A5
FR2169573A5

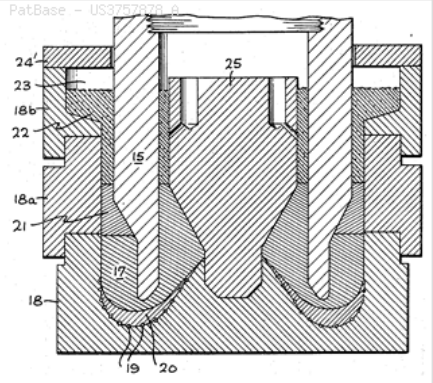
Anmelder: CHRISTENSEN DIAMOND PROD CO

Erfinder:
AASAA GUREIBUZU WAIRUDAA
BRIDWELL HAROLD CLOYD
HARORUDO KUROIDO BURITSUDOUERU
WILDER ARTHUR GRAVES

IPC-Notationen:	**B24D0003-00**	**CPC-Notationen:**	B22D0019-06
	B24D0003-04		B22D0019-14
	B24D0003-06		B24D0003-08
	B24D0003-08		B24D0005-123
	B24D0005-00		B24D0007-00
	B24D0005-12		B24D0018-00
	B24D0007-00		C09K0003-1445
	B24D0018-00		E21B0010-46
	C09K0003-14		E21B0010-48
	C22C0001-05		
	E21B0010-46		
	E21B0010-48		

Zusammenfassung:

Source: US3757878 A [EN] Earth boring drills such as are useful in oil well drilling or other drilling **operations** and methods of producing such drills in which metal-encapsulated primary **abrasive** particles such as diamonds and metal-encapsulated secondary particles are bonded together and to a metallic shank by means of a metal matrix



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 116

Titel: **ABRASIVE** ARTICLE WITH EMBOSSED ISOLATION LAYER AND METHODS OF MAKING AND USING

Patentnummer: WO200007776A1

Anmeldung: WO1999US00074
EP19990905415
US20000697201
US19980129823
JP20000563438T
AU19990025575

Priorität: US19980129823 19980805
WO1999US00074 19990105
US20000697201 20001026

Patentfamilie: WO200007776A1
EP1102659A1
US6183346B2
US6364747B1
US6183346B1
JP2002522237T2
AU199925575A5
AU199925575A1

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

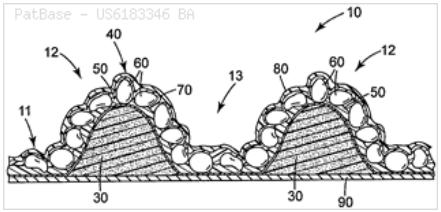
Erfinder: GAGLIARDI JOHN J

IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-34**
B24D0011-00

Zusammenfassung:

Source: US6183346 BA [EN] An **abrasive** article including (i) an embossed isolation layer defining inversely contoured first and second surfaces with a plurality of peaks on the first surface producing a plurality of pockets on the second surface, (ii) **grinding** aid-containing protrusions positioned within the pockets, and (iii) a coating of **abrasive** particles adhered to the contoured first surface of the isolation layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 117

Titel: Structured **abrasive** article adapted to abrade a mild steel workpiece

Patentnummer: WO9836872A1

Anmeldung: WO1998US02435
EP19980906237
DE19986014107T
US19970936441
JP19980536694T
CA19982282687
AU19980061516

Priorität: US19970803791 19970224
US19970936441 19970924
WO1998US02435 19980210

Patentfamilie: WO9836872A1
EP1015179B1
EP1015179A1
DE69814107T2
DE69814107D1
US5851247A
JP2001512373T2
CA2282687A
AU199861516A1

Anmelder: MINNESOTA MINING AND MFG

Erfinder: LARSON ERIC GEORGE
LARSON G
NELSON JEFF W
STOETZEL WILLIAM LEE

IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-002**
B24D0003-28
B24D0003-34
B24D0011-001

Zusammenfassung:

Source: US5851247 A [EN] The present invention is directed to a structured **abrasive** article that provides an enhanced **cut** rate and extended productive **life** when abrading mild steel workpieces. This **abrasive** article includes a backing having a surface that contains precisely shape **abrasive** composites. In this invention, the **abrasive** composites include a binder, **abrasive** particles, water-insoluble metal silicate particles and a coupling agent. The selection of the combination of these components or materials in an **abrasive** composite provides an **abrasive** article having an enhanced **cut** rate and extended productive **life** when used to abrade, finish or grind mild steel, particularly under wet conditions using water or water treated with rust inhibiting agents

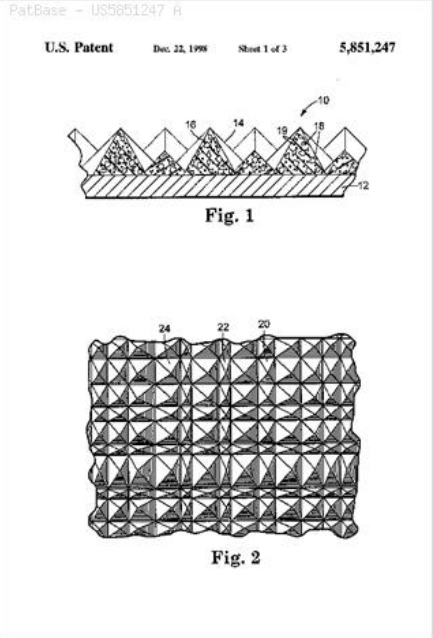


Fig. 1

Fig. 2

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 118

Titel: AQUEOUS RESIN COMPOSITION FOR **ABRASIVE** ARTICLES AND RESULTING ARTICLES

Patentnummer: WO2013090617A1

Anmeldung: WO2012US69567
EP20120857822
US20120365473
FR20110061556

Priorität: FR20110061556 20111213
WO2012US69567 20121213

Patentfamilie: WO2013090617A1
EP2790878A1
EP2790878A4
US2015027064A1
FR2983759B1
FR2983759A1

Anmelder: ARNAUD ALIX
HOUGA CLEMENT
JAFFRENNOU BORIS
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

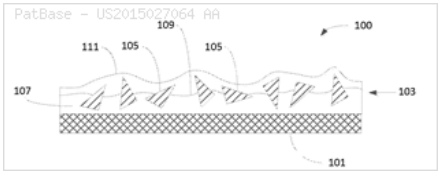
Erfinder: ARNAUD ALIX
HOUGA CLEMENT
JAFFRENNOU BORIS

IPC-Notationen: **B24D0003-00**
B24D0003-28
B24D0003-34
B24D0011-00
C09C0001-68
C09K0003-14

CPC-Notationen: B24D0003-28
C08G0073-0226
C08G0073-0293
C08L0003-02
C08L0033-08
C09D0103-02
C09J0103-02
C09J0179-02

Zusammenfassung:

Source: US2015027064 AA [EN] An aqueous polymer binder composition adapted for the manufacture of **abrasive** articles, such as coated **abrasive** articles, comprising at least one saccharide, at least one polycarboxylic organic acid, and at least one crosslinking catalyst. The aqueous composition is formaldehyde-free and can further comprise rheology modifiers, **fillers**, and hydrophobizing agents



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 119

Titel: **ABRASIVE** ARTICLE WITH SEPARATELY FORMED FRONT SURFACE PROTRUSIONS CONTAINING A **GRINDING AID** AND METHODS OF MAKING AND USING

Patentnummer: WO200007775A1

Anmeldung: WO1999US00118
EP19990905417
DE19996002393T
US20000677115
US19980128692
JP20000563437T
AU19990025576

Priorität: US19980128692 19980805
WO1999US00118 19990105
US20000677115 20000929

Patentfamilie: WO200007775A1
EP1102660B1
EP1102660A1
DE69902393T2
DE69902393D1
US6312315B1
US6186866B1
JP2002522236T2
AU199925576A5
AU199925576A1

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

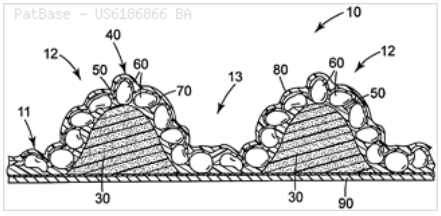
Erfinder: GAGLIARDI JOHN J

IPC-Notationen: **B24D0003-00**
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-34**
B24D0011-00

Zusammenfassung:

Source: US6186866 BA [EN] An **abrasive** article including (i) a first backing, (ii) a plurality of protrusions attached to the first surface of the first backing and including a **grinding aid**, wherein the first surface of the first backing is contoured by the protrusions so as to define a plurality of peaks and valleys, and (iii) a coating of **abrasive** particles adhered to the contoured first surface of the first backing so as to cover at least a portion of both the peaks and the valleys



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 120

Titel: **ABRASIVE** ARTICLE WITH INTEGRALLY MOLDED FRONT SURFACE PROTRUSIONS CONTAINING A **GRINDING AID** AND METHODS OF MAKING AND USING

Patentnummer: WO200007774A1

Anmeldung: WO1999US00111
EP19990901301
US19980129411
JP20000563436T
AU19990021031

Priorität: US19980129411 19980805
WO1999US00111 19990105

Patentfamilie: WO200007774A1
EP1102658A1
US6299508B1
JP2002522235T2
AU199921031A5
AU199921031A1

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

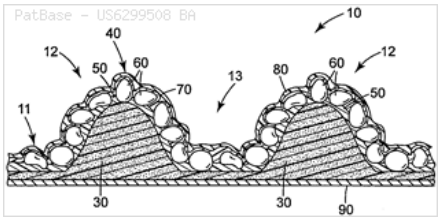
Erfinder: CHESLEY JASON A
GAGLIARDI JOHN J

IPC-Notationen: **B24D0003-00**
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-34**
B24D0011-00

Zusammenfassung:

Source: US6299508 BA [EN] An **abrasive** article including (i) a backing, (ii) a plurality of **grinding** aid-containing protrusions integrally molded on the first surface of the backing, wherein the first surface of the backing is contoured by the protrusions so as to define a plurality of peaks and valleys, and (iii) a coating of **abrasive** particles adhered to the contoured first surface of the first backing so as to cover at least a portion of both the peaks and the valleys



Datum des Suchlaufs: 07.04.2021

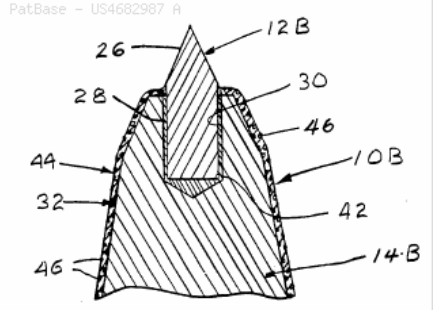
Dokument Nr.: 121

Titel:	Method and composition for producing hard surface carbide insert **tools**
Patentnummer:	US4682987A
Anmeldung:	US19850755316
Priorität:	US19810254998 19810416 US19850755316 19850715
Patentfamilie:	US4682987A
Anmelder:	ANDERSON HARLAN U BRADY WILLIAM J
Erfinder:	ANDERSON HARLAN U BRADY WILLIAM J

IPC-Notationen:	**B24D0003-00** B24D0099-00 B28D0001-18	**CPC-Notationen:**	**B24D0003-007** B24D0099-00 B28D0001-188

Zusammenfassung:

Source: US4682987 A [EN] A hard surfaced heavy duty **cutting tool** having an **abrasive** insert and method for hard surfacing and bonding metallic materials. The composition used in hard surfacing comprises a slurry coating including a high nickel, metal alloy powder and a fluxing agent. The slurry composition is fused at temperatures of about 1830 DEG -1925 DEG **F**. to bond an **abrasive cutting element**, such as tungsten carbide in a base metal matrix, to a **cutting tool** to form the primary working **element** thereof. The slurry composition is also fused at the same temperature range to form a wear surface of the **tool** adjacent to the **abrasive** insert as a hard surface, wear resistant coating in which **abrasive** compounds and other materials may be incorporated



Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	122

Titel: POLYCRYSTALLINE DIAMOND COMPACTS INCLUDING A CEMENTED CARBIDE SUBSTRATE AND APPLICATIONS THEREFOR

Patentnummer: US10494874B1

Anmeldung: US20180017657
US20140539015

Priorität: US20140539015 20141112
US20180017657 20180625

Patentfamilie: US10494874B1
US10030451B1

Anmelder: US SYNTHETIC CORP

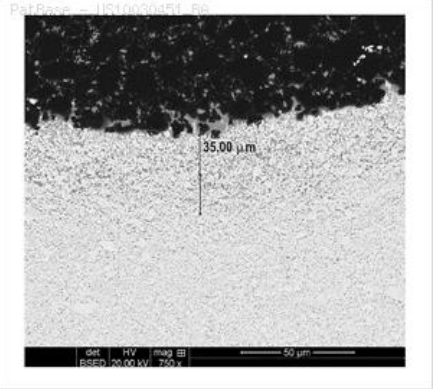
Erfinder: MUKHOPADHYAY DEBKUMAR
TOPHAM GREG CARLOS
VENTURA RENATO

IPC-Notationen:
B24D0003-02
B24D0003-06
B24D0018-00
C09C0001-68
C09K0003-14
E21B0010-567

CPC-Notationen:
B22F0003-14
B22F0007-08
B22F2005-001
B24D0003-06
B24D0018-0009
C22C0026-00
C22C0029-08
E21B0010-567

Zusammenfassung:

Source: US10030451 BA [EN] Embodiments relate to a polycrystalline diamond compact ('PDC') including a polycrystalline diamond ('PCD') table having at least two regions and being bonded to a fine grained cemented tungsten carbide substrate. In an embodiment, a PDC includes a cemented carbide substrate having a cobalt-containing cementing constituent cementing tungsten carbide grains together that exhibit an average grain size of about 1.5 micro m or less, and a PCD table having at least one upper region including diamond grains exhibiting an upper average grain size and at least one lower region adjacent to the upper region a lower average grain size that may be at least two times greater than the upper average grain size. The cemented carbide substrate includes an interfacial surface and a depletion zone depleted of the cementing constituent that extends inwardly from the interfacial surface to a depth of, for example, about 30 micro m to about 60 micro m



Datum des Suchlaufs: 07.04.2021

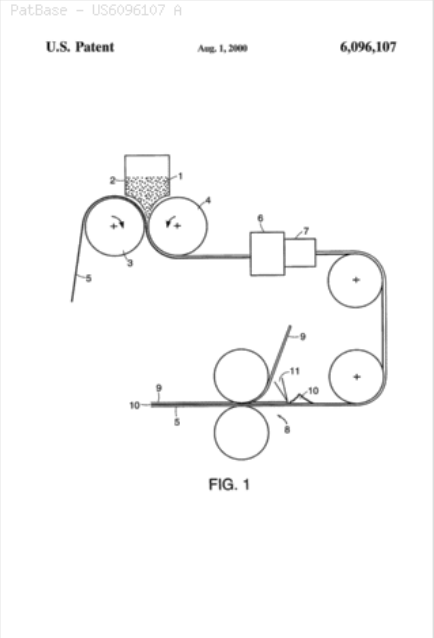
Dokument Nr.: 123

Titel:	SUPERABRASIVE PRODUCTS
Patentnummer:	US6096107A
Anmeldung:	US20000476506
Priorität:	US20000476506 20000103
Patentfamilie:	US6096107A
Anmelder:	NORTON CO
Erfinder:	ANDREWS RICHARD M CARACOSTAS CONSTANTINOS A MILLER BRADLEY J

IPC-Notationen:	**B24D0003-04** **B24D0003-06** B24D0011-00	**CPC-Notationen:**	**B24D0003-06** B24D0011-005 B24D2203-00

Zusammenfassung:

Source: US6096107 A [EN] Coated **abrasives** with engineered **abrasive** surfaces are produced using superabrasive particles mixed with metal particles in a cold-forming process



Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	124

Titel: Improvements in or relating to methods of producing **abrasive** or wear-resistant articles

Patentnummer: GB494300A

Anmeldung: GB19370011321

Priorität: GB19370011321 19370420

Patentfamilie: GB494300A

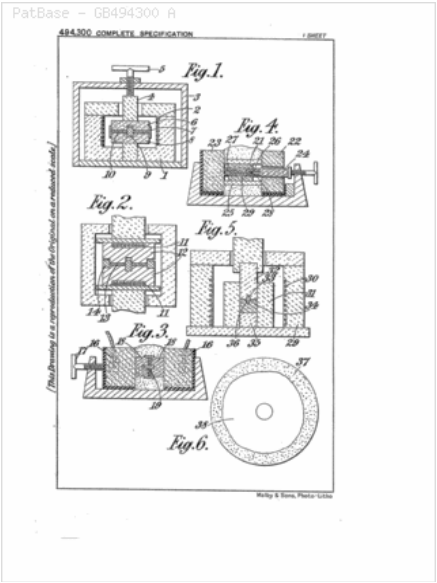
Anmelder: CARBORUNDUM CO

Erfinder:

IPC-Notationen:	B24D0003-08 **B24D0003-34** B24D0018-00	**CPC-Notationen:**	B24D0003-08 **B24D0003-342** B24D0018-00

Zusammenfassung:

Source: GB494300 A [EN] An article having a surface of a metal-bonded or wear-resistant material is produced by bringing together **abrasive** grains, a metal powder and a non-metallic fluxing agent for the metal and treating the metal powder to sinter it and cause it to bond the **abrasive** grains. Examples of the fluxing agent used are those containing borax, **potassium** acid **fluoride** boric oxide or **potassium** carbonate or a solution of borax and boric oxide may be used. The metal powder may be sintered under a low-pressure of 50-500 lb. per sq. in. As metal component of the mixture, copper nickel bronze, brass silver solder or metals of low melting point such as tin or **lead** may be used and the **abrasive** may comprise diamonds, silicon carbide, boron carbide or fused alumina. If the metal powder in the mixture comprises copper or nickel the flux used is borax or a solution containing borax and a water-soluble **fluoride**. In the production of the article, the solution of the flux, the metal powder and the **abrasive** grains are ultimately mixed together and the excess water removed by evaporation. The mixture either in a damp condition or in broken down granular form is introduced into a mould of the desired shape contained in an electrically heated chamber provided with means for applying pressure to the mould. Heat and pressure are now applied simultaneously, and for a mix containing only copper as the metal, a temperature of 750 DEG C. and a pressure of 50 lb. per sq. in. is necessary. The whole of the article may be made in this manner or only the surface, e.g. the surface of a metal wheel or grinding disc. In a modification, the metal and flux are mixed together and then a diamond or diamonds are inserted in the surface of the mix which forms a mounting for the diamond and c. before heat and pressure are applied



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 125

Titel: ORGANIC COMPOUNDS SUITABLE AS REACTIVE DILUENTS, AND BINDER PRECURSOR COMPOSITIONS INCLUDING SAME

Patentnummer: WO9511774A1

Anmeldung:
WO1994US10900
EP19940929893
US19960606512
US19960606325
US19960605987
US19960605986
US19950522610
US19950474289
US19940334817
CA19942174113
AU19940079202
ES19940929893T

Priorität:
US19930143824 19931027
US19930144199 19931220
WO1994US10900 19940927
US19940334817 19941104
US19950474289 19950607
US19950522610 19950901
US19960605986 19960223
US19960605987 19960223
US19960606325 19960223
US19960606512 19960223

Patentfamilie:
WO9511774A1
EP0724503B1
EP0724503A1
US5736747A
US5733648A
US5710281A
US5709935A
US5667842A
US5580647A
US5523152A
CA2174113A
AU677446B2
AU199479202A1
ES2123159T3

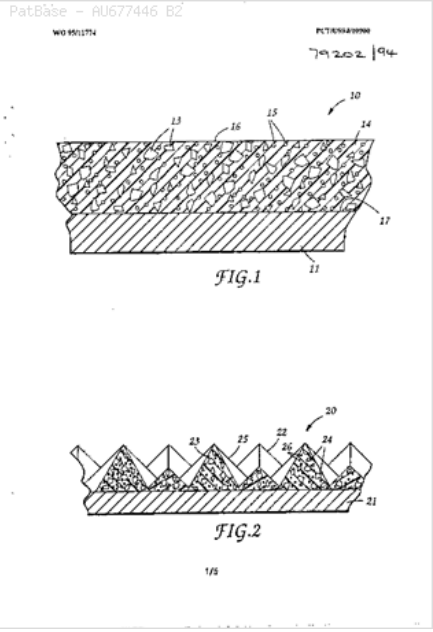
Anmelder: MINNESOTA MINING AND MFG

Erfinder:
DAHLKE GREGG D
EDBLOM ELIZABETH C
KINCAID DON H
KIRK ALAN R
LARSON ERIC G
THURBER ERNEST L

IPC-Notationen:	B24D0003-20 B24D0003-28 **B24D0003-34** B24D0011-00 C07C0069-00 C07C0069-017 C07C0069-54 C07D0209-00 C07D0209-48 C07D0261-00 C07D0261-14 C07D0263-00 C07D0263-14 C07D0277-00 C07D0277-24 C07D0307-00 C07D0307-68 C07D0333-00 C07D0333-38	**CPC-Notationen:**	B24D0003-28 **B24D0003-344** B24D0011-00 C07C0069-017 C07C0069-54 C07D0209-48 C07D0261-14 C07D0263-14 C07D0277-24 C07D0307-68 C07D0333-38 Y10T0428-25 Y10T0428-252 Y10T0428-257 Y10T0428-259 Y10T0442-2115 Y10T0442-699

Zusammenfassung:

Source: US5523152 A [EN] Organic compounds having at least one ethylenically-unsaturated group are described, the organic compounds being suitable for use in coatable compositions as reactive diluents; compounds of the invention preferably have a divalent organic linking moiety devoid of reactive groups other than optional ethylenically-unsaturated groups, and a polar organic moiety and are particularly adept in solubilizing aminoplast resins having radiation-curable pendant groups



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 126

Titel: METHOD FOR PRODUCING **SCHLEIFKOERPERN** (Machine translation)

Patentnummer: DE1015597B

Anmeldung: DE1956L023933

Priorität: 19560126

Patentfamilie: DE1015597B

Anmelder: LEMFOERDER METALLWAREN GMBH
LEMFOERDER METALLWARENGESELLSC

Erfinder: REUTER DR GOTTFRIED

IPC-Notationen:
B24D0003-20
B24D0003-28
B24D0003-34
C08L0075-00
C08L0075-04
C09G0001-00

CPC-Notationen:
B24D0003-28
B24D0003-34
C08L0075-04
C09G0001-00

Zusammenfassung:

Die vorliegende Erfindung hat sich zur Aufgabe gestellt, einen Schleifkörper zu schaffen, mit dem die Feinstbearbeitung von Metalloberflächen möglich ist, ohne dass weitere Schmiermittel zugegeben werden müssen. Sie sieht dazu vor, dass ein Gemisch aus kommunikativen Schleifmitteln und beim Schleifen schmierend wirkenden Stoffen in die gießfähige Schmelze aus Polyestern und Diisocyanaten eingerührt, die Masse verformt und in an sich bekannter Weise ausgehärtet wird. Die nach dem neuen Verfahren geschaffenen Schleifkörper weisen eine Bruchfestigkeit auf, sterben Allen anderen bekannten Schleifkörpern zu überlegen ist, wie sie auch Stoßbeanspruchungen sind gewachsen sind und bei Verwendung in Werkzeugautomaten, wie Zahnflanken-Schleifmaschinen u. dgl., nicht ständig überarbeitet werden müssen, ohne dass ein sonst üblicher,

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 127

Titel: WATER REPELLENT **ABRASIVE**

Patentnummer: US1900430A

Anmeldung: US19280306292

Priorität: US19280306292 19280915

Patentfamilie: US1900430A

Anmelder: BAKELITE CORP

Erfinder: DANIELS RUPERT S

IPC-Notationen: B24D0003-20
B24D0003-32
B24D0003-34

CPC-Notationen: B24D0003-32
B24D0003-348

Zusammenfassung:

Source: US1900430 A [EN] 1. An **abrasive** implement for wet **grinding** having a porous structure prepared from **abrasive** particles bonded with a resinoid and impregnated with **chlorinated** naphthalene which is substantially free from mono- and dichlorna hthalenes

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 128

Titel: WORKING OF TITANIUM

Patentnummer: US2885838A

Anmeldung: US19560583624

Priorität: US19560583624 19560509

Patentfamilie: US2885838A

Anmelder: ARMOUR AND CO

Erfinder: RINKER ROYDEN C
WAITE DOUGLAS E

IPC-Notationen: B24D0003-34 **CPC-Notationen:** B24D0003-346

Zusammenfassung:

Source: US2885838 A [EN] (Claim 1) 1. In a process wherein a metal selected. from the group consisting of titanium metal and its alloys are worked, the improvement which comprises working said metal in the presence of a composition consisting of a compound s-_lected from the group consisting of hydrocarbon oils and glyceride oils containing between about 25 **aid** 45 weight percent of chemically combined **halogen**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 129

Titel: **ABRASIVE** ARTICLE AND NONLOADING COATING THEREFOR

Patentnummer: US3619150A

Anmeldung: US19690860122

Priorität: US19690860122 19690922

Patentfamilie: US3619150A

Anmelder: BORDEN CO

Erfinder: BIGLIN JOSEPH MICHAEL
RINKER ROYDEN CARRINGTON

IPC-Notationen: B24D0003-34 **CPC-Notationen:** B24D0003-344

Zusammenfassung:

Source: US3619150 A [EN] (Claim 1) 1. 1. In an **abrasive** article of manufacture which includes a backing, **abrasive** grains, a make securing said **abrasive** grains to said backing and a size applied over said **abrasive** grains, the improvement comprising a nonloading coating applied to said article over said size coating which comprises A. from 5 to 15 parts by weight of a resin composition that is water-insoluble upon curing comprising a. a thermosetting resin selected from phenol-formaldehyde, urea-formaldehyde, melamine-formaldehyde, resorcinol-formaldehyde and mixtures thereof and b. a resin compatible with said thermosetting resin selected from elastomeric and thermoplastic resins, said elastomeric resin selected from neoprene resins, **chloroprene** resins, natural rubbers, butadiene-styrene resins, butadiene-acrylonitrile resins and mixtures thereof; and said thermoplastic resin is selected from polyvinyl resins, polyacrylic resins, polymethacrylic resins and mixtures thereof; the fatty acids dispersed

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 130

Titel: **GRINDING DISK** E.G. SCRUBBING- AND/OR SEPARATION **DISKS**, FOR MACHINING WORK PIECES, HAS CARRIER- AND **GRINDING** LAYERS JOINED TOGETHER WITH DAMPING LAYER BY COMMON TREATMENT BY SUPPLYING ENERGY, WHERE DAMPING LAYER INCLUDES RECESSES OR GAPS

Patentnummer: DE102011008044B4

Anmeldung: DE201110008044

Priorität: DE201110008044 20110105

Patentfamilie: DE102011008044B4
DE102011008044A1

Anmelder: DRONCO AG
DRONCO GMBH
GUMMIWERK KRAIBURG GMBH AND CO KG

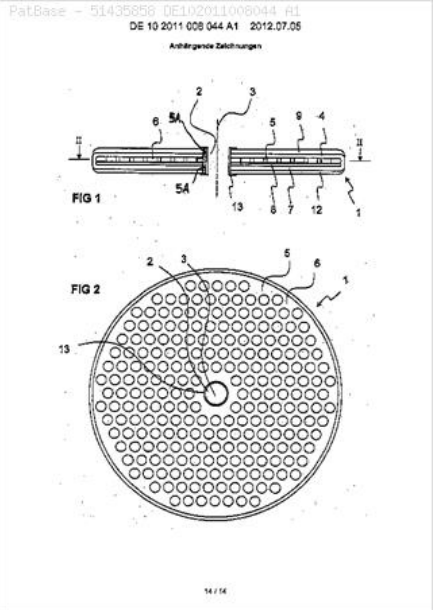
Erfinder: ADASCH VOLKER DR
BREM BETTINA
PLENK FLORIAN
SCHAUBE JENS DR
ZAHN JUDITH

IPC-Notationen: **B24D0003-34**
B24D0005-12
B24D0018-00

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

Source: DE102011008044 A1 [EN] The **grinding disk** (1) has carrier- and **grinding** layers (4, 7) provided with a synthetic resin-bound carrier material and **grinding** bodies. A damping layer (5) is provided with a damping material formed of elastomer or elastomer mixture. The carrier- and **grinding** layers are joined together with the damping layer by common treatment by supplying energy. The damping layer includes recesses or gaps (6) partially filled by the carrier material of the carrier- and **grinding** layers and/or an adhesive layer connected with the carrier- and **grinding** layers. The carrier- and **grinding** layers are embedded with a core, which is provided in form of fabric material or fiber material selected from a group consisting of glass fiber, nylon fiber, polyester fiber, carbon fiber, viscose fiber, aramide fiber, metal fiber, aluminum oxide fiber, silicon carbide fiber or fiber with mineral basalt or mineral wool. An independent claim is also included for a method for manufacturing a **grinding disk**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 131

Titel: **ABRASIVE** ARTICLES WITH WATER SOLUBLE PARTICLES

Patentnummer: WO02078908A1

Anmeldung: WO2002US03571
US20010819238

Priorität: US20010819238 20010328

Patentfamilie: WO02078908A1
US2003024169A1

Anmelder: 3M INNOVATIVE PROPERTIES CO
BRUXVOORT WESLEY J
KENDALL PHILIP E
PARK SOON C

Erfinder: BRUXVOORT WESLEY J
KENDALL PHILIP E
PARK SOON C

IPC-Notationen: **B24D0003-34**
B24D0011-00

CPC-Notationen: **B24D0003-346**
B24D0011-00

Zusammenfassung:

Source: US2003024169 AA [EN] The present invention is directed to a method of abrading a surface of a workpiece. The method of the invention comprises bringing a surface of a workpiece and an **abrasive** article into frictional contact in the presence of an aqueous fluid. The **abrasive** article comprises a backing comprising a surface, and an **abrasive** layer bonded to the surface of the backing, the **abrasive** layer comprising a binder, a plurality of **abrasive** particles, and a plurality of organic water soluble particles, the **abrasive** layer comprising a plurality of three-dimensional **abrasive** composites. The invention is also directed to the **abrasive** article for use in the method

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 132

Titel:	FUNCTIONAL PARTICLE TRANSFER LINER
Patentnummer:	WO2012054283A1
Anmeldung:	WO2011US56060 TW20110137525
Priorität:	US20100394257P 20101018
Patentfamilie:	WO2012054283A1 TW201240774A
Anmelder:	3M INNOVATIVE PROPERTIES CO BUDD KENTON D FLETCHER TIMOTHY D HARDY L CHARLES LUGG PAUL S
Erfinder:	BUDD KENTON DEREK FLETCHER TIMOTHY DUANE HARDY L CHARLES LUGG PAUL STUART

IPC-Notationen:	**B24D0003-34** B24D0018-00 C09J0007-02	**CPC-Notationen:**	**B24D0003-34** B24D0018-0072 C09J0007-0225

Zusammenfassung:

Source: WO12054283 A1 [EN] A functional particle transfer liner is provided that includes a release liner that has a release coating and a layer of functional particles disposed upon the release coating. The functional particles are free of **abrasive** particles and metal particles. The functional particle transfer particles are selected from wear-resistant particles, optical particles, biologically-active particles, photocatalytic particles, dielectric particles, **fluorescent** particles, and combinations thereof. Also provided is a method of making a modified substrate using the provided functional particle transfer liner

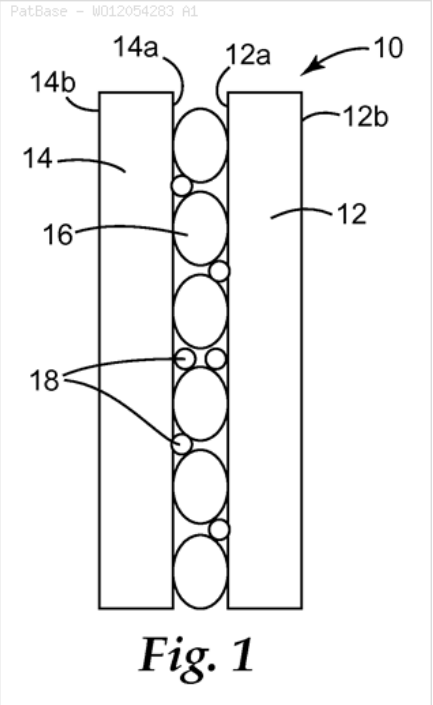


Fig. 1

Datum des Suchlaufs: 07.04.2021

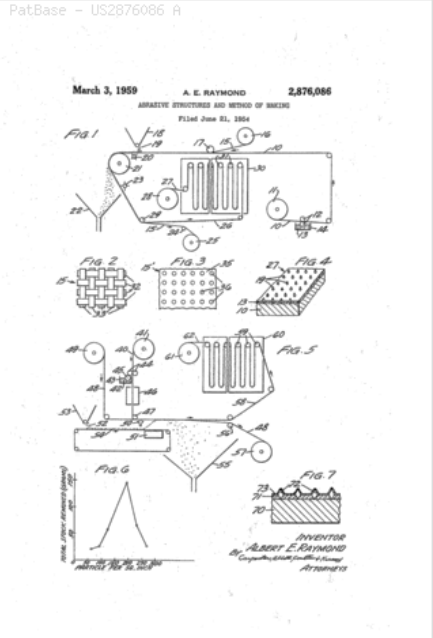
Dokument Nr.: 133

Titel:	**ABRASIVE** STRUCTURES AND METHOD OF MAKING
Patentnummer:	US2876086A
Anmeldung:	US19540438250
Priorität:	US19540438250 19540621
Patentfamilie:	US2876086A
Anmelder:	3M CO MINNESOTA MINING AND MFG
Erfinder:	RAYMOND ALBERT E

IPC-Notationen:	B24D0011-00 **C08J0005-14**	**CPC-Notationen:**	B24D0011-005

Zusammenfassung:

Source: US2876086 A [EN] (Claim 1) 1. A method for producing a flexible coated **abrasive** sheet having elongated **abrasive** particles regularly uniformly individually spaced in an oriented position thereon comprising coating a flexible backing sheet with a layer of a hardenable grit bonding adhesive, placing in said adhesive elongated **abrasive** particles ih individual spaced relation with regular spacing therebetween, orienting said particles to a position such that the long axes thereof are substantially normal to said backing, and hardening 1.5 the adhesive while said particles remain oriented



Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	134

Titel:	PROCESS FOR THE PRODUCTION OF **ABRASIVES**
Patentnummer:	DE2247103B2
Anmeldung:	DE19722247103 US19750610679 JP19730107049 FR19730034277
Priorität:	DE19722247103 19720926 US19730399683 19730724 US19750610679 19750905
Patentfamilie:	DE2247103B2 DE2247103A1 US4047903A JP49071586A2 FR2200773A5
Anmelder:	HOECHST AG REICHHOLD ALBERT CHEMIE AG
Erfinder:	HESSE WOLFGANG DIPL CHEM DR RITZ JUERGEN DIPL CHEM DR RITZ JURGEN TESCHNER ECKART

IPC-Notationen:	B24D0011-00 **C08J0005-14**	**CPC-Notationen:**	B24D0011-001 B24D0011-003 Y10T0428-31511

Zusammenfassung:

Source: US4047903 A [EN] A process for preparing **abrasives** which comprises coating a fibrous substrate with a binder comprising a hardenable resin and subsequently curing the binder coat by electron irradiation. The radiation dose may have an energy of from 175,000 to 1,000,000 eV and a dose of from 0.5 to 30 Mrad. An **abrasive** which is obtained by the process and which is water resistant

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Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	135

Titel: METHODS FOR PRODUCING ARMORED METAL **TOOLS**

Patentnummer: US3598554A

Anmeldung: US19680703931

Priorität: US19680703931 19680208

Patentfamilie: US3598554A

Anmelder: REMINGTON ARMS CO INC

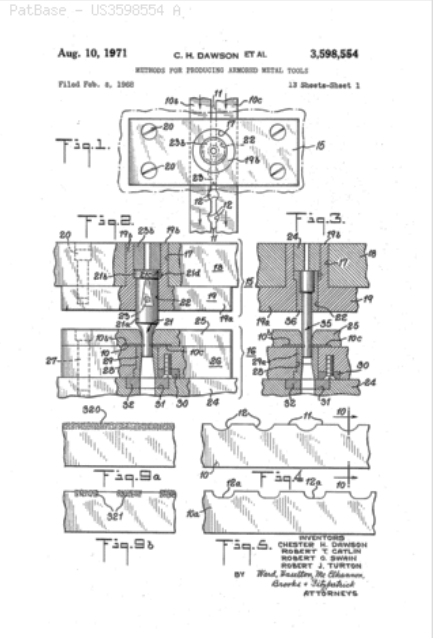
Erfinder: CATLIN ROBERT T
DAWSON CHESTER H
SWAIN ROBERT O
TURTON ROBERT J

IPC-Notationen: B24D0018-00

CPC-Notationen: B24D0018-00
B24D0018-009

Zusammenfassung:

Source: US3598554 A [EN] (Claim 1) 1. The method of producing an armored metal **cutting tool**, comprising a **tool** structure consisting of a base metal of high strength and fracture résistance selected from the group consisting of heat treatable steels and alloy steels, said **tool** structure having over at least a surface portion thereof, a hard wearing, ductile and adherent, **abrasive** coating, which comprises; coating said surface portion with a paste flux adhesive selected from the group consisting of tung oil, naturai, synthetic rosins and resins and boride-fluoride materials in a volatile solvent, and with particles of a strong, ductile and refractory matrix metal selected from the group consisting of high melting nickel base and cobalt base alloys containing about 40-80% of said base metal and the balance principally **elements** of the group Cr, B, Fe, Si, W and Mo, applying to said coating, an over coating of **abrasive** particles of a hard, high melting, diamond substitute material selected from the group consisting of high melting, metal carbides, metal borides, metal nitrides and metal silicides, drying the so coated surface and heating to temperature sufficient to fuse said matrix metal particles to one another and to alloy the same with said base metal and into a matrix metal layer partially embedding said abrasive metal particles therein, thence rapidly cooling said so coated surface to ambient temperature, permanently to bond and alloy said matrix metal to and with said base metal and to retain said abrasive particles permanently embedded in said matrix metal and bonded thereto; and so Controlling the thickness of the coating of said matrix metal particles, as only partially to embed said abrasive particles in said matrix metal layer, whereby said abrasive particles project from said layer to form sharp cutting edges



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 136

Titel: Friction lining

Patentnummer: DE4431642B4

Anmeldung: DE19944431642

Priorität: DE19934331481 19930916
DE19944431642 19940906

Patentfamilie: DE4431642B4
DE4431642A1

Anmelder: LUK LAMELLEN AND KUPPLUNGSBAU

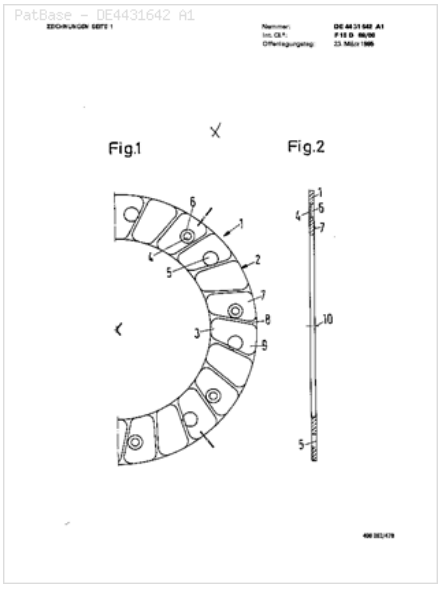
Erfinder: SCHULTE LOUIS FERDINAND DR

IPC-Notationen:
B29C0043-00
C08J0005-04
C08J0005-14
C08K0013-04
C08L0021-00
C08L0033-20
C08L0061-06
C08L0077-10
C09K0003-14
F16D0013-64
F16D0065-12
F16D0069-00
F16D0069-02

CPC-Notationen:
B29C0043-003
B29C0043-006
B29C0043-18
B29C0043-52
B29L2031-16
C08L0033-20
C08L0061-06
C08L0077-10
F16D0065-12
F16D0069-00
F16D0069-026
F16D2069-004

Zusammenfassung:

Source: DE4431642 A1 [EN] Friction lining containing fibres, binder, **filler**, friction agent and lubricant. Published without abstract



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 137

Titel: REACTIVE AQUEOUS METAL OXIDE SOLS AS POLISHING SLURRIES FOR LOW DIELECTRIC CONSTANT MATERIALS

Patentnummer: WO2004015018A1

Anmeldung: WO2003US19727
US20020214677
US20000561387
JP19990165057
AU20030243740

Priorität: US19980096722 19980611
US20000561387 20000427
US20020214677 20020807
WO2003US19727 20030619

Patentfamilie: WO2004015018A1
US6723143B2
US6464740B1
US2003005647A1
JP2000080352A2
AU2003243740A1

Anmelder: ALLIED SIGNAL INC
FURY MICHAEL
HONEYWELL INT INC
TOWERY DANIEL

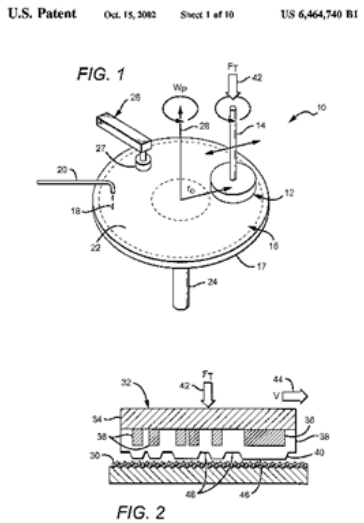
Erfinder: DANIEL L TAWARY
FURY MICHAEL A
MICHAEL A FURIE
TOWERY DANIEL I

IPC-Notationen: C01B0033-00
C01B0033-141
C09C0001-68
C09G0001-00
C09G0001-02
C09K0003-14
H01L0021-02
H01L0021-304
H01L0021-3105

CPC-Notationen: C09G0001-02
C09K0003-1463
H01L0021-31058

Zusammenfassung:

Source: US6464740 BA [EN] An aqueous metal oxide sol slurry has been developed for removal of low dielectric constant materials. The slurry is formed directly in solution utilizing non-dehydrated chemically active metal oxide sols which are formed in a colloidal suspension or dispersion. The oxide sols have not undergone any subsequent drying and the particles are believed to be substantially spherical in structure, dimensionally stable and do not change shape over time. The sol particles are **mechanically** soft and heavily hydrated which reduces surface damage even in the case where soft polymer or porous dielectric films are polished. The sol particles are formed of a chemically active metal oxide material, or combinations thereof, or can be coated on chemically inactive oxide material such as silicon dioxide or can be conformed therewith. The oxide sols can include a bi-modal particle distribution. The slurry can be utilized in CMP processes, with or without conditioning



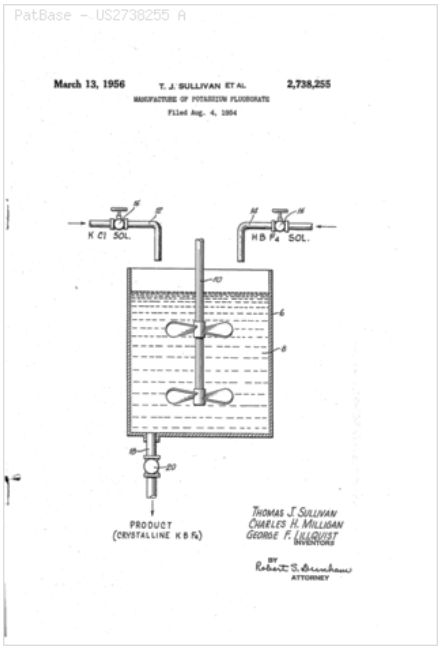
Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 138

Titel:	MANUFACTURE OF **POTASSIUM** FLUOBORATE
Patentnummer:	US2738255A
Anmeldung:	US19540447738
Priorität:	US19540447738 19540804
Patentfamilie:	US2738255A
Anmelder:	AMERICAN AGRICULTURAL CHEM CO AMERICAN AGRICULTURAL CHEMICAL
Erfinder:	LILLQUIST GEORGE F MILLIGAN CHARLES H SULLIVAN THOMAS J
IPC-Notationen:	C01B0035-00 C01B0035-06
CPC-Notationen:	C01B0035-066

Zusammenfassung:

Source: US2738255 A [EN] (Claim 1) 1. The process for producing crystalline **potassium** fluoborate comprising reacting in solution a water-soluble **potassium** salt with fluoboric acid in the presence of seed crystals of **potassium** fluoborate while maintaining the mixture in agitation and at a temperature of at least about 65' C



Datum des Suchlaufs:	07.04.2021
Dokument Nr.:	139

Titel: **POTASSIUM-FLUORINE** GLASSES

Patentnummer: US2840481A

Anmeldung: US19520273671

Priorität: US19520273671 19520227

Patentfamilie: US2840481A

Anmelder: PENNSALT CHEMICALS CORP

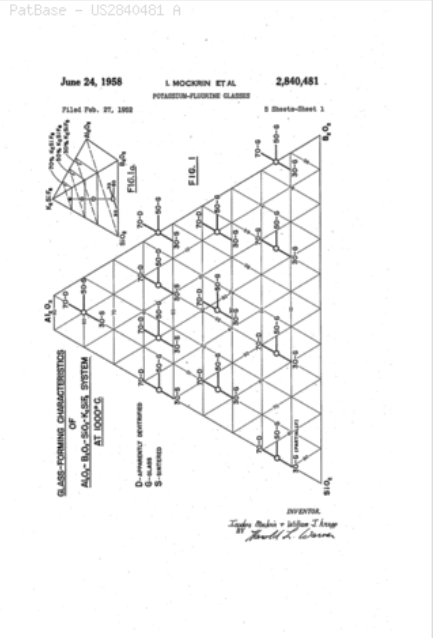
Erfinder: ISADOR MOCKRIN
KNAPP WILLIAM J

IPC-Notationen: C03C0003-062
C03C0003-064

CPC-Notationen: C03C0003-062
C03C0003-064

Zusammenfassung:

Source: US2840481 A [EN] (Claim 1) 1. A glass. composition consistiiig essentially of, on a calculated oxide basis, **fluorine** and compatible metal oxid_-s including K20, SiO2, and at least one material of the group consisting of A1203 and B203 in which the 'luorine to K20 ratio is withiii the ran-e of from 1.0 to 1.4, in which the calculated percent by weight of **fluorine** is 14% to 32% and that Of K20 iS 12% to 26%, and in which the percent by weight of A1203, SiO2 and B20_ with respect to **fluorine** is within the limits defined by the areas labeled 'glass formation' in the graphs shown in Figures 4a, 4b and 4c respectively of the drawin.-S



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 140

Titel: FRICTION MATERIALS

Patentnummer: EP0000841B1

Anmeldung: EP19780300260
DE19782860882T
US19780929533
JP19780097749
GB19770033485
AU19780038756
BR19780005106
CS19780005245
DD19780207210
IN1978DE00567
IT19780050667
SU19782649255
ZA19780004380

Priorität: GB19770033485 19770810

Patentfamilie: EP0000841B1
EP0000841A1
DE2860882D1
US4226759A
JP54034351A2
GB1604828A
AU197838756A1
BR7805106A
CS216921B2
DD138220C
IN148771A
IT1157152A
IT7850667A0
SU890983D
SU890983A3
ZA7804380A

Anmelder: FERODO FA LTD
FERODO LTD GB

Erfinder: CESTER JOHN
CHESTER DZHON
CHESTER JOHN
JIYON CHIESUTAA

IPC-Notationen: **C08J0005-14**
C08K0007-00
C08K0007-04
C08K0007-06
C08L0009-00
C08L0009-02
C08L0061-00
C08L0061-06
C08L0061-10
F16D0069-02

CPC-Notationen: C08K0007-06
F16D0069-026

Zusammenfassung:

Source: US4226759 A [EN] Asbestos-free friction material compositions containing from about 20 to 45 percent by volume of the material of a thermoset binder of a phenol formaldehyde resin and optionally a heat and chemical reistant rubber, up to 10 percent by volume of an inert mineral **filler** and as the sole fibrous reinforcement 5 to 15 percent by volume of short lengths of steel fibers are **disclosed**. The compositions are useful as brake pads and the like and has properties comparable with asbestos-based materials

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 141

Titel: FRICTION MATERIALS

Patentnummer: EP0000839B1

Anmeldung: EP19780300258
DE19782860901T
US19800149697
US19780929535
JP19780097747
GB19770033458
AU19780038754
BR19780005104
CS19780005243
DD19780207214
IN1978DE00566
IT19780050665
SU19782649254
ZA19780004379

Priorität: GB19770033458 19770810

Patentfamilie: EP0000839B1
EP0000839A1
DE2860901D1
US4310452A
US4273699A
JP54034349A2
GB1604839A
AU197838754A1
BR7805104A
CS216919B2
DD138076C
IN148770A
IT1156900A
IT7850665A0
SU837328D
SU837328A3
ZA7804379A

Anmelder: FERODA LIMITED
FERODA LTD
FERODO FA LTD
FERODO LTD GB
FERRODO LTD

Erfinder: CHESTER DZHON
CHESTER JOHN
JIYON CHIESUTAA

IPC-Notationen: **C08J0005-14**
C08K0007-00
C08K0007-04
C08L0009-00
C08L0009-02
C08L0061-00
C08L0061-06
F16D0069-02

CPC-Notationen: F16D0069-026

Zusammenfassung:

Source: US4273699 A [EN] The invention concerns a composition for a friction material e.g. for a brake pad, of the type containing a fibrous reinforcement, a binder and various **additives**. The composition contains a thermoset binder including a phenol-formaldehyde resin and making up 20 to 60 percent by volume of the material. Besides the resin the binder can also include a heat and chemical resistant rubber, but the phenol-formaldehyde resin makes up at least 10 percent by volume of the composition. The composition includes a fibre-based reinforcement which makes up 10 to 35 percent by volume of the material and consists of a mixture of steel fibres or glass fibres with one or more other non-asbestos inorganic reinforcing materials e.g. steel fibre and mica, or steel fibre and milled glass. The friction material contains no asbestos, but has properties comparable with asbestos-based materials

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 142

Titel: OIL COMPOSITION FOR MINIMAL QUANTITY LUBRICATION ALUMINUM PROCESSING

Patentnummer: WO2010092656A1

Anmeldung:
WO2009JP07162
EP20090839978
US20090146150
JP20090028649
CN200980156539
IN2011CN05732
TH20111001424

Priorität:
JP20090028649 20090210
WO2009JP07162 20091224

Patentfamilie:
WO2010092656A1
EP2397535A1
EP2397535A4
US2011287993A1
JP2010184971A2
JP5566037B2
CN102317416A
CN102317416B
IN303866B
IN05732CN2011A
TH116815A

Anmelder:
IBI MASANORI
JX NIPPON OIL AND ENERGY CORP
SENBONGI NORIO
SHIBATA JUNICHI

Erfinder:
IHI MASANORI
MASANORI IBI
SENBONGI NORIO
SHIBATA JUNICHI

IPC-Notationen:	C10M0101-00 C10M0101-02 C10M0105-00 C10M0105-10 C10M0105-12 C10M0105-14 C10M0105-32 C10M0105-38 C10M0105-40 C10M0107-00 C10M0107-02 C10M0129-00 C10M0129-06 C10M0129-76 C10M0169-04 C10N0030-00 C10N0030-06 C10N0040-02 C10N0040-04 C10N0040-08 C10N0040-20 C10N0050-04	**CPC-Notationen:**	C10M0105-12 C10M0105-14 C10M0105-40 C10M0129-04 C10M0129-06 C10M0129-08 C10M2203-1006 C10M2203-1025 C10M2205-0285 C10M2207-021 C10M2207-0215 C10M2207-022 C10M2207-0225 C10M2207-126 C10M2207-281 C10M2207-283 C10M2207-2835 C10M2207-289 C10M2207-2895 C10M2219-024 C10M2223-041 C10N2020-02 C10N2030-06 C10N2030-64 C10N2040-20 C10N2040-22 C10N2040-24 C10N2040-245

Zusammenfassung:

Source: US2011287993 AA [EN] The present invention provides an oil for minimal quantity lubrication aluminum processing. In aluminum processing such as **cutting**, **grinding**, and form-rolling, the oil composition can improve the processing efficiency, **tool life**, and handleability in higher levels in a well-balanced manner and further is highly biodegradable and thus environment friendly. The oil composition comprises an alcohol compound having 1 to 8 hydroxyl groups and 2 to 27 carbon atoms, in an amount of 16 to 100 percent by mass on the basis of the total mass of the composition

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Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 143

Titel: MANUFACTURE OF FRICTION MATERIAL USING FIBER ORIENTED PAPER

Patentnummer: EP0900948B1

Anmeldung: EP19980202621
DE19986019639T
US19970922436

Priorität: US19970922436 19970902

Patentfamilie: EP0900948B1
EP0900948A1
DE69819639T2
DE69819639D1
US5894049A

Anmelder: DELPHI TECH INC
GEN MOTORS CORP

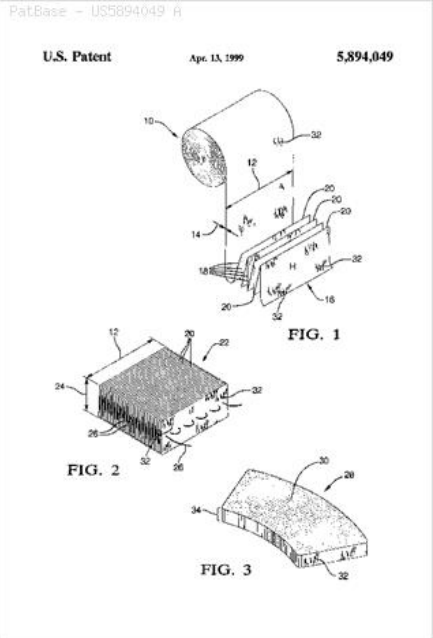
Erfinder: LAMPORT ROBERT ANTHONY

IPC-Notationen: F16D0069-02

CPC-Notationen: F16D0069-026
Y10T0428-24994

Zusammenfassung:

Source: US5894049 A [EN] An improved friction material may be made having reinforcing fibers aligned generally perpendicular to the friction surface of said material by forming a paper of fibrous friction materials such that the fibers in the paper are aligned closely to the longitudinal axis of the paper and then folding or **cutting** the paper into pleats or strips such that the pleats or strips are bonded together with the edges defining the friction surface of the friction body and the fibers perpendicular to that surface



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 144

Titel: Composite fibers of **potassium** hexatitanate and titanium dioxide

Patentnummer: EP0684215B1

Anmeldung: EP19940107996
DE19946021169T
US19940247634
JP19930057877
JP19930057876

Priorität: JP19930057876 19930222
JP19930057877 19930222
EP19940107996 19940524

Patentfamilie: EP0684215B1
EP0684215A1
DE69421169T2
DE69421169D1
US5383963A
JP6248091A2
JP6247717A2
JP3008241B2
JP2990565B2

Anmelder: KUBOTA KK

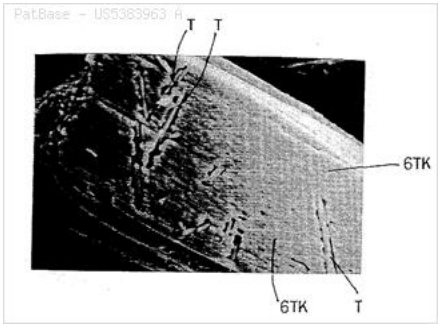
Erfinder: ARAMAKI YUJI
KOBAYASHI ISAMU

IPC-Notationen: C01G0023-00
C04B0035-622
C08J0005-14
C09K0003-14
D01F0009-08
D01F0009-10
F16D0069-02

CPC-Notationen: C01G0023-005
C01P2004-03
C01P2004-10
C01P2004-20
C01P2004-61
F16D0069-02

Zusammenfassung:

Source: US5383963 A [EN] A platelike polycrystalline fiber having a composite phase which consists of **potassium** hexatitanate crystals and titanium dioxide crystals mixed therewith is prepared by heating a mixture of titanium compound and **potassium** compound to obtain a melt, **cooling** the melt to obtain a lump of fibers, treating the lump of fibers in an aqueous acid solution to control the **potassium** content of the fibers to 1 to 13.5 weight percent, and heat-treating the resulting fibers at 900 DEG to 1300 DEG C. The composite fiber is suitable as fibers to be included in friction materials for slide members of automobiles and like brake devices



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 145