

Titel: **ABRASIVE WHEELS** AND METHODS FOR MAKING AND USING SAME

Patentnummer: [WO2017112906A1](#)

Anmeldung: WO2016US68439
CN201510993858
HK20170112938

Priorität: CN201510993858 20151225

Patentfamilie: **WO2017112906A1**
CN106914831A
HK1239615A1

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

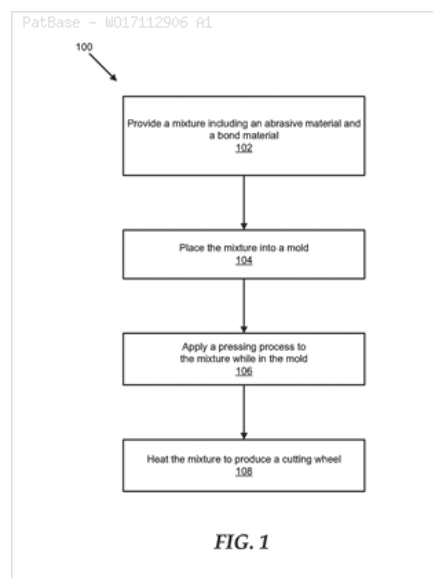
Erfinder: CHEN XU
GAO KUO
NIE DASHI



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Zusammenfassung:

Source: WO17112906 A1 [EN] An **abrasive** article can includes a body having an **abrasive** portion. The **abrasive** portion can include a **filler** composition including pyrite, in particular, pyrite having a sulfur content of at least at least 43 wt percent for a total weight of the pyrite. The **abrasive** portion can include **abrasive** particles including brown alumina. In a particular embodiment, the **abrasive** particle can consist essentially of brown alumina. In another particular embodiment, the **filler** composition can include pyrite, sodium aluminum **fluoride**, **potassium** aluminum **fluoride**, and calcium carbonate. In some instances the **abrasive** article can include a chop saw, while in other situations, the **cutting wheel** can include a **cut-off wheel**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 1

Titel: VITRIFIED BONDED **ABRASIVE TOOLS**

Patentnummer: [WO200170463A3](#)

Anmeldung: WO2001US09347
EP20010924281
DE20016048314
US20020221252
JP20010568701T
CA20012402279
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MX2002PA09304

Priorität: US20000191607P 20000323
EP20010924281 20010323
WO2001US09347 20010323
US20020221252 20020910

Patentfamilie: **WO200170463A3**
WO200170463A2
EP1278614B1
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JP2003527974T2
CA2402279C
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BRPI0109387B1
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NORTON CO
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KING WESLEY A

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

CPC-Notationen: **B24D0003-06**
B24D0003-14
B24D0018-00



Zusammenfassung:

Source: US2003205003 AA [EN] The present invention provides a vitrified-bonded **abrasive tool** wherein the **abrasive** grit portion comprises a thermally sensitive **abrasive** grain, such as sintered sol gel microcrystalline alpha alumina **abrasive** grain or superabrasive grain, and wherein the vitrified bond may be matured by firing at a temperature of about 700 to 1,100 degrees centigrade The invention preferably is carried out with sintered sol gel microcrystalline alpha alumina **abrasive** grain and a phosphorous oxide-containing, alkaliborosilicate vitrified bond composition. In one embodiment, during firing at about 700 to 1,100 degrees centigrade, the vitrified bond of the invention comprises at least two immiscible, amorphous phases

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 2

Titel: **ABRASIVE** ARTICLES WITH IRON SULFIDE AND **POTASSIUM** ALUMINUM **FLUORIDE FILLER**
Patentnummer: [US3246970A](#)
Anmeldung: US19630297210
Priorität: US19630297210 19630724
Patentfamilie: **US3246970A**
Anmelder: CARBORUNDUM CO
Erfinder: EDWARD ZIMMERMAN ROY



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US3246970 A [EN] (Claim 1) 1. An **abrasive** article consistine essentially of **abrasive** grains, an organic bond uniting the grains and a **filler** of iron sulfide finer than 200 mesh and **potassium** aluminum **fluoride** finer than about 100 metal interspersed throughout the bonded mass, said **filler** constituting from about 5% to about 60% by volume of the bond. 5

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 3

Titel: PACKAGE INCLUDING **ABRASIVE** ARTICLE AND DESICCANT

Patentnummer: [WO2020081870A1](#)

Anmeldung: WO2019US56826
US20190656476

Priorität: US20180746925P 20181017
US20190656476 20191017

Patentfamilie: [WO2020081870A1](#)
[US2020122914A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: CASTAGNA ALICIA M
LATOURNERIE JEROME

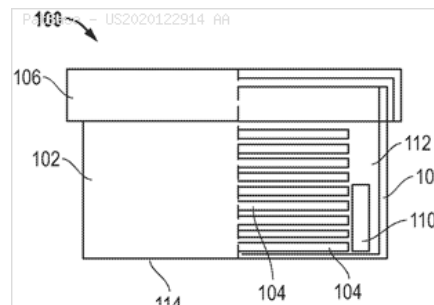


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C09G0001-02
C09K0003-14

CPC-Notationen: B01D0053-261
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B24D0099-00
B65D0033-2508
B65D0081-264
B65D0081-266
B65D0085-62

Zusammenfassung:

Source: US2020122914 AA [EN] An article includes a package including a packaging material defining an enclosed volume, wherein a desiccant and a bonded **abrasive** article are contained within the enclosed volume. In an embodiment, the desiccant comprises calcium ions in an amount of at least 7600 ppm of a total weight of the desiccant. In another embodiment, the bonded **abrasive** article has a moisture uptake of at most 0.3 percent when exposed to 90 percent relative humidity at 40 degrees centigrade for 24 days



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 4

Titel: METAL **GRINDING** AND **CUTTING** AIDS AND METHODS OF THEIR USE IN THE MACHINING OF METALS

Patentnummer: [GB1507154A](#)

Anmeldung: GB19770016204
GB19750017052

Priorität: GB19750017052 19750424
GB19770016204 19750424

Patentfamilie: [GB1507154A](#)
[GB1507153A](#)

Anmelder: WIRTH J

Erfinder:

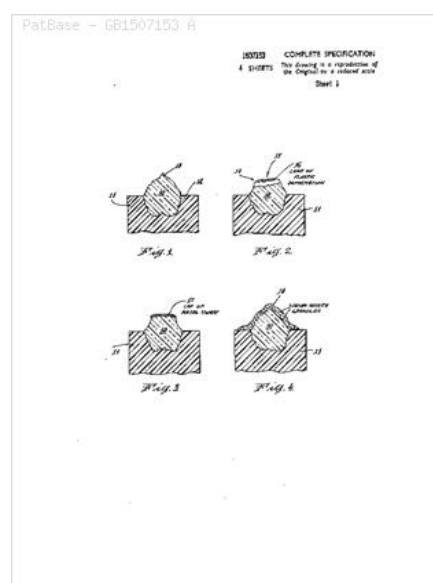


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CPC-Notationen: B24B0001-00
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C10M2207-125
C10M2207-129
C10M2207-40
C10M2207-404
C10M2209-103
C10N2040-22

Zusammenfassung:

Source: GB1507153 A [EN] 1507153 Lubricants **J C J** WIRTH 24 April 1975 17052/75 Heading C5F [Also in Division B3] A **grinding** or **cutting aid** composition comprises **potassium** nitrite, sodium nitrate, **potassium** nitrate, lithium nitrite, lithium nitrate, **potassium** dichromate, or mixtures thereof, or mixtures thereof with sodium nitrite mixed with a waxy or oily vehicle other than paraffin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 5

Titel: **ABRASIVE** ARTICLES INCLUDING CONFORMABLE COATINGS AND POLISHING SYSTEM THEREFROM



Patentnummer: [WO2019012391A1](#)

Anmeldung: WO2018IB54980
US20180629987
CN201880046070
TW20180123788
SG20201100259

Priorität: US20170530989P 20170711
US20180629987 20180705
WO2018IB54980 20180705

Patentfamilie: **WO2019012391A1**
[US2020130133A1](#)
[CN110869166A](#)
[TW201908455A](#)
[SG11202000259RA1](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

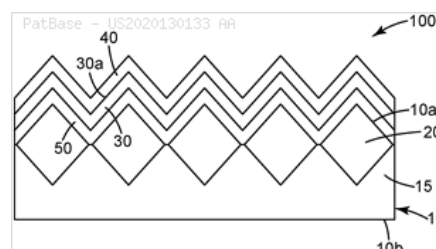
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DAVID MOSES MEKALA
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JING NAIYONG
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NELSON CALEB TIMOTHY
RIDDLE JUSTIN ALLEN

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C09K0003-14

CPC-Notationen: B24B0037-24
B24B0053-017
B24D0003-28
B24D0003-346
B24D0007-02
C09K0003-1409

Zusammenfassung:

Source: US2020130133 AA [EN] The present **disclosure** relates to **abrasive** articles including conformable coatings, e.g. a hydrophilic coating, and polishing systems therefrom. The present **disclosure** provides an **abrasive** article including a body having an abrading surface and an opposed second surface, wherein the abrading surface of the body includes a plurality of inorganic **abrasive** particles; a conformable metal oxide coating adjacent to and conforming to the plurality of engineered features, wherein the conformable metal oxide coating includes a first surface; and a conformable polar organic-metallic coating in contact with the first surface of the conformable metal oxide coating, wherein the conformable polar organic-metallic coating includes a chemical compound having at least one metal and an organic moiety having at least one polar functional group



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 6

Titel: ANTI-LOADING TREATMENTS

Patentnummer: [WO03087256C1](#)

Anmeldung: WO2003US10606
WO2001US49590
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DE20011097149T
US20020121293
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ZA20030005042
ZA20040008028

Priorität: US20010754912 20010104
JP20020562521 20011228
WO2001US49590 20011228
US20020121293 20020412
WO2003US10606 20030404

Patentfamilie: [WO03087256C1](#)
[WO03087256A1](#)
[WO02062531A1](#)
[DE10392537B4](#)
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[US6835220B2](#)



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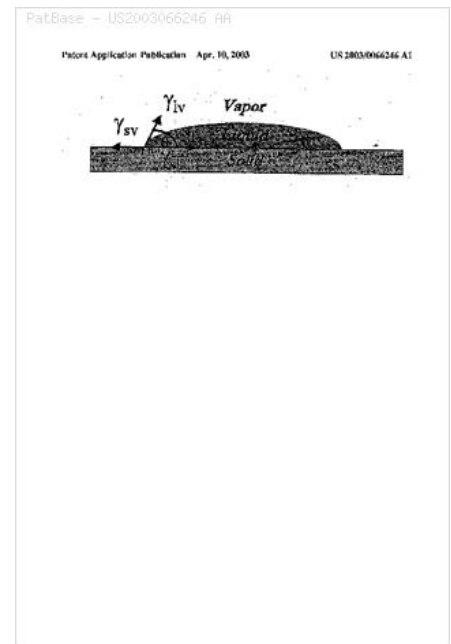
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CPC-Notationen: B24C0011-005
B24D0003-04
B24D0003-14
B24D0003-342
B24D0011-001
C09K0003-1409

Zusammenfassung:

Source: US2003066246 AA [EN] An **abrasive** is give a top coat layer consisting essentially of an inorganic, anti-loading agent selected from the group consisting of metal silicates, silicas, metal carbonates, and metal sulfates. The metal silicates can be selected from the group consisting of magnesium silicates, **potassium** aluminum silicates, aluminum silicates, and calcium silicates. In one embodiment, the magnesium silicates include talc, the **potassium** aluminum silicates include micas, the aluminum silicates include clays, and the calcium silicates include wollastonite. The silicas can be selected from the group consisting of fused silica, fumed silica, and precipitated amorphous silica. The metal carbonates can include calcium carbonate. The metal sulfates can include hydrous calcium sulfate or anhydrous calcium sulfate



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 7

Titel: **ABRASIVE** ARTICLE FOR ULTRA HIGH MATERIAL REMOVAL RATE **GRINDING OPERATIONS**

Patentnummer: [WO2013078324A1](#)

Anmeldung: WO2012US66273
EP20120851081
DE201260071191T
US20120682926
JP20140541436T
CA20122856129
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PL20120851081T
RU20140124215
SG20141102082
TH20141002620
ZA20140004297

Priorität: US20110563373P 20111123
EP20120851081 20121121
US20120682926 20121121
WO2012US66273 20121121

Patentfamilie: **WO2013078324A1**
[EP2782712B1](#)
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[EP2782712A4](#)
[DE602012071191D1](#)
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SARANGI NILANJAN
SEN GOBEN ABRAZIF
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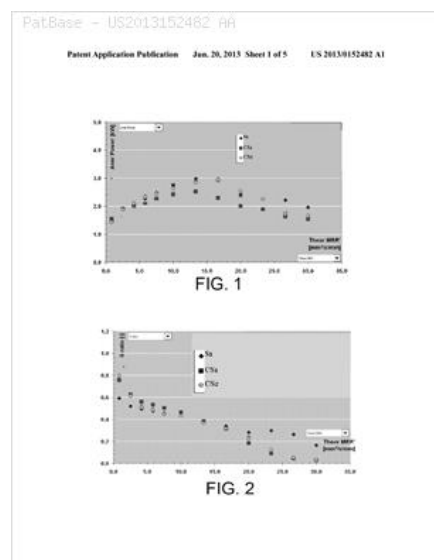
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JOHN R BESSE
JONH CAMPANIELLO
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IPC-Notationen: B24D
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C09K0003-14
C09K0003-1409

Zusammenfassung:

Source: US2013152482 AA [EN] An **abrasive** article including a bonded **abrasive** body having a bond material present in an amount of not greater than about 15 vol percent for the total volume of the body, **abrasive** particulate material contained in the bond material, the **abrasive** particulate material including **abrasive** agglomerates and unagglomerated **abrasive** particles, wherein the body comprises an **abrasive** particulate ratio (APp: APagg) within a range between 3: 1 and about 1: 3, wherein APp represents the amount (vol percent) of unagglomerated **abrasive** particles present in the body and APagg represents the amount (vol percent) of **abrasive** agglomerates present in the body, and a porosity of at least about 42 vol percent of the total volume of the bonded **abrasive** body



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 8

Titel: **ABRASIVE** ARTICLE FOR LOWER SPEED **GRINDING OPERATIONS**

Patentnummer: [WO2014008356A1](#)

Anmeldung: WO2013US49251
EP20130812896
US20130934714
JP20150520675T
CN201380042495
KR20157002204
TW20130123548
AR2013P102363
BR20151100164
IL20130236438
IN2015DN00417
MX20150000143
RU20150102911
ZA20150000148

Priorität: US20120668860P 20120706
US20120677655P 20120731
US20130934714 20130703
WO2013US49251 20130703

Patentfamilie: **WO2014008356A1**
EP2869968A1
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Anmelder: FOX STEPHEN E
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KRAUSE RUSSELL L
RUKMANI SANDHYA JAYARAMAN
SAINT GOBAIN ABRASIFS SA
SARANGI NILANJAN
SEN GOBEN ABRAZIVS INK

Erfinder: FOKS STIVEN E
KRAUZE RASSEL L
RUKMANI SANDKHJA DZHAJARAMAN
RUSSELL L KRAUSE
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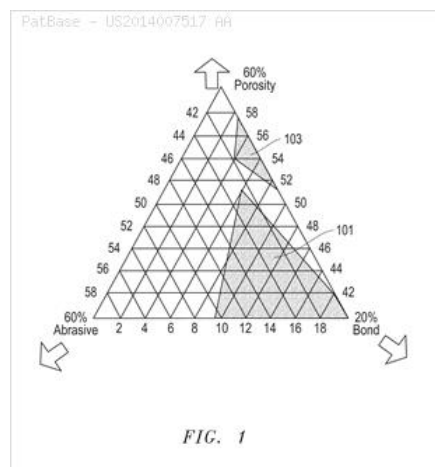


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CPC-Notationen: B24D0003-02
B24D0003-06
B24D0003-18

Zusammenfassung:

Source: US2014007517 AA [EN] An **abrasive** article includes a bonded **abrasive** body having **abrasive** particles contained within a bond material. The bonded **abrasive** body may include an **abrasive** particle-to-bond material interfacial modulus of elasticity (MOE) of at least about 225 GPa. The bonded **abrasive** body may be configured to grind a workpiece comprising metal at a speed of less than about 60 m/s



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 9

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

Patentnummer: [WO2011069006A3](#)

Anmeldung: WO2010US58783
EP20100835147
US20100959282
JP20140092945
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Priorität: US20090266043P 20091202
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WO2010US58783 20101202

Patentfamilie: **WO2011069006A3**
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Anmelder: HILLERS MAIKE
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MCNEAL KELLEY
QUEREL GILLES
RUKMANI SANDHYA JAYARAMAN
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SEHN GOBEHN ABRAZIF
SEHNT GOBEHN EHBREJZIVS INK

Erfinder: MAIKE HILLERS
MCNEAL KELLEY
MUTHU JEEVANANTHAM
QUEREL GILLES
RUKMANI SANDHAYA JAYARAMAN
SANDHYA JAYARAMAN RUKMANI

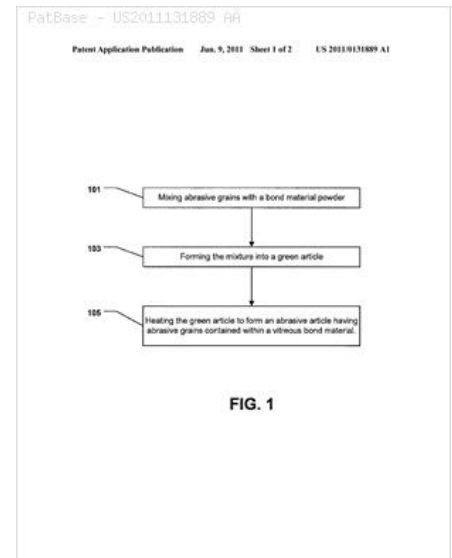


IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-04
B24D0003-06
B24D0003-14
B24D0003-16
B24D0003-18
B24D0018-00
C03C0003-089
C03C0003-091
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-02**
B24D0003-06
B24D0003-14
B24D0018-00
B24D0018-0009
C09K0003-14

Zusammenfassung:

Source: US2011131889 AA [EN] An **abrasive** article including an **abrasive** body having **abrasive** grains made of microcrystalline alumina contained within a bond material, wherein the bond material comprises a total content of alumina of at least about 15 mol percent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 10

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

Patentnummer: [WO2008112914A3](#)

Anmeldung: WO2008US56884
EP20080732146
DE200860017405T
US20080048123
JP20090553784T
CA20082680750
CN200880012644
KR20097021337
BR2008PI09003
ES20080732146T
IN2009CN05863
MX20090009845

Priorität: US20070894873P 20070314
EP20080732146 20080313
US20080048123 20080313
WO2008US56884 20080313

Patentfamilie: **WO2008112914A3**
WO2008112914A2
EP2132002B1
EP2132002A2
DE602008017405D1
US7935158B2
US2008222965A1
JP2010521327T2
CA2680750C
CA2680750A
CN101678532A
CN101678532B
KR20090133110A
KR101161337B1
BRPI0809003B1
BRPI0809003A2
ES2391686T3
IN271787B
IN05863CN2009A
MX2009009845A1

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

Erfinder: JOUSSEAUME CECILE
PAUL S DANDO
QUEREL GILLES
RICHARD W HALL

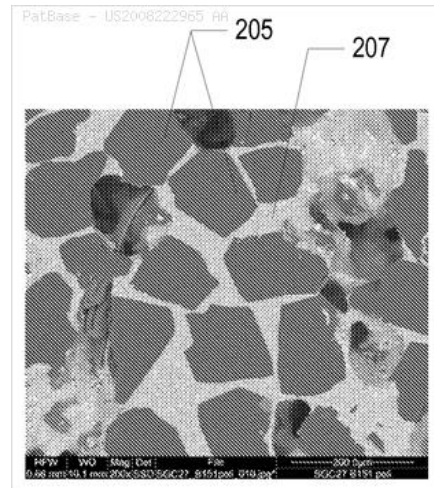
IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-04
B24D0003-14
B24D0003-18
C03C0003-00
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-007**
B24D0003-04
B24D0003-06
B24D0003-14
C03C0003-091
C03C0003-093
C03C0014-004
C03C2214-04



Zusammenfassung:

Source: US2008222965 AA [EN] A bonded **abrasive** article is provided which includes **abrasive** grains made of cubic boron nitride within a bond matrix including a silicate. The bonded **abrasive** further includes a reaction product at the interface between the **abrasive** grains and bond matrix comprising a transition metal nitride



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 11

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

Patentnummer: [WO2013102173A4](#)

Anmeldung: WO2012US72239
EP20120863828
US20120732231
JP20140549005T
CN201280062393
KR20147020033
IN2014DN06044

Priorität: US20110582049P 20111230
WO2012US72239 20121230
US20120732231 20121231

Patentfamilie: [WO2013102173A4](#)
[WO2013102173A1](#)
[EP2798034A1](#)
[EP2798034A4](#)
[US8986410B2](#)
[US2013167448A1](#)
[JP5905604B2](#)
[JP2015503453T2](#)
[CN103998561A](#)
[KR20140121406A](#)
[IN06044DN2014A](#)

Anmelder: RUKMANI SANDHYA JAYARAMAN
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SARANGI NILANJAN

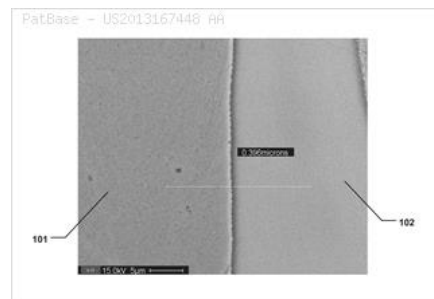
Erfinder: RUKMANI SANDHYA JAYARAMAN
SARANGI NILANJAN

IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
[B24D0003-06](#)
B24D0003-14
B24D0003-20
B24D0011-00
B24D0018-00
C09C0001-68
C09G0001-02
C09K0003-14

CPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
[B24D0003-04](#)
[B24D0003-06](#)
B24D0003-14
B24D0003-20
B24D0018-0009
B24D0018-0063
C09G0001-02
C09K0003-1409

Zusammenfassung:

Source: US2013167448 AA [EN] A method of forming an **abrasive** article includes providing a green body having **abrasive** particles including microcrystalline alumina, and heating the green body via microwave radiation to form a bonded **abrasive** body including the **abrasive** particles and a bond material comprising a vitreous phase



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 12

Titel: BONDED **ABRASIVE TOOLS** WITH COMBINATION OF FINELY MICROCRYSTALLINE ALUMINOUS **ABRASIVE** AND A SUPERABRASIVE

Patentnummer: [WO8902344A1](#)

Anmeldung: WO1988US03138
EP19880908625
DE19883852819T
US19910717761
US19900532412
US19880243284
JP19880507940T
CA19880577333
CN19881007748
KR19897000801
KR19890700801
AT19880908625T
ES19880002814
GR19880100599

Priorität: US19870095781 19870914
US19880243284 19880909
WO1988US03138 19880913
CA19880577333 19880914
US19900532412 19900604
US19910717761 19910619

Patentfamilie: **WO8902344A1**
EP0335930B1
EP0335930A1
EP0335930A4
DE3852819T2
DE3852819D1
US5152810A
US5090970A
US4944773A
JP2643401B2
JP2501209T2
CA1331838A1
CN1032512A
CN1015785B
KR19897001284A
KR19890701284A
KR950010538B1
AT117233E
ES2008823AF
GR1000486B
GR880100599A

Anmelder: NORTON CO LTD

Erfinder: LEOMARD K PUKAITE
PUKAITE LEONARD G
PUKAITE LEONARD K
RUE V CHARLES
SUBRAMANIAN KRISHNAMOORTHY



IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-14
B24D0003-34
C01F0007-00
C01F0007-02
C04B0035-10
C09C0001-68
C09K0003-14

CPC-Notationen: **B24D0003-00**
B24D0003-346
C09K0003-1418

Zusammenfassung:

Source: US4944773 A [EN] Bonded **abrasive grinding tools** with more cost effective **grinding** performance than those known in the prior art for **grinding** certain types of hard metals may be made by combining in the **tool** both grits of conventional superabrasives and grits of aluminous **abrasive** characterized by a microstructure that predominantly comprises tightly packed, very fine crystals of alpha alumina or of an aluminum spinel such as magnesium aluminate. The predominant crystallites in the best type of aluminous **abrasive** have maximum dimensions of no more than about 0.3 micron and generally show little or no regular faceting at about 5,000 magnification and are approximately equiaxed, with no higher aspect ratio than 2, usually less than 1.5

PatBase - JP2643400 B2 表 1

酸化物の化学式	Na ₂ O	K ₂ O	MgO	CaO	SiO ₂	Al ₂ O ₃	B ₂ O ₃	Fe ₂ O ₃	TiO ₂
モル分	0.47	0.07	0.25	0.21	3.77	0.58	0.05	0.01	0.03

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 13

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

Patentnummer: [US8361176B2](#)

Anmeldung: US20110236355
US20090386360
TW20090112700

Priorität: US20080124618P 20080418
US20090386360 20090416
US20110236355 20110919

Patentfamilie: [US8361176B2](#)
[US8021449B2](#)
[US2012066980A1](#)
[US2009260297A1](#)
[TW200951209A](#)
[TWI414590B](#)

Anmelder: CAI YING
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SETH ANUJ

Erfinder: CAI YING
SETH ANUJ

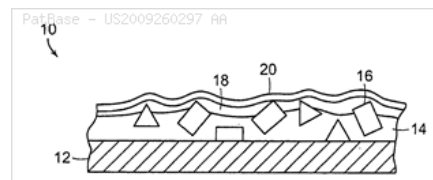


IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
C04B0035-626
C04B0035-628
C09K0003-14

CPC-Notationen: [B24D0003-00](#)
C09K0003-1409
C09K0003-1436
F21V0007-04
G02B0006-0036
G02B0006-0038
G02B0006-0053
G02B0006-0061

Zusammenfassung:

Source: US2009260297 AA [EN] A surface-modified **abrasive** grain includes an **abrasive** grain as a substrate, and a film on the **abrasive** 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.: 14

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

Patentnummer: [WO2016154130A1](#)

Anmeldung: WO2016US23447
EP20160769508
US20160560120
CN201680025767
IN201717036053

Priorität: IN2015CH01432 20150321
WO2016US23447 20160321

Patentfamilie: **WO2016154130A1**
EP3274130A1
EP3274130A4
US2018085896A1
CN107530865A
IN201717036053A

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

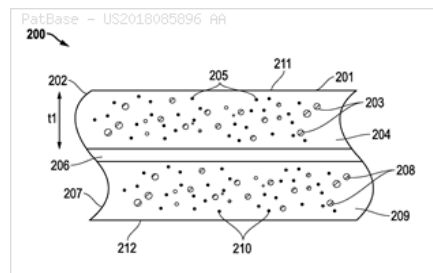
Erfinder: DAS DIBYENDU
PARAMBAN UDAYAN
SANKARANARAYANAN JAGADIS
SATHYANARAYANAIAH ADISESHAIAH K

IPC-Notationen: **B24D0003-02**
B24D0003-06
B24D0003-14
B24D0003-20
B24D0003-34
B24D0005-02
B24D0005-12
B24D0005-14
B24D0007-14

CPC-Notationen: B24D0003-20
B24D0003-344
B24D0005-02
B24D0005-12
B24D0005-14
B24D0007-14

Zusammenfassung:

Source: US2018085896 AA [EN] An **abrasive tool** including a bonded **abrasive** including a body comprising **abrasive** particles contained within a three-dimensional matrix of bond material, the bond material including an organic material, the **abrasive tool** further including a first **filler** contained within the three-dimensional matrix of bond material including a silicate in a first content and a second **filler** contained within the three-dimensional matrix of bond material including a sulfate in a second content, and the first content is greater than the second content



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 15

Titel: **Grinding wheel** **abrasive** composition

Patentnummer: [EP0482412B1](#)

Anmeldung: EP19910117055
DE19916015220T
US19900601632
JP19910231651
CA19912047129
KR19910018499

Priorität: US19900601632 19901022
CA19912047129 19910716

Patentfamilie: [EP0482412B1](#)
[EP0482412A3](#)
[EP0482412A2](#)
[DE69115220T2](#)
[DE69115220D1](#)
[US5061295A](#)
[JP4226863A2](#)
[JP2950657B2](#)
[CA2047129C](#)
[CA2047129A](#)
[KR19920008166A](#)
[KR100178404B1](#)
[KR0178404B1](#)

Anmelder: NORTON COMPANY

Erfinder: GOODON II HITSUKORII
HICKORY GORDON E
MAIKERU JIEE HOWAITO
WHITE MICHAEL J

IPC-Notationen: [B24D0003-02](#)
[B24D0003-28](#)
[B24D0003-34](#)

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



Zusammenfassung:

Source: US5061295 A [EN] An improved **abrasive** product such as a **grinding wheel** is **disclosed**. The **abrasive** product contains an active **filler** mixture of tin, FeS₂, and K₂SO₄, which mixture improves the **grinding** quality and versatility of the **abrasive** product

PatBase - JP2950657 表 1						
直径 1.5" の C1018 スチールの切断研削結果						
砥石	時間/切断	MRR	E	G-比	E/MRR	焦げ%
I	2.5	5.62	12.43	5.03	2.21	0
	3.5	4.00	9.89	6.66	2.48	20
	4.5	3.14	9.41	6.33	3.00	50
A	2.5	5.66	13.61	6.29	2.40	0
	3.5	4.02	12.14	6.47	3.03	70
	4.5	3.12	11.76	4.03	3.76	100
B	2.5	5.70	12.38	3.96	2.17	0
	3.5	4.09	9.50	5.13	2.32	0
	4.5	3.20	8.65	5.79	2.70	45
II	2.5	5.56	12.53	5.25	2.26	0
	3.5	3.92	9.51	6.29	2.42	30
	4.5	3.08	9.01	5.79	2.70	60

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 16

Titel: GLASS CERAMIC AND PREPARATION METHOD THEREOF, AND A BOND FOR COMPOSITE **GRINDING WHEEL** COMPRISING THE GLASS CERAMICS AND PREPARATION METHOD AND APPLICATION THEREOF



Patentnummer: [WO2019127324A1](#)

Anmeldung: WO2017CN119715
US20170349588
CN201780002903

Priorität: US20170349588 20171229
WO2017CN119715 20171229

Patentfamilie: [WO2019127324A1](#)
[US10815146B2](#)
[US2020165157A1](#)
[CN110461789A](#)

Anmelder: JIANGXI GUANYI ABRASIVES CO LTD
JINGDEZHEN CERAM INST
JINGDEZHEN CERAMIC INST

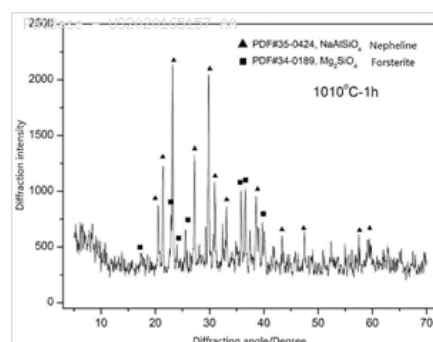
Erfinder: RUSHKIN NIR
WANG YONGQING
WU MIN
XIAO ZHUOHAO
YI CHENHAO
YI WEIMIN

IPC-Notationen: [B24D0003-04](#)
[B24D0003-34](#)
C03C0010-00
C03C0010-04
C03C0010-06
C03C0010-08
C03C0010-10
C03C0010-12

CPC-Notationen: [B24D0003-04](#)
[B24D0003-34](#)
[B24D0003-34Z](#)
C03B0019-1045
C03C0001-00
C03C0003-097
C03C0008-08
C03C0008-24
C03C0010-0018
C03C0010-0045
C03C0010-0054
C03C0014-004
C03C2203-10
C03C2203-52
C03C2214-20

Zusammenfassung:

Source: US2020165157 AA [EN] The application relates to bond materials for a **grinding wheel**, in particular a glass ceramic and a preparation method thereof, and a bond for the composite **grinding wheel**. The glass ceramic is prepared from raw materials comprising kaolin, silica, diboron trioxide, lithium superoxide, albite, **potassium** feldspar, talc, dolomite, phosphorus pentoxide, and yttrium oxide. A glass ceramic composed entirely of microcrystalline phases is obtained from the glass prepared by the above raw materials at 900-1020 degrees centigrade, achieving a complete conversion of the glass phase at a low temperature. The application also provides a bond for a composite **grinding wheel**, comprising glass ceramic and glass with mass ratio of (20-50) : (50-80), the glass phase having a low flow temperature and, together with the glass ceramic phase, forming encapsulation of the **abrasive** particles, realizing low-temperature sintering of the **grinding wheel**. Microcrystalline phase in the bond results in high **mechanical** strength for the obtained grinding wheel



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 17

Titel: **ABRASIVE** ARTICLE COMPRISING A BOND HAVING A **FILLER** THEREIN
Patentnummer: [US2308982A](#)
Anmeldung: US19420429502
Priorität: US19420429502 19420204
Patentfamilie: **US2308982A**
Anmelder: NORTON CO
Erfinder: KISTLER SAMUEL S



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

This invention relates to abrasive articles and more particularly to grinding wheels having abrasive grains united various types of bonding material, and where in the bond contains a filler or agent capable of modifying or improving the abrading properties.

Filler	Material removed by weight M	Wheel wear by weight W	$\frac{M}{W}$
Potassium calcium sulfate.....	1,650	280	.97
Kaolin.....	875	330	.23

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 18

Titel: BONDED **ABRASIVE** ARTICLES CONTAINING **FILLERS**
Patentnummer: [US2308983A](#)
Anmeldung: US19420439125
Priorität: US19420439125 19420415
Patentfamilie: **US2308983A**
Anmelder: NORTON CO
Erfinder: KISTLER SAMUEL S



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

This invention relates to abrasive articles and more particularly to grinding wheels in which abrasive grains are united integrally by bonds containing fillers or agents capable of improving the wheel quality.

Filler	Material removed M pounds per hour	Wheel wear W cubic inches per hr.	Ratio R $\frac{M}{W}$
Cryolite.....	10.5	11.7	.92
KBF ₄	12.8	11.9	1.07

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 19

Titel: METAL PHOSPHIDE **FILLER** FOR **GRINDING WHEELS**
Patentnummer: [US3032404A](#)
Anmeldung: US19610103247
Priorität: US19610103247 19610417
Patentfamilie: [US3032404A](#)
Anmelder: SIMONDS WORDEN WHITE COMPANY
Erfinder: DOUGLASS THOMAS E
TILTON CLARENCE B



IPC-Notationen: [B24D0003-34](#)

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

Zusammenfassung:

Source: US3032404 A [EN] (Claim 1) is claimed as new is as follows: 1. An abrasive article comprising abrasive grains, a bond material uniting the grains as an integral body and a filler consisting essentially of finely divided solid heavy metal phosphide interspersed throughout the bond.

	Percent by Weight	Percent by Volume
Al ₂ O ₃ abrasive grain.....	72.3	59.86
Bond: Phenol-formaldehyde resin.....	9.35	26.27
Filler:		
Manganese phosphide.....	9.84	5.29
Potassium Aluminum fluoride.....	6.66	8.04
Lime (CaO).....	1.85	2.04
	100	100

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 20

Titel: FILLER FOR GRINDING WHEELS
Patentnummer: [US3113006A](#)
Anmeldung: US19610085492
Priorität: US19610085492 19610130
Patentfamilie: [US3113006A](#)
Anmelder: CINCINNATI MILLING MACHINE CO
Erfinder: KIBBEY HARRY S



IPC-Notationen: [B24D0003-34](#)

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

Zusammenfassung:

Source: US3113006 A [EN] (Claim 1) 1. In an **abrasive** article essentially composed of **abrasive** grains bonded with a synthetic resin bond having a filler dispersed therethrough, the - improvement which comprises incorporating in said **filler** from 10% to 100% by volume of **potassium** silicofluoride

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 21

Titel: Improvements in compositions relating to **abrasive** articles

Patentnummer: [DE1469863A1](#)

Anmeldung: DE19601469863
US19600073538
GB19590042226
FR19600846517

Priorität: GB19590042226 19591211

Patentfamilie: **DE1469863A1**
US3111401A
GB891046A
FR1275868A

Anmelder: CARBORUNDUM CO

Erfinder: COHEN JOHN CUNNINGHAM
JACKSON EDWARD ROY BETTISON
R BETTISON EDWARD

IPC-Notationen: **B24D0003-34**
C08J0005-14
C08L0061-00
C08L0061-10

CPC-Notationen: **B24D0003-344**



Zusammenfassung:

Source: GB891046 A [EN] An **abrasive wheel** or other article is made from a composition including **abrasive** grains, an organic bonding material and a **filler** comprising a **potassium** zirconium **fluoride**. Compositions specified contain 51,5 percent fused alumina grains, 26,0 percent phenol-formaldehyde resin, 8,0 percent of **potassium** zirconium pentafluoride or hexafluoride and 14,5 percent of additional **filler** material. ALSO: An **abrasive wheel** or other article is made from a composition including **abrasive** grains, an organic bonding material and a **filler** comprising a **potassium** zirconium **fluoride**. Compositions specified contain 51,5 percent fused alumina grains, 26,0 percent phenol-formaldehyde resin, 8,0 percent of **potassium** zirconium pentafluoride or hexafluoride and 14,5 percent of additional **filler** material

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 22

Titel: LARGE DIAMETER **CUTTING TOOL**

Patentnummer: [US2013337730A1](#)

Anmeldung: US20130911331

Priorität: US20120656421P 20120606
US20130911331 20130606

Patentfamilie: [US2013337730A1](#)

Anmelder: DELEUZE CHARLES
JEEVANANTHAM MUTHU
KHAUND ARUP K
LI LINGYU
MCNEAL KELLY
SCHOCH ANDREW B
SRINIVASAN SIDDHARTH

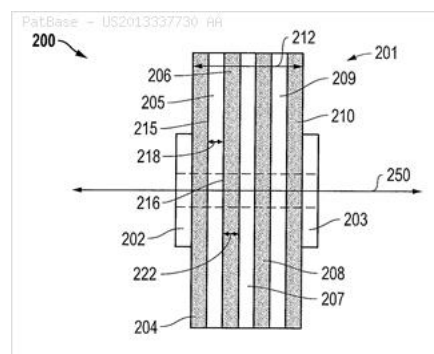
Erfinder: DELEUZE CHARLES
JEEVANANTHAM MUTHU
KHAUND ARUP K
LI LINGYU
MCNEAL KELLY
SCHOCH ANDREW B
SRINIVASAN SIDDHARTH

IPC-Notationen: B24D0005-12

CPC-Notationen: [B24D0003-342](#)
B24D0005-04
B24D0005-12

Zusammenfassung:

Source: US2013337730 AA [EN] An **abrasive cutting tool** has a body in the shape of a large diameter **disk** having an outer diameter of at least about 60 centimeters, and an aspect ratio defined as a ratio between the outer diameter to an axial thickness of the body of at least about 10: 1. The body includes an **abrasive** portion having a bond material and **abrasive** particles contained within the bond material. The **abrasive** particles comprise brown fused alumina. A first **filler** is contained within the **abrasive** portion comprising iron and sulfur having an average particle size of not greater than about 40 microns



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 23

Titel: Coated **abrasive** having an overcoating of an epoxy resin coatable from water

Patentnummer: [EP0546831B1](#)

Anmeldung: EP19920311283
EP19910310533
DE19926017019T
DE19916011190T
US19950515866
US19950515748
JP19920330346
JP19910294192
CA19922083868
CA19912054554
AU19940078942
AU19920029773
KR19920023792
KR19910020133
BR1991PI04924
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ES19910310533T
MX19910001950
MX19920007000
ZA19910008680

Priorität: US19900610701 19901114
CA19912054554 19911030
US19910804968 19911211
CA19922083868 19921126
AU19920029773 19921130
US19950515748 19950816
US19950515866 19950816

Patentfamilie: [EP0546831B1](#)
[EP0486308B1](#)
[EP0546831A3](#)
[EP0486308A3](#)
[EP0546831A2](#)
[EP0486308A2](#)
[DE69217019T2](#)
[DE69111190T2](#)
[DE69217019D1](#)
[DE69111190D1](#)
[US5556437A](#)
[US5549719A](#)
[JP5261666A2](#)
[JP4292632A2](#)
[JP3285374B2](#)
[CA2083868A](#)
[CA2054554A](#)
[AU669825B2](#)
[AU656640B2](#)
[AU199478942A1](#)
[AU199229773A1](#)
[KR930012202A](#)
[KR19930012202A](#)
[KR19920009577A](#)
[KR100189173B1](#)
[BRPI9104924A](#)
[BRPI9204977A](#)
[ES2074234T3](#)
[MX9101950A1](#)
[MX9207000A1](#)



ZA9108680A

Anmelder: 3M CO
MINNESOTA MINING AND MFG

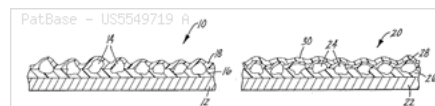
Erfinder: BUCHANAN SCOTT J C O MINNESOTA
BUCHANAN SOCTT J
CHIYON SOO RII
LEE CHONG S C O MINNESOTA MINI
LEE CHONG SOO
SCOTT JAMES BUCHANAN
SUKOTSUTO JIEIMUZU BATSUCHIYAN

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
C08G0059-00
C08J0005-14
C08L0063-00
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-344

Zusammenfassung:

Source: US5549719 A [EN] A coated **abrasive** article having a coating comprising a composition formed from an epoxy resin that is capable of being coated from water, a curing agent, and optionally a **grinding aid** dispersed in the epoxy resin. It is preferred that the coat containing the epoxy resin and the **grinding aid** be the outermost coat of the coated **abrasive** article, e.g. the size coat or supersize coat, in order to position the **grinding aid** in direct contact with the workpiece being abraded



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 24

Titel: **Abrasive** slurries and **abrasive** articles comprising multiple **abrasive** particle grades

Patentnummer: [WO9914016A1](#)

Anmeldung: WO1998US19285
EP19980946073
DE19986022313T
US19970987496
JP20000511612T
AU19980093168
KR20007002710

Priorität: US19970931228 19970916
US19970987496 19971209
WO1998US19285 19980916

Patentfamilie: [WO9914016A1](#)
[EP1015181B1](#)
[EP1015181A1](#)
[DE69822313T2](#)
[DE69822313D1](#)
[US5942015A](#)
[JP2001516652T2](#)
[AU750293B2](#)
[AU199893168A1](#)
[KR20010023986A](#)

Anmelder: 3M INNOVATIVE PROPERTIES COMPA
MINNESOTA MINING AND MFG

Erfinder: CULLER SCOTT R
MUCCI MICHAEL V

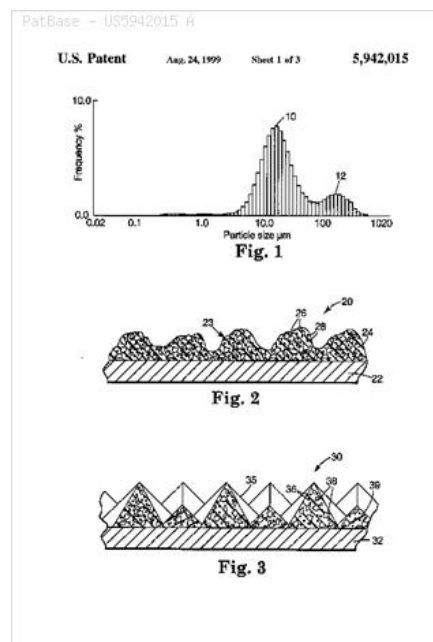
IPC-Notationen: [B24D0003-00](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0018-00

CPC-Notationen: B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0018-00



Zusammenfassung:

Source: US5942015 A [EN] **Abrasive** slurries, **abrasive** articles made from the **abrasive** slurries, and methods for the production of the **abrasive** articles are **disclosed**. The **abrasive** slurries and **abrasive** articles made therefrom comprise at least two grades of **abrasive** particles (i.e., a first larger grade, and a second smaller grade) . The **abrasive** grades have a median particle size ratio of about 2, where the median particle size ratio equals the median particle size of the larger grade of **abrasive** particles divided by the median particle size of any smaller grade of **abrasive** particles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 25

Titel: PROCESS FOR USING COATED **ABRASIVE** PRODUCTS

Patentnummer: [DE2129640A1](#)

Anmeldung: DE19712129640
US19750580671
US19720310986
JP19710043367
GB19710029031
FR19710022205
CA19710116041
SE19710007907
ZA19710003966

Priorität: US19700047786 19700619
US19710141666 19710510
US19720310986 19721130
US19750580671 19750527

Patentfamilie: [DE2129640A1](#)
[US3997302A](#)
[US3806956A](#)
[JP51007350B4](#)
[GB1360015A](#)
[FR2099204A5](#)
[CA969376A1](#)
[SE400208C](#)
[SE400208B](#)
[ZA7103966A](#)

Anmelder: NORTON CO
RICHARD D CASSAR

Erfinder: J SWIATEK HENRY
SUPKIS S J
SUPKIS STANLEY J

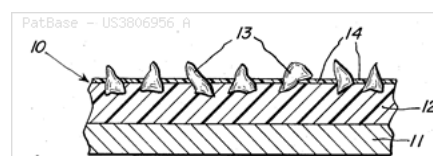
IPC-Notationen: [B24D0003-00](#)
B24D0011-00
B24D0018-00
[C08J0005-14](#)
C09K

CPC-Notationen: [B24D0003-004](#)
B24D0011-00
B24D0018-00



Zusammenfassung:

Source: US3806956 A [EN] Coated **abrasive** articles are provided which have at the exposed **grinding** surface a supersize layer which facilitates **grinding**. Such a layer comprises a polymeric material and in the most preferred embodiment an active **filler**. The presence of this layer on the coated **abrasive** article results in a much **cooler grinding operation** thus reducing the conditions conducive to metal **glazing** thereby permitting extended coated **abrasive** product **life**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 26

Titel: **ABRASIVE** ARTICLES HAVING **ABRASIVE** LAYER BOND SYSTEM DERIVED FROM SOLID, DRY-COATED BINDER PRECURSOR PARTICLES HAVING A FUSIBLE, RADIATION CURABLE COMPONENT



Patentnummer: [WO9956914A1](#)

Anmeldung: WO1999US06962
EP20040011951
EP19990915130
DE19996043189T
DE19996021803T
US20010761371
US20010028160
US19980071263
JP20000546916T
AU19990033722

Priorität: US19980071263 19980501
EP19990915130 19990330
WO1999US06962 19990330
US20010761371 20010116
US20010028160 20011220

Patentfamilie: **WO9956914A1**
EP1493535B1
EP1077791B1
EP1493535A1
EP1077791A1
DE69921803T2
DE69943189D1
DE69921803D1
US6753359B2
US6441058B2
US6228133B1
US2002123548A1
US2001011108A1
JP4303421B2
JP2002513685T2
AU199933722A1

Anmelder: 3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

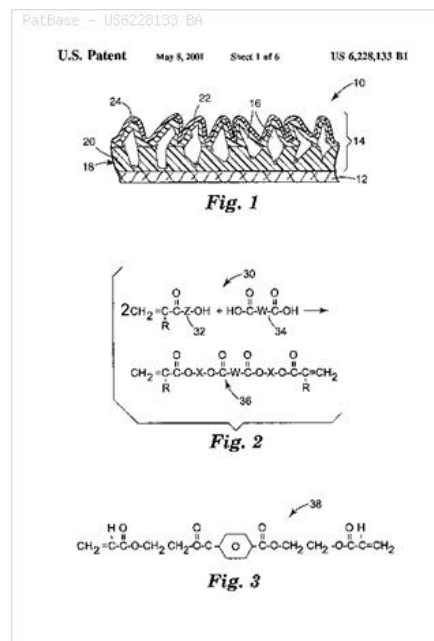
Erfinder: DAHLKE GREGG D
DEVOE ROBERT J
KIRK ALAN R
LARSON ERIC G
MEIEROTTO MARK R
MEIEROTTO MARK R
STUBBS ROY
THURBER ERNEST L
VOE ROBERT J DE

IPC-Notationen: B24D0003-28
B24D0003-34
B24D0011-00
C08F0002-46
C08K0005-098

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0011-001
B24D0011-005
Y10T0428-24372
Y10T0428-24413

Zusammenfassung:

Source: US6228133 BA [EN] The present invention involves the use of powder coating methods to form coated **abrasives**. In one embodiment, the powder is in the form of a multiplicity of binder precursor particles comprising a radiation curable component. In other embodiments, the powder comprises at least one metal salt of a fatty acid and optionally an organic component that may be a thermoplastic macromolecule, a radiation curable component, and/or a thermally curable macromolecule. In either embodiment, the powder exists as a solid under the desired dry coating conditions, but is easily melted at relatively low temperatures and then solidified also at reasonably low processing temperatures. The principles of the present invention can be applied to form make coats, size coats, and/or supersize coats, as desired



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 27

Titel: **ABRASIVE** ARTICLES
Patentnummer: [US2408319A](#)
Anmeldung: US19460643202
Priorität: US19460643202 19460124
Patentfamilie: **US2408319A**
Anmelder: NORTON CO
Erfinder: KISTLER SAMUEL S



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2408319 A [EN] 1. An **abrasive** article comprising **abrasive** grains, a bond uniting the grains as an integral body, and the combination of iron sulphide and **potassium** fluoborate interspersed throughout the bonded mass.; `` **f**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 28

Titel: ABRASIVE ARTICLE CONTAINING ZIRCONIUM TETRAFLUORIDE FILLER
Patentnummer: [US3269813A](#)
Anmeldung: US19630288627
Priorität: US19630288627 19630618
Patentfamilie: [US3269813A](#)
Anmelder: CINCINNATI MILLING MACHINE CO
Erfinder: KIBBEY HARRY S

IPC-Notationen: [B24D0003-34](#) **CPC-Notationen:** [B24D0003-344](#)



Zusammenfassung:

Source: US3269813 A [EN] (Claim 1) 1. In an **abrasive** article essentially composed of abra- sive grains bonded with a synthetic resin bond having a **filler** dispersed therethrough, the improvement which comprises utilizing a **filler** containing zirconiim tetrafluoride

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 29

Titel: **Abrasive** material

Patentnummer: [DE2813258C2](#)

Anmeldung: DE19782813258
US19800197193
GB19790010848
CH19790002785

Priorität: DE19782813258 19780328

Patentfamilie: [DE2813258C2](#)
[DE2813258A1](#)
[US4364746A](#)
[GB2018811B2](#)
[GB2018811A1](#)
[CH647447A](#)

Anmelder: SCHWEIZER SCHMIRGEL SCHLEIF
SIA SCHWEIZER SCHMIRGEL AND SCHL
SIA SCHWEIZER SCHMIRGEL U SCHL

Erfinder: ACKERMANN JAKOB DIPL CHEM
BITZER DIETHELM DIPL CHEM DR
KRAMIS JOST DIPL CHEM DR

IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)
C09K0003-14

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



Zusammenfassung:

Source: US4364746 A [EN] An **abrasive** compound in which individual **abrasive** grains of various types are joined in a preliminary step into the formation of so-called agglomerated **abrasive** grains, each of which may contain a number of individual grains. The particular feature of the invention is that the **abrasive** compound which is to be applied to a suitable surface to constitute an **abrasive** or **grinding tool** consists of a mixture of agglomerated **abrasive** grains of substantially different types. The differences in the agglomerated **abrasive** grain refer principally to the **abrasive** power and strength and the ability to sustain abrading forces, i.e., they are related to the endurance of the agglomerated grains under conditions of use. The substantially different strengths or properties of the agglomerated **abrasive** grains may derive from different types of binder used to create them from the individual grains, different methods of hardening or drying, different quantities of binder, or different constituent individual grains. The mixture of agglomerated abrasive grains of substantially different strength may be used with a component of non-agglomerated grains as well as with a reinforcing additive of short, chopped carbon or graphite fibers. Various embodiments are presented

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 30

Titel: **Abrasive tool** for **grinding** needles
Patentnummer: [US6015338A](#)
Anmeldung: US19970919871
Priorität: US19970919871 19970828
Patentfamilie: [US6015338A](#)
Anmelder: NORTON CO
Erfinder: ASPI FERSHID
DWYER PATRICK E
HONG KEITH C
KEIL ELINOR B
LAMBERT EDWARD

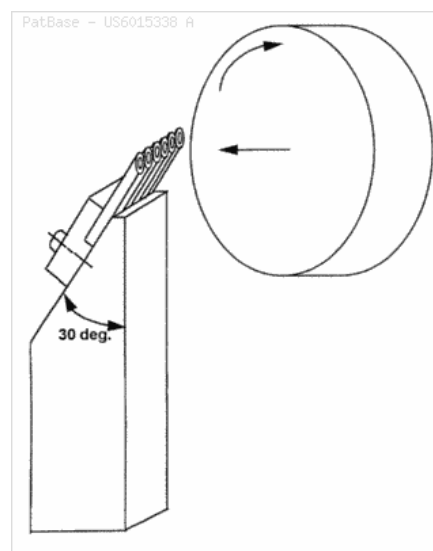


IPC-Notationen: A61B0017-00
A61B0017-06
A61M0005-32
B24B0019-00
B24B0019-16
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0018-00

CPC-Notationen: A61B0017-06066
A61B2017-00526
A61B2017-061
A61M0005-3286
B24B0019-16
B24D0003-28
[B24D0003-344](#)
B24D0018-0009

Zusammenfassung:

Source: US6015338 A [EN] **Abrasive tools** and a **grinding** process are for use in the manufacture of hypodermic needles. In particular, a formulation including selected bond components, and a process for manufacturing **grinding wheels** having an embrittled bond permits a new method for **grinding** of fine hollow metal tubes to shape the tips of hypodermic needles with the substantial elimination of metal burrs or fines from the **grinding** process



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 31

Titel: **TOOL** FOR THE TREATMENT OF SURFACES OF DENTAL MATERIALS

Patentnummer: [EP2394601A1](#)

Anmeldung: EP20100405114
US20110156712

Priorität: EP20100405114 20100611

Patentfamilie: [EP2394601A1](#)
[US2011306012A1](#)

Anmelder: INTENSIV SA
SMAILUS GUENTER

Erfinder: SMAILUS GUENTER

IPC-Notationen: A61C0003-00
A61C0003-06

CPC-Notationen: A46B0015-0032
A46D0001-00
A46D0001-0207
A61C0003-06



Zusammenfassung:

Source: US2011306012 AA [EN] The **tool** for the treatment of surfaces of dental materials with liquids, includes an **abrasive** body that includes a carrier material and **abrasive** particles embedded therein. In order to achieve a vibration-free treatment of said dental surface the carrier material is cellulose-based and the cellulose-based material is prepared in such a way as to possess a capacity for absorbing liquids for softening the carrier material

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 32

Titel: GRINDING AND POLIERKOERPER FOR DENTAL TREATMENTS (Machine translation)
Patentnummer: [DE1165807B](#)
Anmeldung: DE1960J018299
Priorität: 19600618
Patentfamilie: [DE1165807B](#)
Anmelder: KARL SCHRIEVER
SVEN JARBY DR
Erfinder:



IPC-Notationen:	A61C0003-06	CPC-Notationen:	A61C0003-06
	A61K0008-19		A61K0008-21
	A61K0008-21		A61K0008-89
	A61K0008-72		A61K0008-922
	A61K0008-89		A61Q0011-00
	A61K0008-92		
	A61Q0011-00		

Zusammenfassung:

Schleif- und Polierkörper für Zahnbehandlungen Die Erfindung betrifft Schleif- und Polierkörper mit feinverteilten medikamentösen Zusätzen für die Zahnbehandlung.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 33

Titel: **ABRASIVE TOOL** INCLUDING AGGLOMERATE PARTICLES AND AN ELASTOMER, AND RELATED METHODS

Patentnummer: [WO2007079168A1](#)

Anmeldung: WO2006US49465
EP20060848265
US20060159262

Priorität: US20050754906P 20051229
US20060159262 20061228
WO2006US49465 20061228

Patentfamilie: **WO2007079168A1**
EP1968476A1
US2009042166A1

Anmelder: 3M INNOVATIVE PROPERTIES CO
CRAIG BRADLEY D
FLETCHER TIMOTHY D
JACOBS DWIGHT W
MARGL JAMES C
NEWHOUSE SUSAN J
WATSON MITCHELL R

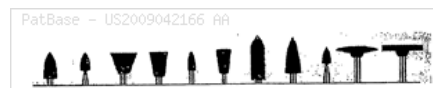
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NEWHOUSE SUSAN J
WATSON MITCHELL R

IPC-Notationen: A61C0003-06
B24B0001-00
C09K0003-14

CPC-Notationen: A61C0003-02
A61C0003-06
B24D0003-24
B24D0007-18
C09K0003-1436

Zusammenfassung:

Source: US2009042166 AA [EN] **Abrasive tools** (particularly dental **tools**) , and methods of using and making such **tools**, wherein the **abrasive tools** include an elastomeric binder (e.g., one prepared from a **fluoroelastomer**) and agglomerate particles that include an oxide matrix (preferably, silica) and **abrasive** particles (preferably, diamond)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 34

Titel: POWDERED MATERIAL AND CERAMIC MATERIAL MANUFACTURED THEREFROM

Patentnummer: [WO03041662A1](#)

Anmeldung: WO2002SE01481
EP20020759034
DE20026041250
US20040490628
US20020490628
JP20030543549T
CA20022460814
AU20020325451
CN20028018905
AT20020759034T
BR2002PI12740
IN2004CN00617
RU20040107855
SE20010003190
SE20020001067

Priorität: SE20010003190 20010926
SE20020001067 20020409
EP20020759034 20020821
WO2002SE01481 20020821

Patentfamilie: [WO03041662A1](#)
[EP1441687B1](#)
[EP1441687A1](#)
[DE60241250D1](#)
[US7351281B2](#)
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[SE200103190A0](#)
[SE200201067A0](#)

Anmelder: AHN FELT NILS OTTO
DOXA AKTIEBOLAG
DOXA CERTEX AB
ENGQVIST HAAKAN
GOMEZ ORTEGA GUNILLA
HERMANSSON IRMELI
HERMANSSON LEIF
KRAFT LARS



Erfinder: AHNFAELT LARS
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 ENGQVIST HAAKAN
 ENQVIST HAAKAN
 GUNILLA GOMEZ ORTEGA
 HAKAN ENGQVIST
 IRMELI HERMANSSON
 LARS KRAFT
 LEIF HERMANSSON
 NILS OTTO AHNFAELT

IPC-Notationen: A61K
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 A61K0006-878
 C04B0028-00
 C04B0028-06

CPC-Notationen: A61K0006-16
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 A61K0006-838
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 A61K0006-851
 A61K0006-86
 A61K0006-871
 A61K0006-876
 A61K0006-878
 C04B0028-00
 C04B0028-06
 C04B2111-00836
 C04B2111-00862
 C04B2111-80
 C04B2111-807
 C09K0011-00

Zusammenfassung:

Source: US2004206273 AA [EN] Powdered material, the binder phase of which mainly consists of a cement-based system, which powdered material has the capacity following saturation with a liquid reacting with the binder phase to hydrate to a chemically bonded ceramic material, preferably for dental purposes. According to the invention the powdered material has a composition and/or structure suitable for giving the ceramic material translucence in the hydrated state. The invention also relates to the ceramic material produced by hydration of the powdered material

PatBase - RU2004107855 A

РОССИЙСКАЯ ФЕДЕРАЦИЯ

(19) RU (11) 2004 107 855 (13) A

(51) МКП A 61 K 6/06

ФЕДЕРАЛЬНАЯ СЛУЖБА
 ПО ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ,
 ПАТЕНТАМ И ТОВАРНЫМ ЗНАКАМ

(12) ИЗВЕЩЕНИЕ К ЗАЯВКЕ НА ИЗОБРЕТЕНИЕ

(21) (22) Заявка: 2004107855/15, 21.08.2002

(30) Приоритет: 26.08.2001 SE 0103190-5
 08.04.2002 SE 0201067-6

(42) Дата публикации заявки: 10.04.2006

(86) Дата наращения заявки РСТ на национальную фазу: 26.04.2004

(86) Заявка РСТ: SE 0201481 (21.08.2002)

(87) Публикация РСТ: WO 03/041862 (22.08.2003)

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(74) Патентный поверенный:
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(54) ПОРОШКОВЫЙ МАТЕРИАЛ И КЕРАМИЧЕСКИЙ МАТЕРИАЛ, ИЗГОТОВЛЕННЫЙ ИЗ НЕГО

КЛАСС - Приспособление заявки на изобретение относящееся к классу с неограниченным и установленный срок
 действительности с применением международной заявки по приоритету

Дата отправки заявки: 10.02.2006

Исходная опубликована: 27.03.2006 БИ: 08/2006

Страница 1

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 35

Titel: BONDED **ABRASIVE** ARTICLE INCLUDING A COATING

Patentnummer: [WO2019191660A1](#)

Anmeldung: WO2019US24963
EP20190774813
US20190370284
CN201980024043
KR20207030749
SG20201109730

Priorität: US20180650876P 20180330
US20190370284 20190329
WO2019US24963 20190329

Patentfamilie: [WO2019191660A1](#)
[EP3775090A1](#)
[US10933508B2](#)
[US2019299365A1](#)
[CN111936595A](#)
[KR20200126013A](#)
[SG11202009730YA1](#)

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

Erfinder: BRIGHT ROBIN M
DUBOVICK KENNETH
GASDASKA CHARLES J
LANE WILLIAM H
TEMPERELLI ALEXANDRE J
UPADHYAY RACHANA

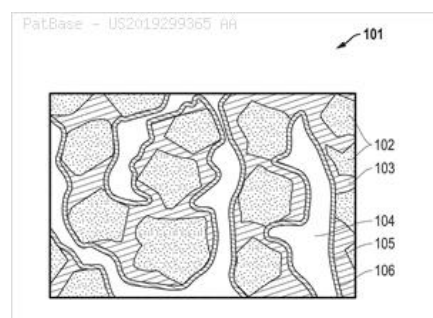


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B24D0018-00
C09K0003-14

CPC-Notationen: B05D0001-60
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B24D0003-18
B24D0003-348
B24D0005-02
B24D0018-0072
C09K0003-1409
C09K0003-1436

Zusammenfassung:

Source: US2019299365 AA [EN] A bonded **abrasive** article can include a body including a bond material, **abrasive** particles contained within the bond material, and pores contained within the body. At least a portion of the pores of the body can include a coating. In one aspect, the coating can be a poly (p-xylylene) polymer applied via vapor deposition. The coated **abrasive** body can maintain a high permeability and pore volume after coating, and the coating can provide an increase in flexural strength and corrosion resistance to the **abrasive** article, thereby greatly enhancing its **life** time



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 36

Titel: LUMINESCENT SUBSTRATE CONTAINING **ABRASIVE** PARTICLES, AND METHOD FOR THE PRODUCTION THEREOF



Patentnummer: [WO2017055394A1](#)

Anmeldung: WO2016EP73177
EP20160777646
DE201660011396T
US20160763011
JP20180516187T
FR20150059281
CN201680055772

Priorität: FR20150059281 20150930
EP20160777646 20160929
WO2016EP73177 20160929

Patentfamilie: **WO2017055394A1**
[EP3356083B1](#)
[EP3356083A1](#)
[DE602016011396D1](#)
[US10357869B2](#)
[US2018257200A1](#)
[JP6543766B2](#)
[JP2018538149T2](#)
[FR3041650B1](#)
[FR3041650A1](#)
[CN108349069A](#)
[CN108349069B](#)

Anmelder: COMMISSARIAT A L ENERGIE ATOMIQUE
COMMISSARIAT A LENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
THERMOCOMPACT SA

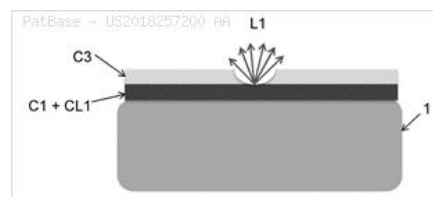
Erfinder: CHABLI AMAL
COUSTIER FABRICE
DEBOURDEAU MATHIEU
LAGUITTON BRUNO
SIMONATO JEAN PIERRE

IPC-Notationen: B23D0061-18
B24B0049-12
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[B24D0003-02](#)
[B24D0003-04](#)
[B24D0003-06](#)
[B24D0003-34](#)
B24D0018-00
C09K0003-14
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C23C0028-00
H01L0021-304

CPC-Notationen: B24B0049-12
[B24D0003-34](#)
[B24D0003-346](#)
B24D0018-0018

Zusammenfassung:

Source: US2018257200 AA [EN] An **abrasive** sawing or polishing substrate includes a substrate, a binder C1 covering at least a portion of the substrate, and **abrasive** particles having an at least partial coating, C2. The **abrasive** sawing or polishing substrate also includes a coating C3 coating binder C1 and the **abrasive** particles coated with C2 and at least one light-emitting compound. The **abrasive** particles coated with C2 are in contact with binder C1 and with coating C3



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 37

Titel: **ABRASIVE** ARTICLE AND METHODS OF MANUFACTURING AND USE OF SAME

Patentnummer: [WO200220218A3](#)

Anmeldung: WO2001US19630
EP20010967932
DE20016005177T
US20020313233
JP20020524676T
CA20012418078
AU20010288212
KR20037003388
TW20010120530
AT20010967932T
HK20030107839
MX2003PA01954
MY20010003974

Priorität: US20000657401 20000908
WO2001US19630 20010619
US20020313233 20021206
KR20037003388 20030307
WO2001US19630 20030307

Patentfamilie: **WO200220218A3**
WO200220218A2
EP1315600B1
EP1315600A2
DE60105177T2
DE60105177D1
US6758727B2
US2003134577A1
JP2004508947T2
CA2418078A
AU2001288212A1
KR20030028840A
KR100793459B1
TW519505B
AT274401E
HK1057187B
HK1057187A1
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MY128143A

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

Erfinder: COAD ERIC CARL

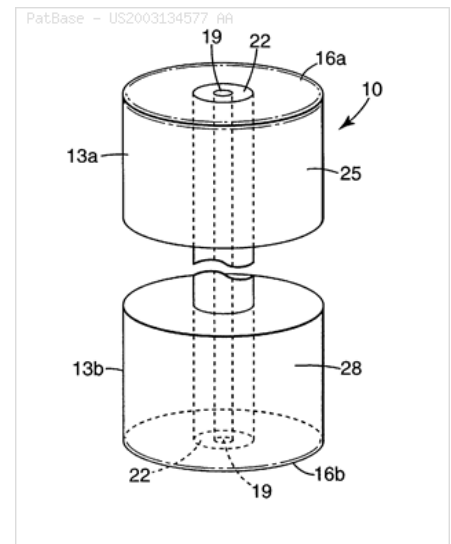
IPC-Notationen: B24B
B24B0019-00
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B24D
B24D0003-00
B24D0003-02
B24D0003-34
B24D0011-00

CPC-Notationen: B24B0019-226
B24D0003-344



Zusammenfassung:

Source: US2003134577 AA [EN] The present invention provides an **abrasive** article formed of a binder, **abrasive** particles associated with the binder, and a lubricating particulate **additive** comprising polytetrafluoroethylene associated with the binder. The **abrasive** article of the invention is useful in the polishing of fiber optic connectors because the lubricating particulate **additive** allows the polishing rate of the softer glass fiber material to be slower than the polishing rate of the harder ceramic ferrule material. Methods of manufacture and methods of polishing a fiber optic connector is also provided



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 38

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

Patentnummer: [WO2008079934A3](#)

Anmeldung: WO2007US88293
EP20070869608
US20070962013
CA20072672243
CN200780047899

Priorität: US20060871367P 20061221
US20070962013 20071220
WO2007US88293 20071220

Patentfamilie: [WO2008079934A3](#)
[WO2008079934A2](#)
[EP2094444A2](#)
[US7947097B2](#)
[US2008148650A1](#)
[CA2672243C](#)
[CA2672243A](#)
[CN101939140A](#)
[CN101939140B](#)

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

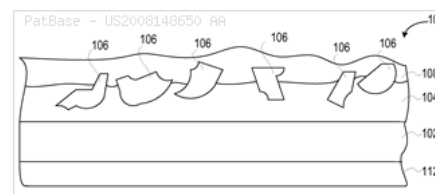
Erfinder: YOU XIAORONG



IPC-Notationen: B24B0001-00 B24D0003-00 B24D0003-02 B24D0003-20 B24D0003-28 B24D0003-34 B24D0011-00 B24D0011-02 C08K0003-00 C08K0005-00 C08L0071-00 C08L0071-02 C08L0101-00 C09C0001-68 C09K0003-14	CPC-Notationen: B24D0003-28 B24D0003-34 B24D0011-00 B24D0011-02 C08G0065-105 C08G0065-18 C08K0003-013 C08K0005-1515 C08K0005-1525 C08L0063-00 C08L0071-02
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Zusammenfassung:

Source: US2008148650 AA [EN] An **abrasive** article includes a binder and **abrasive** grains. The binder is formed from a formulation including a polymer component, a curing agent, and an acid bonding agent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 39

Titel: **ABRASIVE** MATERIAL AND METHOD OF FORMING SAME

Patentnummer: [WO9943491A1](#)

Anmeldung: WO1999US04102
EP19990910994
JP19990543820T
CA19992288022
KR19997009913
BR1999PI04869

Priorität: US19980032727 19980227
WO1999US04102 19990225

Patentfamilie: [WO9943491A1](#)
[EP0980307A1](#)
[JP2001523171T2](#)
[CA2288022A](#)
[KR20010020307A](#)
[BRPI9904869A](#)

Anmelder: ANTHONY DAVID POLLASKY

Erfinder: POLLASKY ANTHONY DAVID

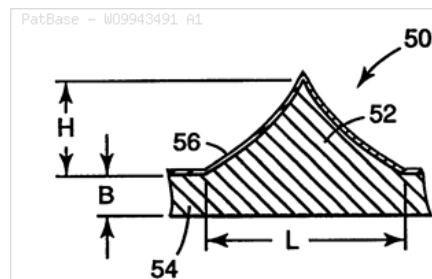
IPC-Notationen: B24B0001-00
[B24D0003-00](#)
B24D0003-10
[B24D0003-34](#)
B24D0011-00
B24D0018-00
B32B0003-00

CPC-Notationen: [B24D0003-001](#)
[B24D0003-004](#)
[B24D0003-008](#)
B24D0003-10
[B24D0003-346](#)
B24D0018-00



Zusammenfassung:

Source: WO9943491 A1 [EN] The present invention provides an **abrasive** material (50) comprising a base surface having a plurality of pyramidal shapes protruding therefrom the base surface and the protrusions (52) being formed of the same material, each protrusion (52) having a substantially triangular, square, or polygonal base and triangular sides which meet at an apex which substantially forms a point. The protrusions (52) provide intermixed **cutting** and planing edges in a pattern such that the material (50) is capable of abrading independent of direction of use. A coating (56) is applied to improve **abrasive** performance and reduce surface porosity. A method of forming the **abrasive** material (50) is also provided



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 40

Titel: NONWOVEN **ABRASIVE** ARTICLE WITH WAX ANTILOADING COMPOUND AND METHOD OF USING THE SAME



Patentnummer: [WO2015038401A1](#)

Anmeldung: WO2014US54094
EP20140843252
DE201460055713T
US20140022290
CN201480050994

Priorität: US20130878269P 20130916
EP20140843252 20140904
US20140022290 20140904
WO2014US54094 20140904

Patentfamilie: **WO2015038401A1**
[EP3046730B1](#)
[EP3046730A1](#)
[EP3046730A4](#)
[DE602014055713D1](#)
[US9902046B2](#)
[US2016229032A1](#)
[CN105555479A](#)
[CN105555479B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

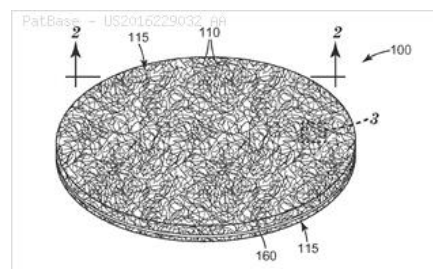
Erfinder: KAUR JASMEET
MEVISSEN SCOTT M
MOREN LOUIS S
WOO EDWARD J

IPC-Notationen: B24B0001-00
[B24D0003-00](#)
[B24D0003-34](#)
B24D0011-00
B24D0011-02

CPC-Notationen: B24B0001-00
[B24D0003-00](#)
[B24D0003-34](#)
B24D0011-00
B24D0011-02

Zusammenfassung:

Source: US2016229032 AA [EN] A nonwoven **abrasive** article includes: a lofty open nonwoven fiber web, an **abrasive** layer bonded to the lofty open nonwoven fiber web, and a peripheral antiloading composition disposed on the **abrasive** layer. The peripheral antiloading composition comprises at least 50 percent by weight of wax having a melting point onset of from 180 degrees Fahrenheit (82 degrees centigrade) to 290 degrees Fahrenheit (143 degrees centigrade) . A method of abrading a workpiece using the nonwoven **abrasive** article is also [disclosed](#)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 41

Titel: **ABRASIVE** ARTICLES COMPRISING A **FLUOROCHEMICAL** AGENT FOR WAFER SURFACE MODIFICATION



Patentnummer: [WO9915311A1](#)

Anmeldung: WO1998US01364
EP19980904673
DE19986024747T
US19970933870
JP20000512666T
AU19980062489
CN19988010846
KR20007002909
TW19980114989

Priorität: US19970933870 19970919
WO1998US01364 19980123

Patentfamilie: [WO9915311A1](#)
[EP1015175B1](#)
[EP1015175A1](#)
[DE69824747T2](#)
[DE69824747D1](#)
[US6121143A](#)
[JP4344083B2](#)
[JP2001517558T2](#)
[AU199862489A1](#)
[CN1278201A](#)
[CN1158167C](#)
[KR20010024145A](#)
[KR100491452B1](#)
[TW480280B](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
MINNESOTA MINING AND MFG

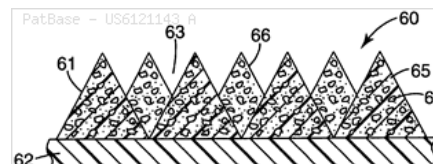
Erfinder: KESSEL C R
KESSEL CARL RICHARD
MESSNER ROBERT PAULL
MOORE GEORGE G I
MOORE GEORGE GOWER INNES

IPC-Notationen: B24B0037-00
B24B0037-04
[B24D0003-00](#)
B24D0003-32
[B24D0003-34](#)
B24D0011-00
B29C0070-58
C09K0003-14
H01L0021-304

CPC-Notationen: B24B0037-04
[B24D0003-00](#)
B24D0003-32
[B24D0003-34](#)
Y10T0428-24388
Y10T0428-31
Y10T0428-31663

Zusammenfassung:

Source: US6121143 A [EN] This invention relates to fixed **abrasive** articles and **abrasive** constructions containing at least one **fluorocchemical** agent. The fixed **abrasive** articles and **abrasive** constructions are used in semiconductor wafer surface modification processes during the fabrication of semiconductor devices. Specifically, fixed **abrasive** articles comprise an **abrasive** composite that is coextensive with a backing and at least one **fluorocchemical** agent associated with the composite. The invention further relates to methods of making fixed **abrasive** articles comprising at least one **fluorocchemical** agent



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 42

Titel: INCORPORATING **ADDITIVES** INTO FIXED **ABRASIVE** WEBS FOR IMPROVED CMP PERFORMANCE

Patentnummer: [WO2014047014A1](#)

Anmeldung: WO2013US60022
EP20130838975
US20130425697
JP20150533125T
CN201380049086
KR20157009287
TW20130133978
SG20151102225

Priorität: US20120703815P 20120921
US20130425697 20130917
WO2013US60022 20130917

Patentfamilie: **WO2014047014A1**
EP2897767A1
EP2897767A4
US2015217424A1
JP2015532895T2
CN104822495A
KR20150058302A
TW201420706A
SG11201502225XA1

Anmelder: 3M INNOVATIVE PROPERTIES CO
JOSEPH WILLIAM D
LOPER STEPHEN C
QIAN JULIE Y

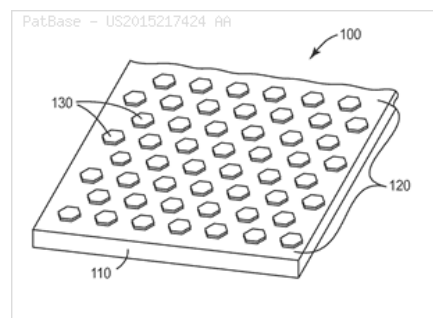
Erfinder: JOSEPH WILLIAM DALE
LOPER STEPHEN CRAIG
QIAN JULIE YU



IPC-Notationen: B24B0037-00 B24B0037-24 B24D0003-02 B24D0003-28 B24D0003-34 B24D0011-00 C09C0001-68 C09G0001-02 C09G0001-06 C09J0167-00 C09K0003-14 H01L0021-304 H01L0021-3105	CPC-Notationen: B24B0037-245 B24D0003-344 C09K0003-1436 H01L0021-31053
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Zusammenfassung:

Source: US2015217424 AA [EN] A structured **abrasive** article is provided that has a backing having first and second opposed major surfaces and a structured **abrasive** layer disposed on and secured to the first major surface of the backing. The structured **abrasive** layer includes a polymeric binder, **abrasive** particles dispersed in the binder and an **additive** dispersed in the binder. The **additive** provides improved chemical **mechanical** planarization (CMP) polish performance, including high oxide/nitride selectively, high removal rates, lower nitride loss and improved with-in-wafer non-uniformity (WIWNU)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 43

Titel: CERIUM BASED **ABRASIVE** MATERIAL AND METHOD FOR EVALUATING CERIUM BASED **ABRASIVE** MATERIAL



Patentnummer: [WO200248280A1](#)

Anmeldung: WO2001JP10879
EP20010270579
US20020181450
JP20020549799T
AU20020221123
AU20020021123
CN20018004918
KR20027009571
TW20010129098
TH20011004950

Priorität: JP20000379179 20001213
WO2001JP10879 20011212

Patentfamilie: **WO200248280A1**
EP1342766A1
EP1342766A4
US6585787B2
US2003051412A1
JP2002048280A1
AU200221123A5
AU2002221123A1
AU200221123A1
CN1400995A
CN1202197C
KR20020080389A
KR100495774B1
TW528796B
TH38419B
TH57777A

Anmelder: MITSUI MINING AND AMP SMELTING C
MITSUI MINING AND SMELTING CO
TAKAHASHI KAZUAKI
UCHINO YOSHITSUGU
YAMASAKI HIDEHIKO

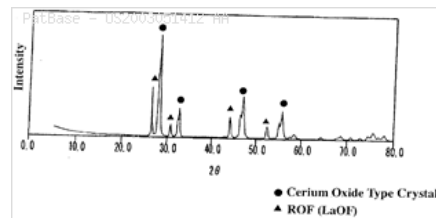
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YAMASAKI HIDEHIKO
YAMAZAKI HIDEHIKO
YOSHITSUGU UCHINO

IPC-Notationen: B24B0037-00
B24D0003-34
C01F0017-00
C09G0001-00
C09G0001-02
C09K0003-14
G01N0023-20

CPC-Notationen: **B24D0003-346**
C01F0017-00
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C01F0017-259
C01P2002-54
C01P2002-72
C01P2002-77
C01P2002-78
C09G0001-02
C09K0003-1409
G01N0023-20

Zusammenfassung:

Source: US2003051412 AA [EN] There is provided a cerium-based **abrasive** which enables formation of a highly accurate polished surface and has improved grindability. There is also provided a method of evaluating cerium-based **abrasives** in a relatively easy manner. In order to achieve the above objects, the cerium-based **abrasive** of this invention is a cerium-based **abrasive** containing 40 percent by weight or more of cerium oxide (on the basis of the total weight of rare earth oxides) which is characterized by further containing 0.5 to 10 percent by weight of **fluorine** per 100 percent by weight of the cerium-based **abrasive**, in terms of atomic weight, and polishing particles consisting of crystals with a lattice constant measured by an X-ray powder diffraction method ranging from 0.544 to 0.560 nm. And the method of evaluating cerium-based **abrasives** of this invention is a method including the steps of: analyzing samples of cerium-based **abrasive** to be subjected to evaluation by the X-ray powder diffraction method; obtaining a diffraction angle (θ) of at least one of maximum peaks appearing over the prescribed four ranges; and calculating a lattice constant of crystals constituting the polishing particles of the cerium-based abrasive using the above diffraction angle (θ)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 44

Titel: **ABRASIVE TOOL** WITH FLAT AND CONSISTENT SURFACE TOPOGRAPHY FOR
CONDITIONING A CMP PAD AND METHOD FOR MAKING



Patentnummer: [WO2011009046A3](#)

Anmeldung: WO2010US42267
EP20100800607
US20140227467
US20100384331
JP20150014842
JP20120520812T
CN201080031324
KR20127003058
SG20120001350

Priorität: US20090226074P 20090716
US20090232040P 20090807
JP20120520812 20100716
JP20120520812T 20100716
US20100384331 20100716
WO2010US42267 20100716
US20120384331 20120116
US20140227467 20140327

Patentfamilie: [WO2011009046A3](#)
[WO2011009046A2](#)
[EP2454052A4](#)
[EP2454052A2](#)
[US8721395B2](#)
[US2014208661A1](#)
[US2012122377A1](#)
[JP2015096294A2](#)
[JP2012532767T2](#)
[CN102470505A](#)
[CN102470505B](#)
[KR20120046227A](#)
[KR101268287B1](#)
[SG177568A1](#)

Anmelder: HALL RICHARD W J
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
WU JIANHUI
ZHANG GUOHUA

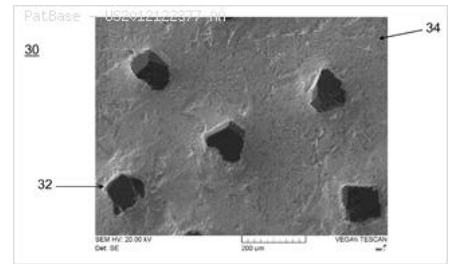
Erfinder: RICHARD W J HALL
WU JIANHUI
ZHANG GUOHUA

IPC-Notationen: B24B0037-04
B24B0037-24
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B24B0053-017
B24B0053-12
[B24D0003-00](#)
[B24D0003-06](#)
B24D0018-00
C09K0003-14

CPC-Notationen: B24B0053-017
[B24D0003-06](#)
B24D0018-0009
B24D0018-0054

Zusammenfassung:

Source: US2012122377 AA [EN] An **abrasive tool** with flat and consistent surface topography for conditioning a CMP pad and method for making are **disclosed**. The **abrasive tool** includes **abrasive** grains coupled to a low coefficient of thermal expansion (CTE) substrate through a metal bond. There is an overall CTE mismatch that ranges from about 0.1 micro m/m- degrees centigrade to about 5.0 micro m/m- degrees centigrade The overall CTE mismatch is the difference between the CTE mismatch of the **abrasive** grains and the metal bond and the CTE mismatch of the low CTE substrate and the metal bond



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 45

Titel: GRINDING WHEEL

Patentnummer: [EP2202032B1](#)

Anmeldung: EP20090177709
DE200960006996T
US20090639608
JP20080330750

Priorität: JP20080330750 20081225
EP20090177709 20091202

Patentfamilie: [EP2202032B1](#)
[EP2202032A3](#)
[EP2202032A2](#)
[DE602009006996D1](#)
[US8348728B2](#)
[US2010167634A1](#)
[JP2010149240A2](#)
[JP5332597B2](#)

Anmelder: IDO MASAHIRO
JTEKT CORP
MARUYAMA TOSHIO
SANO SHOICHI

Erfinder: IDO MASAHIRO
MARUYAMA TOSHIO
SANO SHOICHI

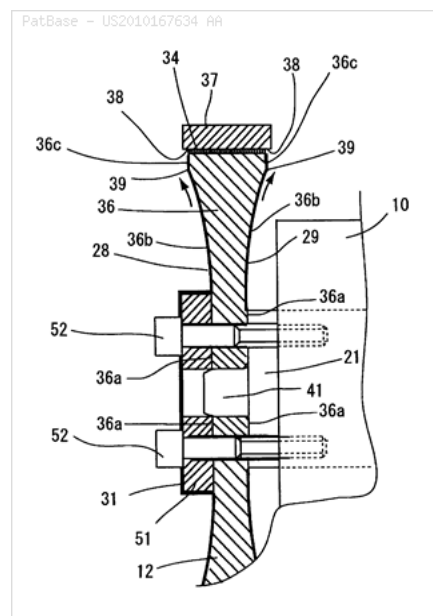


IPC-Notationen: B24B0055-00
B24B0055-02
[B24D0003-00](#)
[B24D0003-34](#)
B24D0005-00
B24D0005-16

CPC-Notationen: B24B0055-00
B24D0005-16

Zusammenfassung:

Source: US2010167634 AA [EN] A **grinding wheel** having a grindstone portion formed on a core includes slippery **fluoroplastic** coating films that prevent attachment of foreign matter, the coating films being provided on the portions of the core, with which portions the foreign matter can be brought into contact



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 46

Titel: ABRASIVE MEDIUM COMPRISING A PHOSPHATE-BASED FILLER

Patentnummer: WO2015040172A1

Anmeldung: WO2014EP70023
EP20140772314
DE201310015564
US20140023166
CN201480051432
HK20160113205
IN201617012153

Priorität: DE201310015564 20130920
WO2014EP70023 20140919

Patentfamilie: WO2015040172A1
EP3046728A1
DE102013015564A1
US2016236326A1
CN105592983A
HK1224986A1
IN201617012153A

Anmelder: RHODIUS SCHLEIFWERKZEUGE GMBH AND CO KG

Erfinder: BUEHLER GUNNAR
BUHLER GUNNAR
KONZACK THORSTEN
PUETZ HERBERT
PUTZ HERBERT

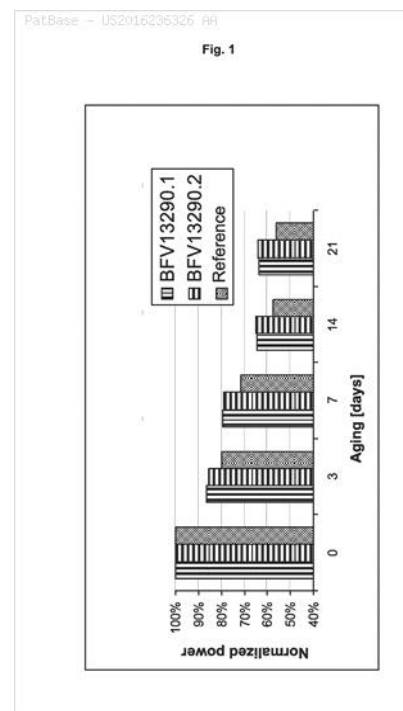
IPC-Notationen: B24D
B24D0003-28
B24D0003-34
B24D0007-02
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0003-285
B24D0003-344
B24D0007-02
B24D0018-0009



Zusammenfassung:

Source: US2016236326 AA [EN] The invention relates to an **abrasive** medium which is bonded with a thermosetting material and comprises **abrasive** particles, a thermosetting binder and optionally further **fillers**, and contains a phosphate-based **additive**, the percentage of the phosphate-based **additive** being 1 to 10 wt.- percent of the starting mixture of the **abrasive** medium. The phosphate-based **additive** is homogeneously distributed in the **abrasive** medium. The invention also relates to a method for producing corresponding thermosetting resin-bonded **grinding disks**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 47

Titel: CERAMIC AGGREGATE PARTICLES

Patentnummer: [WO200228802C1](#)

Anmeldung: WO2001US42525
WO2001US31397
EP20100180213
EP20060026827
EP20060026826
EP20060026825
EP20060026824
EP20060026823
EP20060026822
EP20010981411
EP20010979956
DE20016048863
DE20016044850
DE20016025808T
DE20016025592T
DE20012022729U
US20040776156
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US20010971899
JP20020532551T
JP20020532191T
AU20020213054
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AT20010026827T
AT20010979956T
AT20010981411T

Priorität: US20000238826 20001006
US20000238826P 20001006
US20000238844 20001006
US20000238844P 20001006
EP20010979956 20011005
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EP20060026827 20011005
EP20100180213 20011005
US20010971899 20011005
US20010972315 20011005
WO2001US31397 20011005
WO2001US42525 20011005
US20040776156 20040211

Patentfamilie: [WO200228802C1](#)
[WO200228980A3](#)
[WO200228802A3](#)
[WO200228980A2](#)
[WO200228802A2](#)
[EP1356008B9](#)
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[EP2264115B1](#)
[EP1770145B1](#)
[EP1356008B1](#)
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[EP2264115A1](#)
[EP1770145A3](#)
[EP1770144A3](#)
[EP1770143A3](#)
[EP1770142A3](#)



EP1770141A3
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 AU200213054A5
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 AT349506E
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 AT513885E

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: CULLER SCOTT R
MCARDLE JAMES L
WOOD WILLIAM P

IPC-Notationen:

B24D0003-00
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 C04B0028-00
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 C09K0003-14

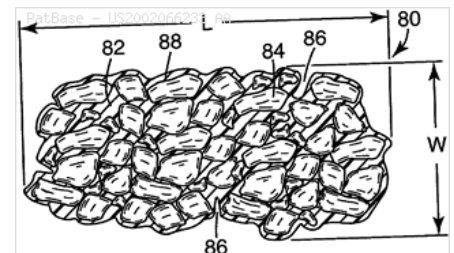
CPC-Notationen:

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 C09K0003-1409
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 Y10T0428-2982
 Y10T0428-2991
 Y10T0428-2993
 Y10T0428-2996
 Y10T0428-2998

Zusammenfassung:

Source: US2002066233 AA [EN] Ceramic aggregate particles comprising a plurality of solid particulates bonded together by ceramic binding material and methods of providing a plurality of such particles having substantially uniform cross-sectional shape are provided. The ceramic aggregate particles may incorporate a high percentage of solid particulates. The ceramic binding material may closely conform to the outermost surfaces of the solid particulates contained within the ceramic aggregate particle. When **abrasive** particulates are employed as the solid particulates, **abrasive** articles can be made which provide consistent high **cut** rates and consistent surface finish over relatively long periods of time



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 48

Titel: ABRASIVES CONTAINING AMMONIUM FLUORIDE-BASED GRINDING AID

Patentnummer: EP0442710B1

Anmeldung: EP19910301137
DE19916011090T
US19920877851
US19900479116
JP19910018732
CA19912035094
AU19910070118
KR19910002324
BR1991PI00523
ES19910301137T
ZA19910000533

Priorität: US19900479116 19900213
CA19912035094 19910128
US19920877851 19920504

Patentfamilie: EP0442710B1
EP0442710A3
EP0442710A2
DE69111090D1
US5219463A
US5110321A
JP4217463A2
CA2035094A
AU639067B2
AU199170118A1
KR19910015678A
BRPI9100523A
ES2074223T3
ZA9100533A

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: BROBERG DAVID E C O MINNESOTA
DAVID EARL BROBERG
DEIBITSUDO AARU BUROBAAGU
JACKSON CARL A C O MINNESOTA M
JACKSON CARL ARTHUR
KAARU AASAA JIYAKUSON

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

CPC-Notationen: B24D0003-34

Zusammenfassung:

Source: US5110321 A [EN] This invention provides coated and three-dimensional, low density abrasive articles comprising ammonium fluoride-based salts which serve as grinding aids

TABLE II				
Example	Grinding Aid	% grinding aid in the size based on the total solid content of the size	Edge Test Cut performance, percent of Control-G	Flat Test Cut performance, percent of Control-G
Control-G	Na ₂ AlF ₆	68	100	100
7	K ₂ (NH ₄)AlF ₆	60	119	106

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 49

Titel: RESIN BONDED **ABRASIVE TOOL**

Patentnummer: [EP1126003B1](#)

Anmeldung: EP20010103513
DE20016002951T
US20000636461
JP20050312831
JP20000038653
CN20001024182
KR20000047522
TW20000115324
AT20010103513T

Priorität: JP19990230909 19990817
JP19990246748 19990831
JP20000038653 20000216
JP20050312831 20051027

Patentfamilie: [EP1126003B1](#)
[EP1126003A1](#)
[DE60102951T2](#)
[DE60102951D1](#)
[US6383238B1](#)
[JP2006043884A2](#)
[JP2001138244A2](#)
[JP4586704B2](#)
[CN1284531A](#)
[CN1255496C](#)
[KR20010050103A](#)
[KR100615896B1](#)
[TW473415B](#)
[AT265509E](#)

Anmelder: MITSUBISHI MATERIALS CORP
MITSUBISHI MATERIAL CORP

Erfinder: MASAUDO NAKAMURA
MASAUDO TAKAHASHI TSUTOMU KONO
NAKAMURA MASATO
TAKANO TOSHIYUKI
TOSHIYUKI KONO

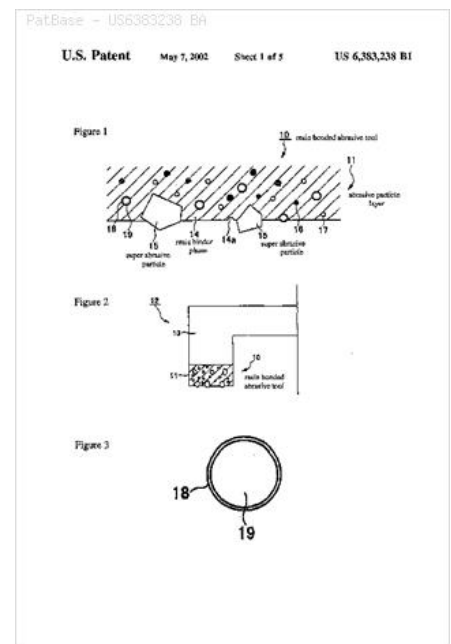
IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
B24D0003-14
B24D0003-20
B24D0003-28
B24D0003-32
[B24D0003-34](#)
B24D0005-12
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
C09K0003-1445



Zusammenfassung:

Source: US6383238 BA [EN] The **abrasive** particle layer of resin bonded **abrasive tool** is constructed by resin binder phase consisting of heat hardening resin, for example, phenol resin etc. and super **abrasive** particle of diamond (or CBN etc.) distributed in this resin binder phase. The wear resistant **filler** consisting of SiC, for example, as hard **filler** and hollow glass and metal coated amorphous carbon is distributed in resin binder phase. The amorphous carbon is made to spherical shape and metal coating layer consisting of Cu, for example, as the metal having high thermal conductivity, is set on a surface of this amorphous carbon



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 50

Titel: **ABRASIVE** ARTICLE AND PROCESSES FOR PRODUCING IT

Patentnummer: [EP0510823B1](#)

Anmeldung: EP19920302876
DE19926003923T
US19920899380
US19910691147
JP19920102848
CA19922063539
KR19920006917

Priorität: US19910691147 19910425
CA19922063539 19920320
US19920899380 19920612

Patentfamilie: [EP0510823B1](#)
[EP0510823A3](#)
[EP0510823A2](#)
[DE69203923T2](#)
[DE69203923D1](#)
[US5251802A](#)
[US5127197A](#)
[JP5111878A2](#)
[CA2063539A](#)
[KR19920019485A](#)

Anmelder: 3M CO
BRUKVOORT WESLEY J
HOWARD ROBERT N
MINNESOTA MINING AND MFG

Erfinder: BRUKVOORT WESLEY J
BRUXVOORT WESLEY J C O MINNESO
HOWARD ROBERT N C O MINNESOTA
ROBAATO NERUSON HAWAADO
UESURII JIEI BURUTSUKUSUBUURUT

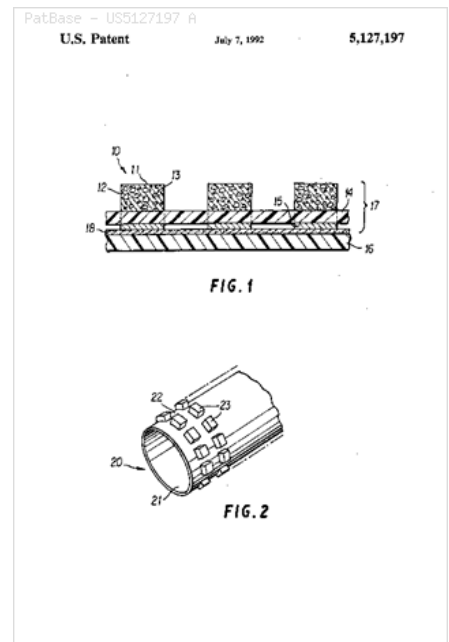
IPC-Notationen: [B24D0003-00](#)
[B24D0003-04](#)
[B24D0003-06](#)
B24D0011-00
B24D0015-00
B24D0015-02
B24D0018-00
C09K0003-14

CPC-Notationen: [B24D0003-002](#)
[B24D0003-06](#)
B24D0011-001



Zusammenfassung:

Source: US5127197 A [EN] An **abrasive** article comprising a coated **abrasive** bonded to a substrate by means of a metallic adhesive and a method for producing the **abrasive** article by heating



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 51

Titel: **ABRASIVE** ARTICLE COMPRISING AN ANTILOADING COMPONENT

Patentnummer: [WO9742007A1](#)

Anmeldung: WO1997US04181
EP19970909046
US19970995570
US19960689960
JP19970539906T
CA19972253498
AU19970020795
CN19971094433
KR19980708997
TW19970105291
BR1997PI08934
ZA19970003841

Priorität: US19960646457 19960508
US19960689960 19960816
WO1997US04181 19970314
US19970995570 19971222
KR19980708997 19981107

Patentfamilie: [WO9742007A1](#)
[EP0912295A1](#)
[US5954844A](#)
[US5704952A](#)
[JP2000509745T2](#)
[CA2253498A](#)
[AU199720795A1](#)
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[CN1092095C](#)
[KR20000010854A](#)
[TW375577B](#)
[BRPI9708934A](#)
[ZA9703841A](#)

Anmelder: MINNESOTA MINING AND MFG

Erfinder: CULK ALAN R
HARMER WALTER LEE
KIRK ALAN RAYMOND
LAW KAM WAH
LOW CAM W
SERVER HONEST L
THURBER ERNEST LOUIE
THURBER NEST L

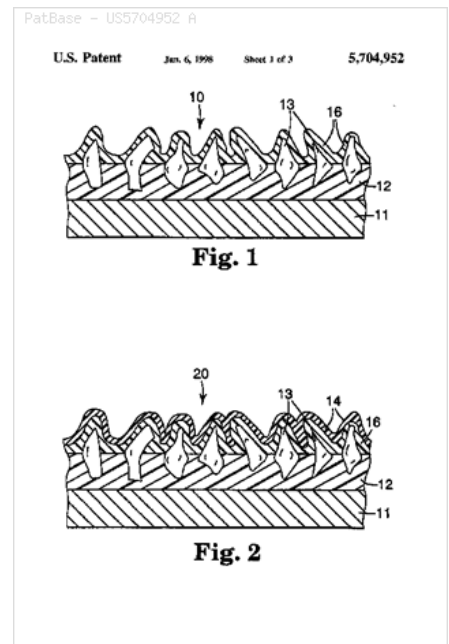
IPC-Notationen: [B24D0003-00](#)
B24D0003-20
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B24D0011-00
B24D0011-02
B32B0027-14
B32B0027-20
[C08J0005-14](#)
C08J0007-00
C08J0007-04
C09K0003-14

CPC-Notationen: [B24D0003-004](#)
B24D0003-28
[B24D0003-34](#)
[B24D0003-344](#)
[B24D0003-346](#)
B24D0011-00
B24D0011-001
B24D0011-02



Zusammenfassung:

Source: US5704952 A [EN] An **abrasive** article, for example, a coated, bonded, or nonwoven **abrasive** article comprising a binder, a plurality of **abrasive** particles, and an antiload component



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 52

Titel: Antiloading components for **abrasive** articles

Patentnummer: [WO9742006A1](#)

Anmeldung: WO1997US04036
EP19970915964
US19960646667
JP19970539904T
CA19972253577
AU19970023257
CN19971095511
KR19980708996

Priorität: US19960646667 19960508
WO1997US04036 19970314

Patentfamilie: [WO9742006A1](#)
[EP0900133A1](#)
[US5667542A](#)
[JP2000510176T2](#)
[CA2253577A](#)
[AU199723257A1](#)
[CN1222108A](#)
[CN1066996C](#)
[KR20000010853A](#)

Anmelder: MINNESOTA MINING AND MFG

Erfinder: HARMER W L
HARMER WALTER L
HARRMO W L
LAO K W
LAW K W
LAW KAM W
LOW CAM W

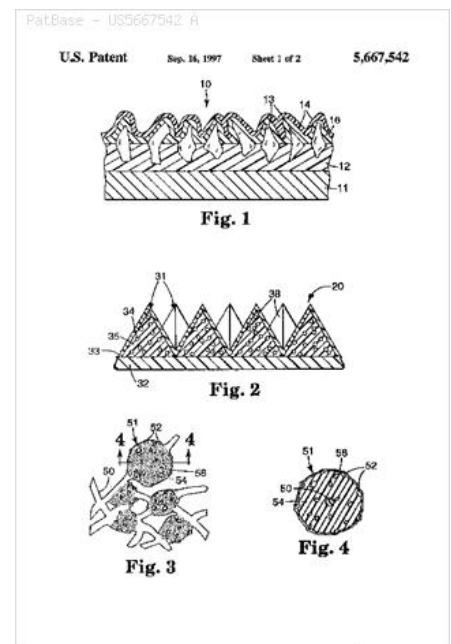
IPC-Notationen: [B24D0003-00](#)
B24D0003-20
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[B24D0003-34](#)
B24D0011-00
C08J0007-00
C08J0007-04
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-34](#)
B24D0011-00



Zusammenfassung:

Source: US5667542 A [EN] An **abrasive** article, for example, a coated, bonded, or nonwoven **abrasive** article comprising a binder, a plurality of **abrasive** particles, and an antiload component in a peripheral coating of the **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 53

Titel: **ABRASIVE ELEMENTS**

Patentnummer: [EP0433031B1](#)

Anmeldung: EP19900313472
DE19906006838T
US19900615142
JP19900401103
GB19890027983
CA19902030403
AU19900067067
KR19900020264
ZA19900009488

Priorität: GB19890027983 19891211
CA19902030403 19901121

Patentfamilie: [EP0433031B1](#)
[EP0433031A1](#)
[DE69006838T2](#)
[DE69006838D1](#)
[US5164265A](#)
[JP4175348A2](#)
[GB8927983A0](#)
[CA2030403A](#)
[AU636415B2](#)
[AU199067067A1](#)
[KR19910012151A](#)
[ZA9009488A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: ROI SUTATSUBUSU
STUBBS ROY

IPC-Notationen: [B24D0003-00](#)
B24D0003-20
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C08F0020-00
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C08L0101-00
C08L0101-04
C09C0001-62
C09C0001-68
C09K0003-14



CPC-Notationen: [B24D0003-004](#)
[B24D0003-34](#)
Y10T0428-25
Y10T0428-3154
Y10T0428-31544

Zusammenfassung:

Source: US5164265 A [EN] An **abrasive element** comprising a substrate having on a surface thereof particles of an **abrasive** material secured by an organic binding medium wherein at least the surface of the **element** between the particles of **abrasive** material contains a **fluorochemical** selected from the group consisting of compounds comprising a **fluorinated** aliphatic group attached to a polar group or moiety and compounds having a molecular weight of at least 750 and comprising a non-fluorinated polymeric backbone having a plurality of pendant **fluorinated** aliphatic groups, said aliphatic groups comprising the higher of (a) a minimum of three C--**F** bonds, or (b) in which 25 percent of the C--H bonds have been replaced by C--**F** bonds such that the compound comprises at least 15 percent by weight of **fluorine**. The compound may be applied as a layer coated over the existing layers of an **abrasive element** or it may be incorporated into at least the coating formulation which will form the outermost layer of the binding medium. The abrasive elements may be in the form of sheets, blocks, discs, pads, belts etc. The presence of the compound serves to reduce the loading of the abrading surface in use, thereby extending the working life of the abrasive element

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 54

Titel: **Fluorinated** diamond particles bonded in a filled **fluorocarbon** resin matrix
Patentnummer: [US4511373A](#)
Anmeldung: US19830551528
Priorität: US19830551528 19831114
Patentfamilie: **US4511373A**
Anmelder: US ENERGY
Erfinder: ROYBAL HERMAN E
TAYLOR GENE W



IPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0003-28
B24D0003-34
C08J0005-14

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

Zusammenfassung:

Source: US4511373 A [EN] A method of producing **fluorinated** diamond particles bonded in a filled **fluorocarbon** resin matrix. Simple hot pressing techniques permit the formation of such matrices from which diamond impregnated **grinding tools** and other articles of manufacture can be produced. Teflon **fluorocarbon** resins filled with Al₂O₃ yield **grinding tools** with substantially improved work-to-wear ratios over **grinding wheels** known in the art

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 55

Titel: GLASS POLISHING ARTICLE

Patentnummer: [EP0320146B1](#)

Anmeldung: EP19880311087
DE19883855176T
US19870131764
KR19880016476

Priorität: US19870131764 19871211

Patentfamilie: [EP0320146B1](#)
[EP0320146A3](#)
[EP0320146A2](#)
[DE3855176T2](#)
[DE3855176D1](#)
[US4842619A](#)
[KR19890009542A](#)
[KR950011674B1](#)

Anmelder: MINNESOTA MINING AND MFG

Erfinder: FRITZ PETER J C O MINNESOTA MI
NNEBEDUM JOSEPH C MINNESOTA MI

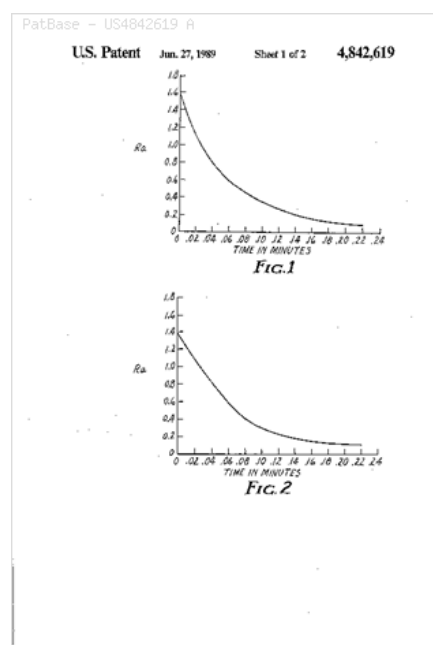


IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)

CPC-Notationen: [B24D0003-002](#)
[B24D0003-342](#)

Zusammenfassung:

Source: US4842619 A [EN] An **abrasive** article for polishing glass and ceramic surfaces comprised of a combination of **abrasive** particles and inorganic glass polishing **aid** dispersed throughout a three-dimensional nonwoven fibrous web of organic material, and adhered therein by a resinous binder. The article is capable of refining a ground glass or ceramic surface to a highly polished surface faster than **abrasive** articles known in the art



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 56

Titel: Resistant support for **abrasives** in oily medium

Patentnummer: [FR2663874B1](#)

Anmeldung: FR19900008348

Priorität: FR19900008348 19900702

Patentfamilie: **FR2663874B1**
FR2663874A1

Anmelder: ARJOMARI PRIOUX

Erfinder: PERRIN CLAUDE

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

CPC-Notationen: **B24D0003-002**
B24D0003-348
B24D0011-001



Zusammenfassung:

Source: FR2663874 A1 [EN] The invention relates to a support for **abrasives**. This support comprises at least fibres which are mostly cellulose fibres, at least one sizing agent, at least one binder and optionally other **additives** which are used in paper making. The support contains in bulk at least one **fluorocarbon** resin and at least one agent for retaining this resin, at least the face which does not contain **abrasive** grains (grit) being treated with a composition containing at least one binder and optionally at least one **fluorocarbon** resin. The binder contained in the composition for treating at least the face which does not contain **abrasive** grains can be a poly (vinyl alcohol) and/or a starch, preferably a silylated poly (vinyl alcohol) . Application as resistant support for **abrasives** in oily medium

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 57

Titel: **ABRASIVE** ARTICLES
Patentnummer: [DE1807052A1](#)
Anmeldung: DE19681807052
 GB19680048578
 19681031
Priorität: US19670680662 19671106
Patentfamilie: [DE1807052A1](#)
[GB1242267A](#)
[FR1590411A](#)
Anmelder: AVCO CORP
Erfinder: C MULLIN GEORGE
 P MURRO RONALD

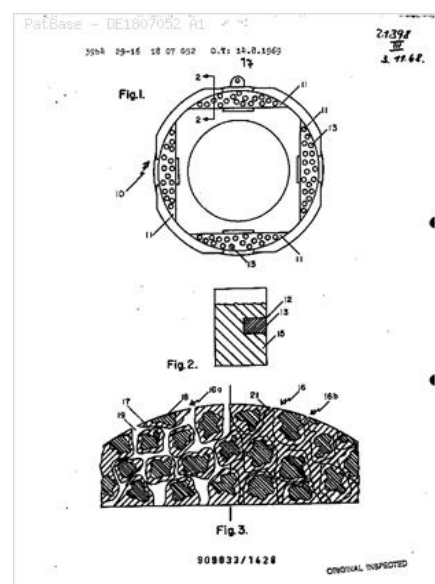


IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
 B24D0018-00
[C08J0005-14](#)

CPC-Notationen: [B24D0003-005](#)
[B24D0003-348](#)
 B24D0018-0027

Zusammenfassung:

Source: GB1242267 A [EN] 1,242,267. **Abrasive** articles. AVCO CORP. 14 Oct., 1968 [6 Nov., 1967], No. 48578/68. Heading C4V. [Also in Division B3] A bonded **abrasive** article has incorporated therein, after the **wheel** reaches the point in its manufacture where the basic formulation has been completed, a supply of **fluorocarbon**, in such an amount and so disposed within the article that throughout the useful **life** of the article **fluorocarbon** particles are continuously provided at the work surface. The **abrasive** body may be a porous body and the **fluorocarbon** an impregnant contained within the pores or the **fluorocarbon** may be solid and configured to conform and fill shaped recesses within the article. The term '**fluorocarbon**' means polytetrafluoroethylene and polytrifluorochloroethylene and copolymers of tetrafluoroethylene and trifluorochloroethylene



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 58

Titel: COATED **ABRASIVE** ARTICLES HAVING A SURFACE DEPOSIT OF **FLUOROCARBON** PARTICLES

Patentnummer: [DE1801009A1](#)

Anmeldung: DE19681801009
US19680762315
GB19680044527
19681001
CH19680014802

Priorität: US19670672992 19671005
US19680762315 19680916

Patentfamilie: **DE1801009A1**
US3869834A
GB1247174A
FR1584857A
CH525747A

Anmelder: AVCO CORP

Erfinder: CHEVALIER VICTOR OSCAR
CO CHEVALIER VICTOR
GEORGE C MULLIN
MULLIN GEORGE CRUISE
ROBERT E WETHERBY
VICTOR O CHEVALIER
WETHERBY ROBERT EARLE

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

CPC-Notationen: **B24D0003-005**
B24D0003-346
C09K0003-1436



Zusammenfassung:

Source: US3869834 A [EN] The invention is directed to **abrasive** articles having a surface deposit comprising an accumulation of **fluorocarbon** particles, which may be loosely applied or densely compacted on the surface. Processes for making such articles are also described in detail

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 59

Titel: NON-LOADING METAL-BACKED ABRADER AND METHOD FOR ITS PRODUCTION

Patentnummer: [US3042508A](#)

Anmeldung: US19590816363

Priorität: US19590816363 19590528

Patentfamilie: [US3042508A](#)

Anmelder: STANLEY WORKS

Erfinder: HAIGIS RUSSELL J
STOWELL AUSTIN L

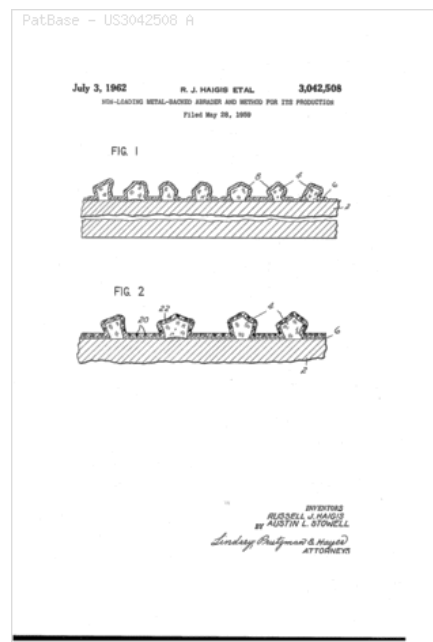


IPC-Notationen: [B24D0003-00](#)
B24D0018-00

CPC-Notationen: [B24D0003-005](#)
B24D0018-00

Zusammenfassung:

Source: US3042508 A [EN] (Claim 1) 1. An abrader resistant to loading by abraded particles comprising a selfsustaining metal-backed abrader havin., **cutters** spaced over the surface thereof, and a _superposed coating consisting essentially of **fluoroethylene** polymer selected from the -roup consisting of polytetrafluoroethylene, polytr ifluorochloroethylene, copolymers containing tetrafluoroethylene and copolymers containing trifluorochloroethylene, said coating being at least 0.1 mil in thickness and heat-stable



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 60

Titel: Coated **abrasive** material
Patentnummer: [DE2216394A1](#)
Anmeldung: DE19722216394
 US19730399106
 JP19720034822
 GB19720010866
 FR19720010993
 CA19720136424
 AU19720039998
 BR19720001931
 IT19720068050
 ZA19720001537
Priorität: US19710131027 19710405
 US19730399106 19730920
Patentfamilie: [DE2216394A1](#)
[US3963458A](#)
[JP52047197B4](#)
[GB1364161A](#)
[FR2136078A5](#)
[CA963668A1](#)
[AU462227B2](#)
[AU197239998A1](#)
[BR7201931A0](#)
[IT954597A](#)
[ZA7201537A](#)
Anmelder: NORTON CO
Erfinder: GLADSTONE MATTHEW THEODORE
 GLADSTONE M
 SUPKIS STANLEY JOSEPH

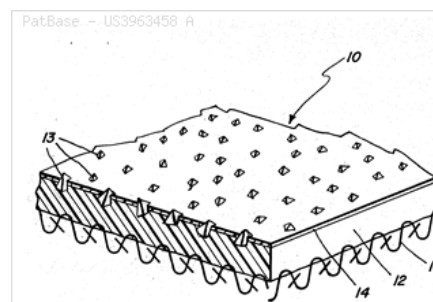


IPC-Notationen: [B24D0003-00](#)
[C08J0005-14](#)

CPC-Notationen: [B24D0003-004](#)

Zusammenfassung:

Source: US3963458 A [EN] Coated **abrasive** material is provided having coated on the adhesive bond a supersize layer which improves **grinding** and which is stabilized against thermal degradation during use of the **abrasive** material. This layer comprises an elastomeric material and a sufficient amount of antioxidant to limit oxidative degradation and, in the most preferred embodiment, an active solid, particulate **filler**. The presence of such a layer on articles manufactured from the coated **abrasive** material results in a much **cooler grinding operation** thereby reducing the conditions conducive to metal **glazing** and resulting in extended coated **abrasive** product **life**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 61

Titel: METAL-BONDED **GRINDING WHEEL**

Patentnummer: [WO2012043661A1](#)

Anmeldung: WO2011JP72249
JP20100222044

Priorität: JP20100222044 20100930

Patentfamilie: [WO2012043661A1](#)
[JP2012076167A2](#)
[JP5551040B2](#)

Anmelder: HONDA MOTOR CO LTD
KITANAKA KAZUHIKO
MATSUMOTO SHINGO
NAMBA NORIYUKI
SUGIYAMA HIROSHI
UJIHASHI MASATO
UNNO NAOHIDE

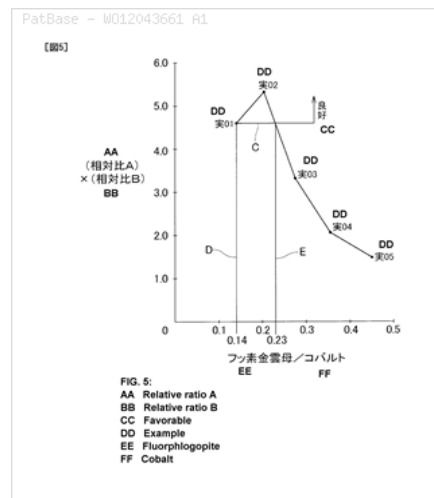
Erfinder: KITANAKA KAZUHIKO
MATSUMOTO SHINGO
NAMBA NORIYUKI
NAMBA NORIYUKI
SUGIYAMA HIROSHI
UJIHASHI MASATO
UMINO NAOHIDE
UNNO NAOHIDE

IPC-Notationen: [B24D0003-02](#)
[B24D0003-06](#)

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

Zusammenfassung:

Source: WO12043661 A1 [EN] The metal-bonded **grinding wheel** has **abrasive** grains as the **grinding** material, cobalt, **fluorophlogopite**, and binder. The value obtained by dividing the volume percentage of **fluorophlogopite** by the volume percentage of cobalt is 0.14-0.23



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 62

Titel: **ABRASIVE TOOL**
Patentnummer: [AT398544B](#)
Anmeldung: AT19920000663
Priorität: AT19920000663 19920401
Patentfamilie: [AT398544B](#)
[AT66392A](#)
Anmelder: RAPPOLD INTERNATIONAL SALES AG
Erfinder: RAPPOLD EDGAR DIPL ING DR



IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
CPC-Notationen: B24D0003-28
B24D0003-344

Zusammenfassung:

Source: AT398544 B [EN] **Abrasive tools** are proposed, containing bonded, preferably resinoid-bonded, granular **abrasive**, in particular diamond and/or CBN, as well as a solid lubricant, the solid lubricant being formed entirely or partly of at least one compound from the group containing boric acids, in particular H₃BO₃, polyboric acids as well as salts of polyboric acids, as well as the use of at least one compound from the group containing boric acids, in particular H₃BO₃, polyboric acids as well as salts of polyboric acids, as solid lubricant in **abrasive tools** and/or friction linings, in particular in **abrasive tools** with resinoid-bonded diamond or CBN as **abrasive**

Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 63

Titel: **Abrasive** articles
Patentnummer: [DE1167249B](#)
Anmeldung: DE1962C027629
GB19620029868
FR19620905931
AT19620006396
Priorität: US19610131726 19610816
Patentfamilie: [DE1167249B](#)
[GB946856A](#)
[FR1330483A](#)
[AT240210B](#)
Anmelder: CARBORUNDUM CO
Erfinder: ZIMMERMANN ROY EDWARD



IPC-Notationen: [B24D0003-34](#) **CPC-Notationen:** [B24D0003-344](#)

Zusammenfassung:

Source: GB946856 A [EN] A bonded **abrasive** article, e.g. a **grinding wheel**, comprises **abrasive** grains, a bond uniting the grains, and a **filler** of an iron sulphide and **potassium** aluminium **fluoride** interspersed throughout the bonded mass. The **filler** suitably comprises 5-60%, preferably 10-35%, by weight of the bond and consists of a 50/50 (volume) mixture of pyrites and **potassium** aluminium **fluoride**, the pyrites having a grain size less than 325 U.S. mesh. The bond may be resin, e.g. a phenolic resin, rubber or shellac, while the **abrasive** may be silicon carbide, aluminium oxide, emery or corundum

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 64

Titel: ABRASIVE ARTICLE
Patentnummer: [US2916368A](#)
Anmeldung: US19560601287
Priorität: US19560601287 19560731
Patentfamilie: [US2916368A](#)
Anmelder: SIMONDS ABRASIVE COMPANY
Erfinder: SUGA ARTHUR M

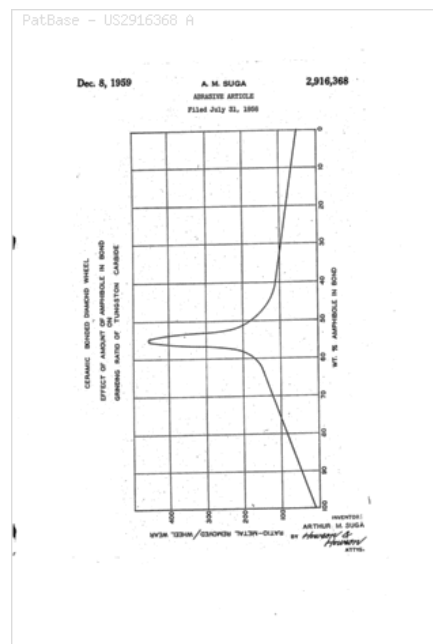


IPC-Notationen: [B24D0003-34](#)

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

Zusammenfassung:

Source: US2916368 A [EN] (Claim 1) 1. An **abrasive** body comprising **abrasive** grain bonded in a ceramic bond consisting essentially of a **fluorinecontaining** amphibole and a borosilicate glass consisting essentially of from about 40% to about 60%, by weight, of silica, from about 20% to about 35% of boron trioxide, from about 10% to about 15% alumina, and from about 5% to about 15% of a material selected from the group consisting of alkali and alkaline earth metal oxides, and mixtures thereof, said amphibole and said glass comprising separate phases of said bond, and said amphibole phase comprising from about 45% to about 65% by weight, of said bond



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 65

Titel: **ABRASIVE** ARTICLE
Patentnummer: [US2729553A](#)
Anmeldung: US19520275222
Priorität: US19520275222 19520306
Patentfamilie: **US2729553A**
Anmelder: SIMONDS ABRASIVE COMPANY
Erfinder: PRICE JAMES E



IPC-Notationen: **B24D0003-34**
C08L0061-00
C08L0061-10

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Then present invention relates to a novel abrasive body of superior mechanical strength in maintained over long periods of time. The invention also relates to a novel method for preparing the abrasive product.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 66

Titel: **GRINDING TOOL**, ESPECIALLY POLISHING **TOOL**, AND METHOD OF MANUFACTURING THE SAME

Patentnummer: [EP0603495A1](#)

Anmeldung: EP19930117225
DE19924243749

Priorität: DE19924243749 19921223

Patentfamilie: [EP0603495A1](#)
[DE4243749A1](#)

Anmelder: RUEGGERBERG AUGUST FA

Erfinder: CASTERMANNS HARRY
CASTERMANS HARRY
SINRAM DIETHARD DR

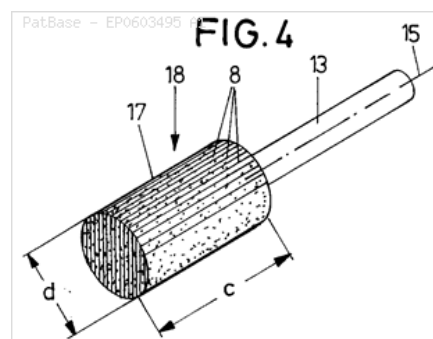


IPC-Notationen: B24D0013-00
B24D0013-02
B24D0018-00
[C08J0005-14](#)

CPC-Notationen: B24D0013-02
B24D0018-0045

Zusammenfassung:

Source: EP0603495 A1 [EN] A **grinding tool**, especially a polishing **tool**, consists of an **abrasive element** (17) and a shank (13) which is fixed in the latter and with respect to the median longitudinal axis (15) of which the **abrasive element** (17) is designed rotationally symmetrically. The **abrasive element** (17) consists of laminated layers (8) which are arranged parallel to one another and parallel to the median longitudinal axis (15), the layers consisting of a base layer, binder and **abrasive** grit. The base layer is formed by a cotton fabric, the fibres of which form chip spaces



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 67

Titel: Friction material

Patentnummer: [EP0034258B1](#)

Anmeldung: EP19810100342
DE19813163331T
US19810224967
JP19800005216
CA19810369067

Priorität: JP19800005216 19800122
CA19810369067 19810122

Patentfamilie: [EP0034258B1](#)
[EP0034258A3](#)
[EP0034258A2](#)
[DE3163331D1](#)
[US4324706A](#)
[JP56103270A2](#)
[JP1033699B4](#)
[CA1197936A1](#)

Anmelder: AKEBONO BRAKE INDUSTRY CO LTD
AKEBONO BRAKE KOGYO KK
TEIJIN KK
TEIJIN LIMITED
TEIJIN LTD

Erfinder: SHIMADA KEISHIN
SHIMADA KEIZO
SUGITA YASUSABUROU
TABE YUTAKA
TAKAMOTO HIROMITSU
TANABE YUTAKA

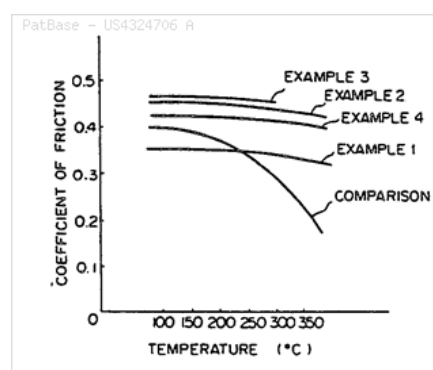


IPC-Notationen: [C08J0005-14](#)
C08K0007-00
C08L0077-00
C08L0101-00
C09K0003-14
F16D0069-02

CPC-Notationen: F16D0069-022
F16D0069-026
F16D2200-0095

Zusammenfassung:

Source: US4324706 A [EN] A friction material having an excellent heat-resistance, comprises 5 to 70 percent by weight of pulp-like particles consisting essentially of a heat-resistant aromatic polymeric material; 1 to 70 percent by weight of a fibrous material comprising at least one member selected from inorganic fibrous materials and heat-resistant organic fibrous materials; 1 to 35 percent by weight of a friction-regulating agent and; 5 to 40 percent by weight of a thermosetting polymeric resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 68

Titel: FRICTION MATERIAL COMPOSITION AND FRICTION MATERIAL THEREFROM

Patentnummer: [WO2004069954A1](#)

Anmeldung: WO2004JP01162
EP20040708450
US20050544706
JP20050504864T
AU20040209939
CN200480003638
KR20057014381
TW20040102577

Priorität: JP20030027713 20030205
WO2004JP01162 20040205

Patentfamilie: [WO2004069954A1](#)
[EP1609837B1](#)
[EP1609837A1](#)
[EP1609837A4](#)
[US8418818B2](#)
[US2006162259A1](#)
[JP2004069954A1](#)
[JP4613131B2](#)
[JP4613131B1](#)
[AU2004209939B2](#)
[AU2004209939A1](#)
[CN1748015A](#)
[CN100494302C](#)
[KR20050095891A](#)
[KR101054609B1](#)
[TW200416276A](#)
[TWI293087B](#)

Anmelder: ABE TAKENORI
HITACHI CHEMICAL CO LTD
INOUE MITSUHIRO
JAPAN BRAKE IND CO LTD
JAPAN BRAKE INDUSTRIAL CO LTD
NAGAYOSHI TERUYUKI
ONO MANABU

Erfinder: MITSUHIRO INOUE
TAKENORI ABE
TAKENORI ONO MANABU NAGAYOSHI
TERUYUKI NAGAYOSHI

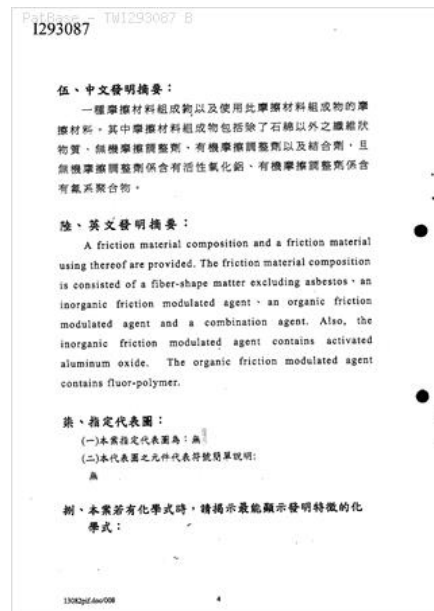
IPC-Notationen: [C08J0005-14](#)
C08L0101-00
C09K0003-14
F16D0065-00
F16D0069-00
F16D0069-02

CPC-Notationen: F16D0069-026
F16D2200-0086



Zusammenfassung:

Source: US2006162259 AA [EN] The present invention is to provide a friction material composition comprising a fibrous material except for asbestos, an inorganic friction regulating agent, an organic friction regulating agent and a binder, wherein active alumina is contained as the inorganic friction regulating agent, and a **fluorine** series polymer is contained as the organic friction regulating agent, and to provide a friction material using the friction material composition



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 69

Titel: ABRADING **AID** CONTAINING PARAFFIN AND AN INHIBITOR

Patentnummer: [DE2508843A1](#)

Anmeldung: DE19752508843
US19780884267
US19760739355
US19710166093
JP19760014778
FR19760003898
CA19750220408
BE19750153903
CH19750002604
IT19750021096

Priorität: US19710166093 19710726
US19740501093 19740827
US19750548107 19750212
US19780884267 19780307

Patentfamilie: [DE2508843A1](#)
[US4239501A](#)
[US4095961A](#)
[US3833346A](#)
[JP51142189A2](#)
[JP56047239B4](#)
[JP1107126C3](#)
[FR2300658B1](#)
[FR2300658A1](#)
[CA1067885A1](#)
[BE826166A](#)
[CH603309A](#)
[IT1034140A](#)

Anmelder: WIRTH JOHN C J

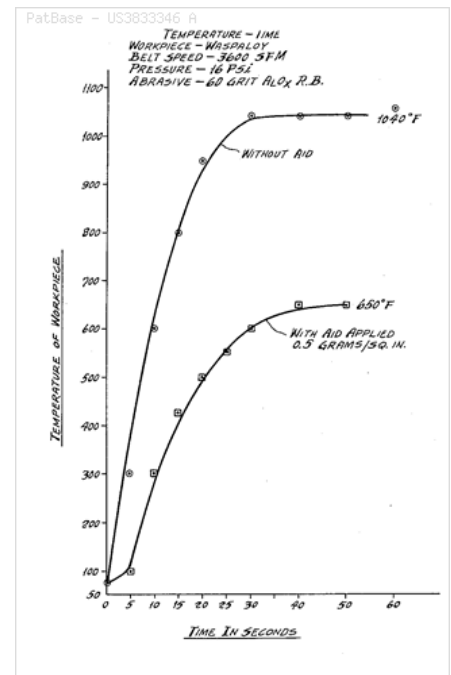
Erfinder: JIYON SHII JIEI WAASU
WIRTH JOHN C J



IPC-Notationen: B23Q0011-10 B24B0001-00 B24B0003-00 B24B0003-34 B24D0003-02 B24D0003-34 B24D0017-00 C08K0003-28 C09K0003-14 C10M0105-00 C10M0105-04 C10M0125-00 C10M0125-10 C10M0125-20 C10N0010-02 C10N0010-12 C10N0030-00 C10N0040-22	CPC-Notationen: B24B0001-00 B24D0003-346 Y10T0083-0443
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Zusammenfassung:

Source: US3833346 A [EN] A direct externally applied **grinding**, abrading and **cutting aid** for **tools** which includes a vehicle or carrier of a suitable matrix softer than the **cutting** material and which will readily adhere thereto without chipping while the **tool** is in motion. Dispersed within the matrix is a **halogen** salt or the like which includes hydrocarbons, **chlorides**, fluoborates, **fluorides** and various sulfides. These materials were selected on the basis that they sublime or decompose at temperatures below those that would metallurgically damage the metal workpiece. This **aid** is applied directly to the **tool**, as for example, to a coated **abrasive** and may be reapplied as often as is necessary, thus increasing both the **life** of the **tool**, its **cutting** rate, total metal removal, and its efficiency in addition to lowering the temperature of the material being **cut**. In addition, there is **disclosed** an automated system for maintaining the workpiece at a selected temperature through the controlled application of the **aid**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 70

Titel: Coated **abrasive** article having diluent particles and shaped **abrasive** particles

Patentnummer: [EP0615816B1](#)

Anmeldung: EP19940104226
DE19946010663T
US19950493177
US19950468040
JP19940041107
CA19942115889
KR19940004754
BR1994PI01140

Priorität: US19930032983 19930318
CA19942115889 19940217
US19940222161 19940404
US19950468040 19950606
US19950493177 19950621

Patentfamilie: [EP0615816B1](#)
[EP0615816A1](#)
[DE69410663T2](#)
[DE69410663D1](#)
[US5584896A](#)
[US5496386A](#)
[JP6297337A2](#)
[CA2115889A](#)
[KR940021191A](#)
[KR19940021191A](#)
[BRPI9401140A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: BANGE DONNA W
BROBERG DAVID E C O MINNESOTA
DEIBITSUDO AARU BUROBAAGU

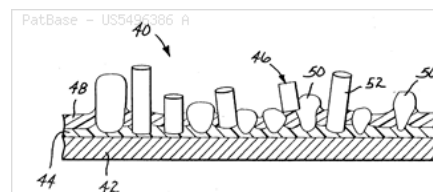
IPC-Notationen: B24B0001-00
[B24D0003-00](#)
[B24D0003-02](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-00
C09K0003-14

CPC-Notationen: [B24D0003-002](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-001
C09K0003-1418



Zusammenfassung:

Source: US5496386 A [EN] Coated **abrasive** articles containing particles having specified shapes. The coated **abrasive** article comprises: a. a backing; b. at least one binder; c. an **abrasive** coating comprising shaped **abrasive** particles and diluent particles said at least one binder serving to bond the **abrasive** coating to the backing. The diluent particles can comprise (1) a plurality of individual **abrasive** particles bonded together by an adhesive to form an agglomerate, (2) a plurality of individual non-abrasive particles bonded together by an adhesive to form an agglomerate, (3) a plurality of individual **abrasive** particles and a plurality of individual non-abrasive particles bonded together by an adhesive to form an agglomerate, (4) individual non-abrasive particles, (5) individual **abrasive** particles, or (6) combinations of the foregoing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 71

Titel: METHOD FOR SURFACE TREATMENT, USE OF AN **ADDITIVE** AND SURFACE TREATMENT AGENT



Patentnummer: [WO2018095849A1](#)

Anmeldung: WO2017EP79743
EP20170804511
EP20160200167
US20190420347
CN201780084233

Priorität: EP20160200167 20161123
WO2017EP79743 20171120
US20190420347 20190523

Patentfamilie: **WO2018095849A1**
EP3544768A1
EP3326755A1
US2019308301A1
CN110198808A

Anmelder: MENZERNA POLISHING COMPOUNDS GMBH AND CO KG

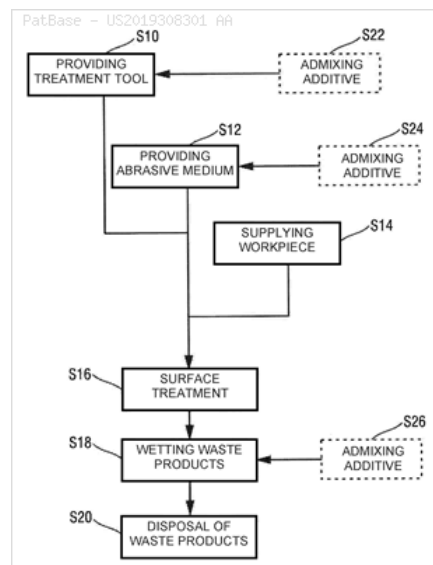
Erfinder: MESSMER RUDI

IPC-Notationen: B24B0055-12
B24C0009-00
B24C0011-00
B24D0003-34
C09G0001-02

CPC-Notationen: B24B0055-12
B24C0009-006
B24C0011-005
B24D0003-346
C09G0001-02
Y02P0070-10

Zusammenfassung:

Source: US2019308301 AA [EN] A method for the surface treatment of workpieces by means of **abrasive** media, and a surface treatment composition. The method comprises the steps of providing a treatment **tool**, providing an **abrasive** medium, supplying a workpiece having a surface to be treated, surface treating the workpiece, involving removal of material and producing waste products, and processing the waste products, wherein at least one of said steps comprises adding an **additive** to lower a self-ignition tendency on the part of the waste products, the **additive** comprising a salt, composed of a carbonate and/or of a **halogen** anion



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 72

Titel: **ABRASIVE** GRAIN AGGLOMERATES, PROCESS FOR THE PRODUCTION THEREOF AND THE USE THEREOF FOR PRODUCING **ABRASIVES**



Patentnummer: [WO2010040472A3](#)

Anmeldung: WO2009EP07048
EP20080017793
DE200850012032T
US20090121643
JP20110530398T
CN200980139795
BR2009PI20458
ES20080017793T
IN2011DN02506
PL20080017793T
PT20080017793T
RU20110118387

Priorität: EP20080017793 20081010
WO2009EP07048 20091001

Patentfamilie: **WO2010040472A3**
WO2010040472A2
EP2174751B1
EP2174751A1
DE502008012032D1
US9102858B2
US2011183142A1
JP2012505085T2
CN102177000A
CN102177000B
BRPI0920458B1
BRPI0920458A2
ES2509821T3
IN330193B
PL2174751T3
PT2174751T
RU2468907C1

Anmelder: CENTER FOR ABRASIVES AND REFRACTORIES RES AND DEVELOPMENT C A R R D GMBH
CT FOR ABRASIVE AND REFRACTORIES RES AND DEV C A R R D GHMBH
CT FOR ABRASIVES AND REFRACTORIES RES AND DEV C A R R D GMBH
CT FOR ABRASIVES AND REFRACTORIES RES AND DEV CARRD GM
GEBHARDT KNUTH
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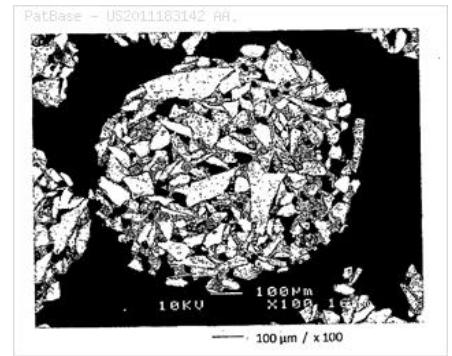
Erfinder: GEBKHARDT KNUT
KNUTH GEBHARDT

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-04
B24D0003-14
B24D0003-18
C04B0012-00
C09K0003-00
C09K0003-14

CPC-Notationen: B24D0003-14
C04B0018-021
C04B0028-006
C04B0028-26
C04B2111-00215
C09K0003-1409
C09K0003-1436
Y02P0040-10
Y02W0030-91
Y10T0428-2982

Zusammenfassung:

Source: US2011183142 AA [EN] The present invention relates to **abrasive** grain agglomerates composed of fine-particle primary **abrasive** grains which are held together by means of a binder based on an aluminosilicate having a molar ratio of Al_2O_3 to SiO_2 of from 1: 2 to 1: 20. The particular advantage of these **abrasive** grain agglomerates is that the binder cures fully at below 450 degrees centigrade, preferably below 400 degrees centigrade, to form **abrasive** grain agglomerates having an extraordinarily high strength



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 73

Titel: RESIN BONDED **ABRASIVE** BODIES FOR SNAGGING METAL CONTAINING LOW **ABRASIVE** AND HIGH **FILLER** CONTENT



Patentnummer: [DE3030506C2](#)

Anmeldung: DE19803030506
US19790067710
JP19800109894
GB19800025228
FR19800017646
CA19800357250
AU19800061078
AT19800004042
BE19801009924
BR19800005073
ES19800494157
FI19800002520
IT19800068280
LU19800082704
NL19800004570
SE19800005438
ZA19800004619

Priorität: US19790067710 19790817
CA19800357250 19800729

Patentfamilie: [DE3030506C2](#)
[DE3030506A1](#)
[US4253850A](#)
[JP56033269A2](#)
[JP57054275B4](#)
[JP1273100C3](#)
[GB2058817B2](#)
[GB2058817A1](#)
[FR2463663B1](#)
[FR2463663A1](#)
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[AU198061078A1](#)
[AT372895B](#)
[AT404280A](#)
[BE884713A](#)
[BR8005073A](#)
[ES8106430A1](#)
[ES494157A0](#)
[FI75582C](#)
[FI75582B](#)
[FI802520A](#)
[IT1166480A](#)
[IT8068280A0](#)
[LU82704A](#)
[NL8004570A](#)
[SE8005438L](#)
[SE450001C](#)
[SE450001B](#)
[ZA8004619A](#)

Anmelder: NORTON COMPANY TE WORCESTER MASSACHUSETTS VER ST V
NORTON CY

Erfinder: CHIYAARUZU BUI RIYUU
KETSUSHIYU ESU NARAYANAN
NARAYANAN K S
NARAYANAN KESH S
RUE C V
RUE CHARLES V

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0005-00
C08J0005-14

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US4253850 A [EN] Organic bonded **abrasive** bodies such as snagging **wheels** and **wheel** segments for conditioning billets, slabs, and castings have abrading portions with 0 to 8 percent pores by volume, a low **abrasive** content of from 24 to 45 percent by volume of 4 to 36 grit size **abrasive**, substantially constant volume of a thermosetting resin of from 18 to 24 percent by volume and a high content of **filler** material constituting from 29 percent to 56 percent by volume of the body and wherein at least 80 percent by volume of the **filler** material is inorganic material

PatBase - CA1129216 A1

**SUBSTITUTE
REPLACEMENT**

**SECTION is not Present
Cette Section est Absente**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 74

Titel: COATED **ABRASIVE** GRAINS, METHOD AND FOR THE PRODUCTION THEREOF AS WELL AS THE USE THEREOF FOR PRODUCING **ABRASIVES**



Patentnummer: [EP2050805B1](#)

Anmeldung: EP20070020212
DE200750003033T
US20080287737
JP20080238495
CN200810166612
AT20070020212T
DK20070020212T
ES20070020212T
IN2008DE01975
PL20070020212T
PT20070020212T
RU20080140983
SI20070030241T

Priorität: EP20070020212 20071016

Patentfamilie: [EP2050805B1](#)
[EP2050805A1](#)
[DE502007003033D1](#)
[US8864862B2](#)
[US2009100766A1](#)
[JP2009096993A2](#)
[JP5613368B2](#)
[CN101412902A](#)
[CN101412902B](#)
[AT459698E](#)
[DK2050805T3](#)
[ES2342328T3](#)
[IN287012B](#)
[IN01975DE2008A](#)
[PL2050805T3](#)
[PT2050805T](#)
[RU2469836C2](#)
[RU2008140983A](#)
[SI2050805T1](#)

Anmelder: CT FOR ABRASIVES AND REFRACTORIES RES AND DEV C A R R D GMBH
GEBHARDT KNUTH
SENER FOR EHBREJSIVZ EHND RIFREHKTORIZ RISERCH EHND DEV S A R R D GMBKH

Erfinder: GEBHARDT KNUTH DR
GEBKHARDT KNUT

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

CPC-Notationen: B24C0011-00
[B24D0003-00](#)
B24D0011-00
B24F0011-00
C09C0003-063
C09K0003-1409
C09K0003-1427
C09K0003-1436

Zusammenfassung:

Source: US2009100766 AA [EN] The present invention relates to **abrasive** grains, which are coated with a micro-particle inorganic powder and a binder, consisting of the group of conventional **abrasive** grains as well as the group of the 'superabrasives', wherein the binder comprises an aluminosilicate with a molar ratio of Al_2O_3 to SiO_2 of 1: 2 to 1: 20 as well as at least one complex alkaline **fluoride**. The particular advantage of this coating is that the binder can already be completely hardened at below 400 degrees centigrade The invention also relates to a method for producing such **abrasive** grains as well as to the use thereof for producing **abrasives**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 75

Titel: **ABRASIVE** ARTICLE WITH CONDUCTIVE, DOPED, CONJUGATED, POLYMER COAT AND METHOD OF MAKING SAME

Patentnummer: [EP0398580B1](#)

Anmeldung: EP19900305002
DE19906012879T
US19900587606
JP19900122777
KR19900007019

Priorität: US19890352734 19890515
US19900587606 19900924

Patentfamilie: [EP0398580B1](#)
[EP0398580A1](#)
[DE69012879T2](#)
[DE69012879D1](#)
[US5061294A](#)
[JP3041127A2](#)
[KR19900018326A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: CHRISTENSEN LEIF C O MINNESOTA
DRTINA GARY J C O MINNESOTA MI
GEIRII JIYOSUFU DORUTEINA
HAABEI JIEROOMU HERUMIN
HARMER WALTER L C O MINNESOTA
HELMIN HARVEY J C O MINNESOTA
REIFU KURISUTENSEN
UORUTAA RII HAAMAA

IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
B24D0011-00
[C08J0005-14](#)
C09K0003-16

CPC-Notationen: [B24D0003-004](#)
[B24D0003-344](#)
B24D0011-00
C09K0003-16
Y10T0428-252
Y10T0428-254
Y10T0428-256
Y10T0428-257

Zusammenfassung:

Source: US5061294 A [EN] Coated **abrasive** product contains a conductive, doped, conjugated polymer to reduce the static charge generated during abrading **operations**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 76



Titel: **ABRASIVE** GRAIN WITH AN **ABRASIVE** COATING

Patentnummer: [WO200130935A1](#)

Anmeldung: WO2000EP10294
EP20000979505
DE20005003675T
DE19991051250
US20040966862
US20020111486
JP20010533920T
AT20000979505T

Priorität: DE19991051250 19991025
DE20005003675T 20001019
WO2000EP10294 20001019
US20020111486 20020828
US20040966862 20041015

Patentfamilie: **WO200130935A1**
EP1230316B1
EP1230316A1
DE19951250A1
DE50003675D1
US7097679B2
US6811582B1
US2005050802A1
JP2003513145T2
AT249507E

Anmelder: SKALE FRANZ
TREIBACHER SCHLEIFMITTE AG
TREIBACHER SCHLEIFMITTEL AG
TREIBACHER SCHLEIFMITTEL GMBH
WURZER THOMAS

Erfinder: SKALE FRANZ
WURZER THOMAS

IPC-Notationen: **B24D0003-00**
B24D0005-00
C09K0003-14

CPC-Notationen: C09K0003-1436

Zusammenfassung:

Source: US6811582 BA [EN] A flowable, granular **abrasive** material and method of manufacture thereof. The material is comprised of at least one **abrasive** grain selected from aluminum oxide, silicon carbide, cubic boron nitride and/or diamond and has a organic or inorganic coating comprised of a binder and an **abrasive** filling material in the amounts of 0.5 to 8 percent and 1 to 15 percent by weight, respectively. The filling material may include sulfides, phosphates, carbonates, **halogenides**, and/or sulfide-, carbonate- and/or **halogenide-containing** complex compounds. The binder may include a low-viscosity phenol resin, epoxy resin and/or polyurethane resin

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 77



Titel: Coated **abrasive** containing erodable agglomerates

Patentnummer: [WO9520469A1](#)

Anmeldung: WO1994US14279
WO1991US06389
EP19950904884
EP19910917177
DE19916023749T
US19950567811
US19920831083
JP19950520037T
JP19910516157T
CA19942180435

Priorität: US19900594104 19901009
WO1991US06389 19910906
US19920831083 19920205
US19940188302 19940128
WO1994US14279 19941212
US19950567811 19951206

Patentfamilie: [WO9520469A1](#)
[WO9205915A1](#)
[EP0552190B1](#)
[EP0741632A1](#)
[EP0552190A1](#)
[DE69123749T2](#)
[DE69123749D1](#)
[US5578098A](#)
[US5454750A](#)
[JP3256226B2](#)
[JP9508324T2](#)
[JP6501889T2](#)
[CA2180435A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

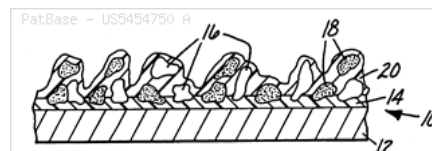
Erfinder: CHESLEY JASON A
COSMANO RICHARD J
DUWELL ERNEST J
GAGLIARDI JOHN J
HOUCK CHARLES H

IPC-Notationen: [B24D0003-02](#)
B24D0003-28
[B24D0003-34](#)
B24D0011-00
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: [B24D0003-34](#)
[B24D0003-344](#)
B24D0011-00
B24D0011-001
C09K0003-1436
Y10T0428-254

Zusammenfassung:

Source: US5454750 A [EN] Coated **abrasive** article comprising a backing bearing on at least one major surface thereof erodable agglomerates and **abrasive** grains, wherein the erodable agglomerates consist essentially of a **grinding aid**, and optionally, a binder. The erodable agglomerates can be above, between, or beneath the **abrasive** grains, or the erodable agglomerates can be above, between, and beneath the **abrasive** grains. The coated **abrasive** article of this invention utilizes a higher level of **grinding aid** than coated **abrasive** articles of the prior art



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 78

Titel: **Abrasive** articles, methods of making **abrasive** articles, and methods of using **abrasive** articles



Patentnummer: [WO9524991A1](#)

Anmeldung: WO1995US02092
EP19950912569
DE19956006851T
US19950386887
JP19950524028T
CA19952183242
KR19967005073
KR19960705073
BR1995PI07082

Priorität: US19940213541 19940316
US19950386887 19950210
WO1995US02092 19950222

Patentfamilie: **WO9524991A1**
EP0750539B1
EP0750539A1
DE69506851T2
DE69506851D1
US5562745A
JP9511454T2
CA2183242A
KR970701613A
KR19977001613A
KR19970701613A
BRPI9507082A

Anmelder: MINNESOTA MINING AND MFG

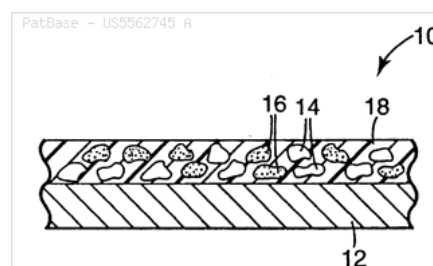
Erfinder: CHESLEY JASON A
GAGLIARDI JOHN J
HARMER WALTER L
HOUCK CHARLES H
OLSON GARY L

IPC-Notationen: **B24D0003-02**
B24D0003-34
C08J0005-14
C09K0003-14

CPC-Notationen: **B24D0003-342**
B24D0003-344

Zusammenfassung:

Source: US5562745 A [EN] **Abrasive** articles comprising a plurality of **abrasive** particles, a combination of **potassium** tetrafluoroborate and a **halogenated** polymer, and a binder to which the plurality of **abrasive** particles are adhered, and methods of making and using the **abrasive** articles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 79

Titel: POLYCRYSTALLINE DIAMOND COMPACT FABRICATED FROM SURFACE FUNCTIONALIZED DIAMOND PARTICLES

Patentnummer: [WO2015061073A1](#)

Anmeldung: WO2014US60336
US20130061341

Priorität: US20130061341 20131023

Patentfamilie: [WO2015061073A1](#)
[US9815176B2](#)
[US2015107163A1](#)

Anmelder: DIAMOND INNOVATIONS INC

Erfinder: KONOVALOV VALERIY V

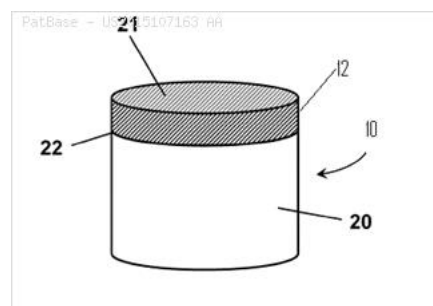


IPC-Notationen: [B24D0003-04](#)
[B24D0003-34](#)
B24D0018-00
B24D0099-00
C04B0035-52
C04B0035-5831
C04B0035-626
C04B0035-628
C04B0035-645
C09K0003-14
E21B0010-567

CPC-Notationen: [B24D0003-34](#)
B24D0018-0009
B24D0099-005
C04B0035-52
C04B0035-5831
C04B0035-6268
C04B0035-62802
C04B0035-645
C04B2235-427
C04B2235-5436
E21B0010-567

Zusammenfassung:

Source: US2015107163 AA [EN] A superabrasive compact and a method of making the superabrasive compact are **disclosed**. A superabrasive compact may comprise a plurality of polycrystalline superabrasive particles made of surface functionalized superabrasive particle The surface functionalized superabrasive particles may have **halogens** or organic moiety instead of hydrogen



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 80

Titel: COATABLE MIXTURES INCLUDING ERODABLE **FILLER** AGGLOMERATES, METHODS OF PREPARING SAME, **ABRASIVE** ARTICLES INCORPORATING CURED VERSIONS OF SAME, AND METHODS OF MAKING SAID ARTICLES



Patentnummer: [WO9317080A1](#)

Anmeldung: WO1993US00551
EP19930903623
DE19936002265T
US19920839132
JP19930514842T
CA19932117473
AU19930034814
CN19931001770
TW19930100530
AT19930903623T
BR1993PI05930
ES19930903623T
MX19930000740
ZA19930000534

Priorität: US19920839132 19920220
WO1993US00551 19930119

Patentfamilie: [WO9317080A1](#)
[EP0626987B1](#)
[EP0626987A1](#)
[DE69302265T2](#)
[DE69302265D1](#)
[US5269821A](#)
[JP7504220T2](#)
[CA2117473A](#)
[AU660072B2](#)
[AU199334814A1](#)
[CN1075736A](#)
[TW222305B](#)
[AT136923E](#)
[BRPI9305930A](#)
[ES2086218T3](#)
[MX9300740A1](#)
[ZA9300534A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

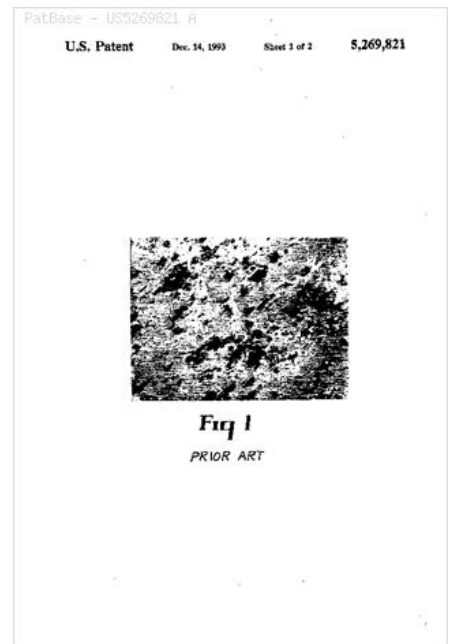
Erfinder: HARMER WALTER LEE
HELMIN HARVEY JEROME

IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
C09D0007-12
C09K0003-14
H04L0009-18
H04L0009-26

CPC-Notationen: [B24D0003-346](#)
C09K0003-14

Zusammenfassung:

Source: US5269821 A [EN] Coatable mixtures including erodable **filler** agglomerates, and **abrasive** articles into which they may be incorporated are presented, the agglomerates comprising a plurality of individual grains of water insoluble **filler** agglomerated by an agglomerating agent which includes water soluble **filler** and a binder. A preferred water soluble **filler** is $\text{Al}_2(\text{SO}_4) \cdot 3.14\text{-}18\text{H}_2\text{O}$, a preferred water insoluble **filler** is Na_3AlF_6 (**cryolite**), while a preferred binder is a phenolic resin. Methods of making coatable mixtures including erodable **filler** agglomerates are also presented



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 81

Titel: A PROCESS FOR CURING ACID-CURABLE **ABRASIVE** COMPOSITIONS

Patentnummer: [DE3317570A1](#)

Anmeldung: DE19833317570
JP19830086488
GB19830013057
FR19830008043
CA19830428111
NO19830001755

Priorität: CH19820003051 19820517
CA19830428111 19830513

Patentfamilie: [DE3317570A1](#)
[JP58213079A2](#)
[GB2120263B2](#)
[GB2120263A1](#)
[GB8313057A0](#)
[FR2526801B1](#)
[FR2526801A1](#)
[CA1216816A1](#)
[NO831755L](#)
[NO831755A](#)

Anmelder: CIBA GEIGY AG

Erfinder: BERNER GODWIN DR
GOTSUDOUIN BERUNAA



IPC-Notationen:	B24D0003-20 B24D0003-28 C08J0003-28 C08J0005-14 C08K0005-00 C08K0005-42 C08L0061-00 C08L0061-04 C08L0061-10 C08L0061-20 C09K0003-14	CPC-Notationen:	B24D0003-28 B24D0003-285 C08K0005-42
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Zusammenfassung:

No clipped image for: CA1216816 A1

Source: GB2120263 A1 [EN] A process for curing **abrasive** compositions containing an acid- curable binder and, as curing catalyst, an organic sulfonic acid releasable by the action of light, and also **additives** customarily used in **abrasives** technology, in which process the **abrasive** compositions after drying are exposed to the action of light rays and thus cured. Of particular interest as masked curing catalysts are organic compounds of the formulae I and II wherein n and R1 to R8 have the meanings given in Claim 4.g

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 82

Titel: **GRINDING** WITH **ABRASIVE** GRAIN (Machine translation)

Patentnummer: [AT366944B](#)

Anmeldung: AT19800001755

Priorität: AT19800001755 19800401

Patentfamilie: [AT366944B](#)
[AT175580A](#)

Anmelder: SWAROVSKI TYROLIT SCHLEIF

Erfinder:

IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-34](#)
[B24D0003-344](#)
[B24D0003-346](#)



Zusammenfassung:

Source: AT366944 B [DE] [Source: Claim 1] 1Schleifkörper mit Schleifkorn, beispielsweise Korund, einem anorganischen oder organischen Bindemittel, beispielsweise Phenolharz, und schleifaktiven Füllstoff, der zumindestens zum Teil von einem Metallhalogenid gebildet wird, dadurch gekennzeichnet, dass zumindestens ein Teil des schleifaktiven Füllstoffes aus Eisen-II-chlorid, oder Eisen-III-chlorid oder aus einer Mischung von beiden besteht.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 83

Titel: **Halogen-containing fillers** for **abrasive** bodies, in particular for **grinding wheels** or **cutting wheels**, to a process for the production of these **fillers** and to **abrasive** bodies containing them



Patentnummer: [EP0299950B1](#)

Anmeldung: EP19880890179
DE19883865563T
US19880219549
AT19870001810
AT19880890179T

Priorität: AT19870001810 19870717

Patentfamilie: [EP0299950B1](#)
[EP0299950A1](#)
[DE3865563D1](#)
[US4877420A](#)
[AT68389E](#)
[AT394961B](#)
[AT181087A](#)

Anmelder: BBU CHEMIE GMBH
BLEIBERGER BERGWERKS UNION AG

Erfinder: BUXBAUM LOTHAR DR
BUXBAUM LOTHER
STESSEL HELMUT DIPL ING

IPC-Notationen: [B24D0003-34](#)

CPC-Notationen: [B24D0003-346](#)

Zusammenfassung:

PatBase - US4877420 A
 $A_xMey^{II}Mez^{III}HalE.nBfCgHale.mH_2O.oNH_3$ $A_xFe_{y++}Fe_{z+++}Cl_{x+2y+3z}$

Source: US4877420 A [EN] Proposed is a **halogen-containing filler** for **abrasive** bodies on the basis of at least one metal halide or metal complex salt of the formula $A_xMey^{II}Mez^{III}HalE.nBfCgHale.mH_2O.oNH_3$ wherein A: is an alkali metal or ammonium, x: a number of 0 to 10, Mell: Mn, C, Mg, Zn, Sn, Cu, Co or Ni, y: a number of 0 to 2, Melll: Al, B or Ti, z: a number of 0 to 2, Hal: a **halogen**, E: a number of 1 to 10, n: a number of 0 to 10, B: an alkali metal or ammonium, **f**: a number of 0 to 1, C: Ca, Mg, Zn, Sn or Mn, g: a number of 0 to 1, e: a number of 1 to 2, m: a number of 0 to 10 and o: a number of 0 to 10, and/or at least one alkali **chloroferrate** (II,III) of the formula $A_xFe_{y++}Fe_{z+++}Cl_{x+2y+3z}$ wherein A represents an alkali metal or ammonium, x stands for a number of 1 to 10, y is a number of zero to 1 and z is a number from zero to 1 and y and z are not simultaneously zero, the ferrate preferably being formed in combination with a basic inorganic compound such as zinc oxide, **potassium** carbonate or sodium sulfide, and/or at least one mixture of a basic aluminum chloride with NaCl and/or KCl, which is characterized above all in that it contains at least one fluorine compound, in particular at least one fluoride, and/or at least one salt of an oxygen acid of nitrogen, phosphorus and/or sulfur; an abrasive body, in particular for metals, which contains this filler, said body containing an abrasive, a binder as well as said active, halogen-containing filler, optionally in addition to other fillers, as well as a process for the production of said filler

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 84

Titel: COATED **ABRASIVE** CONTAINING AN OVER-SIZE LAYER OF A METAL HALIDE
Patentnummer: [US3541739A](#)
Anmeldung: US19680745106
Priorität: US19680745106 19680716
Patentfamilie: **US3541739A**
Anmelder: ENGLISH ABRASIVES LTD
Erfinder: BRYON JOHN P
 ROLFE ALAN G



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

Source: US3541739 A [EN] ABSTRACT OF THE **DISCLOSURE** A coated **abrasive** article comprising a backing, **abrasive** particles, and a bond securing the particles to the backing, such **abrasive** being oversized with a top coating of 15 a reactive **filler** above the conventional sand size coating normally applied in the industry, such filier consisting of or containing a simple or complex halide, the proportion of such filier being 40-95% by weight of the total dry oversizing weight the remaining percentage being an ad- 20 hesive to bind the **filler** to the **abrasive** surface. This invention relates to flexible coated **abrasive** articles, more particularly it relates to coated **abrasive** articles which are suitable for dry **grinding** of metals. The use of various **additives** has been suggested to improve the rate of **cut** of coated **abrasives**. 'When metal is ground, there is a tendency for **glazing** of the **abrasive** surface to occur and for particles of metal to become welded to the tops of the grains. The action of **additives** to the adhesive bond is to reduce this tendency to glaze and weld. In particular, compounds containing halogens and/or sulfur have been suggested. Thiourea, mercaptans, thiuram tetrasulfide, 2: 4 dichlorobenzoic acid, and 35 chlorinated alkyl esters of phosphoric acid are cited. In the case of bonded abrasives such as grinding wheels, similar additives have been suggested to aid cutting in certain cases, but in most instances, inorganic fillers have been employed. Sodium cryolite has been used for some time in bonded abrasive wheels and more recently such materials as potassium fluoroborate, alkali metal halides and iron sulfide have been used. In Pat. 3,246,970 to Zimmerman issued Apr. 19, 1966, for instance, claims have been made for the use of potassium cryolite and iron 45 sulfide as a filler giving improved performance to a grinding wheel. From the fact that such materials improve the performance of a grinding wheel, it can in no way be inferred that the inclusion of the same materials in a coated abrasive product will result in a similar improvement in 50 performance. Whereas, a grinding wheel has a multiplicity of grain layers and wears more or less rapidly in use, a coated abrasive has only a monolayer of grit, and the factor which determines its life is in many cases the degree of blunting of the grit and the 'capping' of the grit with 55 metal swarf particles, and not the degree of grit loss. This particularly applies when metals such as stainless steel and high temperature resistant nickel alloys are being ground. It is well known that in the literature reference is made 60 to the inclusion of metallic halides, sulfides and other fillers in coated abrasives and amongst these materials sodium cryolite is mentioned. The use of sodium cryolite and other metallic halides in practice however has not been widespread in the manufacture of coated abrasives. 65 In the case of sodium cryolite, this has been used as a supposedly inert filler, as is evidenced by references to its use as an alternative to such fillers as walnut shell flour, calcium carbonate or silica. Such references are to be found in Pat. 3,232,729 to Holland et al. issued Feb. 1, 70 1966, Example 7; and in Pat. 2,468,056 to Goepfert et al. issued Apr. 26, 1949 Examples II and in. The reason that materials such as sodium cryolite have been deemed inert is that they have often been present in quantities too small to exert an influence on the grinding mechanism, or else have been included in the 'making' or first layer of adhesive where they can

make little or no contribution to the cutting process as they are covered with the 'sand-size' or top coat of adhesive. (See Pat. 2,468,056 Example II) . When the halide or sulfide fillers are included in the sand-size coat, a limit is imposed on the amount that can be included, by the reduction in strength of the adhesive which results at high level of addition. In practice, therefore, no great increase in performance can be expected from the inclusion in coated abrasive of many of the fillers and additives which give good results in wheels

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 85

Titel: **CHLOROFLUOROFERRATE** (II,III) , A PROCESS FOR ITS MANUFACTURE, ITS USE AND A **GRINDING WHEEL** CONTAINING **CHLOROFLUOROFERRATE** (II,III)



Patentnummer: [EP0044028B1](#)

Anmeldung: EP19810105285
DE19813160391T
DE19803026294
US19810281845
JP19810107239
AT19810105285T
DK19810003085
FI19810002161
NO19810002368

Priorität: DE19803026294 19800711
DE19813160391T 19810708
EP19810105285 19810708

Patentfamilie: [EP0044028B1](#)
[EP0044028A1](#)
[DE3026294A1](#)
[DE3160391D1](#)
[US4370148A](#)
[JP57047727A2](#)
[AT3628E](#)
[DK308581A](#)
[FI812161L](#)
[FI812161A](#)
[NO812368L](#)
[NO812368A](#)

Anmelder: RIEDEL DE HAEN AG

Erfinder: BERUNTO SHIEENFUERUTO
HIRSCHBERG RUDOLF DIPL CHEM DR
RUUDORUFU HIRUSHIYUBERUKU
SCHOENFELD BERND DIPL CHEM DR
SCHONFELD BERND DR

IPC-Notationen: [B24D0003-34](#)
C01G0049-00
C04B0033-02
C04B0033-14
C08K0003-00
C08K0003-16
C08L0061-00
C08L0061-04

CPC-Notationen: [B24D0003-34](#)
[B24D0003-344](#)
C01G0049-009

Zusammenfassung:

Source: US4370148 A [EN] **Chlorofluoroferrates** (II,III) are manufactured by fusing alkali metal halides or ammonium halides with an iron (III) halide and metallic iron. The starting materials used are, in particular, (a) an alkali metal **chloride** or ammonium **chloride**, (b) an alkali metal **fluoride** or ammonium **fluoride**, (c) anhydrous iron (III) **chloride** and (d) iron powder. The reaction is carried out a temperature of 300 DEG to 900 DEG C. The **chlorofluoroferrates**, which have a markedly lower hygroscopicity compared with customary **chloroferrates**, are particularly suitable for use as active **fillers** for **grinding wheels**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 86

Titel: Active **filler** for **grinding wheels**

Patentnummer: [US4475926A](#)

Anmeldung: US19830529076

Priorität: US19820352290 19820225
US19830529076 19830902

Patentfamilie: [US4475926A](#)

Anmelder: NORTON CO

Erfinder: HICKORY GORDON E

IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)

CPC-Notationen: [B24D0003-346](#)



Zusammenfassung:

Source: US4475926 A [EN] A resinoid bonded **abrasive** article in which the resinoid bond includes 5-80 percent by volume of an improved active **filler** or **grinding aid**. The active **filler** is a mixture of iron pyrites, **potassium** sulfate and an alkali haloferate; the alkali haloferate having the formula $A_x Fe_{y++} Fe_{z+++} H_{x+2y+3z}$ where A is an alkali metal, H is a **halogen**, x is a number from 1 to 10, y is a number from 0 to 1, z is a number from 0 to 1, and y and z are not zero at the same time. The **fillers** are present in the bond in a ratio of alkali-haloferate-to-pyrites-to-potassium sulfate of 0.5: 1: 0.5

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 87

Titel: COATING FOR FLEXIBLE **ABRASIVE** BANDS

Patentnummer: [DE2001612C3](#)

Anmeldung: DE19702001612
US19730325866
GB19700056700
FR19710001165
CH19700017809

Priorität: DE19702001612 19700115
US19700098964 19701216
US19730325866 19730122

Patentfamilie: [DE2001612C3](#)
[DE2001612B2](#)
[DE2001612A1](#)
[US3888640A](#)
[GB1334865A](#)
[FR2075566A5](#)
[CH544143A](#)

Anmelder: VER SCHMIRGEL AND MASCHF

Erfinder: BIGORAJSKI GUENTER DIPL CHEM D
BIGORAJSKI GUNTER
JOACHIM ELLERKAMP
RER NAT BIGORAJSKI GUENTER DR

IPC-Notationen: [B24D0003-34](#)
C08L0061-00
C08L0061-10

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

Zusammenfassung:

Source: US3888640 A [EN] A binder for the **grinding** grains of **grinding** bodies comprising animal glues or synthetic resins and **fillers**, to which is added 1 to 50 percent, and preferably 10 to 30 percent, by weight of a **chlorinated** paraffin or other organic **halogen** compound, to improve the **grinding** efficiency. Claims, No Drawings

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 88



Titel: Coated **abrasive** articles
Patentnummer: [DE1577577A1](#)
Anmeldung: DE19661577577
GB19650013878
Priorität: GB19650013878 19650401
GB19650053689 19651217
Patentfamilie: [DE1577577A1](#)
[GB1145082A](#)
Anmelder: ENGLISH ABRASIVES CORP LTD
Erfinder: BRYON JOHN PATRICK
PATRICK BYRON JOHN
ROLFE ALAN GEORGE



IPC-Notationen: B24D0011-00
[C08J0005-14](#) **CPC-Notationen:** B24D0011-00

Zusammenfassung:

Source: GB1145082 A [EN] 1,145,082. **Abrasive** composition. ENGLISH **ABRASIVES** CORP. Ltd. 23 March, 1966 [1 April, 1965; 17 Dec., 1965] , Nos. 13878/65 and 53689/65. Heading C4V. A coated **abrasive** article comprises a backing, and a bond comprising a plurality of coats securing **abrasive** particles to the backing a bond including at least in the outermost coat a **filler** containing or consisting of a simple or complex metal halide, the proportion of **filler** being 40-90 percent by weight of the total composition of that coat. The halide may be sodium or **potassium chloride** or bromide with or without sodium or **potassium hexafluoride**. Other halides specified are ferric, magnesium and aluminium **fluoride**, **potassium** borofluoride and sodium or **potassium** silico **fluoride**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 89

Titel: HYDROLYZABLE, **FLUORINATED** SILANES, METHOD OF THEIR PRODUCTION AND THEIR USE FOR PRODUCING SILICIC ACID POLYCONDENSATES AND HETERO SILICIC ACID POLYCONDENSATES



Patentnummer: [EP0799832B1](#)

Anmeldung: EP19970104202
DE19975011197T
DE19961013650
US19970832283

Priorität: DE19961013650 19960404

Patentfamilie: [EP0799832B1](#)
[EP0799832A3](#)
[EP0799832A2](#)
[DE19613650C1](#)
[DE59711197D1](#)
[US5973176A](#)

Anmelder: FRAUNHOFER GES FORSCHUNG

Erfinder: OLSOWSKI BIRKE E
POPALL MICHAEL DR RER NAT
ROSCHER CHRISTOF DIPL CHEM

IPC-Notationen: C07F0007-00
C07F0007-04
C07F0007-12
C07F0007-18
C08G0077-00
C08G0077-24
C08G0077-58
[C08J0005-14](#)
C09C0003-12
C09D0183-08
C09K0003-10
G03F0007-00

CPC-Notationen: C07F0007-06
C07F0007-12
C07F0007-1804
C07F0007-1896
C08G0077-24
C08G0077-58
C09C0003-12
C09D0183-08
C09K0003-1018
G03F0007-00

Zusammenfassung:

Source: US5973176 A [EN] The invention relates to hydrolyzable **fluorinate** silanes, methods of their production and of their use for producing silicic acid polycondensates and hetero silicic acid polycondensats The silanes in accordance with the invention are of the general formula: $\{ [R' - (Y) e] c + 1 (C_6F_4 - c) (C_6F_4) d \} f SiRaXb (I)$ in which the groups and indices are identical or different and have the following meaning: R=alkyl, alkenyl, aryl, alkylaryl or arylalkyl, substituted if required, each with 1 to 15 carbon atoms, whereby the groups may be interrupted by oxygen or sulfur atoms, ester, carbonyl, amide or amino groups; R'=I, **Br**, **Cl** (if d NOT EQUAL 0) , **F** (if d NOT EQUAL 0) , H (if X NOT EQUAL H or R NOT EQUAL methyl or e=1) or an organic group with 1 to 50 carbon atoms; X=hydrogen, **halogen** except **fluorine**, hydroxy, alkoxy, acyloxy, alkylcarbonyl, alkoxy carbonyl or NR''2, with R''=hydrogen, alkyl or aryl; Y=O, S, NH or NR', where R' is an organic group with 1 to 50 carbon atoms; a=0, 1 or 2; b=1, 2 or 3; c=0 or 1; d=0 to 9; e=0 or 1; f=1, 2 or 3, with a+b+f=4

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 90

Titel: **ABRASIVE** PRODUCT, METHOD OF MAKING AND USING THE SAME, AND APPARATUS FOR MAKING THE SAME

Patentnummer: [WO2006069179C1](#)

Anmeldung: WO2005US46437
WO2003US17244
EP20050855061
EP20030731482
DE20036028790T
US20050247668
US20050247039
US20050247008
US20040985288
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US20040017334
US20020205711
JP20100106118
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CN20038017902
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KR20057001337
AT20030731482T
BR2003PI12953
BR2005PI19125
IN2005CN00068
MX2005PA00744

Priorität: US20020205711 20020720
US20020205711 20020726
WO2003US17244 20030602
US20040985287 20041110
US20040985288 20041110
US20040017334 20041220
US20050247008 20051011
US20050247039 20051011
US20050247668 20051011
WO2005US46437 20051220
JP20040524496 20100506
JP20040524496T 20100506

Patentfamilie: [WO2006069179C1](#)
[WO2004011196C1](#)
[WO2006069179A3](#)
[WO2006069179A2](#)
[WO2004011196A1](#)
[EP1526949B1](#)
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[EP1827764A2](#)
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[US6833014B2](#)
[US2006156634A1](#)



US2006048704A1
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 JP2010188522A2
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 JP4555080B2
 JP2008524009T2
 JP2005533670T2
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 CN101124066A
 CN101124066B
 CN100357064C
 KR20100134115A
 KR20070091344A
 KR20050025665A
 KR101227209B1
 AT439214E
 BRPI0519125A2
 BRPI0312953A
 IN218825B
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 MXPA05000744A1

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

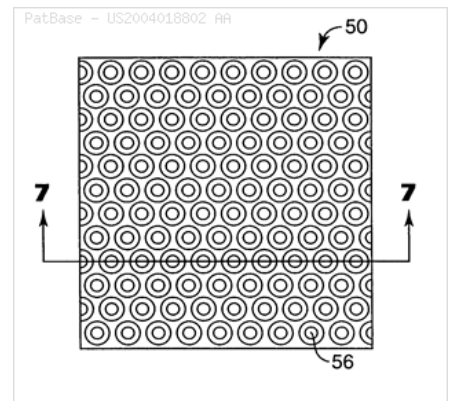
Erfinder: CHESLEY JASON A
 MOREN LOIUS S
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 WELYGAN DENNIS G

IPC-Notationen: B04D0018-00
 B05C0001-08
 B05C0011-00
 B05C0013-00
 B05C0019-00
 B05C0019-04
 B24B0001-00
 B24D0003-00
 B24D0003-02
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 C09K0003-14

CPC-Notationen: B01J0002-20
 B01J0002-26
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 B24D0003-28
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 B24D0011-001
 B24D0011-005
 B24D0011-008
 B24D0018-0009
 B24D2203-00
 C09K0003-1409

Zusammenfassung:

Source: US2004018802 AA [EN] The invention provides a method and apparatus for making an **abrasive** product comprising providing a substantially horizontally deployed flexible backing having a first surface bearing an at least partially cured primer coating and an opposite second surface; providing a dry flowable particle mixture comprising **abrasive** particles and particulate curable binder material; depositing a plurality of temporary shaped structures comprised of said particle mixture on the at least partially cured primer coating of the first surface of the backing; softening said particulate curable binder material to provide adhesion between adjacent **abrasive** particles; and curing the softened particulate curable binder material to convert said temporary shaped structures into permanent shaped structures and cure the at least partially cured primer coating on the first surface of the backing. The invention also provides an **abrasive** product made by the method



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 91

Titel:ROTOGRAVURE PROCESS FOR PRODUCTION OF PATTERNED **ABRASIVE** SURFACES

Patentnummer: [WO9830361A1](#)

Anmeldung: WO1997US23826
EP19970953428
DE19976029476T
US19970780750
JP19980530918T
CA19972276506
AU19980057178
CN19971081255
KR19997006213
TW19980100194
AR1998P100075
AT19970953428T
BR1997PI14201
CL19980000037
CO19980000487
CZ19990002419
DK19970953428T
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IN1998MA00009
NO19990003361
NZ19970335615
PL19970334497
RU19990116786
ZA19980000042

Priorität: US19970780750 19970108
EP19970953428 19971222
WO1997US23826 19971222

Patentfamilie: [WO9830361A1](#)
[EP0954411B1](#)
[EP0954411A1](#)
[DE69729476T2](#)
[DE69729476D1](#)
[US5840088A](#)
[JP3958373B2](#)
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[ES2223086T3](#)



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 IN200736B
 IN00009MA1998A
 NO993361L
 NO314074B1
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 NO993361A0
 NZ335615A
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 RU2173631C2
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 ZA9800042A

Anmelder: NORTON COMPANY
 SAINT GOBAIN ABRASIVES INC

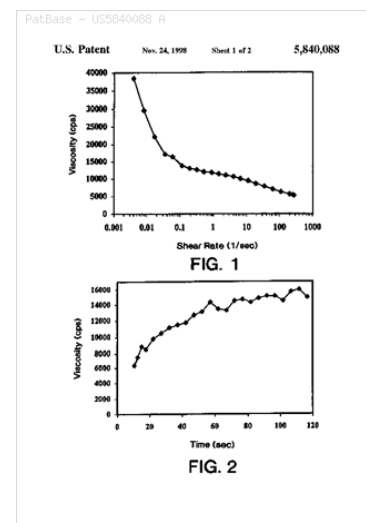
Erfinder: ALLEN KEVIN BRUCE
 GUOXIN SUI
 SWEI GWO SHIN
 WEI PAUL
 YANG WENLIANG PATRICK
 ZHIYUAN WEI

IPC-Notationen: B24B0001-00
B24D0003-02
 B24D0003-20
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 B29C0039-00
 B29C0039-10
 B29C0039-14
C08J0005-14

CPC-Notationen: **B24D0003-02**
 B24D0003-20
 B24D0003-285
 B24D0011-00
 B29C0039-148

Zusammenfassung:

Source: US5840088 A [EN] Coated **abrasives** suitable for very fine abrading applications can be obtained by depositing formulations comprising **abrasive** grits, **fillers**, **grinding aid**, **additives** and a binder resin and in patterns on a surface using a rotogravure technique providing the viscosity is controlled such that the formulation deposited does not lose its shape prior to cure



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 92

Titel: **ABRASIVE** PRODUCTS INCLUDING ACTIVE **FILLERS**

Patentnummer: [WO2009042591A1](#)

Anmeldung: WO2008US77372
EP20080834652
DE200860006756T
US20080284616
CA20082699987
CN200880106846
AT20080834652T
PL20080834652T

Priorität: US20070995104P 20070924
US20080124708 20080417
US20080124708P 20080417
EP20080834652 20080923
US20080284616 20080923
WO2008US77372 20080923

Patentfamilie: **WO2009042591A1**
[EP2200780B1](#)
[EP2200780A1](#)
[DE602008006756D1](#)
[US8491681B2](#)
[US2009077900A1](#)
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[CN101801610A](#)
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AT507935E
[PL2200780T3](#)

Anmelder: CHUDA KATARZYNA
GARNIER PATRICK
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SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

Erfinder: KATARZYNA CHUDA
LATOURNERIE JEROME
PATRICK GARNIER

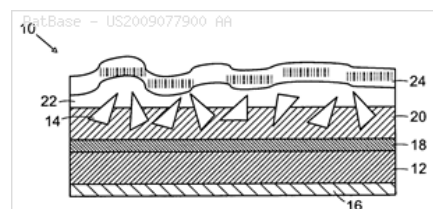
IPC-Notationen: B24B0001-00
[B24D0003-34](#)
B24D0011-00
C09K0003-14

CPC-Notationen: [B24D0003-344](#)
[B24D0003-346](#)
B24D0011-00



Zusammenfassung:

Source: US2009077900 AA [EN] An **abrasive** product comprises an **abrasive** component and a bond component. In one embodiment, the bond component includes a binder and a **filler** component that includes a **cryolite** and at least one member selected from the group consisting of sodium oxalate ($\text{Na}_2\text{C}_2\text{O}_4$), sodium borate ($\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$), sodium polyphosphate (NaPO_3), opal glass, a hexafluorophosphate, a hexafluoroferrate, a hexafluorozirconate and ammonium tetrafluoroborate. In another embodiment, the bond component includes a binder and a **filler** component that includes at least one member selected from the group consisting of a hexafluoroferrate, a hexafluorophosphate and a hexafluorozirconate. Alternatively, an **abrasive** product comprises an **abrasive** component and a **filler** component that includes at least one member selected from the group a hexafluoroferrate and a



hexafluorozirconate. The **abrasive** component includes at least one of **abrasive** particles and agglomerates of **abrasive** particles

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 93

Titel: Structured **abrasive** article

Patentnummer: [WO9507796A1](#)

Anmeldung: WO1994US08832
WO1992US00305
EP19940925736
EP19920904602
DE19946007304T
DE19926010221T
US19930121110
US19930029302
US19910651660
JP20030173709
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KR19930702327
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BR1994PI07537
CS19930001581
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ES19940925736T
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HU19930002029
MX19920000306
RU19930054180
SG19960005019

Priorität: US19910651660 19910206
JP19920504556 19920107
JP19920504556T 19920107
WO1992US00305 19920107
US19920921905 19920729
US19930029302 19930308
US19930121110 19930913
WO1994US08832 19940804

Patentfamilie: [WO9507796A1](#)
[WO9213680A1](#)
[EP0719200B1](#)
[EP0570457B1](#)
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[US5152917B1](#)
[US5378251A](#)
[US5304223A](#)
[US5152917A](#)



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JP6505200T2

CA2170990C

CA2100059C

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CN1066087C

KR960704678A

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KR100358480B1

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BRPI9407537A

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CZ9301581A3

ES2086731T3

ES2110772T3

HK1032021B

HK1006688A1

HK1032021A1

HU68648A2

MX9200306A1

RU2106238C1

RU93054180A

SG73390A1

Anmelder:

BBC BROWN BOVERI AND CIE

MINNESOTA MINING AND MFG CO 3M

MINNESOTA MINING AND MFG COMPA

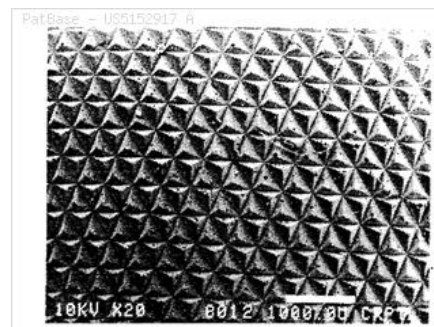
Erfinder: BERG GREGORY A
CULLER SCOTT R
DZHON R PAJPER
GARI L KHOLMS
HEITI R V
HEITI ROBERT V HEITI ROBERT V
HEITI VON ROBERT
HOLMES GARY L HOLMES GARY L
HOLMES GARY LEE
HYDI J R PIPOE M V MUTZ R V
JON R PIPER
MAJKL V MASSI
MUCCI M V
MUCCI MICHAEL V MUCCI MICHAEL
MUCCI VON MICHAEL
OLSON RICHARD M OLSON RICHARD
OLSON RICHARD MICHAEL
PIEPER J R
PIEPER JON R PIEPER JON R
PIEPER JON RAY
ROBERT V KHITI

IPC-Notationen: B24D
B24D0003-00
B24D0003-08
B24D0003-28
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-002**
B24D0003-28
B24D0003-34
B24D0011-00
B24D0011-005

Zusammenfassung:

Source: US5152917 A [EN] A coated **abrasive** article comprising a backing bearing on at least one major surface thereof **abrasive** composites comprising a plurality of **abrasive** grains dispersed in a binder. The binder serves as a medium for dispersing **abrasive** grains, and it may also bond the **abrasive** composites to the backing. The **abrasive** composites have a predetermined shape, e.g., pyramidal. The dimensions of a given shape can be made substantially uniform. Furthermore, the composites are disposed in a predetermined array. The predetermined array can exhibit some degree of repetitiveness. The repeating pattern of a predetermined array can be in linear form or in the form of a matrix. The coated **abrasive** article can be prepared by a method comprising the steps of: (1) introducing a slurry containing a mixture of a binder and a plurality of **abrasive** grains onto a production **tool**; (2) introducing a backing to the outer surface of the production **tool** such that the slurry wets one major surface of the backing to form an intermediate article; (3) at least partially curing or gelling the binder before the intermediate article departs from the outer surface of the production tool to form a coated abrasive article; and (4) removing said coated abrasive article from the production tool



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 94

Titel: RESIN BONDED GRINDING WHEELS WITH FILLERS

Patentnummer: EP0221497A3

Anmeldung: EP19860114975
US19850793440
JP19860258705
CA19860514829
AU19860064410
KR19860009138
BR1986PI05382
ZA19860008166

Priorität: US19850793440 19851031
CA19860514829 19860729

Patentfamilie: EP0221497A3
EP0221497A2
US4657563A
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Anmelder: NORTON CO

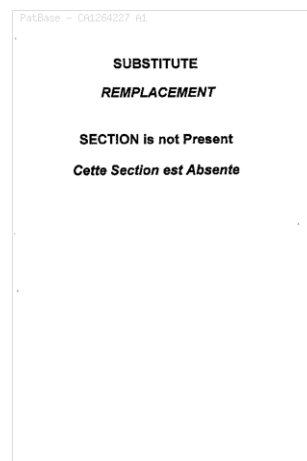
Erfinder: HOLDEN ROBERT L
LICHT ROBERT H
ROBAATO EICHI RIKUSUTO
ROBAATO ERU HOORUDEN

IPC-Notationen: B24D0003-00
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0007-00
C09K0003-14

CPC-Notationen: B24D0003-344

Zusammenfassung:

Source: US4657563 A [EN] An improved resin bonded grinding wheel composition is shown making use of a kyanite or sillimanite or andalusite filler or mixtures thereof. More particularly the grinding wheel is a hot pressed phenol formaldehyde wheel having an alumina-zirconia abrasive with a kyanite additive therein. These wheels can be used for heavy duty metal grinding and have been determined to be especially useful for the snag grinding of titanium metal



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 95

Titel: HIGH PERFORMANCE **ABRASIVE** ARTICLES CONTAINING **ABRASIVE** GRAINS AND NONABRASIVE COMPOSITE GRAINS



Patentnummer: [WO9714536A1](#)

Anmeldung: WO1996US14395
EP19960930755
US19970929556
US19950545874
JP19970515813T
CA19962233470
KR19980702798
BR1996PI11090

Priorität: US19950545874 19951020
WO1996US14395 19960906
US19970929556 19970915

Patentfamilie: [WO9714536A1](#)
[EP0855947A1](#)
[US5840090A](#)
[US5702811A](#)
[JP11513621T2](#)
[CA2233470A](#)
[KR19990064303A](#)
[BRPI9611090A](#)

Anmelder: HARMER WALTER L
HO KWOK LUN
MINNESOTA MINING AND MFG

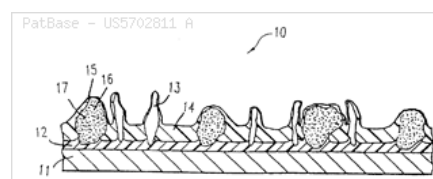
Erfinder: HARMER WALTER L
HO KWOK LUN
HO KWOK LUN

IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00

CPC-Notationen: [B24D0003-344](#)
B24D0011-00
Y10T0428-25
Y10T0428-254
Y10T0428-256
Y10T0428-257
Y10T0428-258
Y10T0428-259
Y10T0428-2991

Zusammenfassung:

Source: US5702811 A [EN] A coated **abrasive** article comprised of a backing having a layer of grains adherently bonded thereto by a binding material, wherein the layer of grains comprises **abrasive** grains and nonabrasive composite grains, and the nonabrasive composite grains comprise inorganic nonabrasive particles bonded together by a binder selected from the group consisting of a metal salt of fatty acid, colloidal silica, and combinations thereof. The **abrasive** article has an unexpected abrading efficiency, performing equal to, or superior to, a coated **abrasive** article containing only **abrasive** grains. The invention also relates to a bonded **abrasive** article comprising the **abrasive** grains and nonabrasive composite grains adhered together



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 96

Titel: STRUCTURED **ABRASIVES** WITH ADHERED FUNCTIONAL POWDERS

Patentnummer: [WO9912707A1](#)

Anmeldung: WO1998US18893
WO1997US23828
EP19980948139
EP19970952625
DE19986003995T
DE19976039424T
US19970927611
US19970892494
JP20000510577T
JP19980530919T
CA19982295686
CA19972276508
AU19980094772
AU19980056193
CN19988007076
CN19971081256
KR20007002523
KR19997006176
TW19980114495
TW19980100135
AR1998P100076
AR1998P104525
AT19970952625T
AT19980948139T
BR1997PI14259
BR1998PI11787
CL19980000021
CL19980002183
CO19980000486
CO19980052132
CZ19990002418
CZ20000000532
DK19970952625T
DK19980948139T
ES19970952625T
ES19980948139T
HK20000103560
HK20000108113
HU20000000771
HU20000003575
ID19990000645
ID20000000458
IN1998MA00008
IN1998MA01770
NO19990003338
NO20000001275
NZ19970335614
NZ19980501453
PL19970334452
PL19980339145
RU19990116793
RU20000102907
ZA19980000016
ZA19980006899



Priorität: US19970782013 19970107
US19970892494 19970714
US19970927611 19970911
WO1997US23828 19971222
WO1998US18893 19980908

Patentfamilie: WO9912707A1
WO9830358A1
EP1011924B1
EP0954410B1
EP1011924A1
EP0954410A1
DE69803995T2
DE69803995D1
DE69739424D1
US5863306A
US5833724A
JP3776729B2
JP3391463B2
JP2001515801T2
JP2000507885T2
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AU199894772A1
AU199856193A1
CN1266392A
CN1244827A
CN1120076C
CN1077829C
KR20010023846A
KR20000069963A
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KR100335520B1
TWI225888B
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AR011374AA
AR016922AA
AT213685E
AT432147E
BRPI9714259A
BRPI9811787A
CL41271B
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CL1998000021A1
CL1998002183A1
CO4870714A1
CO5031303A1
CZ300279B6
CZ302363B6
CZ20000532A3
CZ9902418A3
DK0954410T3
DK1011924T3
ES2173625T3
ES2327983T3
HK1024202A1
HK1028580A1

HU224180B1
HU228778B1
HU0000771AB
HU0000771AC
HU0003575AB
HU0003575AC
ID21768A
ID23980A
IN208661B
IN210071B
IN00008MA1998A
IN01770MA1998A
NO20001275L
NO993338L
NO315707B1
NO315792B1
NO20001275A
NO993338A
NO20001275A0
NO993338A0
NZ335614A
NZ501453A
PL185688B1
PL200042B1
PL334452A1
PL339145A1
RU2169068C2
RU2173251C1
RU2000102907A
RU99116793A
ZA9800016A
ZA9806899A

Anmelder: NORTON CO
SAINT GOBAIN ABRASIVES INC

Erfinder: ALLEN KEVIN BRJUS
ALLEN KEVIN BRUCE
JANG UENLIANG PATRIK
SUEJ GUO SHIN
SWEI G S
SWEI GWO SHIN
TRAYLOR KEVIN BRUCE
UEJ POL
WEI PAUL
WEL PAUL
YANG W P
YANG WEN LIANG PATRICK
YANG WENLIANG P

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0011-00
B24D0011-04
B24D0017-00
B24D0018-00
B24D0099-00
C08J0005-14
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0011-001
B24D0011-04

Zusammenfassung:

Source: US5833724 A [EN] Coated **abrasives** suitable for very fine abrading applications can be obtained by depositing a layer of a formulation comprising **abrasive** grits, **fillers**, **grinding aid**, **additives** and a binder resin on a substrate in the form of a structured **abrasive** and then adhering to the surface of the structured **abrasive** a functional powder

研磨スラリー配合 表 1

成分	I	II	III	IV
Ebecryl 3605	19.3%			
Ebecryl 3700		6.3%		
NVP	8.3%			
ICTA		7.9%	14.7%	14%
TMPTA		8.1%	14.7%	14%
TRPGDA		5.3%		
Irgacure 651		0.8%		
Darocure 1173	1.1%		0.6%	0.6%
2 MI	0.2%			
Cab-O-Sil		0.8%		
シラン	1.1%	0.8%		
Pluronic 25R2				1.4%
KBF ₄	23.3%	23.3%	23.3%	23.3%
粒子	46.7%	46.7%	46.7%	46.7%

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 97

Titel: **Abrasive** article

Patentnummer: [EP0418738B1](#)

Anmeldung: EP19900117665
DE19906016327T
US19900506059
US19890406487
JP19900241389
CA19902025177
ES19900117665T

Priorität: US19890406487 19890913
US19900506059 19900409
CA19902025177 19900912

Patentfamilie: [EP0418738B1](#)
[EP0418738A3](#)
[EP0418738A2](#)
[DE69016327T2](#)
[DE69016327D1](#)
[US5110322A](#)
[US5037453A](#)
[US5110322C2](#)
[US5037453C2](#)
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[US5037453C1](#)
[JP3178775A2](#)
[JP2523971B2](#)
[CA2025177C](#)
[CA2025177A](#)
[ES2066923T3](#)

Anmelder: NORTON CO

Erfinder: KESHIYU ESU NARAYANAN
MIYUNI ESU RAMAKURISHIYUNAN
NARAYANAN KESH S
RAMAKRISHNAN MUNI S



IPC-Notationen: [B24D0003-00](#)
[B24D0003-02](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-346](#)
C09K0003-1409

Zusammenfassung:

Source: US5037453 A [EN] **Abrasive** article using sintered sol-gel **abrasive** particles mixed with other particles having greater friability, and carried in a bond

PatBase - JP2523971-B2		パッチ重量(ギン)							
おイール		A01	C	D	E	G	J	K	
部度		2,04	2,36	2,04	2,17	2,11	2,24	1,92	
部グロリトシーブ・ダブル・ゲルアルミナ・研磨材		0	4,33	7,29	11,57	7,14	11,23	13,77	
部グロリト・研磨材・ゲルアルミナ・研磨材		20,11	10,58	0	0	0	0	0	
部グロリト・研磨材・ゲルアルミナ・研磨材		0	0	0	0	0	0	3,90	
部グロリト・研磨材・ゲルアルミナ・研磨材		0	2,99	11,05	7,83	11,27	7,98	0	
部グロリト・研磨材・ゲルアルミナ・研磨材		2,30	2,46	2,87	2,79	3,79	3,57	4,25	
部グロリト・研磨材・ゲルアルミナ・研磨材		0,37	0,40	0,45	0,44	0	0	0	
部グロリト・研磨材・ゲルアルミナ・研磨材		2,10	2,34	2,82	2,46	2,46	2,32	2,78	
部グロリト・研磨材・ゲルアルミナ・研磨材		0,05	0,05	0,05	0,05	0	0	0	
部グロリト・研磨材・ゲルアルミナ・研磨材		50cc	50cc	50cc	50cc	40cc	0	0	
部グロリト・研磨材・ゲルアルミナ・研磨材						105cc	150cc	191cc	
部グロリト・研磨材・ゲルアルミナ・研磨材						0,54	0,51	0,63	

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 98

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

Patentnummer: [WO2018106583A1](#)

Anmeldung: WO2017US64469
EP20170878194
US20170467156
JP20190530821T
CN201780075794
KR20197019555

Priorität: US20160432122P 20161209
US20170467156 20171204
WO2017US64469 20171204

Patentfamilie: **WO2018106583A1**
EP3551388A1
EP3551388A4
US2020070315A1
JP2020513337T2
CN110072669A
KR20190085557A

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: MARTINEZ JAIME A
MOREN LOUIS S
SOMMER STACY A
WILSON GEOFFREY I
ZHANG JING

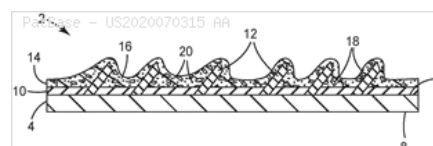
IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0003-28
B24D0003-34
B24D0009-00
B24D0011-02
C09K0003-14

CPC-Notationen: **B24D0003-004**
B24D0003-28
B24D0003-34
B24D0003-344
B24D0009-006
B24D0011-02
C09K0003-1409
C09K0003-1436



Zusammenfassung:

Source: US2020070315 AA [EN] An **abrasive** article includes a backing, **abrasive** particles secured to the backing, and a size coat provided over the **abrasive** particles, the size coat comprises a binder resin, at least one **filler** material and at least one lubricant material having a melting temperature of at least about 200 degrees **F**. A method of **grinding** aluminum using such an **abrasive** article is also described



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 99

Titel: **ABRASIVE** MEANS, USE OF ALKALI METAL **FLUOROALUMINATES** OR ALKALINE EARTH **FLUOROALUMINATES** FOR STABILIZING POLYMERS AGAINST CHANGE IN COLOR BY THE ACTION OF HEAT, AND MIXTURE CONSISTING OF **POTASSIUM** TETRAFLUOROALUMINATE AND DIPOTASSIUM PENTAFLUOROALUMINATE AND OF OTHER **ABRASIVE-ACTIVE FILLERS**



Patentnummer: [WO2006100043A3](#)

Anmeldung: WO2006EP02601
EP20060723602
EP20050006553
US20060909395
JP20080502312T
CA20062601019
CN200680009006
KR20077024331
BR2006PI09707

Priorität: EP20050006553 20050324
EP20060723602 20060321
WO2006EP02601 20060321

Patentfamilie: **WO2006100043A3**
WO2006100043A2
EP1704965A1
EP1871573A2
US2009241432A1
JP2008535960T2
CA2601019A
CN101146651A
KR20070116142A
BRPI0609707A2

Anmelder: PAKUSCH AXEL
PISCHTIK ANJA
SCHWARZE THOMAS
SOLVAY FLUOR AND DERIVATE
SOLVAY FLUOR GMBH

Erfinder: PAKUSCH AXEL
PISCHTIK ANJA
THOMAS SCHWARZE

IPC-Notationen: **B24D0003-00**
B24D0003-02
B24D0011-00
C01F0007-00
C01F0007-54
C09K0003-14

CPC-Notationen: **B24D0003-004**
B24D0003-342
B24D0011-00

Zusammenfassung:

Source: US2009241432 AA [EN] The invention relates to an **abrasive** means with **abrasive-active fillers**. The **abrasive** means is comprised, in general, of a support, **abrasive** grit and of a binder system. In order to improve the **abrasive** action and the **serviceable life** of the **abrasive** means, the binding agent system contains synthetic alkali metal **fluoroaluminates**, and/or alkaline earth metal **fluoroaluminates**, in particular, alkali metal tetrafluoroaluminate, preferably **potassium** tetrafluoroaluminate, together with at least one additional **abrasive-active filler**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 100

Titel: BONDED **ABRASIVE** ARTICLE

Patentnummer: [WO2010068543A3](#)

Anmeldung: WO2009US66492
EP20090832399
DE200960022514T
US20090133589
CA20092745874
CN200980156386
KR20117015648
BR2009PI17761
IN2011CN03976
PE20110001207
PL20090832399T

Priorität: US20080121950P 20081212
EP20090832399 20091203
US20090133589 20091203
WO2009US66492 20091203

Patentfamilie: **WO2010068543A3**
WO2010068543A2
EP2370231B1
EP2370231A4
EP2370231A2
DE602009022514D1
US2011296767A1
CA2745874C
CA2745874A
CN102307705A
CN102307705B
KR20110097929A
KR101660069B1
BRPI0917761A2
IN03976CN2011A
PE06232012A1
PE20120623A1
PL2370231T3

Anmelder: 3M INNOVATIVE PROPERTIES CO
CHOI YEON HO
LEE DOO HYUN

Erfinder: LEE DOO HYUN
YEON HO CHOI

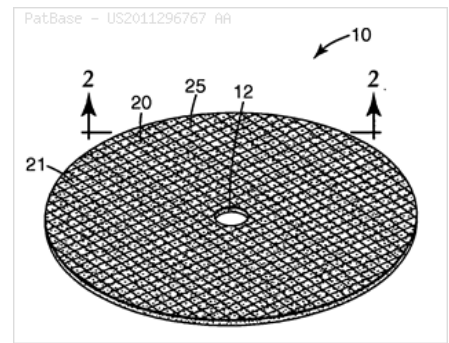


IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-06
B24D0003-14
B24D0003-20
B24D0003-28
B24D0005-12
C09C0001-68
C09G0001-02
C09K0003-14

CPC-Notationen: **B24D0003-00**
B24D0003-20
B24D0005-12
C09G0001-02
C09K0003-1409

Zusammenfassung:

Source: US2011296767 AA [EN] A bonded **abrasive** article includes, on a total weight basis: 30 to 37 percent of ceramic-coated blue fused aluminum oxide particles; 30 to 37 percent of non-seeded sol-gel alumina-based **abrasive** particles, wherein the non-seeded sol-gel alumina-based **abrasive** particles are composed of crystallites of alpha alumina, magnesium alumina spinel, and rare earth hexagonal aluminate; a phenolic binder that comprises a reaction product of 8 to 12 percent by weight of curable novolac phenolic resin and 2.1 to 5.1 percent by weight of curable resole phenolic resin; 3 to 6 percent by weight of metal fibers having a length of 5 millimeters or less; 8 to 11 percent by weight of **cryolite**; and 0.1 to 0.3 percent by weight of electrically conductive particles. Methods of making and using the bonded **abrasive** article are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 101

Titel: COATED **ABRASIVES** HAVING A PERFORMANCE ENHANCING COMPOSITION

Patentnummer: [WO2018119275A1](#)

Anmeldung: WO2017US67966
EP20170883629
US20170850896
CA20173045480
CN201780078330
BR20191113057
IN201927020081

Priorität: US20160438625P 20161223
US20160440596P 20161230
US20170850896 20171221
WO2017US67966 20171221

Patentfamilie: **WO2018119275A1**
[EP3558590A1](#)
[EP3558590A4](#)
[US2018185983A1](#)
[CA3045480A](#)
[CN110177652A](#)
[BR112019013057A2](#)
[IN201927020081A](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

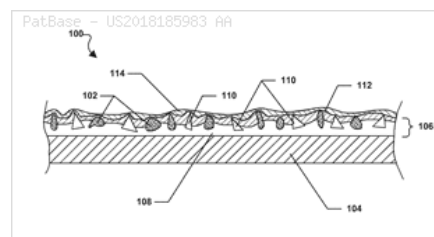
Erfinder: HERBERT CHARLES G
MILSHTEIN ROBIN
ROBIN BARABASZ
SHIH CHIEH KUNG
WANG JIANNA
WILLIAM C RICE

IPC-Notationen: **B24D0003-00**
B24D0003-22
B24D0003-34
B24D0011-00

CPC-Notationen: **B24D0003-005**
B24D0003-342
B24D0003-346

Zusammenfassung:

Source: US2018185983 AA [EN] The present **disclosure** relates generally to coated **abrasive** articles that include a tribological performance enhancing composition in a make coat, a size coat, a supersize coat, or combinations thereof, as well as methods of making coated **abrasive** articles. The present **disclosure** also relates to coated **abrasive** articles including a supersize coating comprising a sulfide scavenging composition and/or a crosslinked zinc acrylic binder, as well as methods for making and using such **abrasive** articles. The present **disclosure** also relates generally to **abrasive** articles that include aggregates having an anti-wear composition or **grinding aid** disposed on or within the aggregates



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 102

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

Patentnummer: [WO9810896A1](#)

Anmeldung: WO1996US14570
EP19990125307
EP19960932205
DE19966037418T
DE19966029054T
JP19980513587T
CA19962264872
AU19960071083
KR19997001995
BR1996PI12737
ZA19970007477

Priorität: EP19960932205 19960911
EP19990125307 19960911
WO1996US14570 19960911
KR19997001995 19990310

Patentfamilie: [WO9810896A1](#)
[EP1038637B1](#)
[EP0925151B1](#)
[EP0925151A1](#)
[EP1038637A3](#)
[EP1038637A2](#)
[DE69637418T2](#)
[DE69629054T2](#)
[DE69637418D1](#)
[DE69629054D1](#)
[JP2001500068T2](#)
[CA2264872A](#)
[AU199671083A1](#)
[KR20000036021A](#)
[BRPI9612737A](#)
[ZA9707477A](#)

Anmelder: 3M CO
CULLER SCOTT R
GAGLIARDI JOHN J
LARKEY THOMAS W
LARSON ERIC G
MARTIN LAWRENCE L
MINNESOTA MINING AND MFG
NELSON JEFFREY W

Erfinder: CULLER SCOTT RICHARD
GAGLIARDI JOHN JAMES
LARKEY THOMAS WILLIAM
LARKEY W
LARSON ERIC GEORGE
LARSON G
MARTIN LAWRENCE LEE
NELSON JEFFREY WELDON
NELSON W

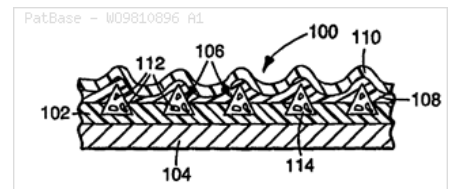
IPC-Notationen: [B24D0003-02](#)
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B24D0011-00
B24D0011-02
[C08J0005-14](#)

CPC-Notationen: B24D0003-28
[B24D0003-34](#)
[B24D0003-344](#)
B24D0011-00
B24D0011-001



Zusammenfassung:

Source: WO9810896 A1 [EN] This invention pertains to an **abrasive** article comprising precisely shaped particles. The **abrasive** article may be a coated **abrasive** article, a bonded **abrasive** or a nonwoven **abrasive** article. The precisely shaped particles may further comprise **abrasive** grits, **fillers**, **grinding** aids and lubricants. The precisely shaped particles can be made according to the following method: (a) providing a production **tool** having a three-dimensional body which has at least one continuous surface, said surface containing at least one opening formed in said continuous surface, said at least one opening providing access to a cavity in said three-dimensional body; (b) providing a dispensing means capable of introducing a binder precursor comprising a thermosetting resin into said at least one cavity through said at least one opening; (c) providing a means, within a curing zone, for at least partially curing said binder precursor; (d) introducing said binder precursor into at least a portion of said at least one cavity; (e) continuously moving said at least one cavity through said curing zone to at least partially cure said binder precursor to provide a solidified, handleable binder having a shape corresponding to that portion of the cavity into which the binder precursor has been introduced; (f) removing said binder from said at least one cavity; and (g) converting said binder to form a precisely shaped particle. Steps (f) and (g) may be conducted simultaneously. The particles can be bonded together to form a shaped mass, e.g., a wheel; alternatively, the particles can be bonded to a backing to form a coated abrasive article; or the particles can be bonded into a fibrous, nonwoven substrate to form a non-woven abrasive article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 103

Titel: **ABRASIVE** ARTICLES AND METHOD OF MAKING **ABRASIVE** ARTICLES

Patentnummer: [WO9524992A1](#)

Anmeldung: WO1995US02319
EP19950912603
DE19956030976T
US19960589998
US19950558241
JP19950524031T
CA19952182874
AU19950019696
CN19951092086
KR19967005183
KR19960705183
BR1995PI07083

Priorität: US19940214394 19940316
WO1995US02319 19950222
US19950538183 19950823
US19950558241 19951117
US19960589998 19960123

Patentfamilie: [WO9524992A1](#)
[EP0750540B1](#)
[EP0750540A1](#)
[DE69530976D1](#)
[US5552225A](#)
[US5551962A](#)
[JP9510403T2](#)
[CA2182874A](#)
[AU676799B2](#)
[AU199519696A1](#)
[CN1143923A](#)
[KR970701614A](#)
[KR19977001614A](#)
[KR19970701614A](#)
[BRPI9507083A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: HO K L
HO KWOK LUN

IPC-Notationen: [B24D0003-02](#)
[B24D0003-34](#)
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: [B24D0003-34](#)
Y10T0428-29
Y10T0428-2991
Y10T0428-2998

Zusammenfassung:

Source: US5551962 A [EN] **Abrasive** articles are described that include a plurality of **abrasive** particles, a plurality of coated **grinding aid** particles, the coated **grinding aid** particles comprising **grinding aid** particles coated with an inert, hydrophobic, hydrocarbon-containing substance, and a binder in which the **abrasive** particles and the coated **grinding aid** particles are dispersed

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 104



Titel: RESIN-BONDED **GRINDING WHEEL**

Patentnummer: [EP0061035A3](#)

Anmeldung: EP19820101696
DE19820101696T
JP19820039607
CA19820396042
AU19820080800
BR19820001393
ES19820510379
IN1982CA00233
ZA19820001215

Priorität: US19810245855 19810320
CA19820396042 19820211

Patentfamilie: [EP0061035A3](#)
[EP0061035A2](#)
[DE0061035T1](#)
[JP57163067A2](#)
[CA1188103A1](#)
[AU198280800A1](#)
[BR8201393A](#)
[ES8308245A1](#)
[ES510379A0](#)
[IN155234A](#)
[ZA8201215A](#)

Anmelder: NORTON CO

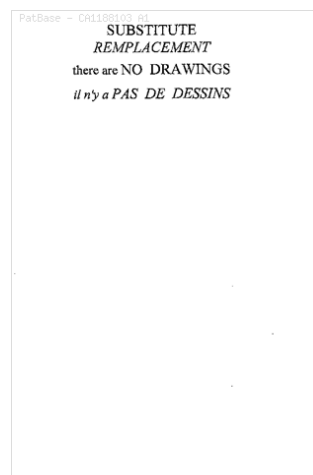
Erfinder: CARVER EDGAR BENJAMIN
CARVER RICHARD HENRY SIQUI BEN
EDOGAA BENJIYAMIN KAABAA
RICHIYAADO HENRII SUI
SIOUI RICHARD HENRY

IPC-Notationen: B24D0003-20
B24D0003-24
B24D0003-28
[B24D0003-34](#)
B24D0005-00

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

Zusammenfassung:

Source: EP0061035 A2 [EN] A resin-bonded **grinding wheel** containing cubic boron nitride **abrasive** grits wherein the resinous bonding matrix contains, as a **filler**, (1) iron sulfide and an alkali sulfate in a volume ratio of 1/4 to 4/1, (2) **cryolite**, or (3) **potassium aluminum fluoride**, or a mixture of (1) , (2) , and/or (3) , in the amount of 8 to 50 percent by volume of the **abrasive**, bond, and **filler** combination



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 105

Titel: Grinding wheel
Patentnummer: [US4913708A](#)
Anmeldung: US19880272976
Priorität: US19880272976 19881118
Patentfamilie: [US4913708A](#)
Anmelder: NORTON CO
Erfinder: KALINOWSKI PAUL W

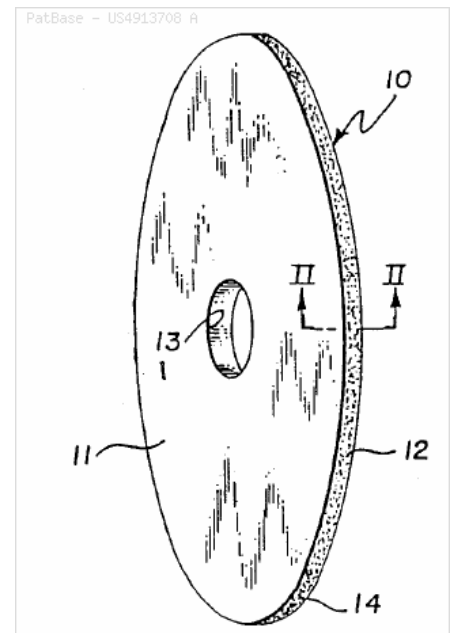


IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)

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

Zusammenfassung:

Source: US4913708 A [EN] The **grinding** performance of organic bonded **abrasive** bodies whose **abrasive** portion is wholly or partially composed of aluminous **abrasive** grits is significantly improved by providing a magnesium oxide-rich or manganese oxide-rich coating on furfural-wetted grits just prior to addition of resin and **filler** in the mixing process



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 106

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

Patentnummer: [EP0494435B1](#)

Anmeldung: EP19910122086
DE19915009030T
DE19914100167
JP19910361347
AU19910090084
KR19910024727
AT19910122086T
DK19910122086T
ES19910122086T
HK19980112571
ZA19920000035

Priorität: DE19914100167 19910105
DE19915009030T 19911221

Patentfamilie: [EP0494435B1](#)
[EP0494435A1](#)
[DE4100167C2](#)
[DE4100167A1](#)
[DE59109030D1](#)
[JP4304287A2](#)
[JP7039575B4](#)
[AU650309B2](#)
[AU199190084A1](#)
[KR19920014565A](#)
[KR100149510B1](#)
[KR0149510B1](#)
[AT168611E](#)
[DK0494435T3](#)
[ES2120952T3](#)
[HK1011632A1](#)
[ZA9200035A](#)

Anmelder: SCHMIRGEL U MASCHINEN FABRIKEN AG VER
SHIYUMIRUGERUU AND MASCHF A VER
VER SCHMIRGEL AND MASCHF
VER SHIYUMIRUGERUU AND MAS FAB A

Erfinder: BUORUFUGANGU FUARUTSU
FALZ WOLFGANG DR
GUSTAV EISENBERG
GUSUTAFU AIZENBERUKU

IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-34](#)

Zusammenfassung:

Source: EP0494435 A1 [EN] The object of the invention is to **disclose** an **abrasive** of the type in question, which, while avoiding the limitations which the **abrasives** of the prior art are subject to, calls for a lower proportion of **abrasive** grains and thus low costs but nonetheless ensures a performance comparable with conventional **abrasives**. This object is achieved in the **abrasive** according to the preamble of Claim 1 by these **additives** being present roughly in the size of the **abrasive** grain and having less hardness than the **abrasive** grain

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 107



Titel: Improvements relating to **abrasive wheels**

Patentnummer: [GB444141A](#)

Anmeldung: GB19350014462
19350518

Priorität: GB19350014462 19350517

Patentfamilie: **GB444141A**
FR790247A

Anmelder: NORTON CO

Erfinder:

IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: GB444141 A [EN] A composition for use in making an **abrasive wheel** consists of **abrasive** grains united by an organic bond, such as vulcanized rubber or a phenolic resin, and a finely divided insoluble **fluoride**, which renders the **wheel** incapable of being softened by normal **grinding** temperatures. The **fluoride** may consist of **cryolite**, calcium **fluoride**, apatite, and the like. The quantity of **cryolite** may be between 20 and 40 per cent by volume of the bond in the case of a rubber bond, or from 15 to 25 per cent in the case of a resin bond, or smaller quantities may be employed with lesser effects. The powdered **cryolite** may be mixed with powdered resin, and the **abrasive** grains moistened with a sufficient quantity of a liquid resin to make up the desired amount of resin, the whole being then mixed. Alternatively, the grains may be given a coating of binding material such as glue, shellac, rubber, or resinoid material, and the **cryolite** is then dusted over them, the coated grains being then mixed with the rubber or resinoid bond

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 108



Titel: Improvements in **abrasive** articles
Patentnummer: [GB826729A](#)
Anmeldung: GB19550018084
Priorität: GB19550018084 19550622
Patentfamilie: **GB826729A**
Anmelder: CARBORUNDUM CO
Erfinder: WILKINSON JOHN



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: GB826729 A [EN] An **abrasive** article comprises **abrasive** grains and negligibly **abrasive** non-metallic inorganic grains, of British Standard 60 mesh or coarser, which function as **grinding** assistants, bound together by a synthetic resin, which may contain finely powdered **filler** material. The granular **grinding** assistants may be composed of an inorganic compound or a mixture of compounds containing sulphur, **chlorine**, **fluorine**, or phosphorus, e.g. iron pyrites (iron sulphide) , troilite, covellite, c., chalcocite, chalcopyrite, rock salt, **cryolite**, **fluorspar**, bone ash or phosphate rock (calcium phosphate) . The only synthetic resin specified is phenol-formaldehyde, and the only **abrasive** grains specified are of fused alumina. Uses.-Grinding **wheels**, especially for **grinding** steels. In the Provisional Specification another form of iron sulphide, viz. marcasite, is mentioned as a **grinding** assistant.ALSO: An **abrasive** article comprises **abrasive** grains and negligibly **abrasive** non-metallic inorganic grains of British Standard 60 mesh, or coarser, which function as grinding assistants, bound together by an organic band, e.g., rubber, synthetic resin or shellac, which may contain finely powdered filler material. The granular grinding assistants may be composed of an inorganic compound or a mixture of compounds containing sulphur, chlorine, fluorine, or phosphorus, e.g., iron pyrites, troilite, chalcocite, covellite, chalcopyrite, rock salt, cryolite, fluorspar, bone ash or phosphate rock

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 109

Titel: **ABRASIVE** ARTICLE
Patentnummer: [US3030198A](#)
Anmeldung: US19600029813
Priorität: US19600029813 19600518
Patentfamilie: **US3030198A**
Anmelder: CINCINNATI MILLING MACHINE CO
Erfinder: KIBBEY HARRY S



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US3030198 A [EN] (Claim 1) 1. In an abras-ive article essentially composed of abra- sive grains bonded with a synthetic resin bond having a **filler** dispersed therethrough, the improvement which comprises utilizing a **filler** containing **potassium** hexafluorophosp-hate

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 110

Titel: FLAP **DISC**
Patentnummer: [WO200030809A1](#)
Anmeldung: WO1999EP08494
EP19990958000
DE19995002492T
DE19981053550
US20010856126
JP20000583675T
CA19992350060
AU20000015516
CN19998012671
AT19990958000T
DK19990958000T
ES19990958000T
HU20010004239
IN2001MN00603
PT19990958000T
RU20010116721
SK20010000592
TR20010001380T
ZA20010003288

Priorität: DE19981053550 19981120
DE19995002492T 19991105
WO1999EP08494 19991105

Patentfamilie: **WO200030809A1**
EP1131187B1
EP1131187A1
DE19853550C1
DE59902492D1
US6582289B1
JP4681120B2
JP2002530213T2
CA2350060C
CA2350060A
AU756920B2
AU200015516A5
AU200015516A1
CN1324287A
CN1131129C
AT222836E
DK1131187T3
ES2183627T3
HU227803B1
HU104239A3
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IN208358B
PT1131187T
RU2205102C2
RU2001116721A
SK200100592A5
TR200101380T2
ZA200103288A

Anmelder: EISENBERG GUSTAV
FERAJNIGTE SHMIRGEL U MASHIN
FERAJNIGTE SHMIRGEL UND MASHIN
SCHMIRGEL U MASCHINEN FABRIKEN AG VER
VER SCHMIRGEL AND MASCHF



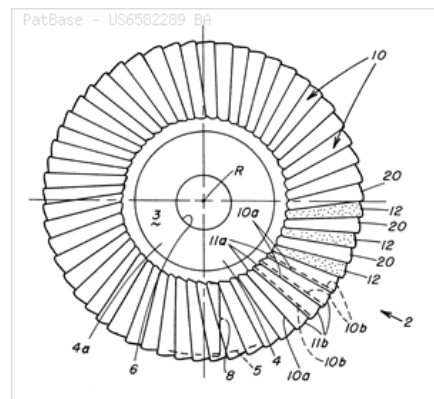
Erfinder: AJZENBERG GUSTAV
EISENBERG GUSTAV

IPC-Notationen: B24D0003-34
B24D0007-00
B24D0007-14
B24D0013-00
B24D0013-06
B24D0013-16

CPC-Notationen: B24D0003-34
B24D0013-01
B24D0013-16

Zusammenfassung:

Source: US6582289 BA [EN] A flap **disc** consists of a backing plate to whose peripheral zone laminae overlapping like a fan or roof tiles are attached. In order to improve the **abrasive** effect of such a flap **disc** using less material and simpler production, the lamellae 10 consist of first lamellae 12, comprising a backing 14, a base bonding coat 15 applied to the backing, a layer of **abrasive** grain 16 deposited over the base bonding coat 15, and a size coat 18 over the layer of deposited **abrasive** grain 16, and second lamellae 20, consisting of a backing 22 and a layer 24 with **grinding** active **fillers** applied to the backing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 111

Titel: [Grinding disk](#)
Patentnummer: [DE3112954C2](#)
Anmeldung: DE19813112954
US19810229671
AT19800001753
Priorität: AT19800001753 19800401
Patentfamilie: [DE3112954C2](#)
[DE3112954A1](#)
[US4381188A](#)
[AT370024B](#)
[AT175380A](#)
Anmelder: SWAROVSKI TYROLIT SCHLEIF
Erfinder: HELLETSBERGER HARALD DR
KRIEGSHABER CHRISTOF DR
SELGRAD VOLKER DR
WAIZER WALTER DR

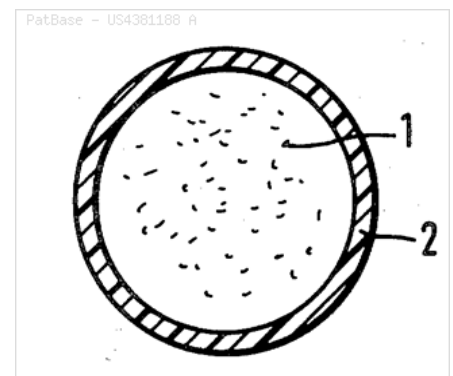


IPC-Notationen: [B24D0003-34](#)
[C08J0005-14](#)

CPC-Notationen: [B24D0003-34](#)
[B24D0003-346](#)

Zusammenfassung:

Source: US4381188 A [EN] An **abrasive disk** comprising **abrasive** grains such as corundum, a bonding material, for example a resin, and a **filler** material. At least part of the **filler** material is active in the **grinding** process. Particles of this **filler** material are provided in the **disk** in the form of pellets or granules. The pellets and granules preferably consist of more than one substance. One substance forms a matrix and at least one other substance is imbedded in said matrix



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 112

Titel: **ABRASIVE** ARTICLE WITH MICROPARTICLE-COATED **ABRASIVE** GRAINS
Patentnummer: [WO2020128783A1](#)
Anmeldung: WO2019IB60845
Priorität: US20180780958P 20181218
Patentfamilie: [WO2020128783A1](#)
Anmelder: 3M INNOVATIVE PROPERTIES CO
Erfinder: ALKHAS ROBINETTE S
BEIERMANN BRETT A
ECKEL JOSEPH B
ERICKSON DWIGHT D
GIVOT MAIKEN
NELSON THOMAS J
NIENABER AARON K
VAN LOC X

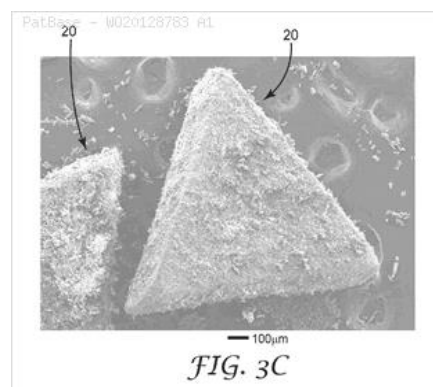


IPC-Notationen: [B24D0003-34](#)
C09K0003-14

CPC-Notationen: [B24D0003-346](#)
C09K0003-1436

Zusammenfassung:

Source: WO20128783 A1 [EN] An **abrasive** article comprising a plurality of shaped **abrasive** particles (20), each shaped **abrasive** particle comprising a microparticulate layer disposed on at least a portion of the outer surface of the **abrasive** particles, wherein the microparticulate layer comprises microparticles (22) dispersed in a microparticle binder and the **abrasive** particles are shaped **abrasive** particles and a binder in which the plurality of shaped **abrasive** particles are dispersed



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 113

Titel: **ABRASIVE** ARTICLES INCLUDING **ABRASIVE** PARTICULATE MATERIALS, COATED **ABRASIVES** USING THE **ABRASIVE** PARTICULATE MATERIALS AND METHODS OF FORMING



Patentnummer: [WO2013049239A1](#)

Anmeldung: WO2012US57376
EP20120836189
DE201260074163T
US20120627923
JP20140532115T
CA20122850147
CN201280047003
KR20147009628
BR20141107089

Priorität: US20110539236P 20110926
EP20120836189 20120926
US20120627923 20120926
WO2012US57376 20120926

Patentfamilie: **WO2013049239A1**
[EP2760639B1](#)
[EP2760639A1](#)
[EP2760639A4](#)
[DE602012074163D1](#)
[US9517546B2](#)
[US2013074418A1](#)
[JP5802336B2](#)
[JP2014526395T2](#)
CA2850147A
[CN103826802A](#)
[CN103826802B](#)
[KR20140075720A](#)
[KR101704411B1](#)
BR112014007089A2

Anmelder: PANZARELLA TRACY H
SAINT GOBAIN CERAM AND PLASTICS INC
SAINT GOBAIN CERAMICS
YENER DORUK O

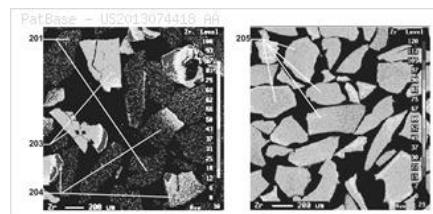
Erfinder: TRACY H PANZARELLA
YENER DORUK OMER

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

CPC-Notationen: [B24D0003-02](#)
[B24D0003-34](#)
[B24D0003-348](#)
C01P2004-50
C09C0001-64
C09K0003-14
C09K0003-1436

Zusammenfassung:

Source: US2013074418 AA [EN] An **abrasive** article includes an **abrasive** particulate material made of alumina crystals and a primary **additive** composition impregnated within the **abrasive** particulate material, the primary **additive** composition including a combination of Mg and Ca, wherein Mg and Ca are present in an **additive** ratio [Mg: Ca] within a range between about 1: 1 and about 10: 1, and further comprising at least about 0.2 wt percent Ca for the total weight of the **abrasive** particulate material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 114

Titel: COATED **ABRASIVE** PRODUCTS CONTAINING AGGREGATES

Patentnummer: [WO2010011579A3](#)

Anmeldung: WO2009US51045
EP20090800836
US20090505345
JP20110520113T
CA20092731768
CN200980133455
KR20137007985
KR20117004018
BR2009PI16391
IN2011MN00324
MX20110000753

Priorität: US20080082731P 20080722
US20090505345 20090717
WO2009US51045 20090717

Patentfamilie: [WO2010011579A3](#)
[WO2010011579A2](#)
[EP2307519A4](#)
[EP2307519A2](#)
[US8628383B2](#)
[US2010022170A1](#)
[JP5425199B2](#)
[JP2011528998T2](#)
[CA2731768C](#)
[CA2731768A](#)
[CN102149784A](#)
[CN102149784B](#)
[KR20130038958A](#)
[KR20110043707A](#)
[KR101333019B1](#)
[BRPI0916391A2](#)
[IN268894B](#)
[IN00324MN2011A](#)
[MX2011000753A1](#)

Anmelder: GAETA ANTHONY
MANNING JAMES
RAFFERTY COLLEEN
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
STARLING SHELLY C
STERNBERG MARK

Erfinder: GAETA ANTHONY C
MANNING JAMES J
RAFFERTY COLLEEN
STARLING SHELLY C
STERNBERG MARK

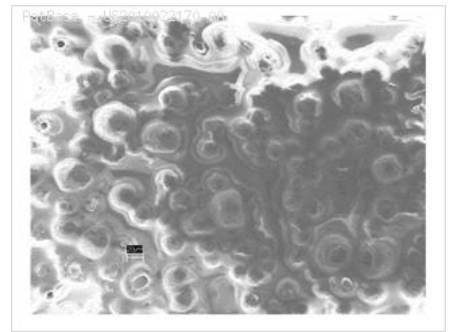
IPC-Notationen: B24B0001-00
[B24D0003-00](#)
B24D0011-00
[C08J0005-14](#)
C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
[B24D0003-346](#)
B24D0011-00
C09K0003-1409
C09K0003-1427



Zusammenfassung:

Source: US2010022170 AA [EN] A coated **abrasive** product includes a particulate material containing green, unfired **abrasive** aggregates having a generally spheroidal or toroidal shape, the aggregates formed from a composition comprising **abrasive** grit particles and a nanoparticle binder. Free **abrasive** products, bonded **abrasive** products, and the particulate material also contain aggregates



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 115

Titel: RESIN BONDED **ABRASIVE TOOL** AND METHOD OF MAKING THE **TOOL**

Patentnummer: [WO9922911A1](#)

Anmeldung: WO1998US16761
EP19980942044
US19970964766
JP20000518817T
CA19982302576
AU19980090181
IN1997BO00524
TH19981003499
ZA19980006824

Priorität: IN1997BO00524 19970908
US19970964766 19971105
WO1998US16761 19980820

Patentfamilie: **WO9922911A1**
EP1028829A1
US5912216A
JP2001521830T2
CA2302576A
AU199890181A1
IN186662A
TH34924A
ZA9806824A

Anmelder: GRINDWELL NORTON LIMITED
GRINDWELL NORTON LTD
NORTON CO

Erfinder: KUMARA KURUBARAN MURUGESAN
KURUBARAN MURUGESAN K
MEYER GERALD W
NANJUNDAIAH THIMMAPPAIAH CHANN
THIMMAPPAIAH CHANNARAYAPATNA N

IPC-Notationen: B24B0003-00
B24B0003-34
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0003-346

Zusammenfassung:

Source: US5912216 A [EN] A resin bonded **abrasive tool** consists of **abrasive** grain and an organic bond comprising a thermosetting resin, such as epoxy resin, phenolic resin or rubber or blends thereof and a precursor **filler** system capable of forming in situ an active **filler** system by reacting under the heat generated during **grinding**. The organic bond optionally further comprises a **filler** system. A method of making the resin bonded **abrasive tool** consists of mixing the **abrasive** grain and the organic bond with the precursor **filler** system, pressing the resulting mixture into shape, and curing the **abrasive tool** at about 150 to 200 DEG C

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 116



Titel: ENGINEERED **ABRASIVES**

Patentnummer: [DE10226358B4](#)

Anmeldung: DE20021026358
 US20010886847
 JP20060203569
 JP20020181108
 GB20020014420
 FR20020007591
 CA20022387293
 AU20020044400
 BR2002PI02339
 IN2002MA00463
 IT2002MI01288
 MX2002PA06319

Priorität: US20010886847 20010621
 CA20022387293 20020523
 JP20020181108 20020621

Patentfamilie: [DE10226358B4](#)
[DE10226358A1](#)
[US6451076B1](#)
[JP2007015103A2](#)
[JP2003025236A2](#)
[JP4648265B2](#)
[GB2378706B2](#)
[GB2378706A1](#)
[GB200214420A0](#)
[FR2826370B1](#)
[FR2826370A1](#)
[CA2387293C](#)
[CA2387293A](#)
[AU771669B2](#)
[AU200244400A5](#)
[AU200244400A1](#)
[BRPI0202339A](#)
[IN229330B](#)
[IN00463MA2002A](#)
[ITMI20021288A1](#)
[MXPA02006319A1](#)

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

Erfinder: DEVORET DAMIEN
 NEVORET DAMIEN
 PEHKONEN MARC
 SWEI GWO SHIN
 WEI PAUL

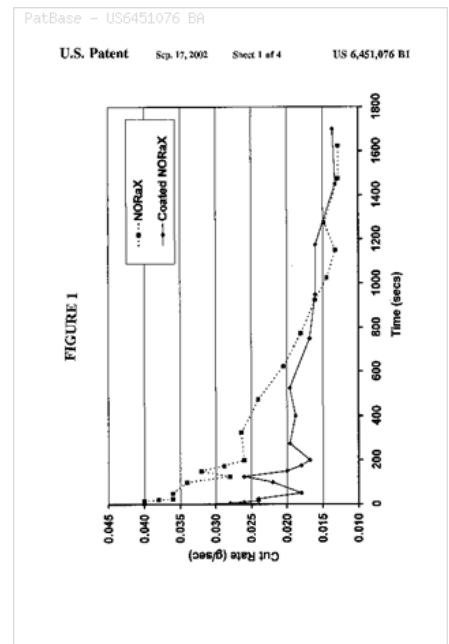
IPC-Notationen: B24B0037-00
[B24D0003-00](#)
 B24D0003-20
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[B24D0003-34](#)
 B24D0011-00
[C08J0005-14](#)
 C09K0003-14

CPC-Notationen: B24D0003-28
[B24D0003-346](#)
 C09K0003-1436



Zusammenfassung:

Source: US6451076 BA [EN] Coated **abrasives** suitable for very fine abrading applications can be obtained by depositing a layer of a formulation comprising **abrasive** grits, **fillers**, **grinding aid**, **additives** and a binder resin on a substrate in the form of a structured **abrasive**, adhering to the surface of the structured **abrasive** a functional powder; and then applying a top size coat over the functional powder



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 117

Titel: **ABRASIVE** ARTICLE AND METHOD FOR FORMING SAME

Patentnummer: [WO2019071053A1](#)

Anmeldung: WO2018US54474
EP20180864642
US20180152386
JP20200519388T
CA20183078474
CN201880072386
KR20207012750
BR20201106842
IN202027018499

Priorität: IN201741035158 20171004
WO2018US54474 20181004

Patentfamilie: **WO2019071053A1**
[EP3691830A1](#)
[US2019099859A1](#)
[JP2020536752T2](#)
[CA3078474A](#)
[CN111315535A](#)
[KR20200063211A](#)
[BR112020006842A2](#)
[IN202027018499A](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

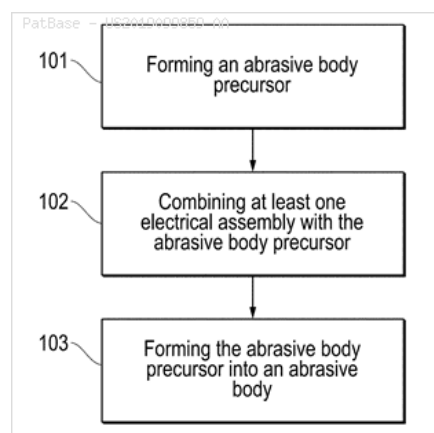
Erfinder: HARALUR GURULINGAMURTHY M
ROBIN CHANDRAS JAYARAM
THANGAMANI ARUNVEL

IPC-Notationen: B24B0037-20
B24B0049-00
B24D0003-02
B24D0007-00
B24D0011-00
B24D0018-00
B24D0099-00

CPC-Notationen: B24B0049-00
B24D0003-02
B24D0011-001
B24D0018-0009
B24D0018-0072
B24D0099-00

Zusammenfassung:

Source: US2019099859 AA [EN] An **abrasive** article includes an **abrasive** body having a bond material, **abrasive** particles contained within the bond material, and an electronic assembly coupled to the **abrasive** body, wherein the electronic assembly comprises at least one electronic device. In an embodiment, the electronic assembly is coupled to the **abrasive** body in a tamper-proof manner



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 118

Titel: ELECTRICALLY CONDUCTIVE GRINDER

Patentnummer: [EP2329917A1](#)

Anmeldung: EP20100187723
DE200910047583

Priorität: DE200910047583 20091207

Patentfamilie: [EP2329917A1](#)
[DE102009047583A1](#)

Anmelder: BOSCH GMBH ROBERT

Erfinder: HLAVAC MARCUS

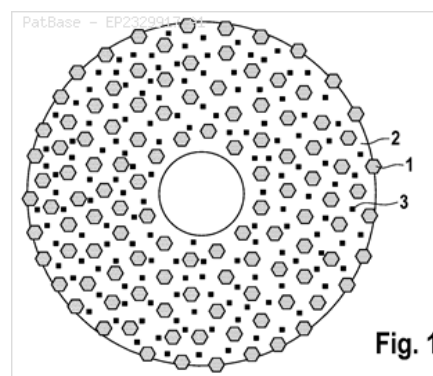
IPC-Notationen: [B24D0003-00](#)
[B24D0003-20](#)
[B24D0003-34](#)

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



Zusammenfassung:

Source: EP2329917 A1 [EN] The electrically conductive **grinding tool** comprises **abrasive** particles (1) , an electrically conductive bonding matrix (2) , where the **abrasive** particles are integrated into the bonding matrix, which comprises an electrically conductive polymer and/or a polymer, and a base body on which the **abrasive** particles are applied to integrated bonding matrix. The polymer has an electrically conductive **additive** (3) . The **abrasive** particles are integrated in homogeneous distributed into the bonding matrix, which is elastic. The **grinding tool** is formed in the form of a rotational symmetric body. The electrically conductive **grinding tool** comprises **abrasive** particles (1) , an electrically conductive bonding matrix (2) , where the **abrasive** particles are integrated into the bonding matrix, which comprises an electrically conductive polymer and/or a polymer, and a base body on which the **abrasive** particles are applied to integrated bonding matrix. The polymer has an electrically conductive **additive** (3) . The abrasive particles are integrated in homogeneous distributed into the bonding matrix, which is elastic. The grinding tool is formed in the form of a rotational symmetric body. The base body is formed in the form of a rotational symmetric body, where the abrasive particles are applied to integrated bonding matrix on the lateral surface the base body and/or one or two top surfaces of the base body. The base body is formed in the form of a disk, where the abrasive particles are applied to integrated bonding matrix on the lateral surface of the disk. An independent claim is included for a material removal process for machining and electrochemical removal of material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 119

Titel: GRINDING MEANS, IN PARTICULAR ABRASIVE DISK

Patentnummer: [WO2018054556A1](#)

Anmeldung: WO2017EP56877

Priorität: DE201610118128 20160926

Patentfamilie: [WO2018054556A1](#)

Anmelder: KLINGSPOR AG

Erfinder: WOZNIAK JANUSZ

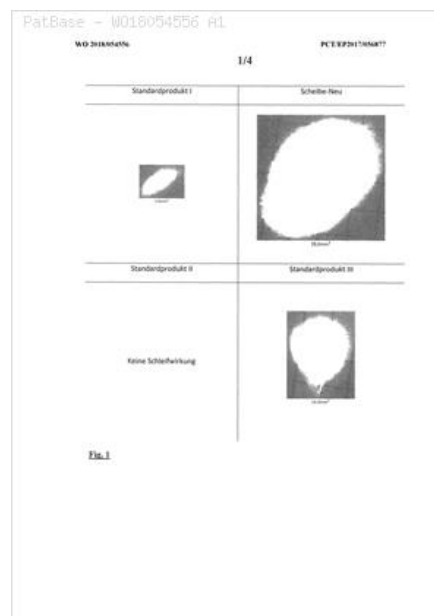


IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)

CPC-Notationen: [B24D0003-004](#)
[B24D0003-34](#)

Zusammenfassung:

Source: WO18054556 A1 [EN] The invention relates to a grinding means, in particular an abrasive disk, characterized by a coating containing at least one fluoropolymer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 120

Titel: ABRASIVE ARTICLE AND ABRASIVE

Patentnummer: EP0375803A1

Anmeldung: EP19890111276
EP19880121884
US19890457953
JP19890338836
CA19892006775

Priorität: EP19880121884 19881230
EP19890111276 19890621
CA19892006775 19891228

Patentfamilie: EP0375803A1
EP0379633A3
EP0379633A2
US5116392A
JP2289672A2
CA2006775A

Anmelder: SWAROVSKI TYROLIT SCHLEIF

Erfinder: FUORUKAA ZERUGURAATO
FURIIDORITSUHI SURADOKII
SELGRAD VOLKER DR
SLADKY FRIEDRICH DR

IPC-Notationen: B24D0003-02
B24D0003-04
B24D0003-28
B24D0003-34
C09K0003-14

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0003-346

Zusammenfassung:

Source: US5116392 A [EN] An **abrasive** article with **abrasive** grain such as corundum, a binder which is a hardenable organic or inorganic system, for example plastic, such as phenol resin, and grinding-active **fillers**, as well as an **abrasive** with **abrasive** grain such as corundum, a binder which is a hardenable organic or inorganic system, for example plastic, such as phenol resin, and grinding-active **fillers**. The **abrasive** compound of the **abrasive** consisting of **abrasive** grain, binder and the **fillers** is placed on a flexible substrate, which is formed by a nonwoven fabric. New low-priced **fillers** with low toxicity are incorporated in the **abrasive** article and, in fact, metal complex salts with the following structure: $uM_1xvM_2wHalxxChalxzPh$ where: M1=pure metal or mixture of alkali metal, alkaline earth metal and/or Al M2=pure metal or mixture of Zn, Mn, Fe except for Fe as **chloride** Hal=pure **halogen** or mixture of **F, Cl, Br, I** Chal=chalcogenides, O and/or S Ph=phosphate or more highly condensed phosphates PrO_s ($r=1$ to 10 , preferably 1 to 2 , $s=4$ to 20 , preferably 4 to 7) u, v, w, x or $z=0$ to 95 percent, and the total of u and $v=1$ to 95 percent, preferably 20 to 80 percent, and the total of w, x and $z=1$ to 95 percent, preferably 20 to 80 percent, and that the total of u, v, w, x and z is 100 percent. These fillers are melted or sintered with each other

PatBase - 3689059 US5116392 A



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 121

Titel: **Grinding aid**

Patentnummer: [EP0185996A3](#)

Anmeldung: EP19850115461
US19840681052
JP19850236508

Priorität: US19840681052 19841213

Patentfamilie: [EP0185996A3](#)
[EP0185996A2](#)
[US4609381A](#)
[JP61146474A2](#)

Anmelder: NORTON CO

Erfinder: KESHIYU SAMUPASU NARAYANAN
NARAYANAN KESH SAMPATH
SHIYOASHIYU SHIYANKARAPA BAGAR
VAGARALI SURESH SHANKARAPPA

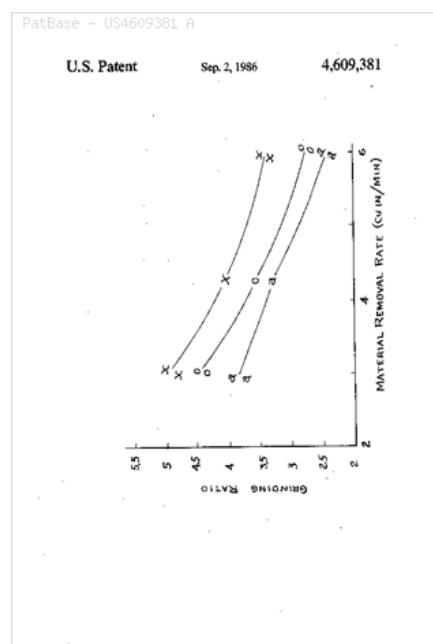


IPC-Notationen: [B24D0003-02](#)
[B24D0003-20](#)
[B24D0003-28](#)
[B24D0003-34](#)

CPC-Notationen: [B24D0003-344](#)
[B24D0003-346](#)

Zusammenfassung:

Source: US4609381 A [EN] This invention relates to organically bonded **abrasive** articles that include **grinding** aids. It has been determined that when known **grinding** aids such as alkali metal sulphates and alkali metal **chlorides** are cofused in about eutectic proportions and added to thermoset resin bonded **abrasive** articles in the form of finely crushed particles having an approximate eutectic composition that an improved **abrasive** article results



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 122

Titel: **Abrasive** article containing a **grinding aid** and method of making the same

Patentnummer: [WO9922912A1](#)

Anmeldung: WO1998US23202
EP20070001220
EP19980957466
DE19986042662
DE19986040935T
US19980167081
JP20000518818T
CA19982309452
AU19990013718
CN19988012904
KR20007004824
BR1998PI14835

Priorität: US19970962622 19971103
US19980167081 19981006
EP19980957466 19981102
EP20070001220 19981102
WO1998US23202 19981102

Patentfamilie: **WO9922912A1**
EP1800801B1
EP1035948B1
EP1035948A1
EP1800801A3
EP1800801A2
DE69842662D1
DE69840935D1
US6039775A
JP2001521831T2
CA2309452A
AU199913718A1
CN1284904A
CN1082869C
KR20010031759A
BRPI9814835A

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

Erfinder: FOLLENSBEE R A
FOLLENSBEE ROBERT A
HARMER WALTER L
HARMET W L
HO K L
HO KWOK LUN
MORRIS MARY L

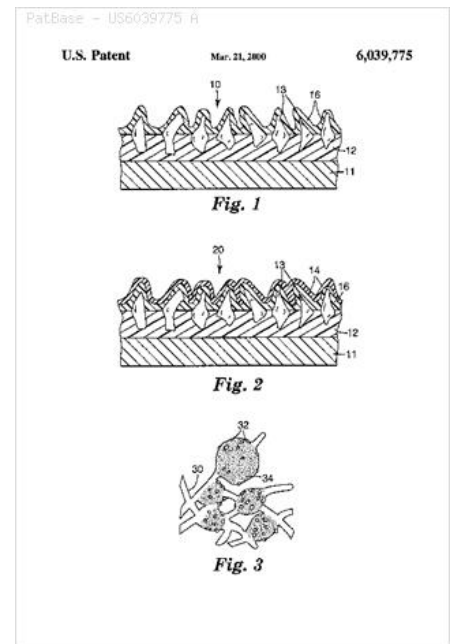
IPC-Notationen: **B24D0003-02**
B24D0003-28
B24D0003-34
B24D0011-00

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



Zusammenfassung:

Source: US6039775 A [EN] An **abrasive** article is provided which includes a peripheral surface formed comprising a **grinding aid**. The **grinding aid** is formed from a mixture including an acid and at least one of an inorganic metal phosphate salt or an inorganic metal sulfate salt. The acid is preferably selected so that the mixture forms a film. The **abrasive** article preferably has sharp **abrasive** particles. The inventive **abrasive** article improves **grinding** efficacy, particularly in titanium **grinding** processes, as compared to **abrasive** articles that are substantially devoid of a **grinding aid** of the present invention. Also provided is a method for making an **abrasive** article and a method of abrading a surface with an **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 123

Titel: MAGNESIUM OXYCHLORIDE PLUG-FILLED MAGNESIUM OXYCHLORIDE BONDED
ABRASIVE

Patentnummer: [US6214067B1](#)

Anmeldung: US19990401831

Priorität: US19990401831 19990922

Patentfamilie: [US6214067B1](#)

Anmelder: HANSON DAVID B

Erfinder: HANSON DAVID B

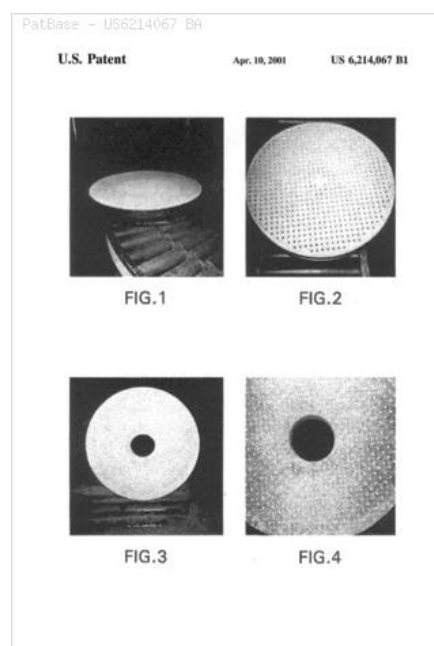


IPC-Notationen: [B24D0003-04](#)
B24D0003-14
[B24D0003-34](#)
B24D0007-00
B24D0007-02
B24D0018-00

CPC-Notationen: B24D0003-14
[B24D0003-34](#)
B24D0007-02
B24D0018-0027

Zusammenfassung:

Source: US6214067 BA [EN] Corrugated **abrasive discs** such as **grinding wheels** are treated by applying a water-resistant coating to the interiors of the corrugations before the corrugations are plugged. **Discs** having water-sensitive matrices such as magnesium oxychloride cement are thus protected against water or water vapor seepage from aqueous-based plug fill material



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 124

Titel: COATED **ABRASIVES** HAVING A BLEND OF **ABRASIVE** PARTICLES AND INCREASED TEAR RESISTANCE



Patentnummer: [WO2018081546A1](#)

Anmeldung: WO2017US58742
US20170795982
CA20173041671
MX20190004497

Priorität: US20160414692P 20161029
US20170795982 20171027
WO2017US58742 20171027

Patentfamilie: **WO2018081546A1**
[US10967484B2](#)
[US2018117737A1](#)
[CA3041671A](#)
[MX2019004497A1](#)

Anmelder: SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC

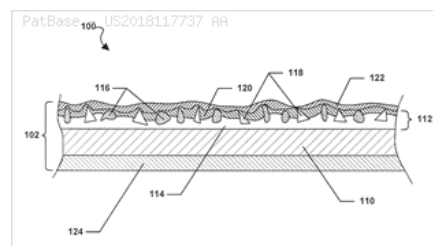
Erfinder: CHRISTOPHER J CHILTON
GAETA ANTHONY C
HERBERT CHARLES G
JAMES M GARRAH
MAASSEL ANNA
NGUYEN ANTHONY TRUC
PARKER DUSTIN JEREMY JAMES
WANG FEI
YENER DORUK O

IPC-Notationen: B24D0003-14
B24D0003-28
B24D0003-34
B24D0011-02
C09K0003-14

CPC-Notationen: B24D0003-14
B24D0003-28
B24D0003-34
B24D0011-02

Zusammenfassung:

Source: US2018117737 AA [EN] The present invention relates generally to coated **abrasive** articles that include a blend of **abrasive** particles, an increased tear resistance, or combinations thereof, as well as methods of making and using said coated **abrasive** articles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 125

Titel: Self-cooling, non-loading abrading **tool**
Patentnummer: [US4720941A](#)
Anmeldung: US19860877137
Priorität: US19860877137 19860623
Patentfamilie: **US4720941A**
Anmelder: JO ED ENTERPRISES INC
Erfinder: BELIEFF JOHN R
SOUTHWARD CLARENCE E

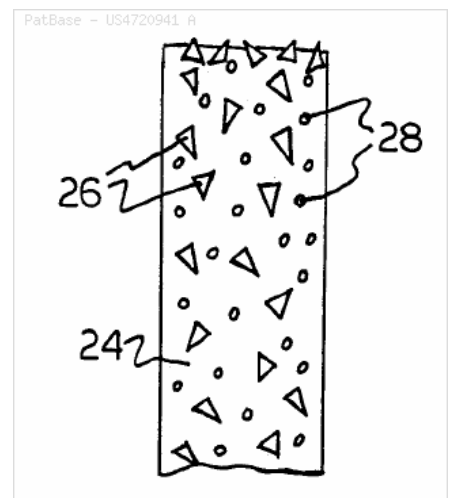


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0018-00

Zusammenfassung:

Source: US4720941 A [EN] A **tool** for **sanding**, **grinding**, or polishing ferrous or non-ferrous work pieces which includes a plurality of **abrasive** particles, such as silica sand or the like, embedded in a binder matrix formed primarily of polytetrafluoroethylene and equivalent polymers. The matrix may further include a stiffening agent for adding rigidity to the **tool**, such as ground glass



Datum des Suchlaufs: 07.04.2021
Dokument Nr.: 126

Titel: **ABRASIVE** ARTICLES INCLUDING AN ANTI-LOADING SIZE LAYER

Patentnummer: [WO2019123335A1](#)

Anmeldung: WO2018IB60376
WO2018CN121974
EP20180892365
EP20180890219
US20200955678
US20180955592
CA20183086471
CA20183086438

Priorität: US20170608350P 20171220
US20180698729P 20180716
US20180955592 20181219
US20180955678 20181219
WO2018CN121974 20181219
WO2018IB60376 20181219

Patentfamilie: [WO2019123335A1](#)
[WO2019120211A1](#)
[EP3727753A1](#)
[EP3727749A1](#)
[US2021069865A1](#)
[US2020338692A1](#)
[CA3086471A](#)
[CA3086438A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
CHEN JING

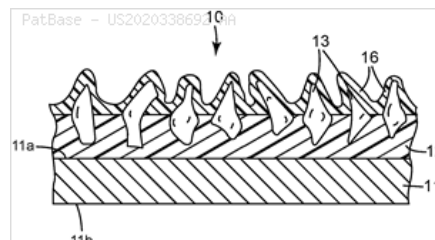
Erfinder: CHEN JING
CONKLIN BATHSHEBA E CHONG
FLOYD THOMAS W
GORGAN ADRIANA C
KLUN THOMAS P
LIU LAN HONG
WANG ZHONGMIN
WU DONG

IPC-Notationen: B24D0003-28
[B24D0003-34](#)
B24D0011-00
B24D0011-02
B24D0011-04
B24D0018-00

CPC-Notationen: B24D0003-28
[B24D0003-346](#)
B24D0011-00
B24D0011-02
B24D0018-0072

Zusammenfassung:

Source: US2020338692 AA [EN] The present [disclosure](#) relates to an **abrasive** article construction containing an anti-loading composition which significantly reduces loading, is coatable, is durable, and is relatively inexpensive to manufacture. In particular, the use of the anti-loading compositions of the present [disclosure](#) as a size coat at least reduces if not eliminates the need for a supersize coat, while offering comparable if not superior performance and durability. In one aspect, the present [disclosure](#) provides an **abrasive** article including a backing with a first major surface and an opposing second major surface, an **abrasive** layer bonded to at least a portion of the first major surface, with the **abrasive** layer comprising **abrasive** particles retained in a make coat. The **abrasive** article further includes an anti-loading size layer comprising a size coat binder and wax at least partially disposed on the **abrasive** layer



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 127

Titel: **ABRASIVE** ARTICLES INCLUDING A CROSSLINKED SILOXANE, AND METHODS OF MAKING AND USING SAME

Patentnummer: [EP0560059B1](#)

Anmeldung: EP19930101898
DE19936001615T
US19920832474
JP19930018496
CA19932087131
AU19930031975
KR19930001530
ZA19930000226

Priorität: US19920832474 19920207
CA19932087131 19930112

Patentfamilie: [EP0560059B1](#)
[EP0560059A3](#)
[EP0560059A2](#)
[DE69301615T2](#)
[DE69301615D1](#)
[US5213589A](#)
[JP5278178A2](#)
[CA2087131A](#)
[AU660060B2](#)
[AU199331975A1](#)
[KR930018004A](#)
[KR19930018004A](#)
[ZA9300226A](#)

Anmelder: 3M CO
MINNESOTA MINING AND MFG

Erfinder: LEIR CHARLES MARTIN
RONNING ALBERT JAMES

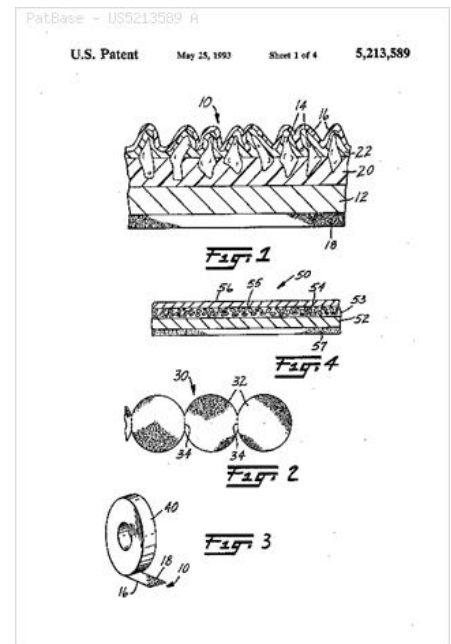
IPC-Notationen: B24D0003-28
[B24D0003-34](#)
B32B0027-14
[C08J0005-14](#)
C08J0007-00
C08J0007-04
C09D0183-00
C09D0183-04
C09K0003-14

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



Zusammenfassung:

Source: US5213589 A [EN] An **abrasive** article is provided, the article including a substrate having an **abrasive** surface thereon including particles of an **abrasive** material secured by a binding medium wherein at least a portion of the **abrasive** surface has thereon a coating including a crosslinked siloxane. Methods of making and using such an articles are also presented



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 128

Titel: Thermosetting plastic powder mixtures

Patentnummer: [EP0595003B1](#)

Anmeldung: EP19930114722
DE19935000950T
DE19934328345
US19930138350
FR19930012874
AT19930114722T
DK19930114722T
ES19930002206
GR19940300031T
IT1993RM00642

Priorität: DE19924236284 19921028
DE19934328345 19930824
DE19935000950T 19930914

Patentfamilie: [EP0595003B1](#)
[EP0595003A1](#)
[DE4328345A1](#)
[DE59300950D1](#)
[US5399606A](#)
[FR2697262B3](#)
[FR2697262A3](#)
[AT130231E](#)
[DK0595003T3](#)
[ES2079305B1](#)
[ES2079305A6](#)
[ES2079305AC](#)
[GR940300031T1](#)
[IT1261939B](#)
[ITRM930642A1](#)
[ITRM930642A0](#)

Anmelder: BAKELITE AG
RUETGERSWERKE AG
RUTGERSWERKE AG

Erfinder: GARDZIELLA ARNO DR
HANSEN ACHIM DR
KOENIG MICHAEL
MICHAEL KONIG
SUREN JOSEF

IPC-Notationen: B24D0003-28
[B24D0003-34](#)
C08G
[C08J0005-14](#)

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

Zusammenfassung:

Source: US5399606 A [EN] A homogenous non-tacky thermosetting plastic powder mixture formed by mixing component A comprising a solid phenol novolac resin powder and a hardener containing a small amount of an oil-like substance liquid at room temperature with component B comprising a liquid resol, **fillers** and optionally **additives** which when containing an **abrasive** are useful for the production of **filler-containing** shaped **elements** or resin-bonded **grinding elements**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 129



Titel: POWDER MIXT. FOR MFG. **GRINDING TOOLS** - CONTAINS **ABRASIVE** AND METAL BINDER, AND FLUX MIXT. EMPLOYED TO REDUCE SINTERING TEMP

Patentnummer: [DE2915651A1](#)

Anmeldung: DE19792915651

Priorität: DE19792915651 19790418

Patentfamilie: [DE2915651A1](#)

Anmelder: VNII KT I PRIRODNYCH ALMAZOV

Erfinder: LVOV VLADIMIR NIKOLAEVITSCH
SAFRONOV VLADIMIR GAVRILOVITSC



IPC-Notationen: [B24D0003-34](#)

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

Zusammenfassung:

Source: DE2915651 A1 [EN] The mixt. contains an **abrasive**, a metal powder and 1-14.5 weight percent of at least two salts contg. **Cl, F** and/or B, with different m.pt.s. The pref. salts include B₂O₃, H₃BO₃, borofluorides, double salts, and/or a eutectic mixt. of usch salts, e.g. **chlorides**. The mixt. is compaced and sintered to make **tools** for **grinding** hard alloys and brittle non-metallic materials. The salts acts as fluxes removing oxide films from the metal powder and lowering the sintering temp

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 130

Titel: POWDER MIXT. FOR MFG. **GRINDING TOOLS** - CONTAINS **ABRASIVE** AND METAL BINDER, AND FLUX MIXT. EMPLOYED TO REDUCE SINTERING TEMP

Patentnummer: [FR2457886A1](#)

Anmeldung: FR19790014005

Priorität: FR19790014005 19790531

Patentfamilie: **FR2457886A1**

Anmelder: INST PRIRODNYKH ALMAZOV I

Erfinder: LVOV V N
SAFRONOV V G



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-342**

Zusammenfassung:

Source: FR2457886 A1 [EN] The mixt. contains an **abrasive**, a metal powder and 1-14.5 weight percent of at least two salts contg. **Cl, F** and/or B, with different m.pts. The pref. salts include B2O3, H3BO3, borofluorides, double salts, and/or a eutectic mixt. of usch salts, e.g. **chlorides**. The mixt. is compaced and sintered to make **tools** for **grinding** hard alloys and brittle non-metallic materials. The salts acts as fluxes removing oxide films from the metal powder and lowering the sintering temp

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 131

Titel: **ABRASIVES**
Patentnummer: [US2811430A](#)
Anmeldung: US19550503795
Priorität: US19550503795 19550425
Patentfamilie: **US2811430A**
Anmelder: ABRASIVE AND METAL PRODUCTS CO
Erfinder: GREGOR JOHN R
ORDEN HAROLD E VAN



IPC-Notationen: **B24D0003-34**

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2811430 A [EN] (Claim 1) 1. An **abrasive** article comprising **abrasive** grains, a thermostat binder resin and a **filler** consisting of at least one alkali metal salt of sulfuric, hydrochloric and hydrobromic acids in admixture with from 5 % to 70% zinc sulfide by volume of the total mixed **filler**, said admixed filler constituting at least about 2% by volume of the total bonding material

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 132

Titel: RESINOID BONDED **ABRASIVE WHEELS**
Patentnummer: [US2952529A](#)
Anmeldung: US19580706541
Priorität: US19580706541 19580102
Patentfamilie: [US2952529A](#)
Anmelder: BAY STATE ABRASIVE PRODUCTS CO
Erfinder: NATHAN STONE H



IPC-Notationen: [B24D0003-34](#)

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

Zusammenfassung:

Source: US2952529 A [EN] (Claim 1) 1. An **abrasive** sulfur free **wheel** which consists of **abrasive** granules and a bond, said bond being free of sulfur _and comprising essentially a heat-hardenable resin, about 27% by volume of **cryolite** and about 14% by volume of ammonium **chloride**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 133

Titel: Improvement in manufacture of **abrasive** articles

Patentnummer: [US2216135A](#)

Anmeldung: US19370143938
GB19380014256

Priorität: US19370143938 19370521

Patentfamilie: [US2216135A](#)
[GB501243A](#)

Anmelder: US RUBBER CO
US RUBBER PROD INC

Erfinder: RAINIER EDWIN T

IPC-Notationen: [B24D0003-34](#)
C08L0061-00
C08L0061-10

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



Zusammenfassung:

Source: GB501243 A [EN] [Class 70] [Also in Group IV] In an **abrasive** article such as a grindingwheel, the **abrasive** grains are bound by an organic bond such as rubber or a resinoid containing sodium or **potassium chloride**. The salt may comprise, in the case of rubber bonded articles, from 10 to 40 per cent by volume of the binder and in resin bonded **wheels** from 10 to 20 per cent by volume of the binder. In examples, (1) sodium **chloride** is used in a rubber bonded **abrasive**, (2) sodium **chloride** is used in an **abrasive** article bonded by 'Bakelite' (Registered Trade Mark) and (3) sodium **chloride** is used in an **abrasive** article bonded by a mixture of softened rubber and 'Bakelite,' the **abrasive** grains being first coated with 'Bakelite' and then admixed with the softened rubber. The rubber may be softened by melting or by the use of phenylhydrazine-zinc **chloride**. The Specification as open to inspection under Sect. 91 comprises also the use of an anhydrous, water-soluble, non-oxidizing, inorganic alkali or alkaline earth metal salt having a melting point between 700 and 1200 C., such as potassium carbonate, sulphate or pyrophosphate, sodium carbonate, sulphate or pyrophosphate, calcium chloride or bromide, magnesium sulphate, chloride or bromide, barium chloride or bromide, lithium sulphate, or strontium chloride. This subject-matter does not appear in the Specification as accepted

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 134

Titel: COATED SUBSTRATE WITH ENERGY CURABLE CYANATE RESIN

Patentnummer: [WO03033212A1](#)

Anmeldung: WO2002US23667
EP20020756658
DE20026019811T
US20010978972
JP20030535987T
AT20020756658T

Priorität: US20010978972 20011015
WO2002US23667 20020725

Patentfamilie: [WO03033212A1](#)
[EP1436122B1](#)
[EP1436122A1](#)
[DE60219811T2](#)
[DE60219811D1](#)
[US6709738B2](#)
[US2003148106A1](#)
[JP2005505432T2](#)
[AT360502E](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

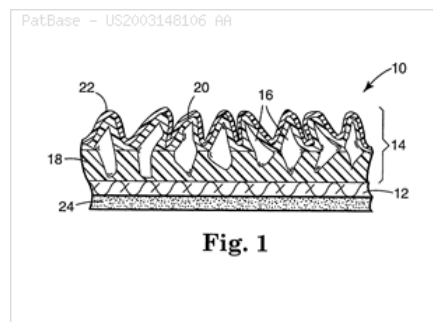
Erfinder: DEVOE ROBERT J
HINE ANDREW M
KINCAID DON H
MA JINGWEN
THURBER ERNEST L

IPC-Notationen: B05D0007-00
[B24D0003-00](#)
B24D0003-20
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C09D0004-02
C09D0133-04
C09D0163-00
C09D0165-00
C09D0167-00
C09D0179-00
C09D0179-04

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
B24D0011-005
C09D0179-04
Y10T0428-24033
Y10T0428-24355
Y10T0428-24405
Y10T0428-249955
Y10T0428-249958
Y10T0428-31504
Y10T0428-31551
Y10T0428-31554
Y10T0428-31855

Zusammenfassung:

Source: US2003148106 AA [EN] Provided is a treated substrate comprising a backing material coated with a resin derived from a curable precursor resin, which comprises an energy-curable component comprising a cyanate ester resin and a curing agent. Also provided is an **abrasive** article comprising a plurality of **abrasive** particles incorporated into a bond system, wherein the bond system comprises a make resin derived from a first curable precursor resin, which comprises a first curable component comprising a cyanate ester resin and a first curing agent, and wherein the bond system additionally comprises a size resin derived from a second curable precursor resin, which comprises a second curable component comprising a cyanate ester resin and a second curing agent. Also provided are methods of making a treated substrate and an **abrasive** article



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 135

Titel: COATED **ABRASIVE** ARTICLE

Patentnummer: [WO03089194A1](#)

Anmeldung: WO2003US07395
EP20030716455
DE20036021154T
US20020125938
JP20030585934T
AU20030220160
AT20030716455T
BR2003PI09072

Priorität: US20020125938 20020419
WO2003US07395 20030307

Patentfamilie: [WO03089194A1](#)
[EP1497079B1](#)
[EP1497079A1](#)
[DE60321154D1](#)
[US6773474B2](#)
[US2003200701A1](#)
[JP4328629B2](#)
[JP2005523169T2](#)
[AU2003220160A1](#)
[AT396011E](#)
[BRPI0309072B1](#)
[BRPI0309072A](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO

Erfinder: KOEHNLE GREGORY A
WOO EDWARD J

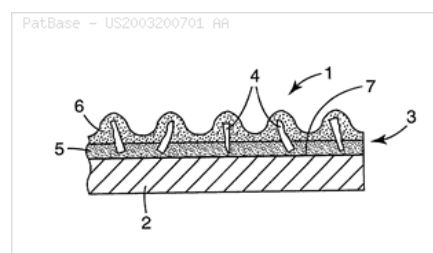


IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00
C08F0290-00
C08F0290-06
C08L0063-00
C09D0004-00

CPC-Notationen: B24D0003-28
[B24D0003-344](#)
C08F0290-061
C08L0063-00

Zusammenfassung:

Source: US2003200701 AA [EN] Coated **abrasive** articles comprise a backing and an **abrasive** layer, and optionally at least one of a backsize layer, tie layer, supersize layer, presize layer, or saturant. The coated **abrasive** article comprises a reaction product of components comprising: polyfunctional acrylate; polyfunctional cationically polymerizable material; free radical photoinitiator; triarylsulfonium salt having the formula 1 [FTIMG=183852767] wherein R 1, R 2 and R 3 independently represent an, optionally substituted, aromatic group having from about 4 to about 20 carbon atoms, and Y - represents a non-interfering anion; and quaternary ammonium salt having the formula 2 [FTIMG=183852769] wherein X - is a non-interfering anion



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 136

Titel: COATED **ABRASIVE** SYSTEMS EMPLOYING IONIZING IRRADIATION CURED EPOXY RESINS AS BINDER



Patentnummer: [WO9832566A1](#)

Anmeldung: WO1998EP00322
EP19980903020
DE19986016643T
US19970788961
CA19982278135
AT19980903020T
BR1998PI06984
ES19980903020T

Priorität: US19970788961 19970124
WO1998EP00322 19980122

Patentfamilie: [WO9832566A1](#)
[EP1027190B1](#)
[EP1027190A1](#)
[DE69816643T2](#)
[DE69816643D1](#)
[US5730764A](#)
[CA2278135A](#)
[AT245511E](#)
[BRPI9806984A](#)
[ES2203923T3](#)

Anmelder: KEMMERER RICHARD
UCB S A
WILLIAMSON SUE ELLEN

Erfinder: KEMMERER RICHARD R
WILLIAMSON SUE ELLEN

IPC-Notationen: B24D0003-20
B24D0003-28
[B24D0003-34](#)
B24D0011-00

CPC-Notationen: B24D0003-28
[B24D0003-34](#)
Y10S0430-114
Y10S0430-115

Zusammenfassung:

Source: US5730764 A [EN] Coated **abrasive** products are **disclosed** in which an ionizing irradiation curable epoxy resin formulation is employed as an **abrasive** binder. The ionizing irradiation curable epoxy resin formulation contains an onium salt initiator and is employed as at least one of the coatings of the coated **abrasive** product

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 137

Titel: FRICTION MATERIAL

Patentnummer: [US6447917B2](#)

Anmeldung: US20000748267
JP19990374008

Priorität: JP19990374008 19991228

Patentfamilie: [US6447917B2](#)
[US2001024917A1](#)
[JP2001181607A2](#)
[JP3883350B2](#)

Anmelder: AKEBONO BRAKE IND CO LTD
NISSAN MOTOR CO LTD
OGATA YOSHIO
SASAKI YOSUKE

Erfinder: OGATA YOSHIO
SASAKI YOSUKE



IPC-Notationen: [C08J0005-14](#)
C09K0003-14
F16D0065-00
F16D0069-02

CPC-Notationen: F16D0065-0006
F16D0069-026
Y10T0428-249924
Y10T0428-249938
Y10T0428-24994
Y10T0428-249964
Y10T0428-2913
Y10T0428-3154
Y10T0442-2311

Zusammenfassung:

Source: US2001024917 AA [EN] A friction material for brake including reinforcing fibers, a friction modifier, a lubricant, and a binder, characterized by containing, as a part of the component of the friction modifier, 2 to 5 wt percent zeolite, 0.8 to 2 wt percent **antimony** oxide and 0.2 to 1 wt percent **fluorine** based polymer

	フェノール樹脂	アラミド繊維、アラミドパルプ	潤滑材	ゼオライト	酸化アンチモン	四フッ化エチレンポリマー	その他の摩擦調整材
実施例 1	20	12	15	2	0.8	0.2	50
実施例 2	20	12	15	2	2	0.2	48.8
実施例 3	20	12	15	2	0.8	1	49.2
実施例 4	20	12	15	2	2	1	48
実施例 5	20	12	15	5	0.8	0.2	47
実施例 6	20	12	15	5	2	0.2	45.8
実施例 7	20	12	15	5	0.8	1	46.2
実施例 8	20	12	15	5	2	1	45
比較例 1	20	12	15	0	0.8	1	51.2
比較例 2	20	12	15	2	0	0.2	50.8
比較例 3	20	12	15	2	0.8	0	50.2

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 138

Titel: FRICTION FACING COMPOSITION AND METHOD OF MANUFACTURE
Patentnummer: [US6534565B1](#)
Anmeldung: US20010940840
Priorität: US20010940840 20010828
Patentfamilie: [US6534565B1](#)
[US2003041524A1](#)
Anmelder: DELPHI TECH INC
Erfinder: GARDNER THOMAS HALEY
LAMPORTE ROBERT ANTHONY



IPC-Notationen:	C08J0005-14	CPC-Notationen:	D21H0013-26
	D21H0013-00		D21H0013-40
	D21H0013-26		D21H0013-46
	D21H0013-40		D21H0013-50
	D21H0013-46		D21H0017-02
	D21H0013-50		D21H0017-48
	D21H0017-00		F16D0069-026
	D21H0017-02		F16D2200-0095
	D21H0017-48		
	F16D0069-02		

Zusammenfassung:

Source: US2003041524 AA [EN] Friction materials for clutch plates, brake shoes and the like are formed of a paper having reduced or eliminated non-functional processing **additives**. The paper composition includes components selected from a group consisting of aramid pulp, aramid staple, carbon/polyacrylonitrile fibers, glass wool, **potassium** octatitinate, bronze wool, high surface area filter cake, graphite, amorphous carbon and cyanated phenolic resin. The paper composition may be precompounded to a particle size in the range of 60 to 200 mesh. Part molding may be carried out by microwave heating the paper at 250 degrees to 550 degrees Fahrenheit The precompounded and dispersed resin provides improved bonding of parts to clutch plates or brake shoes and the like

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 139

Titel: SUPERABRASIVE COATINGS

Patentnummer: [WO2006113447A3](#)

Anmeldung: WO2006US14098
US20070872624

Priorität: US20050671231P 20050414
WO2006US14098 20060414
US20070872624 20071015

Patentfamilie: [WO2006113447A3](#)
[WO2006113447A2](#)
[US2008178536A1](#)

Anmelder: JOHNSON EDWARD C
JOHNSON TED

Erfinder: JOHNSON EDWARD C
JOHNSON TED

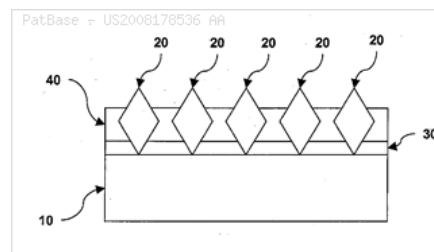
IPC-Notationen: B05D0003-00
B05D0005-02
B24C0011-00
C09K0003-14

CPC-Notationen: [B24D0003-06](#)
B24D0018-0009
B24D0018-0018
C09D0183-16



Zusammenfassung:

Source: US2008178536 AA [EN] The present invention relates to a method for producing an **abrasive**. The **abrasive** is embedded into silazane resin that has been coated onto a work surface. The **abrasive** may include **abrasive** particles such as diamond or cubic boron nitride and may additionally include silazane resin which is then embedded in the silazane resin coating



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 140

Titel: **CUTTING ELEMENT** COMPOSITION COMPRISING AN INTEGRATED LUBRICANT

Patentnummer: [WO2012069266A1](#)

Anmeldung: WO2011EP68615
EP20110781470
DE201150013931T
DE201010062066
CN201180056223
KR20137013331
ES20110781470T

Priorität: DE201010062066 20101126
EP20110781470 20111025
WO2011EP68615 20111025

Patentfamilie: **WO2012069266A1**
EP2643124B1
EP2643124A1
DE102010062066A1
DE502011013931D1
CN103237629A
CN103237629B
KR20140002650A
KR101878219B1
ES2674425T3

Anmelder: BOSCH GMBH ROBERT
MULONE ROBERTO

Erfinder: MULONE ROBERTO

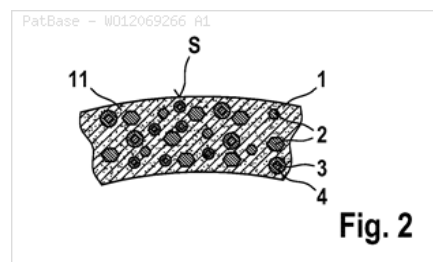
IPC-Notationen: B23D0061-18
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B24D0005-00
B24D0007-00
B24D0015-00
B28D0001-12

CPC-Notationen: B23D0061-18
B24D0003-342
B28D0001-121



Zusammenfassung:

Source: WO12069266 A1 [EN] The invention relates to a composition for a **cutting element**, in particular of a machining **tool** and to a method for producing same. To reduce friction and thus increase the efficiency of the **cutting element** or machining **tool** and to reduce vibrations and noise during machining, the composition or **cutting element** (1) comprises a lubricant component (3)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 141

Titel: GRAPHITE CONTAINING METAL BONDED DIAMOND **ABRASIVE WHEELS**

Patentnummer: [DE1652889C3](#)

Anmeldung: DE19803045760
DE19803045756
DE19752520513
DE19722213018
DE19691950880
DE19690339594U
DE19671652889
US19850749043
US19830558266
US19830523825
US19800212669
US19800212305
US19730323244
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JP19750055283
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GB19680011740
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FR19810001026
FR19720009019
FR19690034807
CA19720136423
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AR19720240947
BE19720780662
BR19720001494
CH19690015274
CH19720003641
ES19680350555
ES19720400739
IE19720000296
IT19720067806
IT19750068165
IT19810067130
IT19810067131
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NL19720003404
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NL19800006599
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SE19720003148
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ZA19720001535
ZA19740002972

Priorität: 19670902
GB19680048306 19681011
GB19690029377 19690610
US19710124047 19710315



US19720227867 19720222
US19730323244 19730112
ZA19740002972 19740509
JP19800010887 19800201
JP19800010888 19800201
JP19800010889 19800201
JP19830212578 19831114

Patentfamilie:

DE1652889C3
DE3045760C2
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FR2474919B1
FR2129687A5
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FR2020424A1
FR1556095A
CA983729A1
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IT8167130A0
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Anmelder:

BAYERISCHE MASCHINENFABRIK F J SCHLAGETER
BEERS IND DIAMOND DIVISIONS LT
DE BEERS IND DIAMOND DIVISION LTD
DE BEERS INDUSTRIAL DIAMOND DIVISION LTD
DEISUKO KK
DISCO ABRASIVE SYSTEMS LTD
DISCO CO LTD
DISCO KK
ELISABETH SCHOLZ
HERMAN SCHOLZ
IMPREGNATED DIAMOND PROD LTD GB
NORTON COMPANY WORCESTER MASSACHUSETTS VER ST V AM
NORTON CY 1 NEW BOND STREET WORCESTER MASSACHUSETT
SCHLAGETER BAYERISCHE MASCHF

Erfinder:

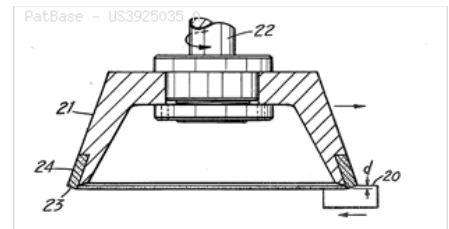
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COLLIN W D
COLLING WILLIAM DAVID
JON JAKOBUSU BAN BIRUJON
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RIGLER CHALKLEY JACK
SCHMID NORBERT
SHINJI SEKIYA
TAKATOSHI ONO
THOMAS DAVID MEIRION
UIRIAMU DEEBITSUDO KORIN
VAN BILJON J J
WALKER R D
WALKER RICHARD DAVID

IPC-Notationen: B24B0007-00
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 B28D0001-02
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CPC-Notationen: B24B0007-00
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 B24D0007-18
 B24D0018-00
 B24D0018-0018
 B27B0005-08
 B28D0001-04

Zusammenfassung:

Source: US3925035 A [EN] The addition of graphite or similarly acting inert fillers to metal bonds for diamond abrasive grinding wheels improves performance of cup-type wheels in the dry grinding of cemented carbides. Filler contents of 15 to 50 percent by volume of the bond, and particle sizes of from 1 micron to 200 microns are useful. Metal coated diamonds show superior performance under many grinding conditions. However under the most severe conditions when localized grinding temperatures are high, uncoated diamonds are superior. Friable type diamond, of the type normally employed in resin bonded wheels must be used. Bonds melt above 300°C. Hardness of bond correlates with amount of filler required, as does bond volume percent of filler. Claims, 2 Drawing Figures



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 142

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

Patentnummer: [WO9942250A1](#)

Anmeldung: WO1999US03326
EP19990934259
DE19996025124T
US19990250821
JP20000532242T
AU19990032956
CN19998003074
KR20007009122
TW19990102428
MY19990000584
TH19991000484

Priorität: US19980075149P 19980219
US19980090220P 19980622
US19980099850P 19980911
US19990250821 19990217
WO1999US03326 19990217

Patentfamilie: **WO9942250A1**
EP1094918B1
EP1094918A1
DE69925124T2
DE69925124D1
US6354929B1
JP2002503559T2
AU199932956A1
CN1291126A
CN1139462C
KR20010041083A
KR100562446B1
TW585900B
MY128106A
TH35804A

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

Erfinder: ADEFRI N B
ADEFRI NEGUS BELIHU
CARLPANTIER L R
CARPENTIER L R
CARPENTIER LOUIS RAYMOND
CHRISTIANSON T J
CHRISTIANSON TODD JON
GOERS BRAIN DAVID
GOERS BRIAN DAVID
GOERS D
MUJUMDAR ASHU NARAYAN
MUJUMDAR N
PALMGREN GARY MARVEN
PALMGREN M
PARK SOON C

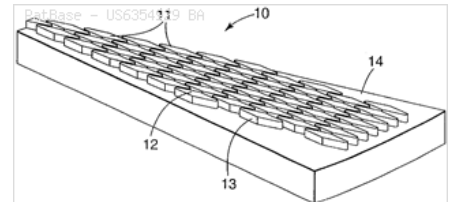


IPC-Notationen: B24B0007-22
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B24D0003-20
B24D0003-28
B24D0003-34
B24D0007-06
B24D0099-00
C03C0019-00
C09K0003-14

CPC-Notationen: B24B0007-24
B24D0003-14
B24D0003-20
B24D0003-28
B24D0003-346
B24D0007-063
B24D0099-005
C03C0019-00

Zusammenfassung:

Source: US6354929 BA [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 a binder, an alkaline metal salt, and diamond **abrasive** particles or agglomerate particles comprising diamond particles, the composites integrally molded to a backing. The **abrasive** article for **grinding** glass is capable of removing between about 200 and 400 micrometers of glass using an RPP procedure having a polish time interval of between 10 and 15 seconds, generally about 12 seconds. The **abrasive** article for polishing glass comprises a backing containing fibers, and a plurality of **abrasive** composites integrally molded to the backing comprising an organic resin, ceria **abrasive** particles, and alkaline metal salt. The **abrasive** articles for polishing glass also provide an optimum rate of breakdown of the **abrasive** composites and improved adhesion between the **abrasive** composites and the backing



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 143

Titel: COMPOSITE MATERIALS AND METHOD FOR MAKING SAME

Patentnummer: [WO2007013947A1](#)

Anmeldung: WO2006US28110
EP20060787916
US20060490433
CA20062600479
CN200680021897
KR20077028522
HK20080109095
HK20080109193
IN2007KN03684
MX20070013703

Priorität: US20050701547 20050722
US20050701547P 20050722
US20060490433 20060720
WO2006US28110 20060720

Patentfamilie: [WO2007013947A1](#)
[EP1919665A1](#)
[US2007017160A1](#)
[CA2600479A](#)
[CN101198442A](#)
[KR20080027767A](#)
[HK1113665A3](#)
[HK1114051A3](#)
[HK1113665A1](#)
[HK1114051A1](#)
[IN03684KN2007A](#)
[MX2007013703A1](#)

Anmelder: CALDWELL STEVEN G
OAKES JAMES J
TDY IND INC

Erfinder: CALDWELL STEVEN G
OAKES JAMES J

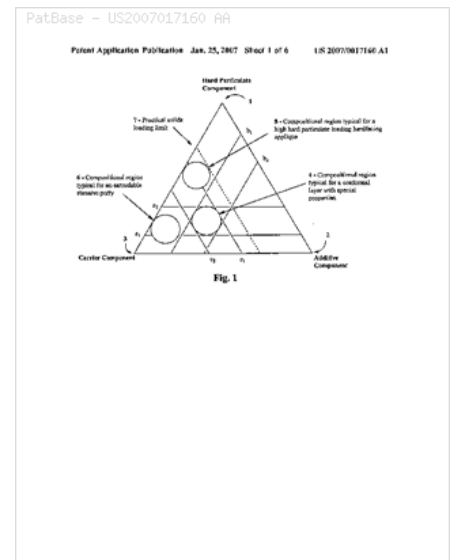


IPC-Notationen: B24D
[B24D0003-00](#)
B24D0003-20
[B24D0003-34](#)
[C08J0005-14](#)
C09G
C09G0001-00
C09G0001-02
C09K
C09K0003-14

CPC-Notationen: [B24D0003-00](#)
B24D0003-20
[B24D0003-34](#)
C08L0021-00
C09G0001-02
C09K0003-1481

Zusammenfassung:

Source: US2007017160 AA [EN] Certain non-limiting embodiments of the present **disclosure** comprise a family of composite materials targeting specific applications through a materials design approach involving; 1) a hard particulate; 2) a carrier or binder phase; and 3) one or more **additives** for property enhancement and/or hardness adjustment. According to certain embodiments, the composite material may be one of flexible conformal sheet; a rigid machinable molded preform; and an extrudable putty. Methods of manufacture of the composite materials are also **disclosed**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 144

Titel: METHOD FOR MAKING AN INJECTION-MOULDED **ABRASIVE** ARTICLE

Patentnummer: [WO2005115716A1](#)

Anmeldung: WO2005US11865
EP20050733733
US20050569097
JP20070527224T
GB20040011268
CN200580019720
KR20067026705

Priorität: GB20040011268 20040520
WO2005US11865 20050408

Patentfamilie: [WO2005115716A1](#)
[EP1761374A1](#)
[US2008258331A1](#)
[JP2007537905T2](#)
[GB200411268A0](#)
[CN1968798A](#)
[KR20070012860A](#)

Anmelder: 3M INNOVATIVE PROPERTIES COMPANY
CONGARD PIERRE M
LE NORMAND JEAN
LISE JONATHAN M
LOHMEIER GERHARD

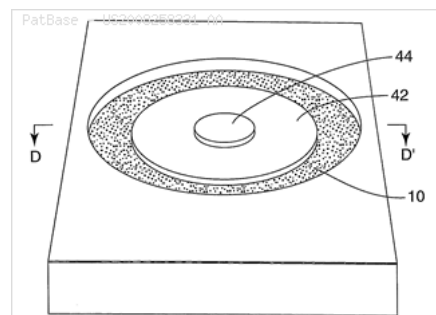
Erfinder: CONGARD PIERRE M
LE NORMAND JEAN LISE JONATHAN
LISE JONATHAN M
LOHMEIER GERHARD

IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-28
B24D0018-00
B29C0037-00
B29C0045-14
B29C0070-00
B29C0070-64
[C08J0005-14](#)

CPC-Notationen: B29C0045-14778

Zusammenfassung:

Source: US2008258331 AA [EN] A method for making an **abrasive** article is **disclosed**. An exemplary embodiment comprises positioning particles of **abrasive** agglomerate (10) in at least a portion (8) of an **abrasive** article mould (2), injecting molten thermoplastic binder resin into the **abrasive** article mould (2) and allowing the thermoplastic binder resin to **cool** such that the particles or **abrasive** agglomerate (10) are secured within the thermoplastic binder resin



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 145

Titel: CELLULAR **ABRASIVE** ARTICLE

Patentnummer: [WO02094507A1](#)

Anmeldung: WO2002US06993
EP20020723356
DE20026005372T
US20010862357
JP20020591208T
CN20028010471
AT20020723356T

Priorität: US20010862357 20010522
WO2002US06993 20020306

Patentfamilie: [WO02094507A1](#)
[EP1395396B1](#)
[EP1395396A1](#)
[DE60205372T2](#)
[DE60205372D1](#)
[US6645263B2](#)
[US2003045213A1](#)
[JP4188703B2](#)
[JP2004527388T2](#)
[CN1524029A](#)
[CN1258434C](#)
[AT301024E](#)

Anmelder: 3M INNOVATIVE PROPERTIES CO
KEIPERT STEVEN J
LUK JOHN S
WELYGAN DENNIS G

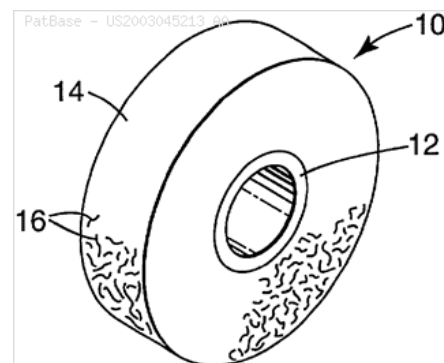
Erfinder: LUK JOHN S KEIPERT STEVEN J WE
WELYGAN DENNIS G

IPC-Notationen: [B24D0003-00](#)
B24D0003-20
B24D0003-32
[B24D0003-34](#)

CPC-Notationen: B24D0003-32
[B24D0003-344](#)

Zusammenfassung:

Source: US2003045213 AA [EN] **Abrasive** articles **abrasive** articles (e.g., **abrasive wheels**) comprised of **abrasive** agglomerate particles dispersed within cellular polymeric material, and methods of making and using the **abrasive** articles



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 146

Titel: **CUTTING ELEMENT** COMPRISING AN INTEGRATED LUBRICANT

Patentnummer: [WO2012069267A1](#)

Anmeldung: WO2011EP68619
EP20110778552
DE201010062073
CN201180056222

Priorität: DE201010062073 20101126
WO2011EP68619 20111025

Patentfamilie: **WO2012069267A1**
EP2643123A1
DE102010062073A1
CN103221182A

Anmelder: BOSCH GMBH ROBERT
MULONE ROBERTO

Erfinder: MULONE ROBERTO

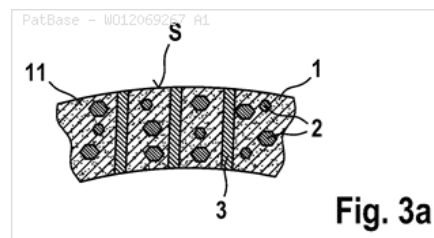
IPC-Notationen: **B24D0003-00**
B24D0003-34
B24D0018-00

CPC-Notationen: **B24D0003-34**
B24D0018-0009



Zusammenfassung:

Source: WO12069267 A1 [EN] The invention relates to a **cutting element**, a machining **tool** and to a method for producing same. To reduce friction and thus increase the efficiency of the **cutting element** or machining **tool** and to reduce vibrations and noise during machining, the **cutting element** (1) comprises lubricant structures (3)



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 147

Titel: RESIN-BONDED **ABRASIVE TOOLS** WITH METAL **FILLERS**

Patentnummer: [DE2140286C3](#)

Anmeldung: DE19712140286
US19730354460
US19710163976
JP19710059902
GB19710036796
FR19710028940
BE19710771022
BR19710005079
ES19710393951
NL19710010869
NO19710002951
SE19710010073
ZA19710005266

Priorität: US19700061905 19700807
US19710163976 19710719
US19730354460 19730425

Patentfamilie: [DE2140286C3](#)
[DE2140286B2](#)
[DE2140286A1](#)
[US3868232A](#)
[US3779727A](#)
[JP51039398B4](#)
[GB1344681A](#)
[FR2104071A5](#)
[BE771022A](#)
[BR7105079A0](#)
[ES393951A1](#)
[NL148822B](#)
[NL7110869A](#)
[NO138689C](#)
[NO138689B](#)
[SE420283C](#)
[SE420283B](#)
[ZA7105266A](#)

Anmelder: NORTON CO

Erfinder: COHEN H M
COHEN HARVEY MARTIN
SIOUI R H
SIOUI RICHARD HENRY
SIOVI R
SIQUI R

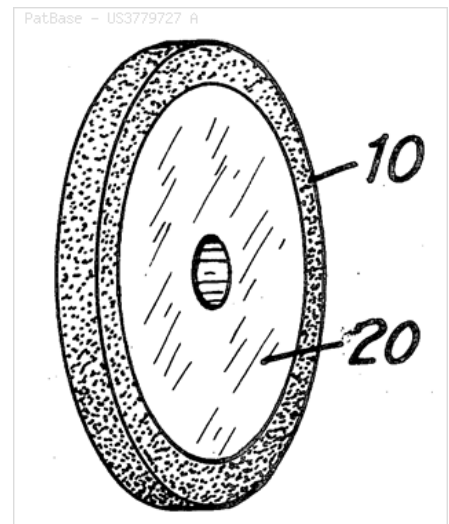
IPC-Notationen: [B24D0003-00](#)
[B24D0003-34](#)
[C08J0005-14](#)
C08K0003-00

CPC-Notationen: [B24D0003-004](#)
[B24D0003-34](#)
C08K0003-013



Zusammenfassung:

Source: US3779727 A [EN] High ratios of metal removed to **abrasive tool** wear are achieved when resin-bonded diamond or cubic boron nitride **abrasive tools** include in the bond from 10 to 60 percent by volume of silver, silver coated copper, or copper powder in the presence of from 5 to 30 percent by volume of a solid lubricant. Other **fillers** such as finely divided metal oxides or carbide such as silicon carbide may be present in an amount of from 0 to 40 percent by volume, depending upon the total content of metal and lubricant. The diamond **wheels** or **tools** of this invention are particularly suitable for the dry **grinding** of carbide **tools**. The cubic boron nitride **wheels** employ metal clad boron nitride **abrasive** particles and are particularly suitable for the dry **grinding** of hard steel **tools**, that is, high speed steels such as T15, M2, M3, and M4. Solid lubricants useful in this invention include organic polymers such as polytetrafluoroethylene, **fluorinated** ethylene polymers, **chlorinated** hydrocarbon, **fluorinated** ethylene propylene polyethylene styrene-butadiene, acrylonitrile-butadiene-styrene, polyurethane, polyformaldehyde, polycarbonate, and nylon and inorganic crystalline solids such as boron nitride, tungsten disulfide, graphite, metal coated graphite, molybdenum disulfide, niobium diselenide tungsten diselenide, and fluorinated graphite



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 148

Titel: **GRINDING WHEEL** CONTAINING CUBIC BORON NITRIDE

Patentnummer: [DE3404851A1](#)

Anmeldung: DE19843404851
JP19840019520
GB19840003567
FR19840001244

Priorität: US19830466231 19830214

Patentfamilie: [DE3404851A1](#)
[JP59152066A2](#)
[JP6069670B4](#)
[JP2125389C3](#)
[GB2136011B2](#)
[GB2136011A1](#)
[GB8403567A0](#)
[FR2540770B1](#)
[FR2540770A1](#)

Anmelder: NORTON CO

Erfinder: BAANDO OSUTAA
CARVER EDGAR BENJAMIN
EDOGAA BII KAABAA
OSTER BERND
RICHIYAADO EICHI SHIOUI
SIOUI RICHARD HENRY

IPC-Notationen: [B24D0003-02](#)
B24D0003-20
B24D0003-28
[B24D0003-34](#)
C08K0003-00
C08K0003-38

CPC-Notationen: [B24D0003-344](#)
C08K0003-013
C08K0003-38

Zusammenfassung:

Source: GB2136011 A1 [EN] A resin bonded cubic boron nitride **wheel** in which the resin bond contains by volume 15-35 percent of a **fluoride** salt **grinding aid**, 0-16 percent of a dry film lubricant **filler** and 5 to 40 percent silver, the resin content of the bond being at least 30 percent by volume. Up to 50 percent of the silver may be substituted by nickel. The resin may be a phenolic resin or a polyamide. The dry film lubricant **filler** may be MoS₂, hexagonal boron nitride, graphite or a **fluorinated** polymer

PatBase - JP6069670 材料	体積%
KAlF ₆ 粉末	25
Ag粉末	20
MoS ₂ 粉末	10
フェノール樹脂(全結合剤体積基準で石灰2.0体積%を含むノボラック)	45

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 149

Titel: METAL BONDED **GRINDING WHEEL** CONTAINING DIAMOND OR CBN **ABRASIVE**

Patentnummer: [EP0071022A3](#)

Anmeldung: EP19820105653
US19810286409
JP19820124527
CA19820404178
AU19820085436
BR19820004169
ES19820514048
IN1982CA00759
ZA19820004505

Priorität: US19810286409 19810724
CA19820404178 19820601

Patentfamilie: [EP0071022A3](#)
[EP0071022A2](#)
[US4378233A](#)
[JP58025380A2](#)
[JP59023746B4](#)
[JP1250836C3](#)
[CA1184041A1](#)
[AU534632B2](#)
[AU198285436A1](#)
[BR8204169A](#)
[ES8705000A1](#)
[ES514048A0](#)
[IN156725A](#)
[ZA8204505A](#)

Anmelder: NORTON CO

Erfinder: CARVER EDGAR BENJAMIN
EDOGAA BENJIYAMIN KAABAA

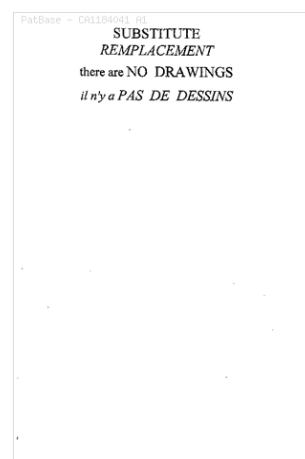
IPC-Notationen: [B24D0003-04](#)
[B24D0003-06](#)
[B24D0003-34](#)
C09K0003-14
C22C0026-00

CPC-Notationen: [B24D0003-06](#)
[B24D0003-342](#)
C22C0026-00



Zusammenfassung:

Source: US4378233 A [EN] An improved **grinding wheel** employing premium **abrasive** (diamond or cubic boron carbide) is made by employing a metal bond made from aluminum, zinc, copper, and tin, and including up to 50 percent of a dry film lubricant **filler**. The **abrasive elements** produced are particularly useful to form cup **wheels** for the dry **grinding** of carbide and **tool** steel



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 150

Titel: **GRINDING TOOL** BINDER COMPSN. - CONTG. GRAPHITE AND CALCIUM **FLUORIDE FILLER**
MIXT. IN ORGANIC RESIN (S) PREF. CONTG. PTFE



Patentnummer: [DE3031657A1](#)

Anmeldung: DE19803031657

Priorität: DE19803031657 19800822

Patentfamilie: **DE3031657A1**

Anmelder: WINTER AND SOHN ERNST

Erfinder: BORSE DIETRICH

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

CPC-Notationen: B24D0003-28
B24D0003-34
B24D0003-346

Zusammenfassung:

Source: DE3031657 A1 [EN] **Tool** contains **abrasive** grains of cubic BN or diamond and a binder compsn. contg. one or more organic resins and graphite as **filler**. Novelty consists in adding CaF₂ to the binder compsn., as additional **filler**. The vol. ratio of the 2 **fillers** is 1: 9 to 9: 1. The total vol. of the 2 **fillers** is 5-70 percent of binder vol. Pref. graphite grain-size is max. 0.35 mm. and CaF₂ grain-size is max. 0.25 mm. The binder compsn. may contain further **fillers**, esp. SiC, Al₂O₃ or opt. B₄C. The **grinding tools** can be used as **discs** for **grinding** hardened alloyed **tool** steels and other hardened steel parts. Graphite and CaF₂ act synergetically in increasing performance. **Grinding** ratio, G is more than doubled without increasing workpiece temp. Tw, and **disc** power input rate, Ps

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 151

Titel:	GRINDING WHEEL
Patentnummer:	<u>EP0770457B1</u>
Anmeldung:	EP19950116805 DE19956019800T
Priorität:	EP19950116805 19951025
Patentfamilie:	EP0770457B1 EP0770457A1 DE69519800T2 DE69519800D1
Anmelder:	OSAKA DIAMOND IND
Erfinder:	FUKUSHIMA KENJI

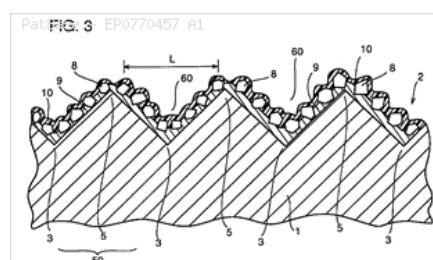


IPC-Notationen: B24D0003-20
B24D0003-28
B24D0003-34
B24D0018-00

CPC-Notationen: B24D0003-28
B24D0003-344
B24D0018-0018

Zusammenfassung:

Source: EP0770457 A1 [EN] A number of pyramidal or truncated-pyramidal projections (50) are formed on a portion of a metal base (1) forming a **grinding** face, to be homogeneously distributed at substantially uniform heights. Super **abrasive** grains (8) having grain sizes which are smaller than the heights of the projections are fixed to the surfaces of the projections (50) . A coating film (10) consisting of **fluororesin** is formed to at least partially cover the outer surface of the **grinding** face (2) including the surfaces of the super **abrasive** grains (8) , for preventing deposition of a workpiece. Since the outer surface of the **grinding** face (2) is covered with the coating film (10) , sharpness of this **grinding wheel** is improved and clearances between the super **abrasive** grains are hardly clogged up with chips, while the chips are hardly deposited onto the **grinding** face



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 152

Titel: **ABRASIVE** ARTICLES AND METHODS OF FORMING THE SAME

Patentnummer: [WO2018009737A1](#)

Anmeldung: WO2017US41007
EP20170824941
US20170314565
CN201780039841
IN201917003771

Priorität: US20160360005P 20160708
US20170450253P 20170125
US20170314565 20170707
WO2017US41007 20170707

Patentfamilie: **WO2018009737A1**
[EP3481589A1](#)
[EP3481589A4](#)
[US2019168358A1](#)
[CN109689298A](#)
[IN201917003771A](#)

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

Erfinder: ADA CARLEEN SENA
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DESHMUKH SUBRAJEET
HSU SHAW LING
MATSUMOTO DEAN S
NASHED ALEXANDER
PATEL JIGNESHKUMAR P
SCHOCH ANDREW B
ZHAO CAIXIA

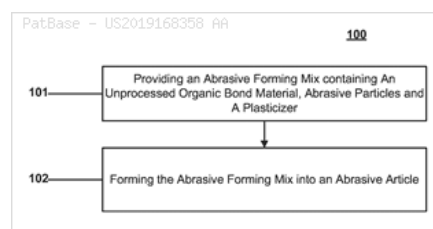
IPC-Notationen: B24D0003-28
[B24D0003-34](#)

CPC-Notationen: B24D0003-28
B24D0003-285
[B24D0003-34](#)
[B24D0003-344](#)
C09K0003-1409



Zusammenfassung:

Source: US2019168358 AA [EN] An **abrasive** article may include an organic bond material, **abrasive** particles contained within the organic bond material and a plasticizer contained within the organic bond material. The plasticizer may include at least one of an aromatic phenyl group, a heteroaromatic furyl group, or a saturated aliphatic hydrocarbon. The plasticizer may further include a polar group



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 153

Titel: Asbestos-free friction material

Patentnummer: [DE3637022A1](#)

Anmeldung: DE19863637022
JP19850247555

Priorität: JP19850247555 19851105

Patentfamilie: [DE3637022A1](#)
[JP62106980A2](#)
[JP6023387B4](#)
[JP1893849C3](#)

Anmelder: AKEBONO BRAKE IND
AKEBONO BRAKE RES AND DEV CENTER
AKEBONO RES AND DEV CENTRE

Erfinder: HASHIMOTO NAOYUKI
JINMON TAKAO

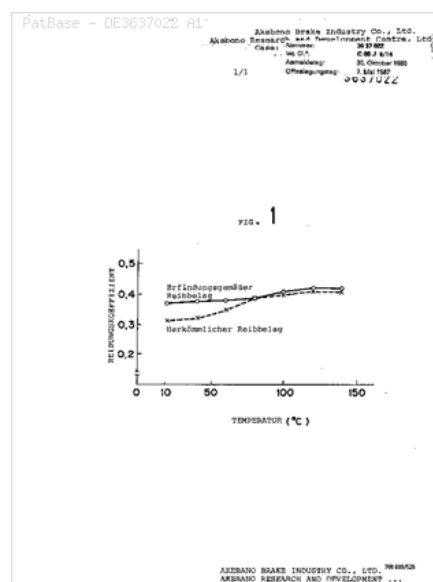
IPC-Notationen: C09K0003-14

CPC-Notationen: C08K0003-08
C08K0007-02
F16D0069-026



Zusammenfassung:

Source: DE3637022 A1 [EN] A friction material, characterized by a content of from 10 to 25 percent by weight of the total-fibre content, of both metal fibres and/or metal powders and Aramid fibres and/or Aramid fibre slurry in a ratio of 100: 5-30, from 5 to 20 percent by weight of a lubricant, such as graphite, **molybdenum** disulphide, etc., and binders and **fillers** as the remainder



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 154

Titel: **ABRASIVE** ARTICLE WITH IMPROVED GRAIN RETENTION AND PERFORMANCE

Patentnummer: [WO2010126934A3](#)

Anmeldung: WO2010US32659
EP20100150370
DE201060014546T
US20100768107
JP20120508616T
CA20102760208
AU20100241762
CN201080024506
KR20117027918
BR2010PI14834
CL20110002694
CO20110161972
IL20100215958
MX20110011383
NZ20100596311
RU20110147732
SG20110078896
UA20110014187
ZA20110008220

Priorität: US20090174240P 20090430
EP20100150370 20100108
US20100768107 20100427
WO2010US32659 20100428

Patentfamilie: [WO2010126934A3](#)
[WO2010126934A2](#)
[EP2177318B1](#)
[EP2177318A1](#)
[DE602010014546D1](#)
[US2011111678A1](#)
[JP2012525273T2](#)
[CA2760208A](#)
[AU2010241762B2](#)
[AU2010241762A1](#)
[CN102470513A](#)
[KR20120012476A](#)
[KR101326032B1](#)
[BRPI1014834A2](#)
[CL2011002694A1](#)
[CO6470829A2](#)
[IL215958A0](#)
[MX2011011383A1](#)
[NZ596311A](#)
[RU2498892C2](#)
[RU2011147732A](#)
[SG175807A1](#)
[UA100639C2](#)
[ZA201108220A](#)

Anmelder: KUIT JOHANNES HERMANUS
SAINT GOBAIN ABRASIFS SA
SAINT GOBAIN ABRASIVES INC
SEHN GOBEHN ABRAZIF
SEHNT GOBEHN EHBREJZIVS INK
ZHANG HAN



Erfinder: CHZHAN KHAN
KEJT JOKHANNES KHERMANUS
ZHANG HAN KUIT JOHANNES HERMANUS

IPC-Notationen: B24B0027-00
B24D
B24D0003-00
B24D0003-02
B24D0003-20
B24D0003-28
B24D0003-34
B24D0005-00
B24D0005-12
B24D0018-00

CPC-Notationen: B24D0003-20
B24D0003-342
B24D0005-12

Zusammenfassung:

Source: US2011111678 AA [EN] An **abrasive** article with improved grain retention and performance and method of making are **disclosed**. The **abrasive** article with improved grain retention results in an article with improved performance and longer article **life**



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 155

Titel: **ABRASIVE** GRAIN, METHOD OF MAKING SAME AND **ABRASIVE** PRODUCTS

Patentnummer: [WO9402562A1](#)

Anmeldung: WO1993US06833
WO1993US06784
EP19930918278
EP19930917282
DE19936029460T
DE19936001660T
US19930065175
US19920920728
JP19940504655T
CA19932139567
CA19932138532
AU19930047783
AU19930046845
KR19957000297
KR19957000155
AT19930917282T
AT19930918278T
BR1993PI06726
BR1993PI06810
ES19930918278T
MX19930004517
RU19950105162

Priorität: US19920920728 19920728
US19930065175 19930520
WO1993US06784 19930720
WO1993US06833 19930720

Patentfamilie: [WO9402562A1](#)
[WO9402561A1](#)
[EP0652919B1](#)
[EP0652917B1](#)
[EP0652919A1](#)
[EP0652917A1](#)
[DE69329460T2](#)
[DE69301660T2](#)
[DE69329460D1](#)
[DE69301660D1](#)
[US5352254A](#)
[US5213591A](#)
[JP7509512T2](#)
[CA2139567A](#)
[CA2138532A](#)
[AU674530B2](#)
[AU671293B2](#)
[AU199347783A1](#)
[AU199346845A1](#)
[KR19957002611A](#)
[KR19957002609A](#)
[AT134694E](#)
[AT196493E](#)
[BRPI9306726A](#)
[BRPI9306810A](#)
[ES2086958T3](#)
[MX9304517A1](#)
[RU95105162A](#)



Anmelder: CELIKKAYA AHMET
MINNESOTA MINING AND MFG
SCHERGER JERALD A
WALD VERNON M

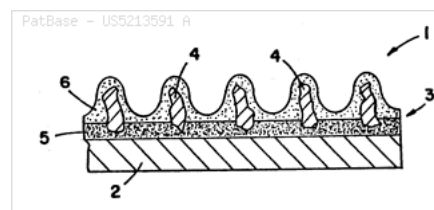
Erfinder: AKHMET SELIKKAJA
CELIKKAYA AHMET
DZHERAL D A SHERGER
SCHERGER JERALD A
VERNON M VAL D
WALD VERNON M

IPC-Notationen: **B24D0003-00**
B24D0003-04
B24D0003-16
B24D0003-34
B24D0011-00
B24D0013-00
B24D0013-12
C04B0035-10
C09K0003-14

CPC-Notationen: **B24D0003-16**
B24D0003-34
B24D0011-00
B24D0013-12
C09K0003-1436
C09K0003-1445

Zusammenfassung:

Source: US5213591 A [EN] An improved **abrasive** grain comprising the sintered product of a porous non-sintered particle having a coating of inorganic material thereon is provided. A preferred method of making such **abrasive** grains comprises coating the porous base particles with inorganic particles. The preferred step of coating comprises a step of mixing the base particles with a suspension containing the inorganic particles in a carrier fluid. The porous base particles having the coating of inorganic particles thereon are sintered, to generate the ceramic **abrasive** grain product. The **abrasive** grains may be incorporated, to advantage, in a variety of **abrasive** products including for example bonded **abrasives**, nonwoven **abrasive** products and coated **abrasive** products



Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 156

Titel: **ABRASIVE** BODIES SUCH AS **GRINDING WHEELS**

Patentnummer: [EP0078896A2](#)

Anmeldung: EP19820108161
JP19820193594

Priorität: US19810319844 19811110

Patentfamilie: [EP0078896A2](#)
[JP58082678A2](#)

Anmelder: NORTON CO

Erfinder: GOODON EBARETSUTO HITSUKORII
HICKORY GORDON EVERETT



IPC-Notationen: [B24D0003-02](#)
B24D0003-28
B24D0003-32
[B24D0003-34](#)

CPC-Notationen: B24D0003-28
B24D0003-285
B24D0003-32
[B24D0003-344](#)

Zusammenfassung:

Source: EP0078896 A2 [EN] Relatively hard grade, high structure cold-formed organic-banded **abrasive** bodies such as metal **grinding**, snagging and **cut-off wheels** have abrading portions of improved **life** and efficiency comprising, by volume, 30 to 44 percent of 12 to 100 grit size **abrasive** particles, 24 to 36 percent thermosetting resin, 14-29 percent active **filler** material and 5-18 percent pores and, wherein the active **filler** replaces reductions in **abrasive** content when going to a higher structure and thereby increasing the volume ratio of **filler** to both the **abrasive** and resin content. The preferred ratios are in the range of 1 volume of **filler** to .8 to 2.6 volumes of resin and 1.0 to 3.2 volumes of **abrasive**

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 157

Titel: **ABRASIVES**
Patentnummer: [US2939777A](#)
Anmeldung: US19570644974
Priorität: US19570644974 19570311
Patentfamilie: **US2939777A**
Anmelder: ABRASIVE AND METAL PRODUCTS CO
Erfinder: GREGOR JOHN R
ORDEN HAROLD E VAN



IPC-Notationen: **B24D0003-34**
C08J0005-14

CPC-Notationen: **B24D0003-344**

Zusammenfassung:

Source: US2939777 A [EN] (Claim 1) 1. An **abrasive** article comprising **abrasive** grains and a bonding material comprising a thermoset binder resili and a filler, at least 1/2 of said filler consisting of at least one alkali metal salt of 93.0sulfuric, hydrochloric and hydrobromic acids in admix88.0 111.6 ture with lead sulfide, said admixed filler constituting 120' 1 126' 5 at least about 2% by volume of the total bonding mate99.3rial, the ratio of 'lead sulfide to said alkali metal salt being within the range of about 9:1 to about 1:8.

Datum des Suchlaufs: 07.04.2021

Dokument Nr.: 158