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SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 06-096403- -00003-0000

Fecha: 2008-08-26 16:43:00 Dep 2020 NUECREACIONE
Tra 11 PATENTE IYII Eve: 379 FASENACIONAL II
Act 538 PETICION Folios: 2

Señora Jefe de la
DIVISION DE NUEVAS CREACIONES
Superintendencia de Industria y Comercio
E. S. D.

Trámite : 011
Evento : 379
Actuación : 538

Referencia : Expediente No. 06.096.403
Asunto : Solicitud de Patente para **PRODUCTOS ABRASIVOS DE RECUBRIMIENTO Y PROCESOS PARA FORMAR LOS MISMOS**
Solicitante : **SAINT-GOBAIN ABRASIVES, INC.**
Clase : B24D 011/000
Publicada en : La Gaceta No. **589** del 29 de febrero de 2008
Fecha de Solicitud : 25 de septiembre de 2006

1. Yo, Emilio FERRERO, identificado como aparece al pie de mi firma, actuando como apoderado en el asunto de la referencia, atentamente, solicito se efectúe el examen de patentabilidad de la solicitud en referencia presentada de acuerdo con el Capítulo II del PCT y según lo establecido en el artículo 44 de la Decisión 486 de la Comisión de la Comunidad Andina. Para tal efecto presento junto con este escrito el recibo por valor de \$ 210.000.00, que corresponde a la tasa fijada según lo dispuesto en la resolución No. 44372 de 26 de diciembre de 2007.

2. Ruego atentamente a la Señora Jefe se sirva ordenar que se anexe este recibo para que se efectúe dicho examen y se continúe con el trámite de la solicitud.

Señora Jefe,

EMILIO FERRERO
T.P.A. No. 31.929

COLO-15547-841-001-4
SDC\SCT\ID-133046\WPC15547
No. M-2008-133046\SDC

17/7/60

THE SECRETARY
OF DEFENCE

MEMORANDUM FOR THE SECRETARY OF DEFENCE

1. The following information was received from the
Director of the Central Intelligence Agency on 17 July 1960.
The Director stated that the following information was received
from the Central Intelligence Agency on 17 July 1960.
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on 17 July 1960.

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Intelligence Agency on 17 July 1960. The information was received
from the Central Intelligence Agency on 17 July 1960.

2. Objeto de la invención

- Título de la solicitud (folio 1)
Productos abrasivos de recubrimiento y procesos para formar los mismos
- Las reivindicaciones 1 a 34 de la solicitud en estudio se refieren a
 - 1.- Un producto abrasivo de recubrimiento, que comprende: un sustrato; y una capa abrasiva que descansa sobre el sustrato, la capa abrasiva comprende granos abrasivos y un ligador, el ligador se forma a partir de una formulación ligadora que comprende primeros y segundos componentes ligadores mezclados uniformemente juntos con los granos abrasivos, en donde el primer componente ligador es curable por radiación y el segundo componente ligador comprende un polvo y es térmicamente curable.
 - 23. Un método para formar un producto abrasivo de recubrimiento que comprende...
- El anterior producto y el anterior procedimiento buscan proporcionar productos abrasivos de recubrimiento mejorados.
- La Clasificación Internacional de Patentes (IPC) para esta solicitud es B24D11/00.

3. De la solicitud de Patente

3.1. Descripción (Artículo 28 D. 486)

La descripción de la solicitud en estudio presenta los siguientes defectos:

- La traducción presenta errores de traducción. Por ejemplo, no existe en el español técnico los rayos-e, o fuente de luz actínica. Se recomienda revisar todo el texto.
- La redacción presenta también errores; habla de cilicio (en vez de silicio, folio 31), cada unote (sic) los primeros (folio 34), etc. Se sugiere revisar todo el documento.
- Se le recuerda al solicitante que todas las unidades de medida deben venir en el Sistema Internacional de Unidades, algo que no sucede con la descripción en estudio.

Por lo anterior, la descripción no cumple con el requisito de claridad y/o divulgación completa que permita su comprensión y ejecución de acuerdo al art. 28 de la Decisión 486 y/o art. 22 del Tratado PCT

3.2. Reivindicaciones (Artículo 30 D. 486)

El capítulo reivindicatorio de la solicitud en estudio presenta los siguientes defectos:

- En español técnico no existen los rayos-e. Se deben revisar.
- No es clara la reivindicación 12, dado que es ambiguo su planteamiento. Se habla que los granos abrasivos se tratan con un balance de la formulación ligadora; técnicamente no está definiendo nada por lo que deberá replantearse dicha reivindicación.
- No es clara la redacción de la reivindicación 21 donde se habla de una patrón "levado", término inexistente técnicamente.
- No se precisa la materia sobre la cual se solicita protección. Cómo se explicará en el punto 4), la presente solicitud no posee unidad de invención, por lo que no está definida la materia sobre la cual se solicita protección.

forma directa, ya que cada uno contiene todas las características reivindicadas en la solicitud colombiana.

De la misma forma el método de las reivindicaciones 23 y siguientes, muy general también, se encuentra anticipada por cada uno de los documentos D5 a D8.

La afectación a los requisitos de patentabilidad se da por la imprecisión en la redacción de las reivindicaciones, lo que conlleva a que fácilmente las anterioridades anticipen el objeto de protección.

7. Conclusión:

Los requisitos de patentabilidad de la presente solicitud se encuentran afectados así:

N°	Documento N°	Reivindicaciones afectadas	Requisito que afecta
D1	US 6 288 133	1 - 22	Novedad
			Nivel inventivo
D2	US 5 833 724	1 - 22	Novedad
			Nivel inventivo
D3	US 5 551 960	1 - 22	Novedad
			Nivel inventivo
D4	US 5 876 470	1 - 22	Novedad
			Nivel inventivo
D5	US 5 014 468	23 - 34	Novedad
			Nivel inventivo
D6	US 4 927 431	23 - 34	Novedad
			Nivel inventivo
D7	US 5 681 361	23 - 34	Novedad
			Nivel inventivo
D8	US 6 413 286	23 - 34	Novedad
			Nivel inventivo

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de SESENTA días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única N° 10 de 2001.


Alix Carmenza Céspedes De Vergel
Jefe de División de Nuevas Creaciones

Concepto Técnico No. 3576
Examinador Técnico 202003
El anterior requerimiento fue notificado por fijación en lista, de fecha 30 OCT 2009



US006228133B1

102
102(12) **United States Patent**
Thurber et al.(10) **Patent No.:** **US 6,228,133 B1**
(45) **Date of Patent:** ***May 8, 2001**(54) **ABRASIVE ARTICLES HAVING ABRASIVE LAYER BOND SYSTEM DERIVED FROM SOLID, DRY-COATED BINDER PRECURSOR PARTICLES HAVING A FUSIBLE, RADIATION CURABLE COMPONENT**(75) **Inventors:** **Ernest L. Thurber**, Woodbury; **Eric G. Larson**, Lake Elmo; **Gregg D. Dahlke**, St. Paul; **Robert J. DeVoe**, Oakdale; **Alan R. Kirk**, Cottage Grove, all of MN (US); **Mark R. Melerotto**, Hudson, WI (US); **Roy Stubbs**, Nuneaton (GB)(73) **Assignee:** **3M Innovative Properties Company**, St. Paul, MN (US)(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) **Appl. No.:** **09/071,263**(22) **Filed:** **May 1, 1998**(51) **Int. Cl.⁷** **B24D 3/02**(52) **U.S. Cl.** **51/295; 51/298; 51/297**(58) **Field of Search** **51/295, 298, 293, 51/307, 309, 297**(56) **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Michael Marcheschi(74) **Attorney, Agent, or Firm**—Scott A. Bardell

(57)

ABSTRACT

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.

48 Claims, 6 Drawing Sheets

104
109

United States Patent [19]
Christianson

[11] Patent Number: 5,551,960
[45] Date of Patent: Sep. 3, 1996

[54] ARTICLE FOR POLISHING STONE
[75] Inventor: Todd J. Christianson, Oakdale, Minn.
[73] Assignee: Minnesota Mining and
Manufacturing Company, St. Paul,
Minn.

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Primary Examiner—Deborah Jones
Attorney, Agent, or Firm—Gary L. Griswold; Walter N.
Kirm; Doreen S. L. Gwin

[21] Appl. No.: 441,426
[22] Filed: May 15, 1995

Related U.S. Application Data

[62] Division of Ser. No. 436,891, May 8, 1995, abandoned,
which is a continuation of Ser. No. 30,787, Mar. 12, 1993,
abandoned.
[51] Int. Cl.⁶ B24D 3/02
[52] U.S. Cl. 51/295; 51/298; 51/297
[58] Field of Search 51/295, 297, 298

[56] References Cited

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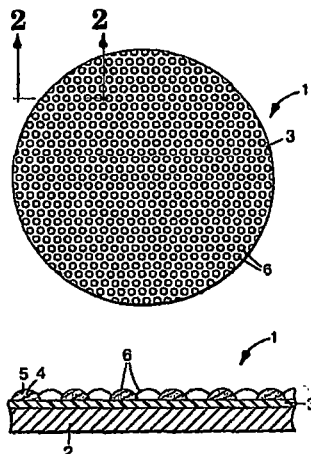
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[57] ABSTRACT

In accordance with the present invention, a method of
polishing stone and an article for use in the method are
presented in which the stone has at least one exposed
surface, the method comprising the steps of:

- bringing into frictional contact an abrasive article to the
exposed surface of the stone; and
- refining the exposed surface of the stone with the
abrasive article, preferably in the presence of water,
wherein the abrasive article comprises a plurality of
abrasive particles adhered to a backing (preferably a
flexible backing) by a binder (preferably a resilient
binder), wherein the binder comprises a cured resin
derived from a resin comprising unsaturated addition
polymerizable units. The binder and abrasive particles
(and plasticizer when used) form a resilient composite
having a hardness no greater than 20 HK but at least 1
HK. Use of the articles and method of the invention
efficiently increases the gloss of stone surfaces.

28 Claims, 3 Drawing Sheets





US005876470A

United States Patent [19]

Abrahamson

[11] Patent Number: 5,876,470
[45] Date of Patent: Mar. 2, 1999

[54] ABRASIVE ARTICLES COMPRISING A BLEND OF ABRASIVE PARTICLES

[75] Inventor: Gerald R. Abrahamson, St. Paul, Minn.

[73] Assignee: Minnesota Mining and Manufacturing Company, St. Paul, Minn.

[21] Appl. No.: 905,488

[22] Filed: Aug. 1, 1997

[51] Int. Cl.⁶ B24D 3/34

[52] U.S. Cl. 51/309; 51/307

[58] Field of Search 51/307, 309, 295; 451/540; 501/152, 153

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Primary Examiner—Deborah Jones

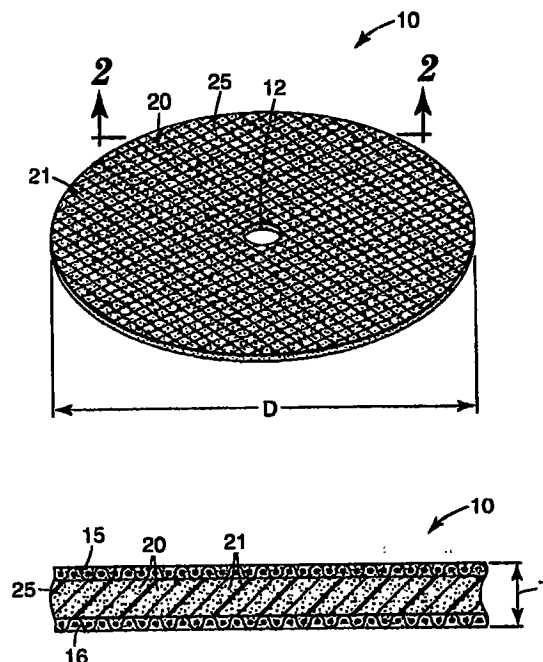
Attorney, Agent, or Firm—Paul W. Busse

[57]

ABSTRACT

The present invention provides an abrasive article, particularly a cut-off wheel, having a mixture of rare earth oxide modified abrasive grains and alpha alumina seeded or iron oxide nucleated abrasive grains. Preferably, the rare earth oxide is present at a level between about 0.1 wt-% to 10 wt-% of the abrasive grain, based on a theoretical oxide basis. In one embodiment, the rare earth oxide modified abrasive grains are rods.

20 Claims, 1 Drawing Sheet



United States Patent [19]
Ravipati et al.

[11] **Patent Number:** 5,014,468
[45] **Date of Patent:** May 14, 1991

[54] **PATTERNED COATED ABRASIVE FOR FINE SURFACE FINISHING**

[75] **Inventors:** Sitaramaiah Ravipati, Latham;
Eugene Zador; Wesley R. Kaczmarek,
both of Ballston Lake, N.Y.; Ernest
A. Coleman, Stamford, Conn.; David
Rostoker, Sturbridge, Mass.

[73] **Assignee:** Norton Company, Worcester, Mass.

[21] **Appl. No.:** 347,663

[22] **Filed:** May 5, 1989

[51] **Int. Cl.⁵** B24B 1/00

[52] **U.S. Cl.** 51/295; 51/293;
51/298; 51/308; 51/309

[58] **Field of Search** 51/293, 295, 298, 308,
51/309

[56] **References Cited**

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Primary Examiner—William R. Dixon, Jr.

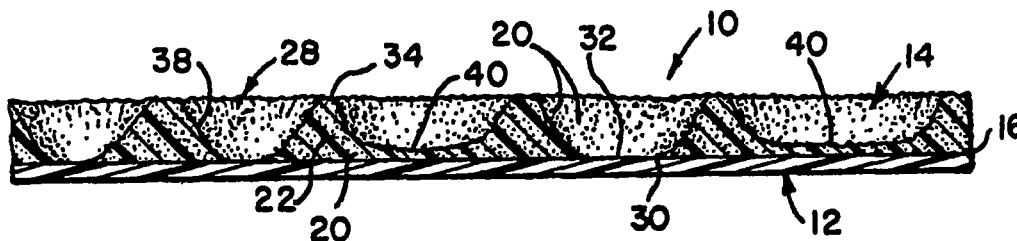
Assistant Examiner—Willie J. Thompson

Attorney, Agent, or Firm—Arthur A. Losiello

[57] **ABSTRACT**

Coated abrasive material for fine finishing applications including second fining ophthalmic application, having patterned surface coating of abrasive grains dispersed in radiation-cured adhesive binder. The patterned surface coating is defined by a plurality of formations of such abrasive/binder each having an inner bottom edge defining an area devoid of coated abrasive, a top edge defining a somewhat larger area devoid of coated abrasive and an inner wall connecting the top and bottom edges.

45 Claims, 4 Drawing Sheets



United States Patent [19]
Buchanan et al.

[11] **Patent Number:** 4,927,431
[45] **Date of Patent:** May 22, 1990

[54] **BINDER FOR COATED ABRASIVES**

[75] **Inventors:** Scott Buchanan; Eric G. Larson; Jon R. Pieper; Thomas E. Boettcher, all of St. Paul, Minn.

[73] **Assignee:** Minnesota Mining and Manufacturing Company, St. Paul, Minn.

[21] **Appl. No.:** 241,946

[22] **Filed:** Sep. 8, 1988

[51] **Int. Cl.³** C09K 3/14

[52] **U.S. Cl.** 51/298; 51/295;
51/308; 51/309; 427/44; 526/261

[58] **Field of Search** 51/295, 298, 308, 309;
427/44; 526/261

[56] **References Cited**

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Primary Examiner—Paul Lieberman

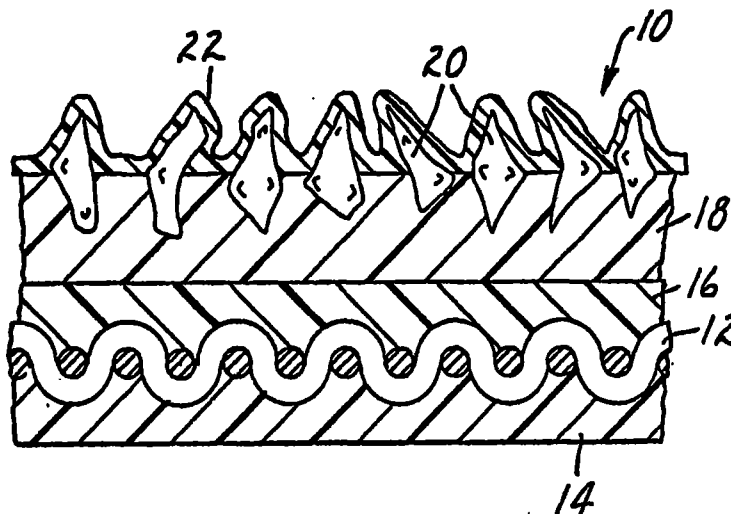
Assistant Examiner—Willie J. Thompson

Attorney, Agent, or Firm—Donald M. Sell; Walter N. Kirn; David L. Weinstein

[57] **ABSTRACT**

An abrasive product comprising abrasive grains bonded to at least one major surface of a backing sheet by a binder formed from a blend comprising radiation curable monomer and a thermally curable resinous material. The radiation curable monomer can be selected from the group consisting of isocyanurate derivatives having at least one terminal or pendant acrylate group, isocyanate derivatives having at least one terminal or pendant acrylate group, and multifunctional acrylate monomers. The thermally curable resinous material is preferably a member selected from the group consisting of phenolic resins, urea-formaldehyde resins, melamine-formaldehyde resins, and epoxy resins. The binder can be used to form the make coat, size coat, both make and size coats, or as a backing treatment for a coated abrasive product. The binder can also be used in fibrous nonwoven abrasive products. The binder can also be used in embodiments where only a single-coat binder is employed.

24 Claims, 1 Drawing Sheet





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(54) **PRODUCTION TOOL PROCESS**

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(58) **Field of Search** **51/298, 293, 307, 51/308, 309, 295**

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(57) **ABSTRACT**

The production of an engineered surface on a coated abrasive is made more versatile by the use of a production tool obtained using a master tool created by a rapid prototyping technique.

8 Claims, 3 Drawing Sheets