



No. 08-001915- -00000-0000

Fecha: 2008-01-10 16:03:11 Dep. 2020 NUECREACIONE
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 69

FORMULARIO ÚNICO DE SOLICITUD DE PATENTE

PCT

ENTRADA EN FASE NACIONAL

22 Feb. 2008

1) SOLICITUD DE:

☒ Patente de invención

☐ Patente de Modelo de Utilidad

☒ Capitulo I.

☐ Capitulo II.

**2) SOLICITANTE
(71)**

**Nombre: UNITED STATES GYPSUM
COMPANY**

**Dirección: 550 West Adams Street,
Chicago, Illinois 60661
Estados Unidos**

**Nacionalidad o domicilio: Chicago,
Illinois, Estados Unidos**

**Lugar de constitución: Illinois,
Estados Unidos**

IDENTIFICACIÓN

C.C. ☐ NIT: ☐

C.E. ☐ OTRO ☐

NÚMERO Cual _____

**Teléfono: Fax:
E. Mail:**

**3) REPRESENTANTE
O APODERADO**

**Nombre: DILIA MARÍA RODRÍGUEZ
D'ALEMAN**

**Dirección: Carrera 11 N°. 86-53 Piso 6
Bogotá D.C.**

**Teléfono: 6181088 Fax: 6350824
E. Mail: info@clarkemodet.com.co**

IDENTIFICACIÓN

C.C. ☒ NIT: ☐

C.E. ☐ OTRO ☐

**NÚMERO: 41.654.882
TP: 20824 CSJ**

**4) INVENTOR (ES)
(72)**

**Nombre: 1. MYERS, Matthew, Earle
Dirección: 1. 4693 Haviland Court, Naperville, IL 60564 Estados
Unidos de América
Nacionalidad o Domicilio: Estadounidense**

5) PCT (86)

Solicitud Internacional No. PCT/US2006/021191 Fecha: JUNIO 1, 2006

Publicación Internacional No. WO2007/018690 A2 Fecha: FEB. 15, 2007

6) Título (54) MANGO DE ESPÁTULA CON INSERTO DE IDENTIFICACIÓN

7) Clasificación Internacional: B26B 3/00

8) PRIORIDAD

SI ☒ NO ☐

33) País de Origen

Estados Unidos

Estados Unidos

(32) Fecha

Julio 22, 2005

Enero 10, 2006

**(31) Número de
Solicitud**

11/187,582

11/328,530

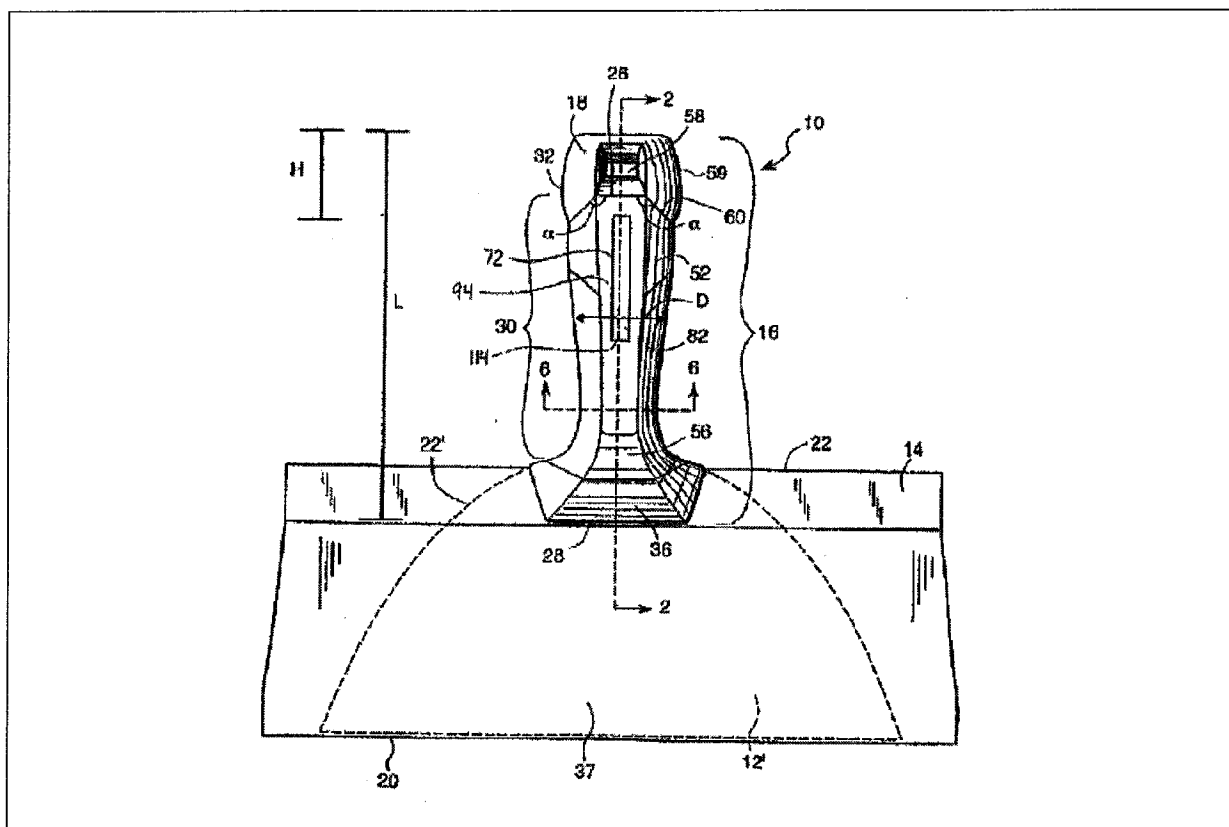
9) Comprobante de pago N°. 08-1,815 de Enero 8 de 2008

10)

ANEXOS

- ☒ Comprobante de pago de la tasa de presentación de la solicitud
- ☐ Comprobante de pago por reivindicación de prioridad
- ☒ Documento que acredita la existencia y representación legal cuando el solicitante sea persona Jurídica
- ☒ Poderes, si fuera el caso
- ☐ Documento de cesión del inventor al solicitante o a su causante
- ☐ Declaraciones
- ☒ Copia de la solicitud Internacional. (Resumen, descripción, reivindicación, Dibujos).
- ☒ Traducción de la solicitud internacional al castellano. (Resumen, descripción, reivindicación, Dibujos)
- ☐ Copia del examen preliminar efectuado por la IPEA
- ☐ De ser el caso, copia del contrato de acceso
- ☐ De ser el caso, documento que acredite la licencia o autorización de uso de conocimientos tradicionales de las comunidades indígenas
- ☐ De ser el caso, certificado de depósito del material biológico
- ☒ Arte final 12 x 12 y 6 x 6 cm
- ☐ De ser el caso, información sobre otras solicitudes de patente o títulos obtenidos en el extranjero por el mismo titular o su causante, relacionados parcial o totalmente con la invención de esta solicitud.
- ☒ Otros:
 1. Reporte internacional de búsqueda
 2. Dirección del solicitante
 3. Request, IB304, IB306

11) FIGURA CARACTERÍSTICA:



12) Solicitud concesión de la patente,

NOMBRE: DILIA RODRÍGUEZ D'ALEMAN

[Handwritten signature]

FIRMA:

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 08-001915- -00000-0300

Fecha: 2008-01-10 16:03:11 Dep. 2020 NUECREACIONE
Tra. 11 PATENTEIYII Eve: 378 FASENACIONALI
Act. 411 PRESENTACION Folios: 69

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

NIT : 800176089-2

RECIBO OFICIAL DE CAJA : 08 - 1,815
FECHA : ENERO 8 DE 2008

***** CONSIGNACION *****

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PAGO	Vr. PAGO
CLARKE MODET Y CO. COLOMB	CONSIGNACION	BANCO DE BOGOTA	062754387	2662954	08/01/2008	40,235,000.00

***** CONCEPTO *****

CANT.	CONCEPTO	TOTAL CONCEPTO
1	50005-01-01 SOLICITUDES	501,000.00
1	TRAMITES DE SOL. DE PATENTE DE IN	501,000.00
	TOTAL :	\$ 501,000.00

SON: QUINIENTOS UN MIL PESOS

RESPONSABLE :

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

3

24
4

89,

622

TRADUCCIÓN OFICIAL No. 05/599 de un documento escrito en inglés, el cual para su identificación se sella con el sello del traductor al tiempo con la presente. Esta traducción ha sido preparada por Juan Pablo Piedrahita Aguilera, Traductor e Intérprete Oficial debidamente reconocido de conformidad con el Certificado de Idoneidad Profesional No. 0045 expedido por la Universidad Nacional de Colombia, por el Ministerio de Relaciones Exteriores y autorizado por el Ministerio del Interior y de Justicia, por resolución número 718 de 2003.

(Se traduce un Certificado notarial, certificado de autorización del Estado de Illinois y Apostilla No. C05GL23962, escritos en inglés, adjuntos a un poder otorgado por la compañía UNITED STATES GYPSUM COMPANY, firmado por Michel M. Geoffrey, con fecha 12 de octubre, 2005, escrito en inglés y español.)

(En español e inglés, poder otorgado por la compañía UNITED STATES GYPSUM COMPANY, firmado por Michel M. Geoffrey, con fecha 12 de octubre, 2005, una (1) hoja).

CERTIFICADO NOTARIAL (Cuando el solicitante es una SOCIEDAD)

(Poderes otorgados en El Salvador, México, Estados Unidos de América y Venezuela)

Expedido hoy día 12 de octubre, 2005, el suscrito Notario CERTIFICA que:

- 1). Michael M. Goffrey, (nombre de quien firma el poder), mayor de edad y domiciliado en Chicago, Illinois, suscribió el anterior documento.
- 2) El otorgante le es conocido personalmente y tiene capacidad para firmar el documento.
- 3) El otorgante ha suscrito el anterior documento en su calidad de Secretario Asistente de la persona jurídica UNITED STATES GYPSUM COMPANY.
- 4) La mencionada persona jurídica con domicilio comercial en Chicago, Illinois, está debidamente constituida, tiene actualmente existencia legal y el fin para el cual se otorga este poder se encuentra dentro de su objeto social.
- 5) El otorgante tiene en efecto la capacidad referida y su representación es



5
legal y está autorizado para otorgar este poder.

6) Fundamento las certificaciones 3), 4) y 5) en los documentos auténticos que para tal fin me fueron exhibidos.

(Firmado) AIDA BLEKHMANN, Notario Público

(Sello Notarial a tinta: SELLO OFICIAL, AIDA BLEKHMANN, NOTARIO PÚBLICO – ESTADO DE ILLINOIS, MI COMISIÓN VENCE SEPT. 30, 2006)

Nota: El Consulado de Colombia debe autenticar la firma del Notario Público.

Para todos los demás países el Señor Cónsul de Colombia o ante quien se otorgue, debe expedir una certificación dejando constancia de: 1) la existencia legal de la sociedad, 2) que cumple actualmente con su objeto social, y 3) que la persona o personas que otorgan este poder están facultadas para hacerlo. El Cónsul también certificará que los tuvo a la vista los documentos que prueban y acreditan tales circunstancias.

LEGALIZACIÓN POR EL CÓNSUL DE COLOMBIA A O POR APOSTILLA

(Sello Pre-impreso del Condado de Cook, Illinois)

Estado de Illinois)

Condado de Cook)

CERTIFICADO DE AUTORIZACIÓN

Yo, DAVID ORR, Escribano del Condado de Cook en el Estado de Illinois, certifico que

BLEKHMANN, AIDA

La persona nombrada en el sello y firma del documento adjunto es un Notario Público PARA EL Estado de Illinois, y estaba autorizado para obrar como tal



en el momento de la presentación en Notaría de dicho documento.

Para verificar este Certificado de Autorización para un Acto Notarial, he estampado mi firma y sello oficial hoy día 26 de Octubre, 2005.

(Firmado) David Orr

Condado de Cook, Estado de Illinois

(Firmado) Maria Canalu

(Sello en Relieve, Condado de Cook, Estado de Illinois)

ESTADO DE ILLINOIS

SECRETARIA DE ESTADO

SPRINGFIELD, ILLINOIS

APOSTILLA

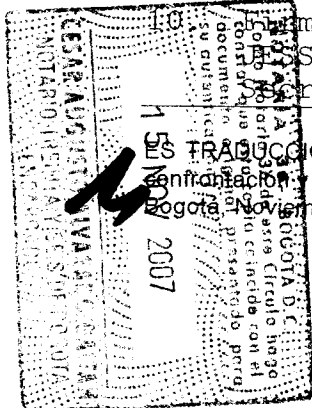
(Convención de la Haya de Octubre 5 de 1961)

1. País: Estados Unidos de América
Este documento público
2. Ha sido firmado por DAVID ORR
3. Actuando en calidad de Escribano del Condado, Condado de Cook.
4. Lleva el sello/estampilla del ESTADO DE ILLINOIS

Certificada

5. En Chicago, Illinois
6. Hoy 26 de octubre, 2005
7. Por El Secretario de Estado del Estado de Illinois,
8. No. **C05GL23962**
9. Sello / Estampilla (Sello Redondo Dorado de Oblea del Estado de Illinois)
10. JOSE WHITE
Secretario de Estado, Estado de Illinois

ES TRADUCCIÓN FIEL Y COMPLETA de la cual se deja copia en los archivos de esta oficina para su confrontación y a la cual me remito.
Bogotá, Noviembre 10, 2005.



TRADUCCION OFICIAL No. **05/599**
JUAN PABLO PIEDRAHITA AGUILERA
TRADUCTOR E INTERPRETE OFICIAL
RES. 718 DE MAYO 2003
DEL MIN. INTERIOR Y DE JUSTICIA

P. 672.7

COLOMBIA

Carrera 11 n° 86-53, Piso 6 Bogotá Colombia Tel: (57 1) 6181088- Fax: (57 1) 6350824-Email: info@clarkemodet.com.co

PODER

Yo (nosotros), abajo firmante(s)

en mi (nuestro) carácter de representante(s) legales de

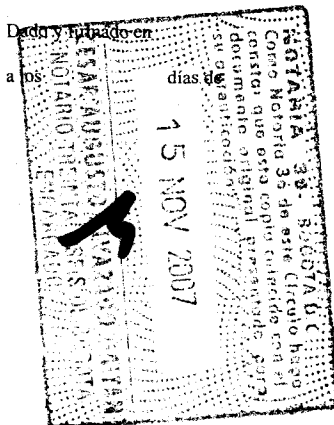
UNITED STATES GYPSUM COMPANY

una sociedad organizada y existente de acuerdo con las leyes de

y en actual cumplimiento de su objeto social, con domicilio en

por el presente instrumento confiero (conferimos) poder especial a favor de DILIA MARIA RODRIGUEZ D'ALEMAN, con Cédula de Ciudadanía No. 41.654.882 de Bogotá, y tp. 20824 y CLAUDIA LUCIA CARO RAMIREZ, con Cédula de Ciudadanía No. 40.017.374 de Tunja, y tp. 36448, con domicilio en Bogotá, Colombia, para que actuando en su orden en nombre del (de la) otorgante le (la) representen ante cualquier entidad, autoridad y/o persona, especialmente ante las del orden Administrativo, Contencioso Administrativo, Judicial, Tribunales de Arbitramento y/o cualquier otro en lo referente a los siguientes asuntos: Solicitud de Patente en Colombia, presentada bajo el No. 05087218 correspondiente a PCT/US2004/083146

- 1) Solicitar, tramitar, obtener y/o registrar cualquiera de las modalidades de Propiedad Industrial, tales como: patentes de invención, modelos de utilidad; diseños industriales, variedades vegetales; marcas, lemas, nombres y enseñanzas comerciales y denominaciones de origen; así como sus renovaciones, prórrogas, transferencias, cambios de nombre y/o domicilio, contratos y licencias.
- 2) Solicitar, tramitar, obtener y/o registrar derechos de autor, en cualquiera de sus presentaciones así como la protección de secretos industriales y know-how.
- 3) Solicitar, tramitar, obtener y/o registrar registros sanitarios, permisos y/o licencias de funcionamiento; así como sus renovaciones o prórrogas, transferencias, cambios de nombre y/o domicilio, contratos y licencias.
- 4) Ejercer acciones de oposición, observación, reclamos, reconsideración, reposición, apelación, cancelación administrativa o judicial, nulidad, protección al consumidor, concesión de licencias, protección de secretos industriales y demás acciones y recursos relacionados con derechos derivados de los asuntos arriba indicados y en contra de la competencia desleal, acciones derivadas de la obtención o explotación de licencias, acciones de indemnización de perjuicios. También podrá(n) intervenir en juicios civiles, comerciales, penales, contencioso-administrativos, tutelas y de policía; en acciones o juicios promovidos por el (la) mandante o en contra el (ella).
- 5) Registrar nombres de dominio ante la entidad competente.
- 6) En el ejercicio de este mandato los mandatarios arriba mencionados quedan facultados para: conciliar, cancelar, transigir, comprometer en árbitros, desistir, recibir y tomar posesión de la cosa objeto de litigio y renunciar o desistir a derechos concedidos o en curso de concesión, admitir los hechos del proceso.
- 7) Ratificar o no la agencia oficiosa.
- 8) Así mismo faculto (facultamos) a los mencionados apoderados para recibir notificaciones y designar apoderados judiciales o extrajudiciales, sustituir el presente poder y revocar las sustituciones que hicieren.



POWER OF ATTORNEY

I (we), the undersigned

Michael M. Geoffrey,
legal representative(s) of

UNITED STATES GYPSUM COMPANY

an organization existing under the laws of
State of Delaware

and in present execution of its business activity, domiciled at
125 South Franklin Street, Chicago, Illinois, U.S.A.

do hereby grant POWER OF ATTORNEY to DILIA MARIA RODRIGUEZ D'ALEMAN, identification card No. 41.654.882 of Bogotá, and tp. 20824 and CLAUDIA LUCIA CARO RAMIREZ, tp. 36448, identification card No. 40.017.374 of Tunja, residing in Bogotá, Colombia, to act in the order of their appointment in behalf of grantor before any entity, authority and/or natural or juridical person, specially before those Administrative, Administrative-Contentious, Judicial, arbitration courts, and/or any other, in all matters concerning the following:
Patent Application in Colombia, file No.

- 1) To apply, process, obtain and/or register any of the modalities of Industrial Property, such as: Patents of Invention, Utility Models; Designs, plant varieties; Marks, Slogans, Trade Names and emblems and appellations of Origin; as well as their renewals, assignments, changes of name and/or domicile, agreements and licenses.
- 2) To apply, process, obtain and/or register copyrights of any kind as well as protection of industrial secrets or know-how.
- 3) To apply, process, obtain and/or register sanitary registrations, operating authorizations and/or licenses; as well as their renewals or assignments, changes of name and/or domicile, agreements and licenses.
- 4) To bring actions of opposition, observations, claims, reconsideration, appeal or legal remedies, cancellations, nullity, protection to the consumer, granting of licenses, protection of trade secrets and other actions related with rights derived from the above-mentioned matters and against the unfair competition, actions resulting from the obtaining or exploitation of licenses, recovering damages actions. They can also intervene or participate in Civil, Commercial, Criminal or Contentious-Administrative Trials; the actions for writ mandamus, police actions; in actions, lawsuits or litigations instituted by the grantor or against him.
- 5) To register domain names before the competent entity.
- 6) To the effect of this mandate the above-named proxy are empowered to: conciliate, cancel, settle, submit to arbitration, withdraw and to receive and take possession of the litigation related objet and waive or renounce the rights granted or in process of granting, admit the facts of the case.
- 7) To ratify or not the officious agency.
- 8) I (we) hereby appoint the afore mentioned attorneys with powers to receive notifications and to designate judicial and extrajudicial attorneys, substitute this Power of Attorney and to revoke such substitutions.

Granted and signed at Chicago, Illinois

on this 12th day of October

of 2005.

Michael M. Geoffrey
Firma / signature

Michael M. Geoffrey

[Handwritten mark]



SPRINGFIELD, ILLINOIS

APOSTILLE
APOSTILLE

(Convention de La Haye du 5 Octobre 1961)

1. Country: United States of America

This public document

2. has been signed by DAVID D. ORR

3. acting in the capacity of COUNTY CLERK, COOK COUNTY

4. bears the seal/stamp of STATE OF ILLINOIS

Certified

5. Chicago, Illinois

6. OCTOBER 26, 2005

7. by the Secretary of State, State of Illinois

8. Notary Public No. 05123962

Seal/Stamp:

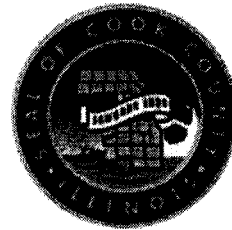
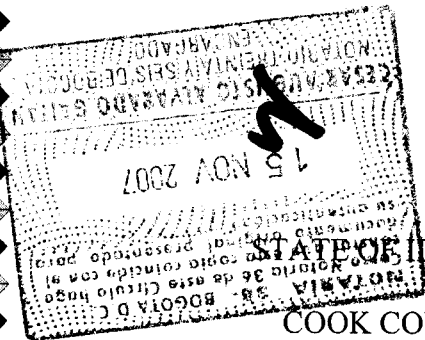
10. Signature:

Jesse White

JESSE WHITE
SECRETARY OF STATE
STATE OF ILLINOIS

TRADUCCION OFICIAL No. 05 / 599
JUAN PABLO PIEDRAHITA AGUILERA
TRADUCTOR E INTERPRETE OFICIAL
RES. 718 DE MAYO 2003
DEL MIN. INTERIOR Y DE JUSTICIA





CERTIFICATE OF AUTHORITY

I, DAVID ORR, County Clerk of Cook County in the State of Illinois, certify that

BLEKHMAN, AIDA

the person named in the seal and signature on the attached document, is a Notary Public for the State of Illinois and was authorized to act as such at the time of the document's notarization.

To verify this Certificate of Authority for a Notarial Act, I have affixed my signature and seal of office this 26 day of October, 2005

Cook County Clerk, State of Illinois

Deputy

TRADUCCION OFICIAL No. 051539
JUAN PABLO PEDRAHITA AGUILERA
TRADUCTOR E INTERPRETE OFICIAL
RES. 718 DE MAYO 2003
DEL MIN. INTERIOR Y DE JUSTICIA

CERTIFICADO NOTARIAL

(Cuando el solicitante es SOCIEDAD)

(Poderes otorgados en: El Salvador, Estados Unidos, México y Venezuela)

A los _____ días del mes de _____ de _____,
el Notario que suscribe DA FE de que:

1. _____
(nombre de la persona que firma el poder)

mayor de edad y domiciliado _____
_____ firmó de su puño
y letra el documento que antecede.

2. Conoce al (a la) otorgante y que este (a) está legalmente capacitado para el otorgamiento.

3. El otorgante ha firmado el referido documento en su carácter de _____

de la persona jurídica UNITED STATES GYPSUM COMPANY

4. La citada persona jurídica con sede en _____ está legalmente
constituida, que tiene actualmente

existencia legal y que el acto para el cual se ha otorgado este poder está comprendido entre los que constituyen su objeto social.

5. El otorgante tiene efectivamente la representación que ostenta, que esta es legítima y que está facultado para otorgar este poder.

6. Las anteriores certificaciones de los puntos 3, 4 y 5, me constan porque he tenido a la vista los documentos auténticos.

Notario Público

NOTA: A continuación de lo anterior, el Cónsul de Colombia debe autenticar la firma del Notario Público.

CERTIFICADO NOTARIAL (Cuando el solicitante es INDIVIDUO)

A los _____ días del mes de _____ de _____,
el Notario que suscribe DA FE de que:

1. _____
(nombre de la persona que firma el poder)

mayor de edad y domiciliado en _____
_____ firmó en su presencia

el documento que antecede, conoce al otorgante y que este está legalmente capacitado para el otorgamiento.

Notario Público

NOTA: A continuación de lo anterior, el Cónsul de Colombia debe autenticar la firma del Notario Público.

Para todos los demás países el Señor Cónsul de Colombia o ante quien se pague, debe expedir una certificación dejando constancia de la existencia legal de la sociedad, 2) de que esta ejerce actualmente su objeto social y 3) de que la persona o personas que otorgan el poder están facultadas para hacerlo, dejando constancia así mismo de que tuvo a la vista las pruebas que acrediten tales circunstancias.

LEGALIZACIÓN POR EL CONSUL DE COLOMBIA

OFICIAL

ALVARADO GARCIA

ENCARGADO

2007

NOTARIAL CERTIFICATE

(When the applicant is a CORPORATION)

(Powers of attorney granted in: El Salvador, Mexico, U.S.A. and Venezuela)

This 12th day of _____ October, 2005,
the undersigned Notary CERTIFIES that:

1. Michael M. Geoffrey
(name of the person who signs the power of attorney)

of legal age and domiciled in Chicago, Illinois set his hand on the foregoing document.

2. The grantor is to him personally known and that he/she has legal capacity to execute the document.

3. The grantor has executed the foregoing document in his capacity of Assistant Secretary.

of the juridical person UNITED STATES GYPSUM COMPANY

4. The mentioned juridical person with place of business in Chicago, Illinois is duly organized, has actual legal existence and that the purposes for which the power of attorney is granted are within the scope of its corporate purposes.

5. The grantor has in fact the referred quality and that his/her representation is legal and that he/she is empowered to grant this power of attorney.

6. I have based the above certifications 3, 4 and 5, on the authentic documents which for such purpose were exhibited to me.

Aida Blekman

Notary Public

OFFICIAL SEAL
AIDA BLEKMAN
NOTARY PUBLIC STATE OF ILLINOIS
MY COMMISSION EXP. SEPT. 30, 2006

NOTA: Then the Colombian Consul must legalize the signature of the Notary Public.

NOTARIAL CERTIFICATE (When the applicant is an INDIVIDUALS)

On this _____ day of the undersigned Notary CERTIFIES that:

1. _____
(name of the person who signs the Power of Attorney)

of legal age and domiciled at _____

_____ signed in his presence the foregoing document, the grantor is to him personally known and that he/she has legal capacity to execute the document.

Notary Public

NOTA: Then the Colombian Consul must legalize the signature of the Notary Public.

For all other countries the Colombian Consul or before who it is granted must issue a certification stating 1) the legal existence of the corporation, 2) that the corporate purposes are actually being accomplished, 3) that the person or persons who grant this Power of Attorney are empowered to do it. The Consul will certify also that the documents evidencing those circumstances were exhibited to him.

LEGALIZATION BY THE COLOMBIAN CONSUL OR BY APOSTILLE.

TRADUCCION OFICIAL No. _____
JUAN PABLO MED. AHITA AGUILERA
TRADUCTOR E INTERPRETE OFICIAL
RES. 718 DE MAYO 2003
DEL MIN. INTERIOR Y DE JUSTICIA



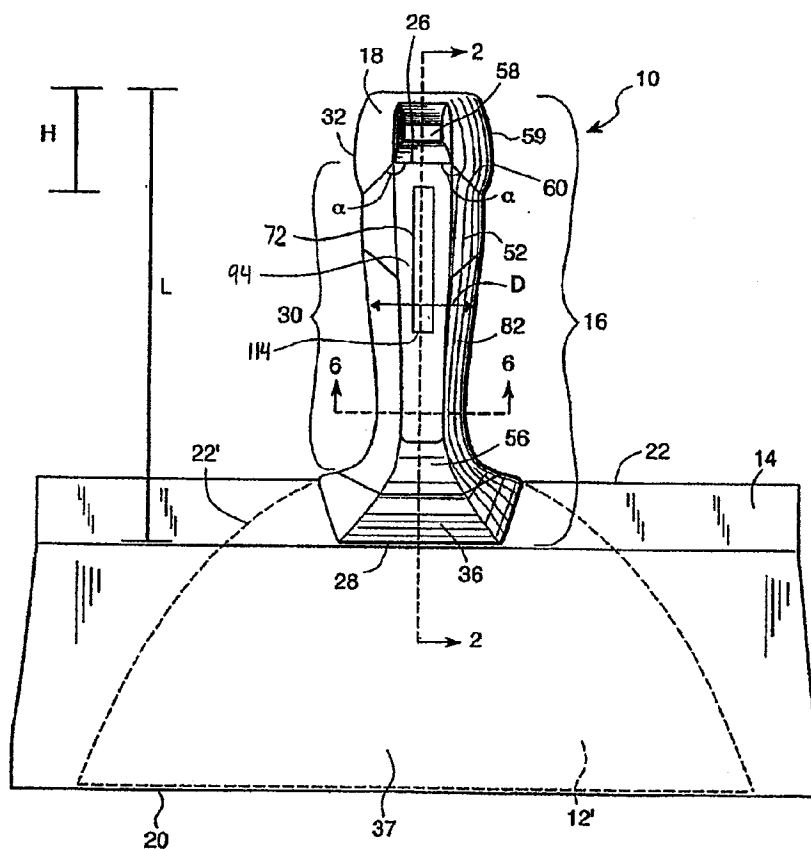
PCT

(10) International Publication Number
WO 2007/018690 A2

- | | |
|---|---|
| <p>(51) International Patent Classification:
 B26B 3/00 (2006.01)</p> <p>(21) International Application Number:
 PCT/US2006/021191</p> <p>(22) International Filing Date: 1 June 2006 (01.06.2006)</p> <p>(25) Filing Language: English</p> <p>(26) Publication Language: English</p> <p>(30) Priority Data:
 11/187,582 22 July 2005 (22.07.2005) US
 11/328,530 10 January 2006 (10.01.2006) US</p> <p>(71) Applicant (for all designated States except US): UNITED STATES GYPSUM COMPANY [US/US]; 125 South Franklin Street, Chicago, IL 60606 (US).</p> <p>(72) Inventor: MYERS, Matthew, Earle; 4693 Haviland Court, Naperville, IL 60564 (US).</p> | <p>(74) Agents: JANICI, David, F. et al.; USG CORPORATION, 125 South Franklin Street, Chicago, IL 60606 (US).</p> <p>(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.</p> <p>(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).</p> |
|---|---|

[Continued on next page]

(54) Title: TAPING KNIFE HANDLE WITH IDENTIFICATION INSERT



(57) Abstract: A handle for a tapping knife having a blade with a working edge and an attachment edge opposite the working edge, the handle including a handle core with distal and proximal ends, the proximal end associated with the attachment edge, the core defining a recess, and at least one identification insert insertable into the handle core recess.

WO 2007/018690 A2

~~11~~



Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

13

TAPING KNIFE HANDLE WITH IDENTIFICATION INSERT

BACKGROUND OF THE INVENTION

5 The present invention generally relates to hand tools, and more particularly to a taping knife of the type used to finish wallboard construction projects.

Taping knives or tools (the terms are considered interchangeable), which have varying blade widths, are used to finish wallboard construction projects and create a smooth transition between abutting wallboard surfaces. After wallboard panels are in place, a smaller (e.g. 4-6 inch) taping knife is generally used to apply a settable joint compound and drywall tape to the joints formed by the abutting wallboard surfaces. At this stage, unseated nails must also be finally set into the wallboards and supporting studs. After the joint compound dries, progressively larger (e.g. 8 inch-14 inch) knives are used to apply more compound to the joint areas. This step is repeated, with intermittent sanding steps, until the joint is sufficiently flat and smooth.

Present taping knives often use wood or plastics, such as glass-filled nylons or polyolefins for the handle. However, the low coefficient of friction on the smooth outer surface of conventional handles allows slippage of the knife in the user's hand, particularly when the hand becomes wet from perspiration or joint compound. Also, users with smaller hands have difficulty holding conventional taping knives during prolonged use.

25 While it is known to provide taping knives with a hammer element at the end of the handle for setting nails or other objects, many conventional knives do not have such hammer elements, and the knives that have hammer elements typically cap off the handle. Many of the workers that use conventional taping knives will set the nail prior to applying joint compound by striking the nail with the side of the handle perpendicular to the nail instead of striking the nail axially with respect to the handle as the tool is intended to be used. This improper use can cause the handle to crack, requiring the replacement of the knife. Also, it

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is not uncommon for users' hands to slip on the handle during the hammering operation and become pinched between the tool and the wall.

Performing a wallboard joint finishing job generally requires the use of several taping knives, as described above, and depending on the size of the project, can also involve the employment of several drywall workers. As is the case with other skilled tradesmen, wallboard tapers are often very possessive of their tools. When multiple tapers are present on a job, taping knives can become difficult to identify by their users at a job site, because they tend to look very similar to each other. In addition, especially after prolonged use, it becomes difficult to identify the manufacturer of taping knives because of their similarities in appearance.

Consequently, there is a need in the home improvement and/or home-decorating industries for an improved taping knife with improved gripping characteristics and an identification system which address the above-identified drawbacks.

BRIEF SUMMARY OF THE INVENTION

The above-listed needs are met or exceeded by the present taping knife, which features an identification insert insertable into a handle of the taping knife for identification purposes. The insert is preferably of a pre-selected color so that the user can easily identify his/her particular taping knife.

More specifically, the present handle for a taping knife including a blade having a working edge and an attachment edge opposite the working edge has a handle including a handle core with distal and proximal ends, the proximal end associated with the attachment edge, the core defining a recess, and at least one identification insert insertable into the handle core recess.

An identification kit for the present taping knife is also provided, the identification kit including a knife with a plurality of identification inserts, each of the inserts individually insertable into the handle core recess.

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BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is a front view of the present taping knife with an identification insert in the handle, with portions omitted for clarity;

FIG. 2 is a cross-section taken along the line 2-2 shown in FIG. 1 in the direction generally indicated;

FIG. 3 is an exploded top perspective view of the present taping knife;

FIG. 4 is a top perspective view of the hammer element;

FIG. 5 is a top perspective view of the present taping knife with the identification insert in the handle;

FIG. 6 is a cross-section taken along the line 6-6 shown in FIG. 1 in the direction generally indicated;

FIG. 7 is a side view of an insert insertable into a handle of the present taping knife;

FIG. 8 is a top view of the insert of FIG. 7; and

FIG. 9 is a top view of the insert of FIG. 7 as it appears in the handle of an alternate embodiment of the present taping knife.

DETAILED DESCRIPTION OF THE INVENTION

Referring to FIGs. 1 and 5, a taping knife generally designated 10 is preferably constructed of a flat metal blade 12, a reinforcing backing plate 14, a handle 16, and a hammer element 18. The blade 12 has a working edge 20 and an attachment edge 22 opposite the working edge 20. While other materials are contemplated, the blade 12 is preferably made of blued steel and the reinforcing backing plate 14 of aluminum. The shape of the blade 12 is as shown in FIG. 1, but it is envisioned that the handle 16 is usable with shorter blades 12' having a curved attachment edge 22' (shown in phantom in FIG.1), and lacking a reinforcing backing plate 14 as are well known in the art. Furthermore, other blade shapes are contemplated, either with or without a reinforcing backing plate 14.

The handle 16 has at least one diameter D and includes distal 26 and proximal ends 28 and a body 30, the proximal end 28 is associated with the attachment edge 22. A feature of the present knife 10

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is the configuration of the hammer element 18, which is associated with the distal end 26 and is preferably but not necessarily made of a harder material relative to the handle 16. Here, "associated with" means that the hammer element 18 will be attached to the distal end 26. However, it is
5 foreseeable that the hammer element 18 and the distal end 26 may not be in direct contact. The same applies to the proximal end 28.

A periphery 32 of the hammer element 18 extends in a radial direction greater than at least one diameter D of the handle body 30. This provides more surface area for striking the drywall fasteners or
10 other hammering tasks performed by users such as wallboard tapers or other tradesmen. In addition, the oversized hammer element 18 acts as a buffer for the end user's hand when striking the wall, reducing the possibility of pinching the hand. It should be noted that the "baseball bat"-type handle and hammer configuration may vary in size to suit the
15 particular application.

The handle 16 described above and best seen in FIG. 1 may have at least one diameter D including a plurality of diameters of various sizes extending from the distal end 26 to the proximal end 28. An
20 advantage of the preferred embodiment is that the largest diameter D of the plurality of diameters is smaller than the periphery 32 of the hammer element 18. The hammer element 18 is contemplated as being constructed of several different hard materials, the properties of which include strength, durability, and low malleability and ductility. It is
25 envisioned that the preferred hammer element 18 is constructed of metal, preferably zinc.

As shown in FIG. 1, an axial length H of the hammer element 18 is most preferably 20-25 percent of an axial length L of the handle 16. However, the axial length H of the hammer element 18 is
30 preferably in the approximate range of 15-30 percent of the axial length L of the handle 16.

As shown in FIG. 6, the handle 16 has a generally elliptical cross-section for better handle comfort. The generally elliptical cross-section of the tapping knife 10 preferably extends to a point directly

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adjacent the attachment edge 22 of the blade 12. This feature allows for placement of the hand closer to the blade 12 for greater control and use.

Referring now to FIGS. 1, 2, and 3, the proximal end 28 flares laterally greater than the width of the handle body 30. This configuration provides increased contact and support of the handle 16 with the blade 12, strengthening a failure point of traditional taping knives. As seen in FIG. 2, the proximal end 28 includes two lips 36 narrowing in thickness towards the working edge 20 of the blade 12. The lips 36 extend over the attachment edge 22, and over a portion of the backing plate 14, or, in narrower blades, over a web 37 of the blade 12.

The preferred embodiment includes a core 38 (seen in FIG. 2) made up of an inner core 40 and an outer core 42 (seen in FIG. 3). The inner core 40 has a distal end 44 and a proximal end 46. Likewise, the outer core 42 has a distal end 48 and a proximal end 50. While other conventional fabrication techniques are contemplated, the inner core 40 is preferably made by injection molding. The outer core 42 is preferably integrally formed by overmolding over the inner core 40, and a resilient gripping region 52 is integrally formed by overmolding over the outer core 42. The technique of overmolding is well known in the art. It is contemplated that the inner core 40 has recess formations 54 for receiving the outer core 42 to increase the strength of the bond between them. Both the inner core 40 and the outer core 42 may be made of polypropylene for its strength, cost, and workability attributes. Other equivalent materials known to skilled practitioners are contemplated. The gripping region 52 may be made of Santoprene brand styrene-ethylene-butylene-styrene or other moldable, resilient, rubber-like materials known in the art.

Furthermore, the resilient gripping region 52 is preferably textured, as by corrugations or ribs for improved gripping characteristics, and may be provided in more than one portion. The textured surface prevents slippage when the hand becomes wet from perspiration or other liquids.

As shown in FIG. 1, the handle body 30 increases in diameter from the proximal end 28 to the distal end 26. In addition, the

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proximal end 28 flares laterally outward from a neck 56 of the handle 16 for providing support to the blade and also for providing additional gripping surface to the user. The hammer element 18 also has a relatively large eyelet 58 allowing the tapping knife 10 to be hung up on a tool rack, hook, or other projection when not in use or to suspend the tool after use to facilitate drying.

The hammer element 18 abuts the distal end 26. A feature of the present knife 10 is that the hammer element 18 has portions that interlock with the distal end 26 allowing greater protection to the handle, especially when the user employs the side of the handle and hammer element as an impact tool, such as to set unseated nails. In the preferred embodiment, the hammer element 18 abuts the distal end 26 at at least one obtuse angle α relative to the extremity of the distal end 26 for dispersing impact forces in the lateral as well as axial directions. In addition, the angular design also protects a side 59 of the handle 16 farther down the length of the handle when compared to a non-angular design.

In the preferred embodiment a lower edge 60 (shown in FIG. 3) of the hammer element 18 has three segments (shown in FIG. 4), a central segment 62 is generally perpendicular to a longitudinal axis of the handle, and two end segments 64, 66, each defining the angle α with the central segment 62. In the preferred embodiment, α is approximately 135 degrees, however other angles are contemplated. As seen in FIG. 3, the distal ends 44 and 48 are provided with corresponding opposing surfaces 44a-c and 48a-c to positively engage the above-identified angled configuration of the lower edge 60 of the hammer element 18.

Referring now to FIGs. 3 and 4, the hammer element 18 is provided with at least one barbed peg 68 for attaching the hammer element 18 to the inner core 40. The barbs on the peg 68 securely retain the hammer element 18 in a corresponding bore (not shown) in the core 40 and prevent the hammer element from becoming severed from the inner core upon impact. Also, the inner core 40 includes at least one and preferably two unbarbed lugs 70 extending from the distal end 44 of the inner core 40. The two unbarbed lugs 70 mate with corresponding holes

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71 in the hammer element 18 and prevent the hammer element from rotating about the single barbed peg 68.

Referring now to FIGs. 1, 3, 5 and 7-9, another feature of the present taping knife 10 is that the handle 16 is configurable so that the user will be able to identify the source manufacturer even after long-term use. Accordingly, the handle 16 has an identification insert 72 including a relatively hard portion 74 having a raised logo 76 and a plurality of protrusions 77 extending downwardly from the relatively hard portion, and a resilient portion 78 surrounding the raised logo 76 to form an inlaid appearance. The resilient portion 78 may be made of a rubber-like material as described in relation to the gripping region 52 upon assembly and is flush with an upper surface 80 of the logo 76. Constructing the logo 76 out of a relatively hard material allows the logo to last longer and, since it is made of integrally formed plastic rather than being painted or printed on the handle 16, makes the logo 76 resistant to rubbing or wearing off during use. Consequently, users will be able to associate the tool with its manufacturer for a longer period of time than conventional taping knives.

In addition, the resilient portion 78 surrounding the logo 76 provides comfort to the user's hand when holding the taping knife 10. Surrounding the hard portion 74 with the resilient rubber-like portion 78 is more comfortable than if the identification insert 72 was made entirely of a hard material. The resilient portion 78 may be made of Santoprene brand styrene-ethylene-butylene-styrene and the hard portion 74 of polypropylene. Those skilled in the art are familiar with equivalent alternatives for the above-identified materials.

Upon assembly, the attachment edge 22 is inserted into the reinforcing backing plate 14, then crimped and/or fastened in place. Next, the blade 12 is placed in a mold and the inner core 40 is formed, preferably by injection molding, however other production techniques are contemplated. During molding, the proximal end 28 of the inner core 40 flows over the reinforcing backing plate 14 and the attachment edge 22, securing these parts together without the use of rivets or other fasteners. This flowing plastic also prevents the seepage of moisture between the

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plastic handle 16 and the metal blade 12, which is known to cause failure in conventional tapping knives. The preferred embodiment eliminates the need for rivets.

5 The inner core 40 and the blade 12 are then placed together in a mold and the outer core 42 is similarly formed, as by injection molding over the inner core 40. After that, an outer covering 82 of a resilient material is provided and formed over the outer core 42 to provide a soft gripping surface for the user. Santoprene brand styrene-ethylene-butylene-styrene or other moldable rubber-like materials may be used for
10 the outer covering 82. The outer covering 82 is also preferably used to facilitate the attachment of the inner core 40 to the blade 12 and optionally the reinforcing backing plate 14. While the outer covering 82 may be provided in one step to cover the outer core 42, in the preferred embodiment the next step in the assembly process is to inject the resilient
15 gripping region 52 as seen in FIG. 3. This gripping region 52 is applied over the outer core 42 and interlocks with the outer covering 82.

The identification insert 72 is assembled by forming the relatively hard portion 74 having the logo 76 and the plurality of protrusions 77, and then the resilient portion 78 is formed around it,
20 preferably by overmolding. The identification insert 72 is then secured into an insert receiving area or recess 86 defined by the handle core 38, such as by a friction fit, with chemical adhesives, ultrasonic bonding or similar technologies (FIG. 3). Lastly, the hammer element 18 is fastened to the distal end 26 of the handle 16 and is secured by insertion of the
25 barbed peg 68.

Referring now to FIG. 7, to enhance the positive engagement of the identification insert 72 into the handle, it is contemplated that the plurality of protrusions 77 includes at least one cylindrical protrusion 88 and at least one tab-shaped protrusion 90.
30 However, it is appreciated that the number and type of protrusion may be variable, as is known in the art.

As shown in FIG. 3, the handle core recess 86 includes a plurality of openings 92, each configured for matingly engaging a corresponding one of the plurality of protrusions 77. After a press-fit

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insertion into the handle recess 86, upper surfaces of the raised logo 76 and the surrounding resilient portion 78 are flush with the upper surface 80 of the logo and an exterior surface 94 of the handle 16 (FIG. 9). Once installed, it is contemplated that the identification insert 72 will not be removable without damaging the handle 16.

Referring to FIGs. 3 and 7, the relatively hard portion 74 further includes a sidewall 96 depending from the raised logo 76. The sidewall 96 includes a plurality of galleries 98 configured for receiving fingers 100 of the resilient portion 78 upon overmolding. It is contemplated that this arrangement will provide a strong bond between the relatively hard portion 74 and the resilient portion 78, helping to prevent the resilient portion from separating from the relatively hard portion after continued use of the taping knife 10. However, it is recognized that other conventional bonding techniques, such as chemical adhesives, may be available for securing the resilient portion 78 to the relatively hard portion 74.

Referring to FIG. 9, an alternate embodiment of the present insert is generally designated 102 and is shown inserted in an alternate taping knife 104. The knife 104 incorporates the same type of handle construction as the tool 10 and identical components are designated with identical reference numbers. In the knife 104, the contours of a handle 106 are modified from those of the handle 16. Also, the hammer element 108 is streamlined in appearance relative to the hammer element 18, and does not extend radially beyond the handle 106. Regarding the insert 102, the main distinction between it and the insert 72 is that it has generally arcuate or rounded ends 110 which matingly engage the corresponding recess 112, corresponding to the recess 86. In the insert 72, respective ends 114 are provided with generally right angled corners.

To further enable source identification of the taping knife 10, it is contemplated that the identification insert 72, 102 is provided so that the raised logo 76 is a distinct color from the resilient portion 78. It is preferred that the colored resilient portion 78 is made of a distinct color from the gripping region 82.

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To enable wallboard tapers to more easily identify or personalize their taping knives, an identification kit is provided, including a plurality of identification inserts 72, each of the identification inserts individually insertable into the handle core recess 86, and each of the
5 inserts 72 is provided with a different color. It is contemplated that providing each of the inserts 72 with a different color, especially in the resilient portion 78, will enable easy identification by the user of his or her particular taping knife 10. Thus personalization of the taping knives 10 is enhanced, and job site confusion of taping knife ownership is prevented.
10 It is also contemplated that the kit can be sold with only the inserts 72 (as a replacement kit) or with both the taping knife 10 and the inserts, i.e., as an identification system.

While a particular embodiment of the present taping knife with identification insert has been described herein, it will be appreciated by
15 those skilled in the art that changes and modifications may be made thereto without departing from the invention in its broader aspects and as set forth in the following claims.

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CLAIMS:

1. A handle for a taping knife having a blade with a working edge and an attachment edge opposite the working edge, the handle comprising;
- 5 a handle core with distal and proximal ends, said proximal end associated with said attachment edge, said core defining a recess; and
- 10 an identification insert insertable into said handle core recess.
2. The handle for the taping knife of claim 1 wherein said handle core includes an inner core and an outer core molded over said inner core.
3. The handle for the taping knife of claim 1 wherein
- 15 said insert includes a relatively hard portion and a resilient portion.
4. The handle for the taping knife of claim 3 wherein said insert relatively hard portion includes a raised logo and a plurality of protrusions extending downwardly from said relatively hard portion, said resilient portion configured for surrounding said raised logo to form an
- 20 inlaid appearance.
5. The handle for the taping knife of claim 4 wherein said plurality of protrusions includes at least one of a cylindrical protrusion and a tab-shaped protrusion.
6. The handle for the taping knife of claim 5 wherein
- 25 said handle core recess includes a plurality of openings each configured for engaging with a corresponding one of said plurality of protrusions.
7. The handle for the taping knife of claim 6 wherein after insertion into said handle recess, said raised logo and said surrounding resilient portion are flush with an exterior surface of said
- 30 handle.
8. The handle for the taping knife of claim 4 wherein said relatively hard portion further includes a sidewall depending from said raised logo.

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9. The handle for the taping knife of claim 8 wherein said sidewall includes a plurality of galleries configured for receiving fingers of said resilient portion.

5 10. An identification kit for a taping knife having a blade provided with a working edge and an attachment edge opposite the working edge, a handle with distal and proximal ends and a core, the proximal end associated with the attachment edge, the core defining a recess, the identification kit comprising:

10 a plurality of visually distinguishable identification inserts, each of said inserts individually insertable into the handle core recess.

11. The identification kit of claim 10 wherein each of said plurality of inserts is provided with a distinct color.

12. The identification kit of claim 11 wherein each of said plurality of inserts includes a relatively hard portion and a resilient portion.

15 13. The identification kit of claim 12 wherein said relatively hard portion includes a raised logo and a plurality of protrusions extending from said relatively hard portion, said resilient portion being configured for surrounding said raised logo to form an inlaid appearance.

20 14. The identification kit of claim 13 wherein said plurality of protrusions includes at least one of a cylindrical protrusion and a tab-shaped protrusion.

25 15. The identification kit of claim 13 wherein the handle core recess includes a plurality of openings each configured for engaging with a corresponding one of said plurality of protrusions in one of said plurality of inserts.

30 16. The identification kit of claim 12 wherein said relatively hard portion further includes a sidewall extending from said raised logo, said sidewall including a plurality of galleries configured for receiving fingers of said resilient portion.

17. A taping knife, comprising:

a blade having a working edge and an attachment edge opposite the working edge;

a handle with distal and proximal ends and a core provided with an inner core and an outer covering molded over said inner core,

said proximal end associated with said attachment edge, said core defining a recess; and

an identification system including a plurality of identification inserts, each of said plurality of inserts independently insertable into said handle core recess and each of said plurality of inserts provided with a different color.

18. The taping knife of claim 17, wherein each of said plurality of inserts includes a relatively hard portion and a resilient portion, said relatively hard portion including a raised logo and a plurality of protrusions extending from said relatively hard portion, said resilient portion surrounding said raised logo to form an inlaid appearance.

19. The taping knife of claim 18 wherein said relatively hard portion further includes a sidewall extending from said raised logo, said sidewall including a plurality of galleries configured for receiving fingers of said resilient portion.

20. An identification insert for use with a taping knife having a blade provided with a working edge and an attachment edge opposite the working edge, a handle with distal and proximal ends and a core provided with an inner core and an outer covering molded over the inner core, the proximal end associated with the attachment edge, the core defining a recess, the insert comprising:

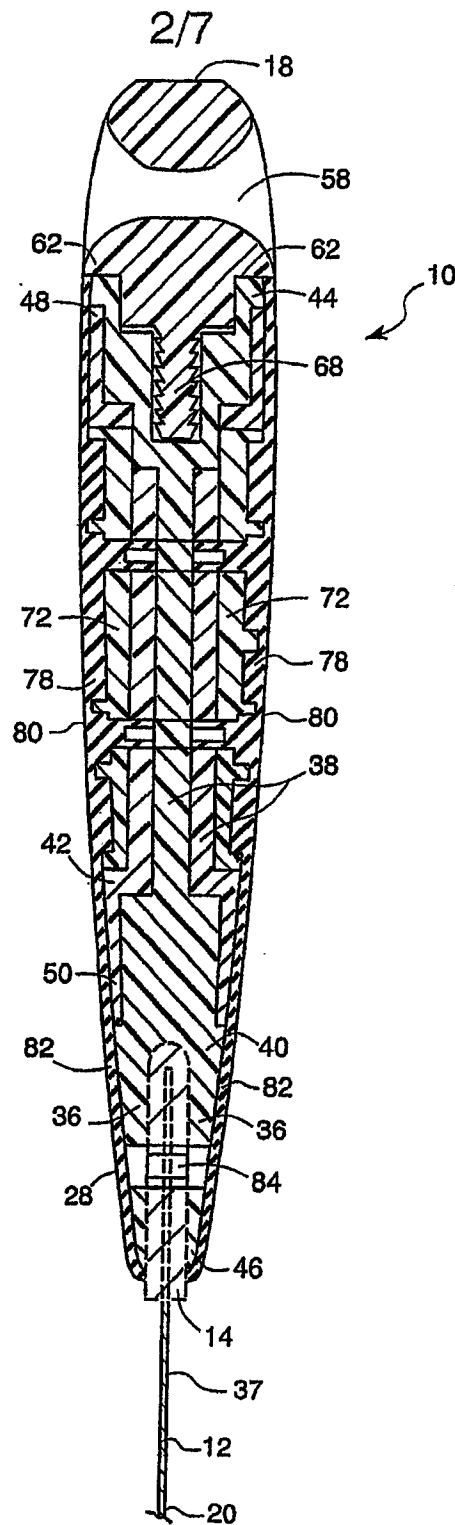
a relatively hard portion having a raised logo; and

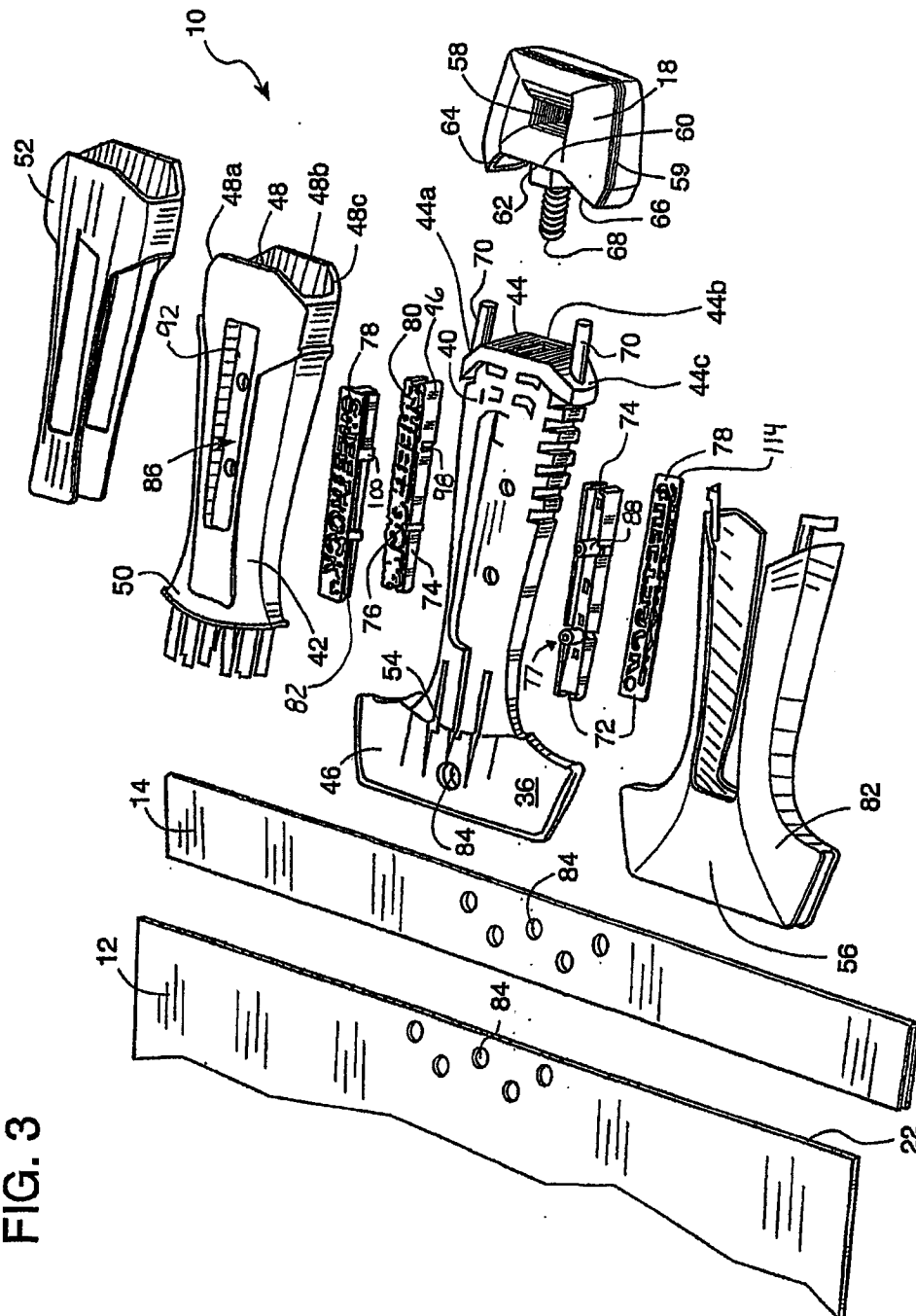
a resilient portion configured for surrounding said raised logo to form an inlaid appearance;

wherein the insert is insertable into the handle core recess.

21. The insert of claim 20 wherein said relatively hard portion further includes a plurality of protrusions extending therefrom and a sidewall extending from said raised logo, said sidewall having a plurality of galleries configured for receiving fingers of said resilient portion.

FIG. 2

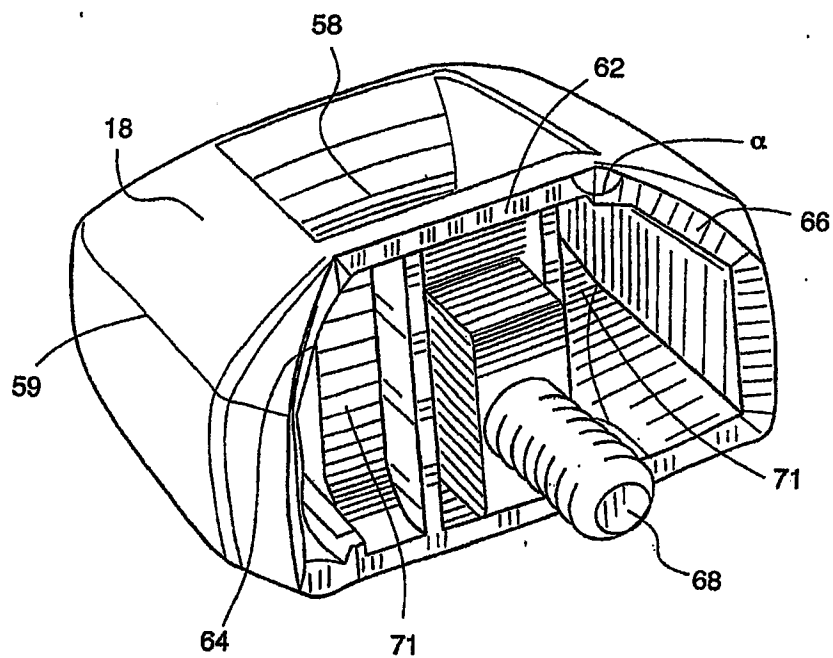




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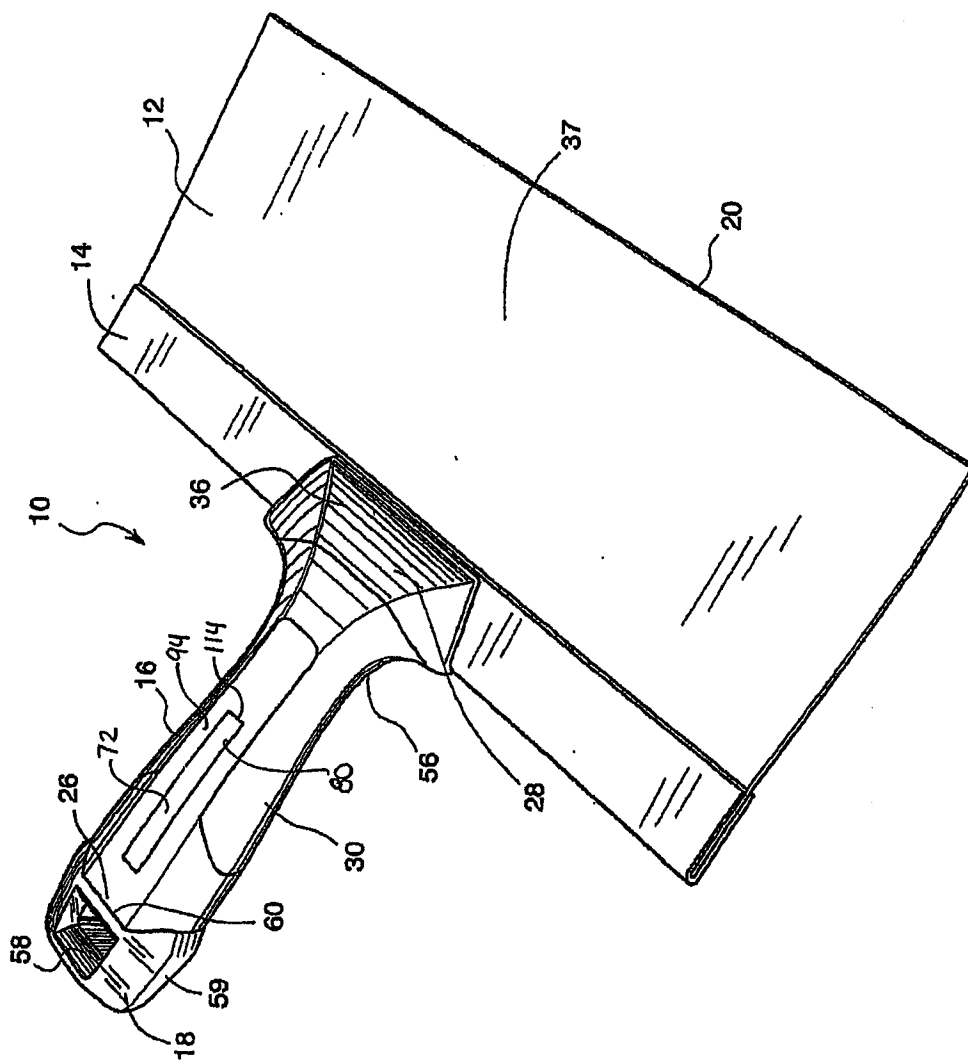
FIG. 4



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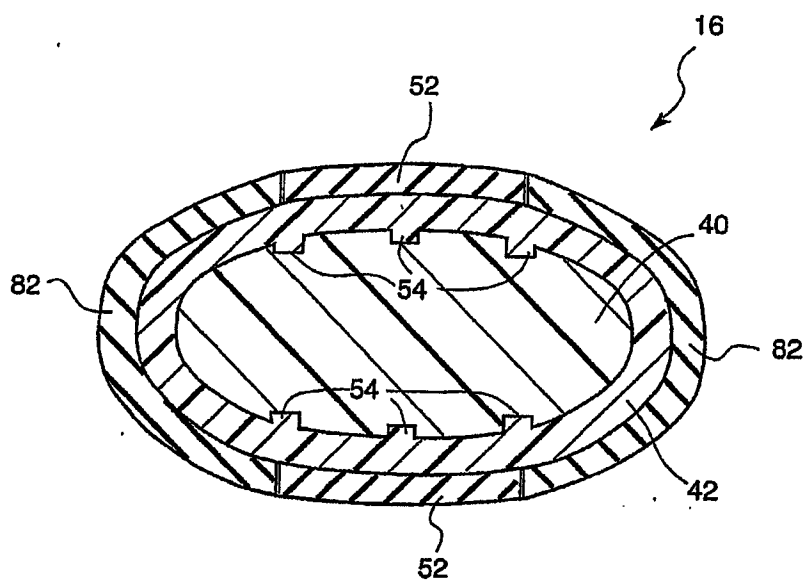


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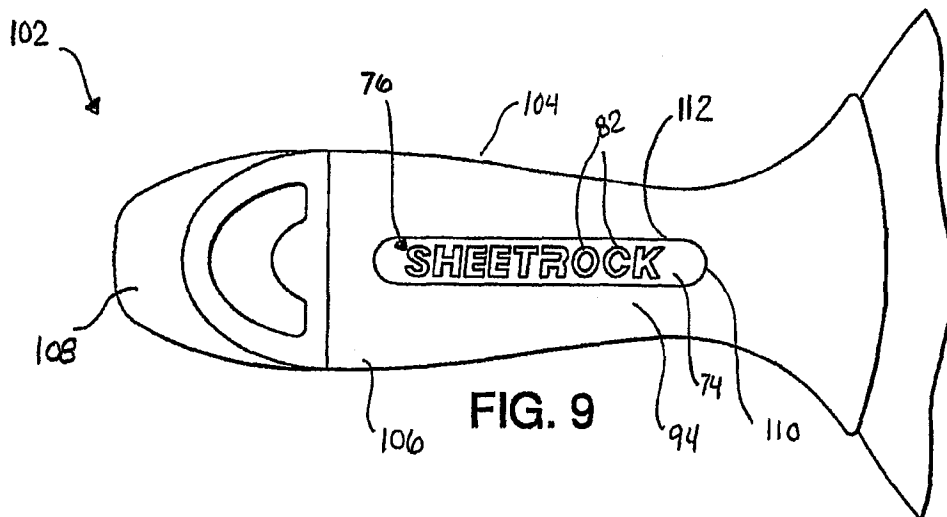
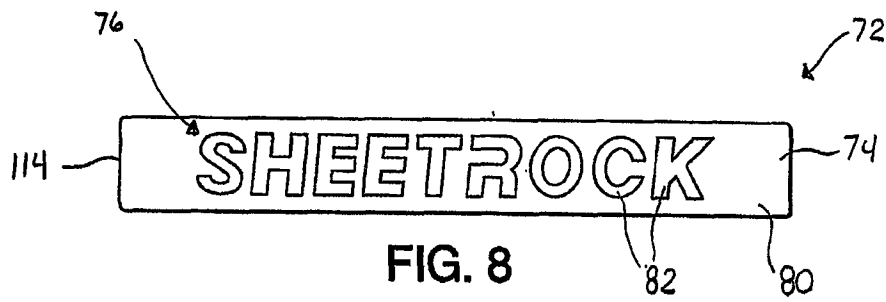
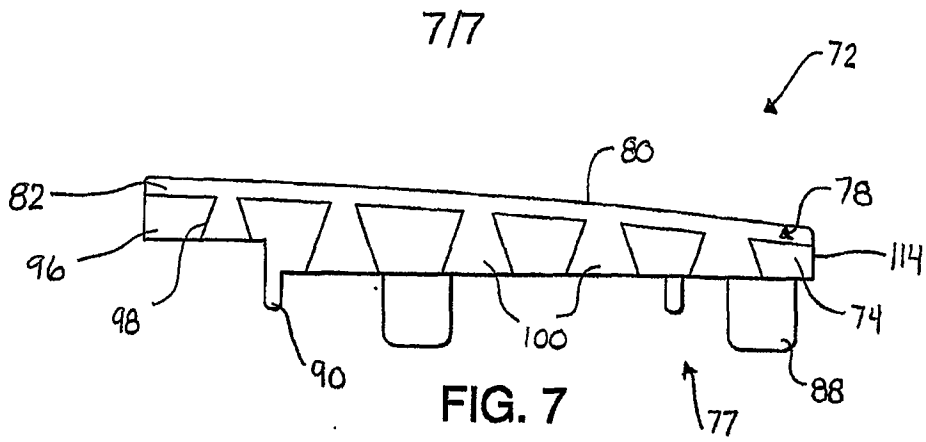
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FIG. 6



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MANGO DE ESPÁTULA CON INSERTO DE IDENTIFICACIÓN

SOLICITUD RELACIONADA

La presente solicitud es una continuación en parte del documento estadounidense N.º de serie 11/187.582, presentado el 22 de julio de 2005.

ANTECEDENTES DE LA INVENCION

La presente invención se refiere en forma general a herramientas manuales y, más en particular, a una espátula del tipo que se utiliza para el acabado de los proyectos de construcción con hojas de fibra prensada.

Las espátulas, cuyo ancho de hoja es variable, se usan para el acabado de proyectos de construcción con hojas de fibra prensada y para lograr una transición suave entre las superficies de las hojas de fibra prensada con juntas a tope. Cuando los paneles de hojas de fibra prensada están en su lugar, generalmente se usa una espátula más pequeña (por ejemplo, de 4–6 pulgadas) para aplicar un compuesto fijable para juntas y masilla para muro en seco a las juntas a tope formadas por las superficies de las hojas de fibra prensada. En este momento, también se deben colocar finalmente clavos sin asiento en las hojas de fibra prensada y pernos de soporte. Cuando se seca el compuesto para juntas, se usan espátulas cada vez más largas (por ejemplo, de 8–14 pulgadas) para aplicar más compuesto a las áreas de unión. Este paso se repite, intercalando pasos de lijado, hasta que la junta esté lo suficientemente plana y lisa.

Las espátulas actuales a menudo emplean madera o plásticos, tales como nailon rellenos de vidrio o poliolefinas, para el mango. Sin embargo, el bajo coeficiente de fricción sobre la superficie exterior lisa de los mangos convencionales permite que la espátula se deslice de la mano del usuario, en particular cuando la mano se humedece por la transpiración o el compuesto

para juntas. Asimismo, a los usuarios de manos más pequeñas les resulta difícil sostener las espátulas convencionales durante un uso prolongado.

Aunque algunas espátulas tienen un elemento de martillo en el extremo del mango para colocar clavos u otros objetos, muchas espátulas convencionales carecen de dichos elementos tipo martillo, y aquellas espátulas que sí tienen elementos tipo martillo generalmente tapan el mango. Muchos de los trabajadores que utilizan espátulas convencionales colocan el clavo antes de aplicar el compuesto para juntas, golpeando el clavo con el costado del mango en sentido perpendicular al clavo en lugar de golpearlo axialmente con respecto al mango, como se supone debe ser usada la herramienta. Este uso indebido puede hacer que el mango se quiebre, con lo que habrá que reemplazar la espátula. Además, no es raro que el mango se deslice de la mano del usuario durante la operación de martillado y ésta quede apretada entre la herramienta y la pared.

La tarea de acabado de juntas de hojas de fibra prensada por lo general requiere del uso de varias espátulas, como se describió anteriormente, y según el tamaño del proyecto también puede ser necesario emplear varios trabajadores del área de muros secos. Como ocurre con otros trabajadores especializados, quienes masillan hojas de fibra prensada suelen ser muy posesivos con sus herramientas. Cuando hay muchos trabajadores desempeñando una tarea, puede ser difícil para cada usuario identificar su espátula en el lugar de trabajo porque se parecen mucho entre sí. Además, en especial luego de un uso prolongado, se hace difícil identificar al fabricante de las espátulas debido a las similitudes en su aspecto.

En consecuencia, existe la necesidad, en las industrias de la reforma y/o la decoración de hogares, de contar con una mejor espátula que presente

mejores características de agarre y un sistema de identificación que resuelva las desventajas antes mencionadas.

BREVE SÍNTESIS DE LA INVENCION

Las necesidades enumeradas anteriormente se satisfacen o se superan con la presente espátula, que posee un inserto de identificación que se puede insertar en el mango de la espátula a los fines de la identificación. El inserto es preferentemente de un color preseleccionado, de modo tal que el usuario pueda identificar su espátula particular con facilidad.

Más específicamente, el presente mango para espátula, que incluye una hoja con un borde de trabajo y un borde de enganche opuesto al borde de trabajo, tiene un mango que incluye un núcleo del mango con un extremo distal y un extremo proximal, en donde el extremo proximal está asociado con el borde de enganche, el núcleo define un entrante, y al menos un inserto de identificación que se puede insertar en el entrante del núcleo del mango.

También se proporciona un equipo de identificación para la presente espátula, equipo de identificación que incluye una espátula con una pluralidad de insertos de identificación, cada uno de los cuales se puede insertar de manera individual en el entrante del núcleo del mango.

BREVE DESCRIPCIÓN DE LAS DISTINTAS VISTAS DE LOS DIBUJOS

La Figura 1 es una vista de frente de la presente espátula con un inserto de identificación en el mango, en donde se han omitido partes por razones de claridad;

la Figura 2 es una vista en corte transversal a lo largo de la línea 2-2 mostrada en la Figura 1 en la dirección generalmente indicada;

la Figura 3 es una vista detallada en perspectiva superior de la presente espátula;

la Figura 4 es una vista en perspectiva superior del elemento de martillo;

la Figura 5 es una vista en perspectiva superior de la presente espátula con el inserto de identificación en el mango;

la Figura 6 es una vista en corte transversal tomada a lo largo de la línea 6-6 mostrada en la Figura 1 en la dirección generalmente indicada;

la Figura 7 es una vista lateral de un inserto que se puede insertar en el mango de la presente espátula;

la Figura 8 es una vista superior del inserto de la Figura 7; y

la Figura 9 es una vista superior del inserto de la Figura 7 como aparece en el mango de una forma de realización alternativa de la presente espátula.

DESCRIPCIÓN DETALLADA DE LA INVENCION

Con respecto a las Figuras 1 y 5, una espátula diseñada en forma general 10 preferentemente se construye con una hoja de metal plana 12, una placa de soporte y refuerzo 14, un mango 16 y un elemento de martillo 18. La hoja 12 tiene un borde de trabajo 20 y un borde de enganche 22 opuesto al borde de trabajo 20. Aunque se contemplan otros materiales, la hoja 12 preferentemente está hecha de acero azulado, y la placa de soporte y refuerzo 14 está hecha de aluminio. La forma de la hoja 12 se muestra en la Figura 1, pero se prevé que el mango 16 se pueda usar con hojas más cortas 12' que tengan un borde de enganche curvado 22' (mostrado en segundo plano en la Figura 1) y sin placa de soporte y refuerzo 14, como bien se sabe en el arte. Más aún, se contemplan otras formas de hoja, ya sea con o sin placa de soporte y refuerzo 14.

El mango 16 tiene al menos un diámetro D e incluye un extremo distal 26 y un extremo proximal 28, y un cuerpo 30, en donde el extremo proximal 28 está asociado con el borde de enganche 22. Una característica de la presente espátula 10 es la configuración del elemento de martillo 18, que está asociado con el extremo distal 26 y con preferencia, aunque no necesariamente, está hecho de un material más duro respecto del mango 16. Aquí, "asociado con" significa que el elemento de martillo 18 estará unido al extremo distal 26. Sin embargo, se prevé que el elemento de martillo 18 y el extremo distal 26 puedan no estar en contacto directo. Lo mismo se aplica al extremo proximal 28.

Una periferia 32 del elemento de martillo 18 se extiende en dirección radial más allá de al menos un diámetro D del cuerpo del mango 30. Esto proporciona más superficie para golpear los sujetadores del muro seco o para otras tareas de martillado que realizan usuarios tales como masilladores de hojas de fibra prensada u otros trabajadores. Además, el elemento de martillo sobredimensionado 18 actúa como amortiguador para la mano del usuario final cuando golpea la pared, lo que reduce la posibilidad de que se golpee la mano. Cabe destacar que la configuración de mango tipo "bate de béisbol" y martillo puede variar de tamaño para adaptarse a la aplicación particular.

El mango 16 descrito anteriormente y que se observa mejor en la Figura 1 puede tener al menos un diámetro D que incluye una pluralidad de diámetros de diversos tamaños que se extienden desde el extremo distal 26 hasta el extremo proximal 28. Una ventaja de la forma de realización preferida es que el diámetro mayor D de la pluralidad de diámetros es menor que la periferia 32 del elemento de martillo 18. Se contempla que el elemento de martillo 18 esté hecho de varios materiales duros diferentes, cuyas propiedades incluyen

resistencia, durabilidad y baja maleabilidad y ductilidad. Se prevé que el elemento de martillo 18 preferido esté hecho de metal, preferentemente zinc.

Como se muestra en la Figura 1, la longitud axial H del elemento de martillo 18 es con mayor preferencia un 20–25% de la longitud axial L del mango 16. Sin embargo, la longitud axial H del elemento de martillo 18 preferentemente está en el rango aproximado del 15–30% de la longitud axial L del mango 16.

Como se muestra en la Figura 6, el mango 16 tiene una sección transversal generalmente elíptica para mayor comodidad al sostenerlo. La sección transversal generalmente elíptica de la espátula 10 preferentemente se extiende hasta un punto directamente adyacente al borde de enganche 22 de la hoja 12. Esta característica permite ubicar la mano más cerca de la hoja 12 y lograr así un mayor control y un mejor uso.

Con respecto ahora a las Figuras 1, 2 y 3, el extremo proximal 28 se extiende lateralmente más allá del ancho del cuerpo del mango 30. Esta configuración proporciona mayor contacto y soporte del mango 16 con la hoja 12, superando de esta forma una desventaja de las espátulas tradicionales. Como se observa en la Figura 2, el extremo proximal 28 incluye dos rebordes 36 cuyo grosor disminuye hacia el borde de trabajo 20 de la hoja 12. Los rebordes 36 se extienden sobre el borde de enganche 22 y sobre una parte de la placa de soporte 14 o, en las hojas más angostas, sobre una red 37 de la hoja 12.

La forma de realización preferida incluye un núcleo 38 (que se observa en la Figura 2) conformado por un núcleo interno 40 y un núcleo externo 42 (que se observan en la Figura 3). El núcleo interno 40 tiene un extremo distal 44 y un extremo proximal 46. De igual manera, el núcleo externo 42 tiene un

extremo distal 48 y un extremo proximal 50. Aunque se contemplan otras técnicas de fabricación convencionales, el núcleo interno 40 preferentemente se hace por moldeo por inyección. El núcleo externo 42 preferentemente está integralmente formado por sobremoldeo sobre el núcleo interno 40, y una región de sujeción resiliente 52 está integralmente formada por sobremoldeo sobre el núcleo externo 42. La técnica del sobremoldeo es bien conocida en el arte. Se contempla que el núcleo interno 40 tenga formaciones entrantes 54 para recibir el núcleo externo 42, de modo de incrementar la resistencia del vínculo entre ambos. Tanto el núcleo interno 40 como el núcleo externo 42 pueden estar hechos de polipropileno para obtener sus atributos en materia de resistencia, costo y funcionalidad. Se contemplan otros materiales equivalentes conocidos para los especialistas en el arte. La región de agarre 52 puede estar hecha de estireno-etileno-butileno-estireno marca Santoprene o de otros materiales moldeables, resilientes, tipo goma conocidos en el arte.

Más aún, la región de agarre resiliente 52 preferentemente es texturada, con corrugaciones o nervaduras para lograr mejores características de agarre, y puede proporcionarse en más de una porción. La superficie texturada evita el deslizamiento cuando la mano se humedece debido a la transpiración u otros líquidos.

Como se muestra en la Figura 1, el cuerpo del mango 30 aumenta de diámetro desde el extremo proximal 28 hasta el extremo distal 26. Asimismo, el extremo proximal 28 se extiende de manera lateral hacia afuera desde un cuello 56 del mango 16 para proporcionar apoyo a la hoja y además para proporcionarle una superficie de agarre adicional al usuario. El elemento de martillo 18 también tiene un ojal relativamente grande 58 que permite colgar la espátula 10 en un bastidor o gancho para herramientas u otro elemento

saliente cuando no se la usa o suspender la herramienta luego de usarla para facilitar el secado.

El elemento de martillo 18 está próximo al extremo distal 26. Una característica de la presente espátula 10 es que el elemento de martillo 18 tiene porciones que se interconectan con el extremo distal 26, lo que permite una mayor protección del mango, en especial cuando el usuario emplea el costado del mango y el elemento de martillo como herramienta de impacto, por ejemplo para colocar clavos sin asiento. En la forma de realización preferida, el elemento de martillo 18 está próximo al extremo distal 26 formando al menos un ángulo obtuso α respecto del final del extremo distal 26 para dispersar las fuerzas de impacto tanto en dirección lateral como en dirección axial. Asimismo, el diseño angular también protege un lado 59 del mango 16 más hacia abajo a lo largo del mango en comparación con el diseño no angular.

En la forma de realización preferida, un borde inferior 60 (mostrado en la Figura 3) del elemento de martillo 18 tiene tres segmentos (mostrados en la Figura 4): un segmento central 62 que, por lo general, es perpendicular a un eje longitudinal del mango, y dos segmentos finales 64, 66, cada uno de los cuales define el ángulo α con el segmento central 62. En la forma de realización preferida, α es de aproximadamente 135° ; sin embargo, se contemplan otros ángulos. Como se observa en la Figura 3, los extremos distales 44 y 48 se proporcionan con sus correspondientes superficies opuestas 44a-c y 48a-c para enganchar positivamente la configuración angular antes mencionada del borde inferior 60 del elemento de martillo 18.

Con referencia ahora a las Figuras 3 y 4, el elemento de martillo 18 se proporciona con al menos una espiga de púas 68 para unir el elemento de martillo 18 al núcleo interno 40. Las púas de la espiga 68 retienen de manera

segura el elemento de martillo 18 en una correspondiente perforación (no se muestra) del núcleo 40 y evitan que el elemento de martillo se separe del núcleo interno durante el impacto. Además, el núcleo interno 40 incluye al menos una y preferentemente dos agarraderas sin púas 70 que se extienden desde el extremo distal 44 del núcleo interno 40. Las dos agarraderas sin púas 70 se acoplan a los correspondientes orificios 71 del elemento de martillo 18 y evitan que el elemento de martillo rote alrededor de la única espiga de púas 68.

Con respecto ahora a las Figuras 1, 3, 5 y 7-9, otra característica de la presente espátula 10 es que el mango 16 se puede configurar de modo tal que el usuario pueda identificar el fabricante de origen incluso transcurrido un largo tiempo de uso. De esta manera, el mango 16 tiene un inserto de identificación 72 que incluye una porción relativamente dura 74 que posee un logo sobreelevado 76 y una pluralidad de protuberancias 77 que se extienden hacia abajo desde la porción relativamente dura, y una porción resiliente 78 que rodea el logo sobreelevado 76 para darle un aspecto embutido. La porción resiliente 78 puede estar hecha de un material similar a la goma, como se describe con relación a la región de agarre 52 durante el ensamblado, y está a nivel con una superficie superior 80 del logo 76. La construcción del logo 76 a partir de un material relativamente duro permite que el logo dure más y, al estar hecho de plástico integralmente formado en lugar de estar pintado o impreso en el mango 16, el logo 76 es resistente al frotamiento o al desgaste durante el uso. En consecuencia, los usuarios podrán asociar la herramienta con su fabricante durante un período de tiempo más largo que con las espátulas convencionales.

Además, la porción resiliente 78 que rodea el logo 76 proporciona comodidad a la mano del usuario cuando éste sostiene la espátula 10. Rodear

la porción dura 74 con la porción resiliente similar a la goma 78 resulta más cómodo que si el inserto de identificación 72 estuviera hecho enteramente de material duro. La porción resiliente 78 puede estar hecha de estireno-etileno-butileno-estireno de marca Santoprene, y la porción dura 74 puede estar hecha de polipropileno. Los especialistas en el arte están familiarizados con las alternativas equivalentes para los materiales mencionados anteriormente.

Durante el ensamblado, el borde de enganche 22 se inserta en la placa de soporte y refuerzo 14, luego se fija y/o se asegura en su lugar. A continuación, la hoja 12 se coloca en un molde y se forma el núcleo interno 40, preferentemente por moldeo por inyección, aunque se contemplan otras técnicas de producción. Durante el moldeo, el extremo proximal 28 del núcleo interno 40 fluye sobre la placa de soporte y refuerzo 14 y el borde de enganche 22, asegurando estas partes entre sí sin usar remaches u otro tipo de sujetadores. Este plástico que fluye además evita la filtración de humedad entre el mango plástico 16 y la hoja de metal 12, algo que se sabe es causa de fallas en las espátulas convencionales. La forma de realización preferida elimina la necesidad de remaches.

El núcleo interno 40 y la hoja 12 luego se colocan juntos en un molde, y el núcleo externo 42 se forma de manera similar, tal como por moldeo por inyección sobre el núcleo interno 40. Luego, se proporciona un recubrimiento exterior 82 de un material resiliente, el cual se forma sobre el núcleo externo 42 de modo de suministrarle al usuario una superficie de agarre suave. Se puede usar estireno-etileno-butileno-estireno de marca Santoprene u otro material moldeable similar a la goma para el recubrimiento exterior 82. El recubrimiento exterior 82 preferentemente se usa además para facilitar la unión del núcleo interno 40 con la hoja 12, y opcionalmente con la placa de soporte y refuerzo

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14. Aunque el recubrimiento exterior 82 se puede proporcionar en un paso para cubrir el núcleo externo 42, en la forma de realización preferida el siguiente paso del proceso de ensamblado consiste en inyectar la región de agarre resiliente 52, como se observa en la Figura 3. Esta región de agarre 52 se aplica sobre el núcleo externo 42 y se interconecta con el recubrimiento exterior 82.

El inserto de identificación 72 se ensambla mediante la formación de la porción relativamente dura 74 que tiene el logo 76 y la pluralidad de protuberancias 77, y luego la porción resiliente 78 se forma alrededor de ella, preferentemente por sobremoldeo. El inserto de identificación 72 se asegura entonces dentro de un área o entrante para recepción del inserto 86 definida por el núcleo del mango 38, tal como por montaje por fricción, adhesivos químicos, unión ultrasónica o tecnologías similares (Figura 3). Por último, el elemento de martillo 18 se fija al extremo distal 26 del mango 16 y se asegura mediante la inserción de la espiga con púas 68.

Con respecto ahora a la Figura 7, para mejorar el enganche positivo del inserto de identificación 72 al mango, se contempla que la pluralidad de protuberancias 77 incluya al menos una protuberancia cilíndrica 88 y al menos una protuberancia en forma de lengüeta 90. Sin embargo, se puede apreciar que la cantidad y el tipo de protuberancias pueden ser variables, como bien se sabe en el arte.

Como se muestra en la Figura 3, el entrante del núcleo del mango 86 incluye una pluralidad de aberturas 92, cada una de las cuales está configurada para engancharse con una correspondiente de una pluralidad de protuberancias 77. Luego de la inserción a presión dentro del entrante del mango 86, las superficies superiores del logo sobreelevado 76 y la porción

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resiliente que lo rodea 78 están al nivel de la superficie superior 80 del logo y una superficie exterior 94 del mango 16 (Figura 9). Una vez instalado, se contempla que el inserto de identificación 72 no se pueda remover sin dañar el mango 16.

Con respecto a las Figuras 3 y 7, la porción relativamente dura 74 incluye además una pared lateral 96 según el logo sobreelevado 76. La pared lateral 96 incluye una pluralidad de galerías 98 configuradas para recibir retenes 100 de la porción resiliente 78 durante el sobremoldeo. Se contempla que esta disposición proporcione un fuerte vínculo entre la porción relativamente dura 74 y la porción resiliente 78, lo que ayuda a evitar que la porción resiliente se separe de la porción relativamente dura luego de un uso continuo de la espátula 10. Sin embargo, se reconoce que se pueden emplear otras técnicas de unión convencionales, tales como los adhesivos químicos, para asegurar la porción resiliente 78 a la porción relativamente dura 74.

Con respecto a la Figura 9, una forma de realización alternativa del presente inserto se designa en forma general 102 y se muestra insertada en una espátula alternativa 104. La espátula 104 incorpora el mismo tipo de construcción de mango que la herramienta 10, y los componentes iguales se designan con los mismos números de referencia. En la espátula 104, los contornos del mango 106 se modifican a partir de los del mango 16. Además, el elemento de martillo 108 se recorta para obtener un aspecto similar al del elemento de martillo 18, y no se extiende en forma radial más allá del mango 106. Respecto del inserto 102, la principal distinción entre éste y el inserto 72 es que generalmente tiene extremos arqueados o redondeados 110 que se enganchan con el correspondiente entrante 112, correspondiente al entrante

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86. En el inserto 72, los respectivos extremos 114 se proporcionan con esquinas generalmente en ángulo recto.

Para permitir la identificación adicional del origen de la espátula 10, se contempla que el inserto de identificación 72, 102 se proporcione de manera tal que el logo sobreelevado 76 tenga un color singular que lo distinga de la porción resiliente 78. Se prefiere que la porción resiliente coloreada 78 esté hecha de un color singular que la distinga de la región de agarre 82.

Para permitir que los trabajadores que masillan hojas de fibra prensada identifiquen con mayor facilidad o personalicen sus espátulas, se provee un equipo de identificación, que incluye una pluralidad de insertos de identificación 72, cada uno de los cuales se puede insertar individualmente en el entrante del núcleo del mango 86, y cada uno de los insertos 72 se proporciona con un color diferente. Se contempla que el suministro de cada uno de los insertos 72 con un color diferente, en especial en la porción resiliente 78, permita la fácil identificación por parte del usuario de su espátula particular 10. De esta forma, mejora la personalización de las espátulas 10 y se evita la confusión de espátulas en el lugar de trabajo. También se contempla que el equipo se pueda vender sólo con los insertos 72 (como equipo de reemplazo) o con la espátula 10 y los insertos, o sea, como sistema de identificación.

Aunque en la presente se ha descrito una forma de realización particular de la presente espátula con inserto de identificación, los especialistas en el arte apreciarán que se pueden introducir cambios y modificaciones sin por ello apartarse de la invención en sus aspectos más amplios y como se la define en las siguientes reivindicaciones.

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REIVINDICACIONES - 1915

1. Un mango para una espátula que tiene una hoja con un borde de trabajo y un borde de enganche opuesto al borde de trabajo, en donde el mango comprende;

un núcleo del mango con un extremo distal y un extremo proximal, en donde dicho extremo proximal está asociado con dicho borde de enganche, en donde dicho núcleo define un entrante; y

un inserto de identificación que se puede insertar en dicho entrante del núcleo del mango.

2. El mango para la espátula de acuerdo con la reivindicación 1, en donde dicho núcleo del mango incluye un núcleo interno y un núcleo externo moldeado sobre dicho núcleo interno.

3. El mango para la espátula de acuerdo con la reivindicación 1, en donde dicho inserto incluye una porción relativamente dura y una porción resiliente.

4. El mango para la espátula de acuerdo con la reivindicación 3, en donde dicha porción relativamente dura del inserto incluye un logo sobreelevado y una pluralidad de protuberancias que se extienden hacia abajo desde dicha porción relativamente dura, en donde dicha porción resiliente está configurada para rodear dicho logo sobreelevado de modo de lograr un aspecto embutido.

5. El mango para la espátula de acuerdo con la reivindicación 4, en donde dicha pluralidad de protuberancias incluye al menos una de una protuberancia cilíndrica y una protuberancia en forma de lengüeta.

6. El mango para la espátula de acuerdo con la reivindicación 5, en donde dicho entrante del núcleo del mango incluye una pluralidad de aberturas,

cada una de las cuales está configurada para engancharse con una correspondiente de dicha pluralidad de protuberancias.

7. El mango para la espátula de acuerdo con la reivindicación 6, en donde luego de la inserción en dicho entrante del mango, dicho logo sobreelevado y dicha porción resiliente que lo rodea están a nivel con una superficie exterior de dicho mango.

8. El mango para la espátula de acuerdo con la reivindicación 4, en donde dicha porción relativamente dura además incluye una pared lateral según dicho logo sobreelevado.

9. El mango para la espátula de acuerdo con la reivindicación 8, en donde dicha pared lateral incluye una pluralidad de galerías configuradas para recibir los retenes de dicha porción resiliente.

10. Un equipo de identificación para una espátula que tiene una hoja con un borde de trabajo y un borde de enganche opuesto al borde de trabajo, un mango con un extremo distal y un extremo proximal y un núcleo, en donde el extremo proximal está asociado con el borde de enganche, el núcleo define un entrante, el equipo de identificación comprende:

una pluralidad de insertos de identificación visualmente distinguibles, cada uno de los cuales se puede insertar de manera individual en el entrante del núcleo del mango.

11. El equipo de identificación de acuerdo con la reivindicación 10, en donde cada uno de dicha pluralidad de insertos se proporciona con un color singular.

12. El equipo de identificación de acuerdo con la reivindicación 11, en donde cada uno de dicha pluralidad de insertos incluye una porción relativamente dura y una porción resiliente.

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13. El equipo de identificación de acuerdo con la reivindicación 12, en donde dicha porción relativamente dura incluye un logo sobreelevado y una pluralidad de protuberancias que se extienden desde dicha porción relativamente dura, en donde dicha porción resiliente está configurada para rodear dicho logo sobreelevado de modo de lograr un aspecto embutido.

14. El equipo de identificación de acuerdo con la reivindicación 13, en donde dicha pluralidad de protuberancias incluye al menos una de una protuberancia cilíndrica y una protuberancia en forma de lengüeta.

15. El equipo de identificación de acuerdo con la reivindicación 13, en donde el entrante del núcleo del mango incluye una pluralidad de aberturas, cada una de las cuales está configurada para engancharse con una correspondiente de dicha pluralidad de protuberancias en uno de dicha pluralidad de insertos.

16. El equipo de identificación de acuerdo con la reivindicación 12, en donde dicha porción relativamente dura incluye además una pared lateral que se extiende desde dicho logo sobreelevado, en donde dicha pared lateral incluye una pluralidad de galerías configuradas para recibir retenes de dicha porción resiliente.

17. Una espátula que comprende:

una hoja que tiene un borde de trabajo y un borde de enganche opuesto al borde de trabajo;

un mango con un extremo distal y un extremo proximal y un núcleo que posee un núcleo interno y un recubrimiento exterior moldeado sobre dicho núcleo interno, en donde dicho extremo proximal está asociado con dicho borde de enganche, dicho núcleo define un entrante; y

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un sistema de identificación que incluye una pluralidad de insertos de identificación, cada uno de los cuales se puede insertar de manera independiente en dicho entrante del núcleo del mango, y cada uno de dicha pluralidad de insertos se proporciona con un color diferente.

18. La espátula de acuerdo con la reivindicación 17, en donde cada uno de dicha pluralidad de insertos incluye una porción relativamente dura y una porción resiliente, en donde dicha porción relativamente dura incluye un logo sobreelevado y una pluralidad de protuberancias que se extienden desde dicha porción relativamente dura, dicha porción resiliente rodea dicho logo sobreelevado para lograr un aspecto embutido.

19. La espátula de acuerdo con la reivindicación 18, en donde dicha porción relativamente dura incluye además una pared lateral que se extiende desde dicho logo sobreelevado, en donde dicha pared lateral incluye una pluralidad de galerías configuradas para recibir retenes de dicha porción resiliente.

20. Un inserto de identificación para usar con una espátula que tiene una hoja con un borde de trabajo y un borde de enganche opuesto al borde de trabajo, un mango con un extremo distal y un extremo proximal y un núcleo que posee un núcleo interno y un recubrimiento exterior moldeado sobre el núcleo interno, en donde el extremo proximal está asociado con el borde de enganche, el núcleo define un entrante, el inserto comprende:

una porción relativamente dura que tiene un logo sobreelevado; y

una porción resiliente configurada para rodear dicho logo sobreelevado de modo de lograr un aspecto embutido;

en donde el inserto se puede insertar en el entrante del núcleo del mango.

21. El inserto de acuerdo con la reivindicación 20, en donde dicha porción relativamente dura incluye además una pluralidad de protuberancias que se extienden desde allí, y una pared lateral que se extiende desde dicho logo sobreelevado, en donde dicha pared lateral tiene una pluralidad de galerías configuradas para recibir retenes de dicha porción resiliente.

p.p. United States Gypsum Company

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RESUMEN

Un mango para una espátula que tiene una hoja con un borde de trabajo y un borde de enganche opuesto al borde de trabajo, en donde el mango incluye un núcleo del mango con un extremo distal y un extremo proximal, el extremo proximal está asociado con el borde de enganche, el núcleo define un entrante, y al menos un inserto de identificación que se puede insertar en el entrante del núcleo del mango.

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FIG. 1

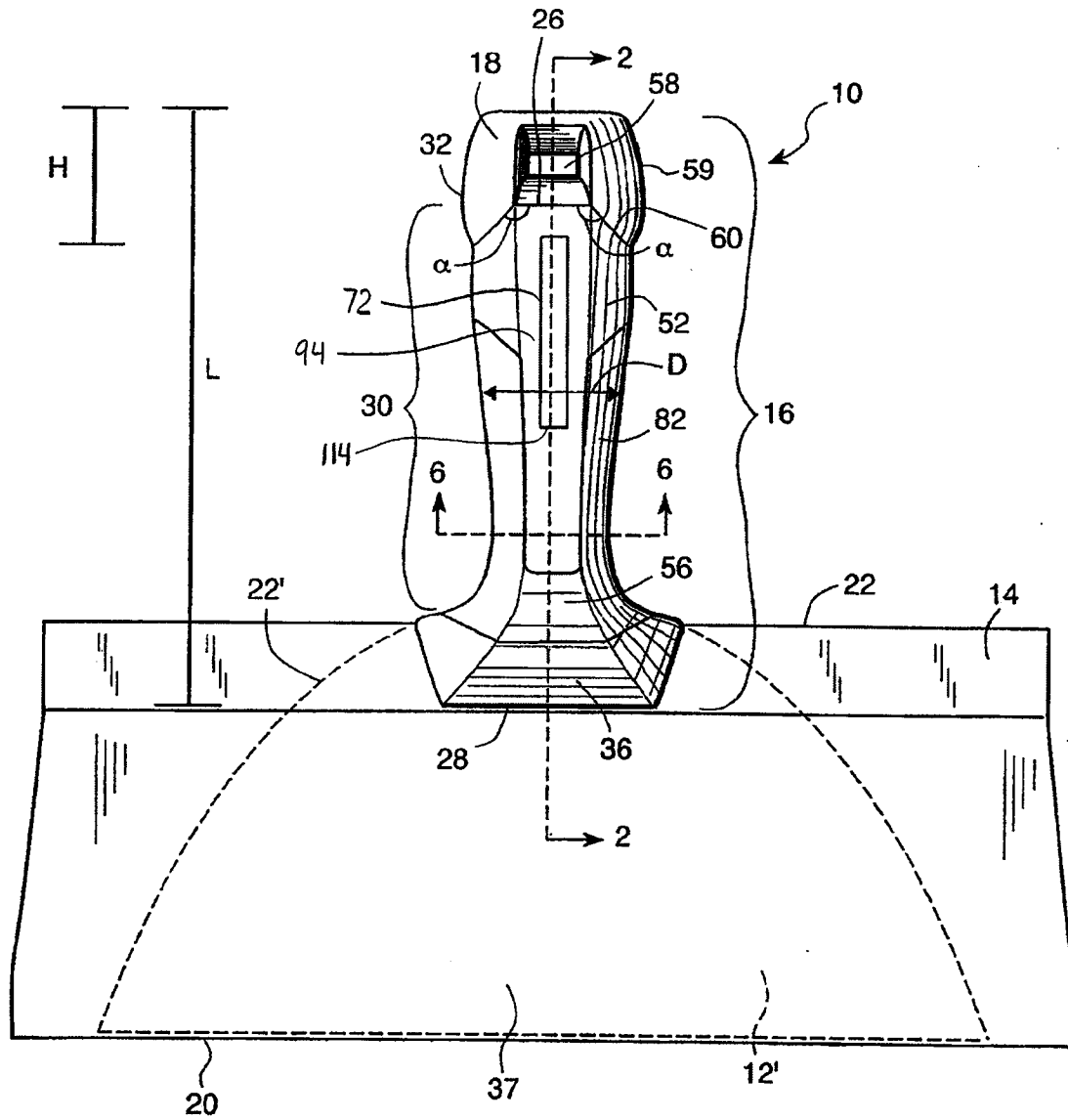


FIG. 2

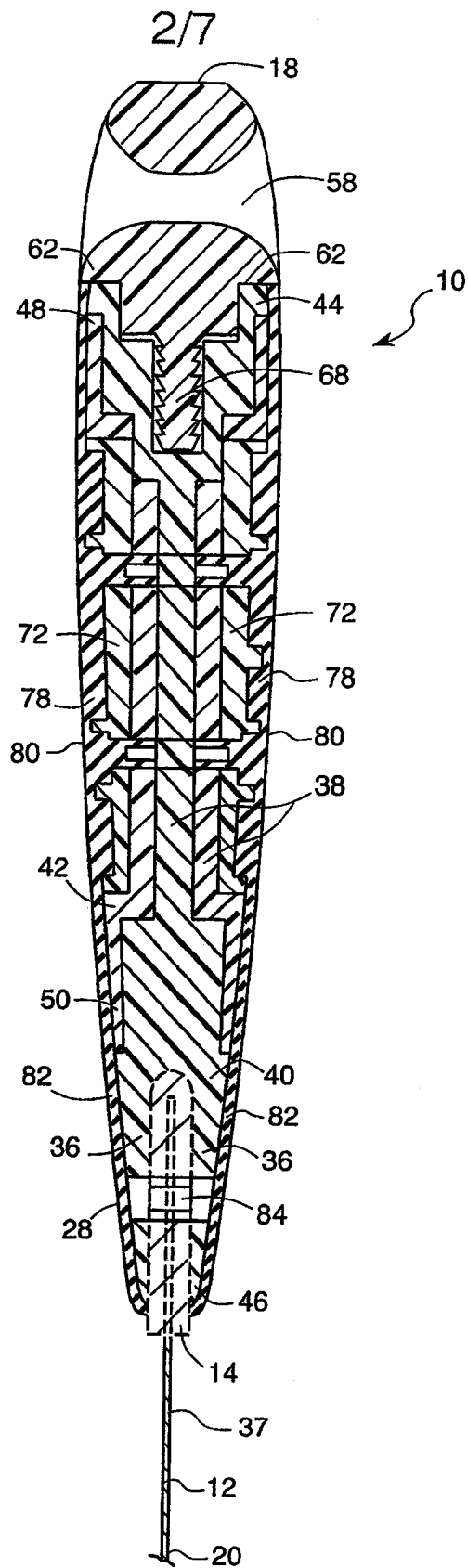
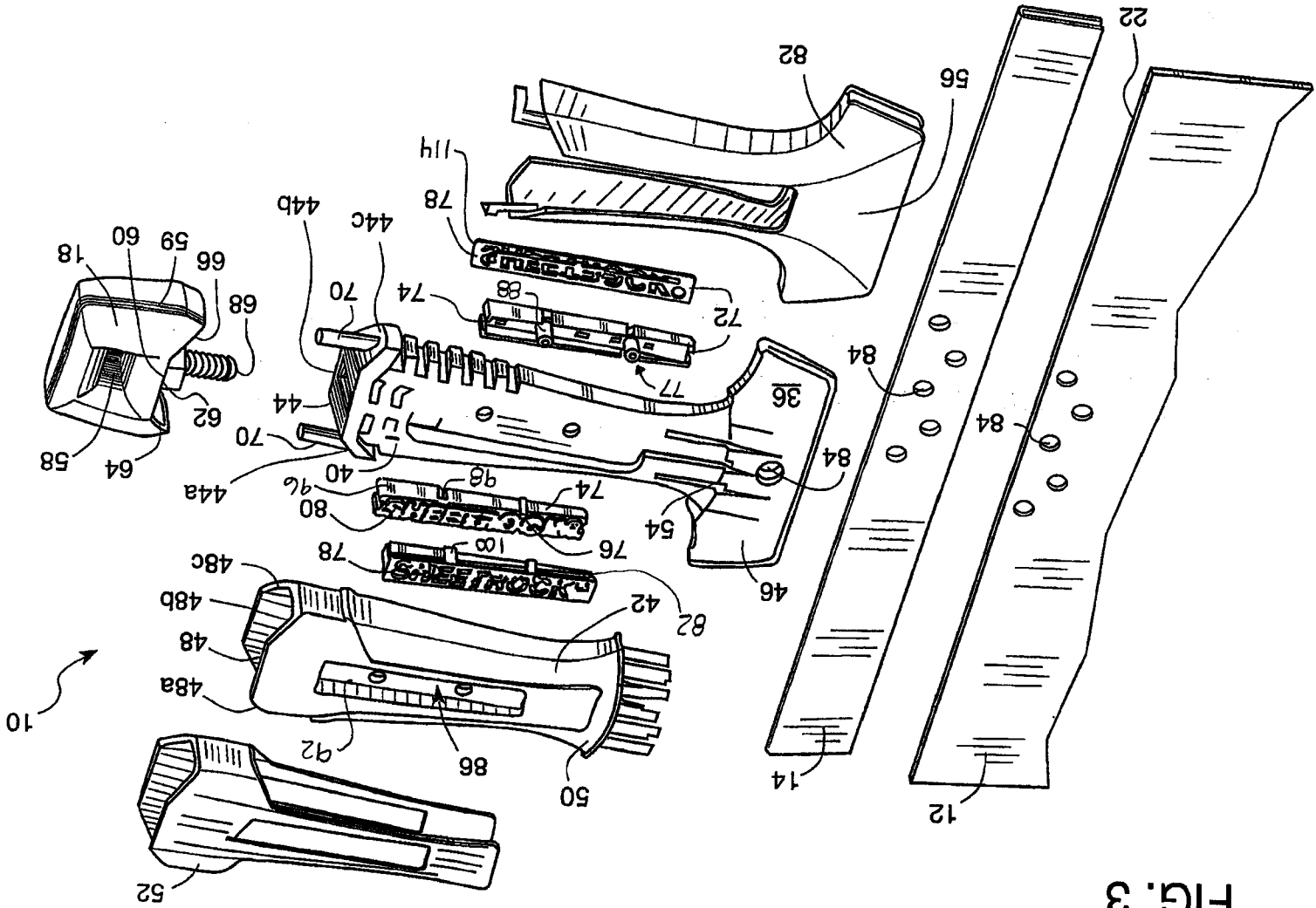


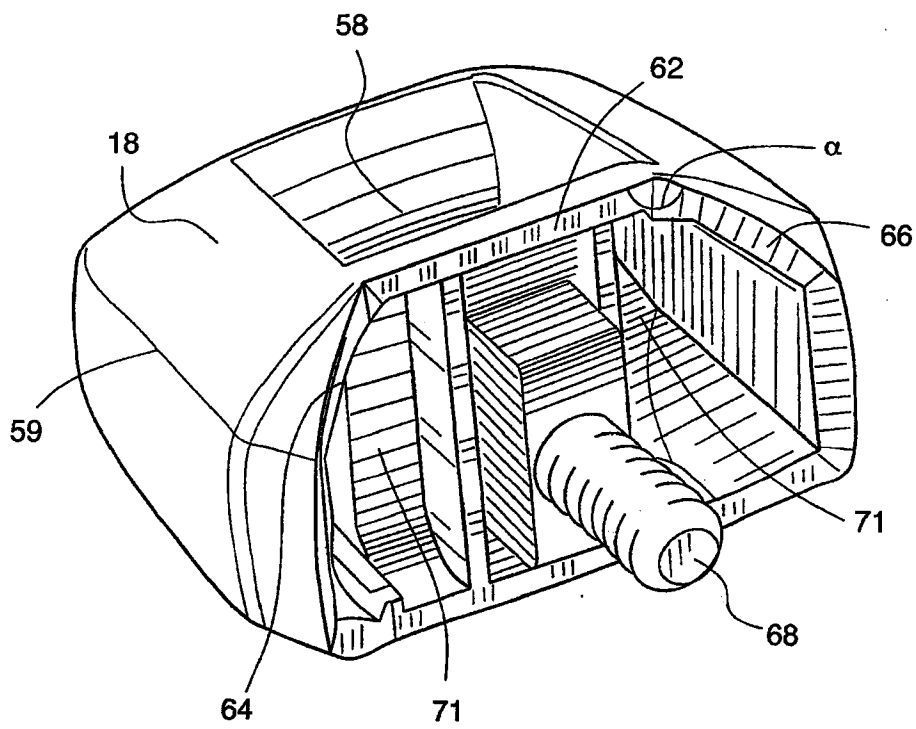
FIG. 3



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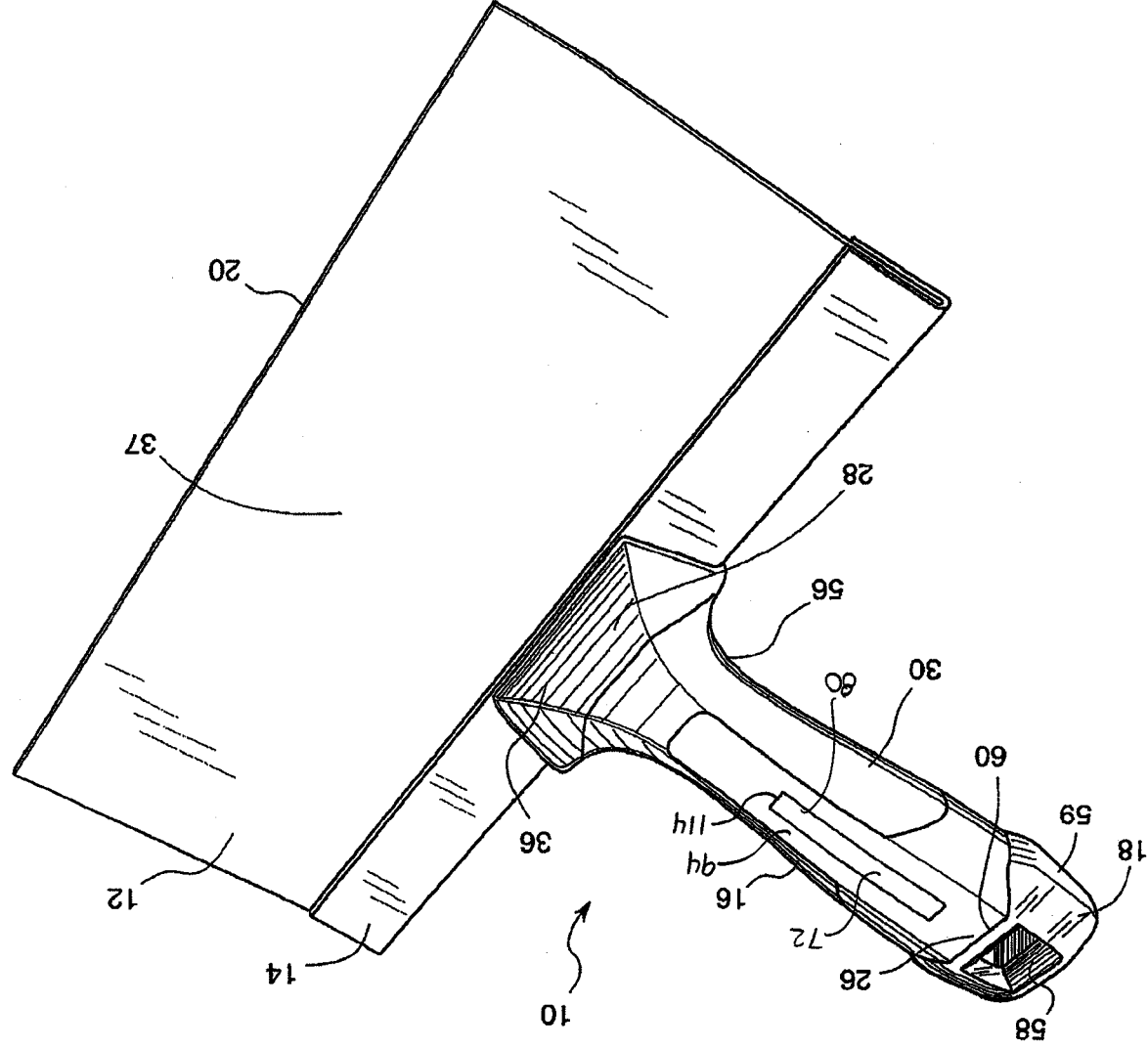
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FIG. 4



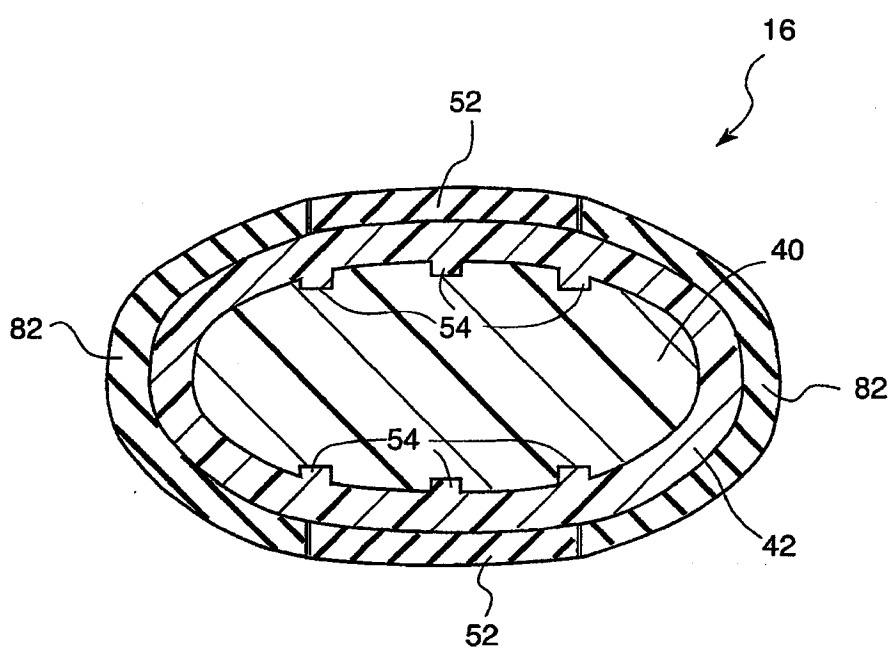
Handwritten signature or mark.

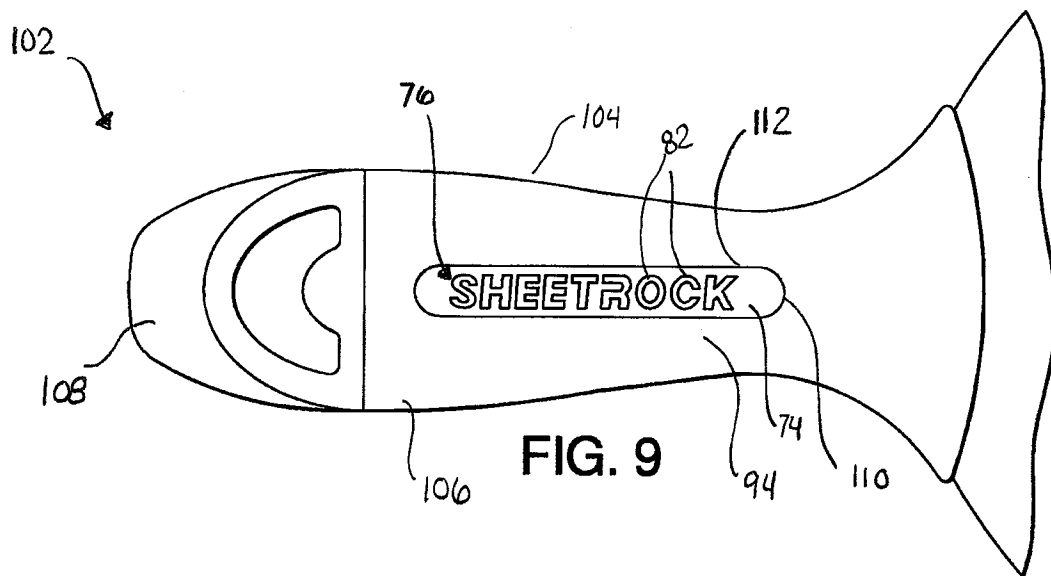
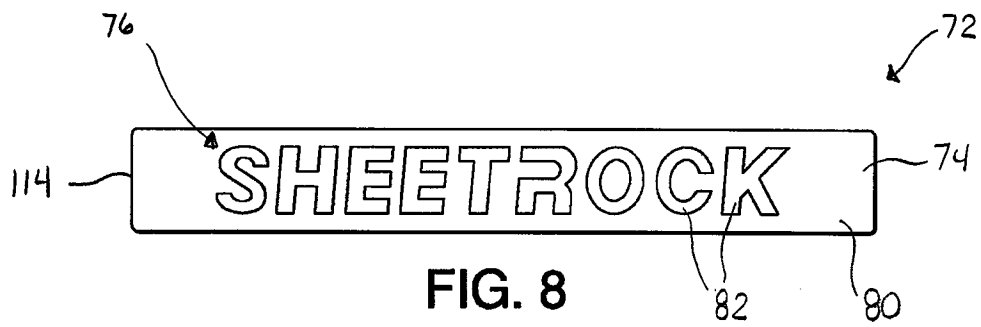
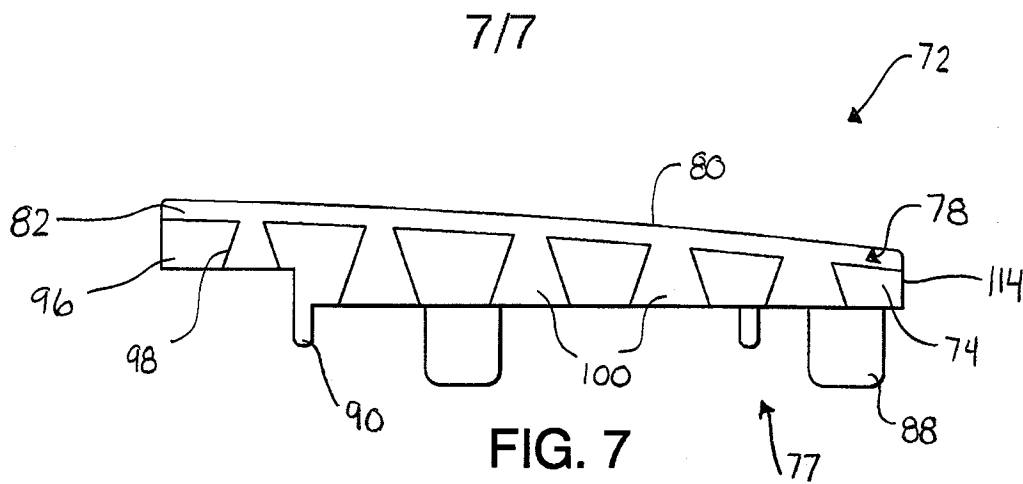
FIG. 5



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FIG. 6





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125 South Franklin Street
Chicago, IL 60606
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 25 July 2007 (25.07.2007)	
Applicant's or agent's file reference 3887WO	IMPORTANT NOTIFICATION
International application No. PCT/US2006/021191	International filing date (day/month/year) 01 June 2006 (01.06.2006)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address UNITED STATES GYPSUM COMPANY 125 South Franklin Street Chicago, IL 60606 United States of America	State of Nationality US	State of Residence US
	Telephone No. 847-970-5113	
	Facsimile No. 312-214-1466	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☐ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address UNITED STATES GYPSUM COMPANY 550 West Adams Street Chicago, IL 60661-3637 United States of America	State of Nationality US	State of Residence US
	Telephone No. 847-970-5113	
	Facsimile No. 312-214-1466	
	Teleprinter No.	

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

☒ the receiving Office	☒ the designated Offices concerned
☒ the International Searching Authority	☐ the elected Offices concerned
☐ the International Preliminary Examining Authority	☐ other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Thévenot Martine e-mail Martine.Thevenot@wipo.int Telephone No. +41 22 338 96 15
---	--

Facsimile No. +41 22 338 82 70

Form PCT/IB/306 (October 2005)

I/DBXISW3U3

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From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

To:

JANICI, David, F.
USG CORPORATION
125 South Franklin Street
Chicago, IL 60606
ETATS-UNIS D'AMERIQUE

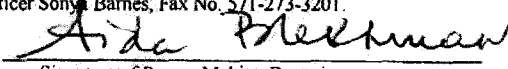
Date of mailing (day/month/year) 13 September 2006 (13.09.2006)	
Applicant's or agent's file reference 3887WO	IMPORTANT NOTIFICATION
International application No. PCT/US2006/021191	International filing date (day/month/year) 01 June 2006 (01.06.2006)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 22 July 2005 (22.07.2005)
Applicant UNITED STATES GYPSUM COMPANY	

- By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- (If applicable)* The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- (If applicable)* An asterisk (*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

Priority date	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
22 July 2005 (22.07.2005)	11/187,582	US	08 August 2006 (08.08.2006)
10 January 2006 (10.01.2006)	11/328,530	US	08 August 2006 (08.08.2006)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Athina Nickitas-Etienne
Facsimile No. +41 22 338 82 70	Facsimile No. +41 22 338 89 95 Telephone No. +41 22 338 94 43

IN THE UNITED STATES PCT RECEIVING OFFICE

Certification under 37 S.F.R. §1.10 (if applicable)		
Express Mail mailing number:	Date of deposit: 11 August 2006	
I hereby certify that this application is facsimile transmitted on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Attention: Authorized Officer Sonya Barnes, Fax No. 571-273-3201.		
Aida Blekhman Typed or Printed Name of Person Making Deposit	 Signature of Person Making Deposit	
International Application No.: PCT/US2006/021191	International Filing Date: 01 June 2006 (01.06.2006)	Earliest Priority Date Claimed: 22 July 2005 (22.07.2005)
Applicant: UNITED STATES GYPSUM COMPANY		
Title: TAPING KNIFE HANDLE WITH IDENTIFICATION INSERT		
File reference no.: 3887WO		

**RESPONSE TO INVITATION TO CORRECT DEFECTS IN THE
INTERNATIONAL APPLICATION**

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attn.: Authorized Officer Sonya Barnes

Dear Ms. Barnes:

This is in response to the Request to Correct Defects in the International Application of 31 July 2006. Enclosed is the replacement Page 1 of the Request embodying the correction to the Box 1. The Applicant requests correction of the typographical error in the title as follows:

"TAPING KNIFE WITH IDENTIFICATION INSERT" to be corrected to read:

--"TAPING KNIFE HANDLE WITH IDENTIFICATION INSERT"--

The Applicant requests correction of this typographical error and recordation of the changes.

Respectfully submitted,

UNITED STATES GYPSUM COMPANY


David F. Janci
Registration No. 28,620

11 August 2006
700 North Highway 45
Libertyville, Illinois 60048
(847) 970-5113

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PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

Replacement Sheet 1

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) 3887WO

Box No. I TITLE OF INVENTION

TAPING KNIFE HANDLE WITH IDENTIFICATION INSERT

Box No. II APPLICANT

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

UNITED STATES GYPSUM COMPANY
125 South Franklin Street
Chicago, Illinois 60606
United States of America

Telephone No.
847 970-5113

Facsimile No.
312 214-1466

Teleprinter No.
n/a

Applicant's registration No. with the Office

State (that is, country) of nationality:

US

State (that is, country) of residence:

US

This person is applicant for the purposes of:

☒ all designated States

☐ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

MYERS, Matthew Earle
4639 Haviland Court
Naperville, Illinois 60564
United States of America

This person is:

☐ applicant only

☐ applicant and inventor

☒ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

JANCI, David F.
USG Corporation
125 South Franklin Street
Chicago, Illinois 60606
United States of America

Telephone No.
847 970-5113

Facsimile No.
312 214-1466

Teleprinter No.
n/a

Agent's registration No. with the Office
28,620

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

TRANSMITTAL LETTER TO THE UNITED STATES RECEIVING OFFICE

Certification under 37 S.F.R. §1.10 (if applicable)

Express Mail mailing number: EQ782651968US

Date of deposit: 1 June 2006

I hereby certify that this application is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Aida Blekhan

Typed or Printed Name of Person Making Deposit

Signature of Person Making Deposit

File reference no.: 3887WO

International Application No. (if known)

Title of Invention:

TAPING KNIFE WITH IDENTIFICATION
INSERT

Earliest Priority Date Claimed

(Day/Month/Year): 22 July 2005 (22.07.2005)

☒ This is a new International Application

SCREENING DISCLOSURE INFORMATION:

In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied. (check as many boxes as apply):

- ☐ The invention disclosed was not made in the United States of America.
☐ There is no prior U.S. application relating to this invention.
☒ The following prior U.S. application(s) contain subject matter which is related to the invention disclosed in the attached international application. (NOTE: priority to these applications may or may not be claimed on the Request (form PCT/RO/101) and this listing does not constitute a claim for priority.)

Application no.	11/187,582	Filed on	22 July 2005 (22.07.2005)
Application no.	11/328,530	Filed on	10 January 2006 (10.01.2006)
Application no.		Filed on	

- ☐ The present international application contains additional subject matter not found in the prior U.S. application(s) identified above. The additional subject matter is found on pages _____ and ☐ DOES NOT ALTER ☐ MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 C.F.R. 5.15.

Itemized list of contents

Sheets of Request form: 5	Check No.: n/a
Sheets of description (excluding sequence listing): 10	Return receipt postcard: yes
Sheets of claims: 3	Power of attorney: no
Sheets of abstract: 1	Certified copy of priority document (specify): n/a
Sheets of drawings: 7 (Figs. 1-9, 7 pgs.)	Other (specify): Fee Calculation Sheet: 1
Sheets of sequence listing: n/a	
Sequence listing diskette/CD: n/a	
Tables related to sequence listing CD: n/a	

The person signing this form is:

☐ Applicant	David F. Janci
☒ Attorney/Agent (Reg. No. 28,620)	Name of person signing
☐ Common Representative	Signature

This collection of information is required by 37 CFR 1.10 and 1.412. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) 3887WO

Box No. I TITLE OF INVENTION
TAPING KNIFE WITH IDENTIFICATION INSERT

Box No. II APPLICANT ☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

UNITED STATES GYPSUM COMPANY
125 South Franklin Street
Chicago, Illinois 60606
United States of America

Telephone No.
847 970-5113

Facsimile No.
312 214-1466

Teleprinter No.
n/a

Applicant's registration No. with the Office

State (that is, country) of nationality:
US

State (that is, country) of residence:
US

This person is applicant for the purposes of: ☒ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

MYERS, Matthew Earle
4639 Haviland Court
Naperville, Illinois 60564
United States of America

This person is:

☐ applicant only

☐ applicant and inventor

☒ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of: ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

JANCI, David F.
USG Corporation
125 South Franklin Street
Chicago, Illinois 60606
United States of America

Telephone No.
847 970-5113

Facsimile No.
312 214-1466

Teleprinter No.
n/a

Agent's registration No. with the Office
28,620

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

FONG, Scott
20F Capitol Center
5019 Jardines Bazaar
Hong Kong
People's Republic of China

This person is:

- ☐ applicant only
☐ applicant and inventor
☒ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only
☐ applicant and inventor
☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.

Supplemental Box

If the Supplemental Box is not used, this sheet should not be included in the request.

1. *If, in any of the Boxes, except Boxes Nos. VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:*

(i) *if more than two persons are to be indicated as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;*

(ii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;*

(iii) *if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;*

(iv) *if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;*

(v) *if, in Box No. VI, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.*

2. *If the applicant intends to make an indication of the wish that the international application be treated, in certain designated States, as an application for a patent of addition, certificate of addition, inventor's certificate of addition or utility certificate of addition: in such a case, write the name or two-letter code of each designated State concerned and the indication "patent of addition," "certificate of addition," "inventor's certificate of addition" or "utility certificate of addition," the number of the parent application or parent patent or other parent grant and the date of grant of the parent patent or other patent grant or the date of filing of the parent application (Rules 4.11(a)(iii) and 49bis.1(a) or (b)).*

3. *If the applicant intends to make an indication of the wish that the international application be treated, in the United States of America, as a continuation or continuation-in-part of an earlier application: in such a case, write "United States of America" or "US" and the indication "continuation" or "continuation-in-part" and the number and the filing date of the parent application (Rules 4.11(a)(iv) and 49bis.1(d)).*

Continuation of Box No. IV:
GEOFFREY, Michael M. (Reg. No. 41,775)
SAHU, Pradip K. (Reg. No. 45,551)

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Box No. V DESIGNATIONS

The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents. However,

- ☐ DE Germany is not designated for any kind of national protection
☐ JP Japan is not designated for any kind of national protection
☐ KR Republic of Korea is not designated for any kind of national protection
☐ RU Russian Federation is not designated for any kind of national protection

(The check-boxes above may only be used to exclude (irrevocably) the designations concerned if, at the time of filing, the international application contains in Box No. VI a priority claim to an earlier national application filed in the particular State concerned, in order to avoid the ceasing of the effect, under the national law, of this earlier national application. See the Notes to Box No. V as to the consequences of such national law provisions in these States).

Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application:* regional Office	international application: receiving Office
item (1) 22 July 2005 (22.07.2005)	11/187,582	US		
item (2) 10 January 2006 (10.01.2006)	11/328,530	US		
item (3)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

☒ all items ☐ item (1) ☐ item (2) ☐ item (3) ☐ other, see Supplemental Box

* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)).

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / US

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)	Number	Country (or regional Office)
10 January 2006	11/328,530	US

Box No. VIII DECLARATIONS

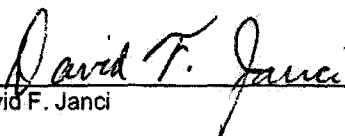
The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of
declarations

- | | | |
|---|--|---|
| ☐ Box No. VIII (i) | Declaration as to the identity of the inventor | : |
| ☐ Box No. VIII (ii) | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent | : |
| ☐ Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : |
| ☐ Box No. VIII (iv) | Declaration of inventorship (only for the purposes of the designation of the United States of America) | : |
| ☐ Box No. VIII (v) | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty | : |

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Box No. IX CHECK LIST; LANGUAGE OF FILING		
This international application contains: (a) on paper, the following number of sheets: request (including declaration sheets) : 5 description (excluding sequence listing and/or tables related thereto) : 10 claims : 3 abstract : 1 drawings : 7 Sub-total number of sheets : 26 sequence listing tables related thereto (for both, actual number of sheets if filed on paper, whether or not also filed in electronic form; see (c) below) Total number of sheets : 26 (b) ☐ only in electronic form (Section 801(a)(i)) (i) ☐ sequence listing (ii) ☐ tables related thereto (c) ☐ also in electronic form (Section 801(a)(ii)) (i) ☐ sequence listing (ii) ☐ tables related thereto Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the ☐ sequence listing: ☐ tables related thereto: (additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item): 1. ☒ fee calculation sheet : 1 2. ☐ original separate power of attorney : 3. ☐ original general power of attorney : 4. ☐ copy of general power of attorney; reference number, if any: 5. ☐ statement explaining lack of signature : 6. ☐ priority document(s) identified in Box No. VI as item(s): 7. ☐ translation of international application into (language): 8. ☐ separate indications concerning deposited microorganism or other biological material : 9. ☐ sequence listing in electronic form (indicate type and number of carriers) (i) ☐ copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) : (ii) ☐ (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter : (iii) ☐ together with relevant statement as to the identity of the copy or copies with the sequence listing mentioned in left column : 10. ☐ tables in electronic form related to sequence listing (indicate type and number of carriers) (i) ☐ copy submitted for the purposes of international search under Section 802(b-quater) only (and not as part of the international application) : (ii) ☐ (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quater) : (iii) ☐ together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column : 11. ☒ other (specify): Post Card	Number of items
Figure of the drawings which should accompany the abstract: 1	Language of filing of the international application: English	

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE	
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).	
 David F. Janci	

For receiving Office use only	
1. Date of actual receipt of the purported international application:	2. Drawings: ☐ received: ☐ not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):	
5. International Searching Authority (if two or more are competent): ISA /	6. ☐ Transmittal of search copy delayed until search fee is paid

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This sheet is not part of and does not count as a sheet of the international application.

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FEE CALCULATION SHEET

Annex to the Request

For receiving Office use only

International Application No.

Date stamp of the receiving Office

Applicant's or agent's
file reference

3887WO

Applicant

UNITED STATES GYPSUM COMPANY

CALCULATION OF PRESCRIBED FEES

1. TRANSMITTAL FEE US\$300.00 T

2. SEARCH FEE US\$300.00 S

International search to be carried out by

ISA/US

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i3 additional component (only if a sequence listing and/or tables related thereto are filed in electronic form under Section 801(a)(i), or both in that form and on paper, under Section 801(a)(ii)):

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Name: David F. Janci
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