

Industria y Comercio
SUPERINTENDENCIA

PCT

SOLICITUD
PATENTE DE INVENCION

21 EXPEDIENTE N°

03-77337

54 TÍTULO

CREATURA DE TÁNDOR DE PASADOPES CITRATORIO CON BARRA LATERAL

CON CONTROL DE BARRA LATERAL.

51 CLASIFICACIÓN INTERNACIONAL

E05B 19/06, 27/04

71 SOLICITANTE

MEDECO SECURITY LOCKS, INC.

DOMICILIO

Belen, Virginia, Estados Unidos de América.

74 APODERADO

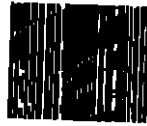
ENTILTO PERMAN

Código No. 1092

22 BOGOTÁ, D C



Industria y Comercio
SUPERINTENDENCIA



03 077337 00

PETITORIO

SUPERINDUSTRIA Y COMERCIO

Radicación : 03077337 00000000

Folios: 125

Fecha (IMP): 2003-09-04 17:10:51

Trámite : 011 PCT-PATENT 379 FASE NNCI 411 PRESENTA

Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

FORMULARIO UNICO DE SOLICITUD DE PATENTE
PCT
ENTRADA EN FASE NACIONAL

1

SOLICITUD DE:



Patente de Invención.



Patente de Modelo de Utilidad.



Capítulo I.



Capítulo II.

2

SOLICITANTE
(71)

Nombre: **MEDECO SECURITY LOCKS, INC.**

sociedad constituida y existente bajo las leyes del Estado de Virginia, Estados Unidos de América..

Dirección: P.O. Box 3075
Salem, Virginia 24153-0330,
Estados Unidos de América.

Domicilio: Salem, Virginia,
Estados Unidos de América.

IDENTIFICACION

C.C.



NIT



C.E.



Otro



Cual _____

Número: _____

3

REPRESENTANTE
APODERADO

Nombre: **EMILIO FERRERO**

Dirección: Carrera 4ª. No. 72-35

Teléfono: 347 38 11

Fax:: 217 92 11

E-mail: clientes@camyp.com.

Domicilio: Bogotá, Colombia.

IDENTIFICACION

C.C.



NIT



C.E.



Otro



Cual _____

Número: 438.019 T.P. 31.929

4

INVENTOR (ES)
(72)

1- **Peter H. FIELD**
P.O.Box 104
Salem, Virginia 24153,
Estados Unidos de América.

2- **Andy E. PERKINS**
2401 Gardner Street,
Lafayette, Virginia 24087,
Estados Unidos de América.

5

PCT (86)

Solicitud Internacional No. PCT/US02/02211Publicación Internacional No. WO 02/068773 A1Fecha: 28 de enero de 2002Fecha : 29 de agosto de 2002

6

Título (54) CERRADURA DE TAMBOR DE PASADORES GIRATORIO CON BARRA LATERAL
CON CONTROL DE BARRA LATERAL

7

Clasificación Internacional (51) E05B 19/06 27/04

8

Prioridad

SI ☒ NO ☐

(33) País de Origen

US.US.

(32) Fecha

8 de febrero de 200119 de octubre de 2001

(31) Número de Solicitud

09/776.92909/981.801

9

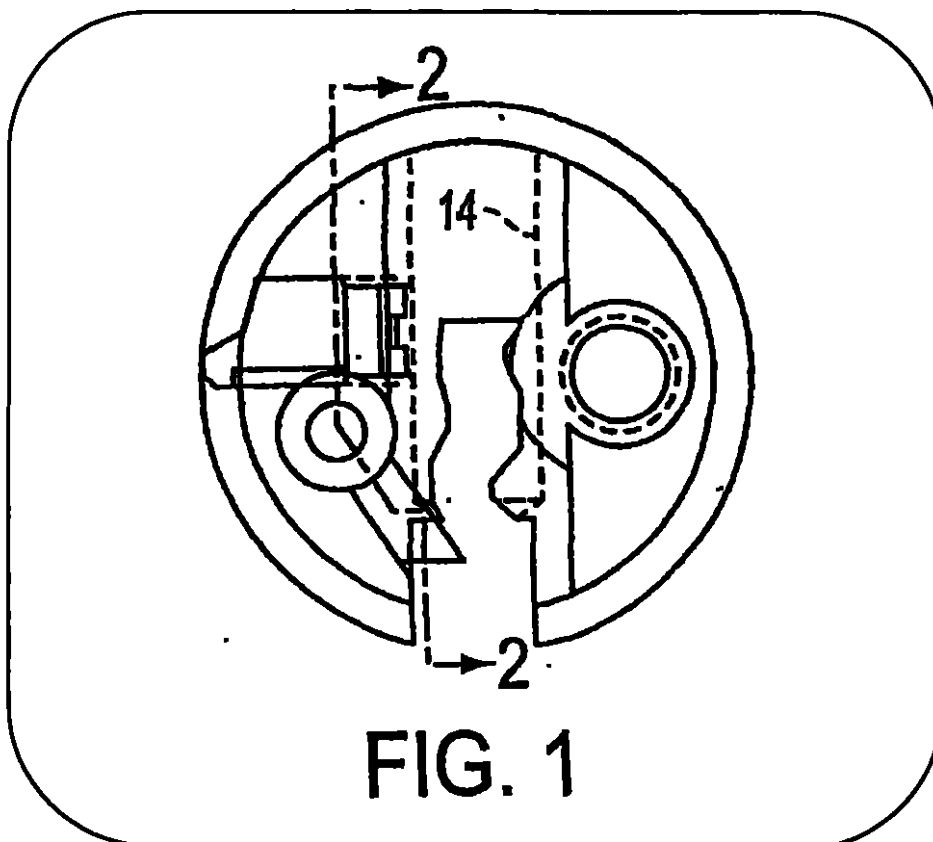
Comprobante de pago No.: 03-59.902 Fecha: 25 de agosto de 2003

10

Anexos:

- ☒ Comprobante de pago de la tasa de presentación de la solicitud por \$ 400.000.00.
- ☐ Comprobante de pago por reivindicación de prioridad.
- ☒ Documento que acredita la existencia y representación legal cuando el solicitante sea persona jurídica.
- ☒ Poderes, si fuere el caso.
- ☐ Documento de cesión del inventor al solicitante o a su causante.
- ☐ Declaraciones.
- ☒ Copia de la solicitud internacional. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Traducción de la solicitud internacional al castellano. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Copia del examen preliminar efectuado por la IPEA.
- ☒ Traducción 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 12x12
- ☐ De ser el caso, información sobre otras solicitudes de patente o títulos obtenidos en el extranjero por el mismo titular o su causante, relacionadas parcial o totalmente con la invención de esta solicitud.
- ☐ Otros

11

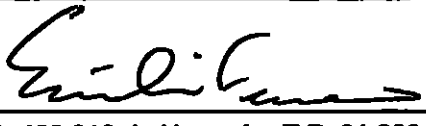
FIGURA CARACTERISTICA:

12

Solicito la concesión de la patente,

N MBRE: EMILIO FERRERO

FIRMA:


C.C. 438.019 de Usaquén T.P. 31.929

WR

CAVELIER

ABOGADOS

EDIFICIO SISEI
CARRERA 4ª N° 72-33
BOGOTÁ, D. C. COLOMBIA

7687-02

For patents, utility designs, trademarks, service marks, commercial names, emblems.

Para patentes, modelos y dibujos industriales, marcas de fábrica y de servicio, nombres comerciales y enseñas.

1233-159 Colombia

REPRESENTACION Y PODER

To (nosotros), abajo firmado(s)
MEDECO SECURITY LOCKS, INC. ✓

Domicilio(s) en U.S. 11 West Allegheny
Drive Salem, Virginia, EE. UU. de América

por el presente nombramos a GERMAN CAVELIER, tpa. 832; GONZALO PERDOMO, tpa. 831; ERNESTO CAVELIER, tpa. 11819; y EMILIO FERRERO, tpa. 31929; domiciliados en la Carrera 4ª N° 72-33, Bogotá, Colombia, en obediencia a lo dispuesto en el parágrafo 1º del Artículo 843 del Código de Comercio, al primero como principal y los demás como suplentes, en su orden, como nuestros representantes en todos los asuntos de propiedad industrial con facultad para recibir notificaciones y nombrar apoderados judiciales o extrajudiciales. El primer representante suplente reemplazará al principal en caso de ausencia o impedimento temporal o definitivo de aquél. La misma regla se aplicará cuando el segundo representante suplente haya de reemplazar al primero, o al tercero al segundo. En tales casos, el representante principal, o el primero, o segundo suplente, en su caso, o ambos, declararán su intención de no ejercer la representación mediante declaración autenticada por Notario Público en Colombia, o por Notario u otro Funcionario Público, o Cónsul de Colombia, en el extranjero; y si se tratare de impedimento, con el certificado respectivo. Si alguno de los nombrados faltare definitivamente, el siguiente tomará su lugar. Cuando cesare la ausencia o impedimento del representante principal, o de su primero o segundo suplente, en su caso, podrán ejercer la representación, en su orden, uno u otros según el caso, asumiéndola por el solo hecho de ejercerla, cesando en ese momento el ejercicio de la representación por el primero, segundo o tercer suplente en su caso.

Además, y bajo las mismas reglas, conferimos poder a los abogados arriba nombrados, para obtener la protección de mi (nuestra) propiedad industrial y contra la competencia desleal, a cuyo efecto autorizo(amos) a los dichos apoderados para que me(nos) representen ante cualesquiera entidades o personas, ejerzan o no jurisdicción, especialmente ante las del orden administrativo, contencioso-administrativo y judicial, en todo lo concerniente a los siguientes asuntos: a) Obtención de patentes de invención, modelos y dibujos industriales; el registro de marcas de fábrica, colectivas, defensivas y de servicios; el depósito de nombres comerciales y enseñas; su renovación, traspaso, cambio de nombre o domicilio, cancelación voluntaria; y el registro de licencias de uso de esos derechos; b) Las acciones de oposición, cancelación, nulidad, medidas cautelares, concesión de licencias y en general los juicios civiles, penales, administrativos o contencioso-administrativos relacionados con estos derechos; acciones y juicios que promovamos o se nos promuevan. Y para que en todos los asuntos arriba determinados, puedan sustituir este mandato, transigir, declarar, cancelar, recibir, renunciar, y ratificar los actos hechos por agentes oficiales.

Dado y firmado hoy 24 de Agosto de 1987

Batesville, Indiana

MEDECO SECURITY LOCKS, INC.

F. Kristen Koepcke - Secretary

(Notary should execute on other side)
(Consular legalization necessary).

REPRESENTATION AND POWER OF ATTORNEY

I (we), the undersigned
MEDECO SECURITY LOCKS, INC.

U.S. 11 West Allegheny Drive
Salem, Virginia
USA

In due compliance with the terms of paragraph 1st. of Article 843 of the Commercial Code, do hereby appoint GERMAN CAVELIER, tpa. 832; GONZALO PERDOMO, tpa. 831; ERNESTO CAVELIER, tpa. 11819; and EMILIO FERRERO, tpa. 31929; domiciled at Carrera 4ª N° 72-33, Bogotá, Colombia, the first as principal and the others as alternates, in the order of their appointment, as our representatives for all industrial property matters with faculty to receive notifications and to appoint attorneys in and out of Court. The first alternate shall replace the principal in case of this absence or of temporal or definitive impediment. The same rule will apply when the second alternate representative is to replace the first one, or when the third is to replace the second. In such cases, the principal representative, or the first or second alternates in their turn, or both of them, shall state their intention not to act as representatives through a declaration given before a Notary Public in Colombia, or before a Notary or another Public Official or a Colombian Consul abroad; and in case of impediment, the appropriate certificate shall suffice. If any of the appointees were to be definitely absent, the following alternate shall take his place. When the absence or impediment of the principal representative, or of the first or second alternate in their turn ceases, the representation can be taken again in their sequence, by the principal, the first or second alternate depending on case, and the mere fact of its exercise will suffice. The exercise of the representation by the first, second or third alternates in their turn shall end at such time. In addition, we grant a Power of Attorney in favor of the above-named attorneys-at-law so that they may obtain the protection of my (our) industrial property and against the unfair competition, for which purpose: (we) authorize the said attorneys to represent me (us) before any authority or person, without, without jurisdiction, especially before administrative, administrative contentious and judicial entities, matters concerning the following: a) Obtaining patents of invention, models and designs; the registration of trademarks, collective, defensive and service marks; deposit of commercial names and emblems; its renewal, assignment, change of name or domicile, voluntary cancellation; and the registration of licenses of use of the above rights; b) Actions of opposition, cancellation, nullity, infringement, granting of licenses and in general the civil, penal, and administrative suits relating to these rights; actions and suits instituted by me (us) or against me (us). And that in all the above matters they may substitute this Power of Attorney, compromise, desist, cancel, receive, resign, and ratify acts done by representatives without a power of attorney.

Given and signed this 24 day of
August 1987
in Batesville, Indiana

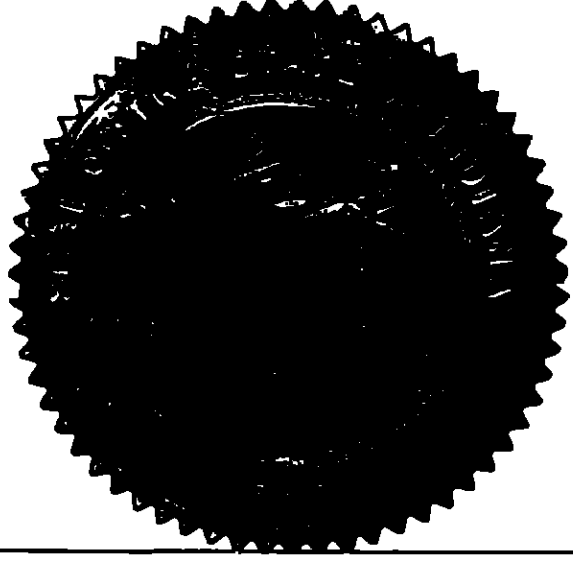
3-2576
RECEIVED OFFICIAL IN
REDAJADO POR EL SECRETARIO

UNITED STATES OF AMERICA
CERTIFICATE OF OFFICE
STATE OF INDIANA

55

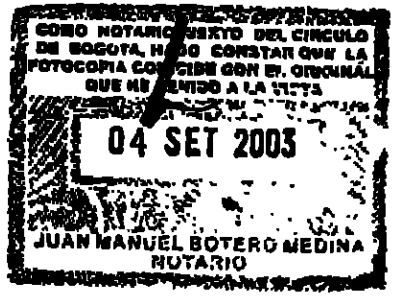
TRANSDUCTION OFFICIAL No. 7-2536
HILDA AGUILERA DE PIEDRAHITA
INTERPRETE OFICIAL
CPR No. 302,082-1114-06-112701

I, EVAN BAYH, Secretary of State of Indiana, DO HEREBY CERTIFY: That,
according to records on file in my office, RITA J. PERCIEFIELD was duly elected
or appointed to the office of NOTARY PUBLIC in and for RIPLEY COUNTY
and that the term of said office included the date of AUGUST 24, 1987: that to all his/her official acts as said offi-



cial, full faith and credit ought to be given in all Courts of
Justice and elsewhere. In testimony whereof, I have here unto
set my hand and affixed the Great Seal of the State of Indiana,
at Indianapolis, this 10th day of
SEPTEMBER, 19. 87

Evan Bayh
Secretary of State
by: Robert C. Short
Deputy



MINISTERIO DE RELACIONES EXTERIORES
 LEGALIZACIONES
 No. 177646
 19 OCT. 1937
 PLAZA COLOMBIA
 Jaime Amado
 firma aparece al pie del presente
 documento, desempeñaba en esa fecha
 las funciones de

No. 3133/37
 lo de Ministro General
 Ministro General

El Sr. CONSUL GENERAL DE COLOMBIA EN CHICAGO, CERTIFICA

que el señor Evan Bay que autoriza el presente

documento, a través legalmente, en la fecha allí expresada, las
 funciones de Sec. de Estado que de firma y sello

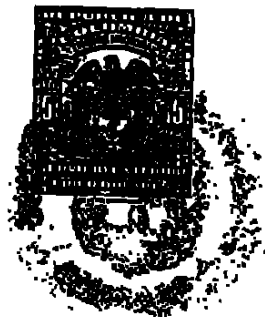
que en el documento aparecen como suyos son los que usa y

acompañan al sus actos oficiales. El Consuli no asume responsa-

bilidad alguna por el contenido del documento. Desechos en

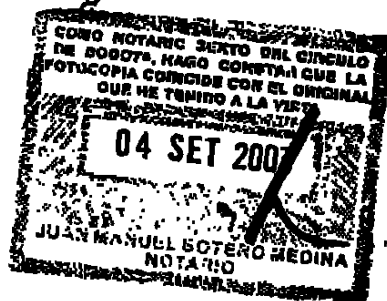
ejemplares del Servicio Exterior, D. S. \$ 5.00

RADUCCION OFICIAL No. 7-2336
 MELBA AGUILERA DE PIEDRAHITA
 INTERPRETE OFICIAL
 C.R. No. 105 del M. de Justicia



Jaime Amado
 Canciller
 Consulado de Colombia
 Chicago

SEP 14 1937



CERTIFICADO NOTARIAL (INDIVIDUO)

A los días del mes de de 19
ante mí, Notario Público de
compareció(eron) personalmente

a quien(es) doy fe de con- car y me consta que es (a n)
la(s) persona(s) firmante(s) del documento que pre-
ceda, y quien(es) tiene(n) capacidad legal para otor-
garlo

Notary Public (Notario Público)

CERTIFICADO NOTARIAL (SOCIEDAD)

Hoy, 24 de Agosto de 1987
compareció(eron) ante mí F. Kristen Koepcke

a quien(es) conozco personalmente y que firma(n)
este documento en representación de la Sociedad
/Compañía denominada

Certifico

1 Que he visto los siguientes documentos • Escrit.de
constitución de Medeco Security Locks, Inc.
que muestra la existencia de acuerdo con las
leyes de Virginia, y B. Resol. Junta Directiva de
Hillenbrand Industries, Inc. propiet. de Medeco
Security Locks, Inc. con poder a F. Kristen Koepcke
Secret. de Medeco para firmar docum en su nombre.

2 Que dichos documentos prueban lo siguiente

2.1 Que MEDECO SECURITY LOCKS, INC.

es una Sociedad/Compañía legalmente constituida y
existente de acuerdo con las leyes de

2.2 Que el domicilio de dicha Sociedad/Compañía
US 11 West Allegheny Drive Salem
es Virginia

2.3 Que el objeto u objetos para los cuales se otorga
el presente poder están comprendidos dentro del ob-
jeto social de la mencionada Sociedad/Compañía

2.4 Que el Sr F. Kristen Koepcke

está(n) autorizado(s) para otorgar el presente Poder

Ciudad Batesville

Estado Indiana

Hoy 24 de Agosto de

de 1987

Notario Público — Notary Public

• Los documentos deben identificarse con fecha y origen.

NOTARIAL CERTIFICATE (INDIVIDUAL)

On this day of . . . 19
before me, a Notary Public of
personally appeared

to me known, and known to me to be the person(s)
who executed that foregoing document, and who has
(have) legal capacity to execute it.

NOTARIAL CERTIFICATE (CORPORATION)

On this 24th day of August 1987
appeared before me - F. Kristen Koepcke

who(m) I know personally and who(m) signed this do-
cument as representative(s) of the Corporation/Com-
pany named MEDECO SECURITY LOCKS, INC.

I Certify

1 That I have seen the following documents •

- A The Articles of Incorporation of Medeco Security Locks, Inc showing its existence to be in accordance with the laws of the State of Virginia, and
- B. The Resolution of the Board of Directors of Hillenbrand Industries, Inc., the owner of Medeco Security Locks, Inc., empowering F. Kristen Koepcke as Secretary of Medeco Security Locks, Inc. and empowering him to sign documents on its behalf.

2 That the above documents duly prove the follow-
ing

2.1 That MEDECO SECURITY LOCKS, INC.
is a Corporation/Company legally constituted and in
existence in accordance with the laws of Virginia

2.2 That the domicile of said Corporation/Company is
US 11 West Allegheny Drive Salem, Virginia

2.3 That the purpose of purposes for which the above-
sent Power of Attorney is granted is within the
within the corporation purposes set forth in the char-
ter of the mentioned Corporation/Company

2.4 That Mr F. Kristen Koepcke

is(are) authorized to grant the present Power of
Attorney

City - Batesville

State - Indiana

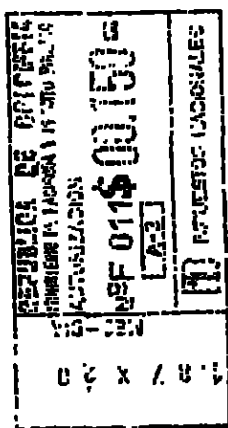
This 24th day of August 1987

Notary Public

• Documents must be identified with date and origin.

RYTA J PERCIFILO
NOTARY PUBLIC STATE OF INDIANA
RIPLEY CO
MY COMMISSION EXPIRES OCT 20, 1989
ISSUED THRU INDIANA NOTARY ASSOC

REGISTRATION OFICIAL No. 3-2576
HEIDA AGUILERA DE PIEDRAHITA
INTERPRETE OFICIAL
DEL TRIB. DE JUSTICIA



CAVELIER - ARCAÑOS

7 8 8 2 1

77

TRADUCCION OFICIAL No. 7-2576 de un documento escrito en inglés, el cual para su identificación se sella con el sello del traductor al mismo tiempo que la presente.

(Legalizaciones que se encuentran a continuación de un Poder escrito en inglés y español otorgado por la sociedad MEDECO SECURITY LOCKS, INC., a los doctores GERMAN CAVELIER, GONZALO PERDOMO, ERNESTO CAVELIER y EMILIO FERRERO)

Dado y firmado en Batesville, Indiana, Estados Unidos de América, el 24 de Agosto de 1987.

MEDECO SECURITY LOCKS, INC.

(Firmado) F. Kristen Koepcke - Secretario

ANEXO:

CERTIFICADO NOTARIAL (SOCIEDAD)

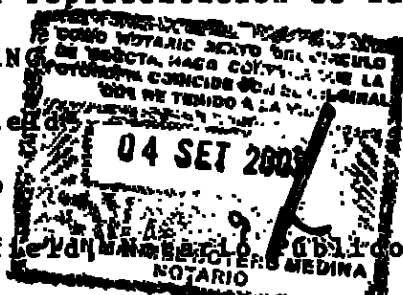
Escrito en inglés y español, por Notario Público de Indiana, el 24 de Agosto de 1987, referente a la firma del Sr. F. Kristen Koepcke, en representación de la sociedad MEDECO SECURITY LOCKS, INC.

(Firmado) Rita J. Percifield

Notario Público

Sello a tinta: Rita J. Percifield, Notario Público, Estado de Indiana, Condado de Ripley. Mi comisión expira el 20 de Octubre de 1989.

(SELLO NOTARIAL EN RELIEVE)



ESTADOS UNIDOS DE AMERICA

CERTIFICADO DE EJERCICIO

ESTADO DE INDIANA

Yo EVAN BAYH, Secretario de Estado de Indiana, POR EL PRESENTE CERTIFICO: Que de conformidad con los

TRADUCCION OFICIAL No. 7-2576
MILDA AGUILERA DE PIEDRAHITA
INTERPRETE OFICIAL
CER. No. 828 DEL MIN. DE JUSTIA

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registros que obran en el archivo de mi oficina, RITA J. PERCIFIELD fue debidamente elegida o nombrada en el cargo de NOTARIO PUBLICO en y para el CONDADO DE RIPLEY y que el término de dicho nombramiento incluyó la fecha de 24 de Agosto de 1987; que a todos sus actos oficiales en calidad de dicho funcionario, debe darse plena fe y crédito en todos los Tribunales de Justicia y en todas partes.

En testimonio de lo cual he firmado el presente y estampado el Gran Sello del Estado de Indiana, en Indianapolis, hoy 10 de Septiembre de 1987.

(Firmado) Evan Bayh

Secretario de Estado

Por (Firmado) Vielnet C. Short, Delegado.

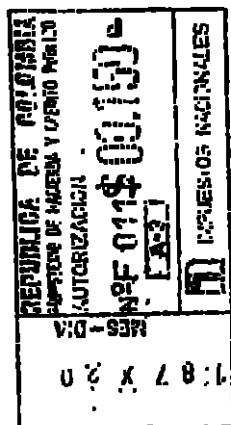
(SELLO DE OBLEA DEL ESTADO DE INDIANA)

En español, legalización de la firma anterior por el Consulado General de Colombia en Chicago, bajo el número 3133/87 del 14 de Septiembre de 1987. Adherida y debidamente anulada estampilla de Servicio Exterior de Colombia por valor de \$5. Legalización por el Ministerio de Relaciones Exteriores de Colombia, Bogotá, D.C., el 16 de Octubre de 1987.

Es TRADUCCION FIEL Y COMPLETA de la cual se deja copia en los archivos de esta oficina para su confrontación y a la cual me remito.

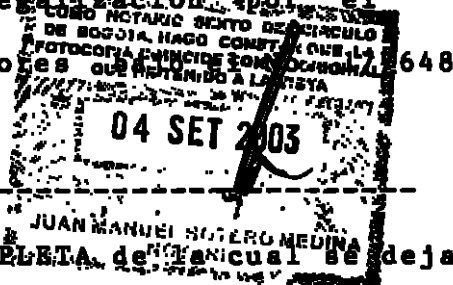
Bogotá, 16 de Octubre de 1987.

7-2576
 RADUCCION DE
 HELDA AGUIER
 INTERPRETE OFICIAL
 REG. No. 225 DE: MIN. DE JUSTICIA



CAVELIER - ABOGADOS

1204021



MINISTERIO DE RELACIONES EXTERIORES
 LEGALIZACIONES 8322E
 Bogotá, 24 OCT. 1994
H. Cei de Pechabita
 Su firma autoriza a los del presente
 documento, desde el día en esa fecha
 las funciones que le corresponden.

[Handwritten signature]

COMO NOTARIO SEXTO DEL CIRCULO DE SANTAFÉ DE
 BOGOTÁ, HAGO CONSTAR QUE LA(S) FIRMA(S) DE
Jorge Perdomo
El Coronel
 CORRESPONDE CON LA FIRMA REGISTRADA POR
 EL (O LOS) EN ESTA NOTARIA
 28 OCT 1994
 COMO NOTARIO SEXTO DEL CIRCULO
 DE BOGOTÁ, HAGO CONSTAR QUE LA
 FOTOCOPIA CUMPLE CON LOS REQUISITOS
 QUE ME TENGO A LA VISTA
 04 SET 2003
 MANUEL M. RODRIGUEZ
 NOTARIO



97

CAVELIER
ABOGADOS

WEB SITE: www.cavelier-abogados.com
E-MAIL: cavelier@colomat.net.co

EDIFICIO SISKI
CARRERA 4 No. 72 - 35
BOGOTÁ 8, COLOMBIA

TELÉFONO: (57) (1) 347-3611
TELÉFAX: (57) (1) 217-9211 (57) (1) 310-4995

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

Poderdante: MEDECO SECURITY LOCKS, INC.

Poder conferido el: 24-08-87

Yo, GERMAN CAVELIER, obrando en mi calidad de apoderado principal del poderdante arriba mencionado, atentamente manifiesto a Usted que sustituyo el poder que me ha sido conferido en la persona del doctor EMILIO FERRERO, Abogado con Tarjeta Profesional No. 31.929, con todas las facultades que me fueron conferidas.

Hago la anterior sustitución conforme al artículo 66 del Código de Procedimiento Civil ya que los otros sustitutos faltan en este momento.

Señor Jefe,



GERMAN CAVELIER

T.P.A. No. 832

C.C. No. 2.877.924 de Bogotá

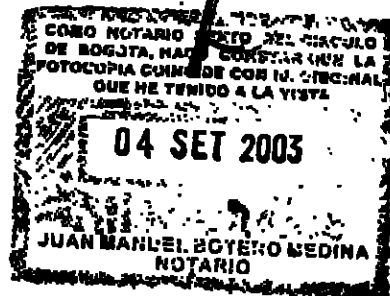
Acepto:



EMILIO FERRERO

T.P.A. No. 31.929

C.C. No. 438.019 de Usaquén



2e-780-2

NOTARIA SEXTA DE BOGOTÁ

RECONOCIMIENTO Y PRESENTACION PERSONAL

Bogotá, D. C.

14 AGO. 1998

Yo, el Sr. PABLO MENDEZ BATAJAS

NOTARIO SEXTO EN LA VIDA DEL CIRCULO DE BOGOTÁ.

Compareció(eron)

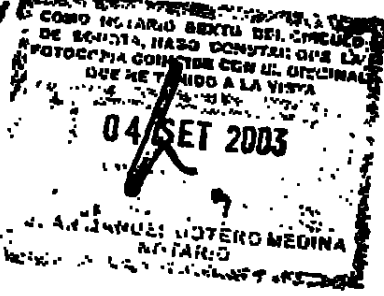
Presentó(aron) documento(s)

U38019 2877924

Y el/los documento(s) es(son)

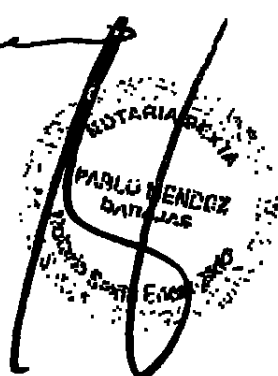
832- 8802 = 31929

domiciliado(s) en Bogotá y declaró(aron) que la(s) firma(s) que aparecen en el presente documento es(son) la(s) suya(s) y que el contenido del mismo es cierto.
En constancia se firma esta Diligencia.



Emili Caba

Emili Caba



(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 August 2002 (29.08.2002)

PCT

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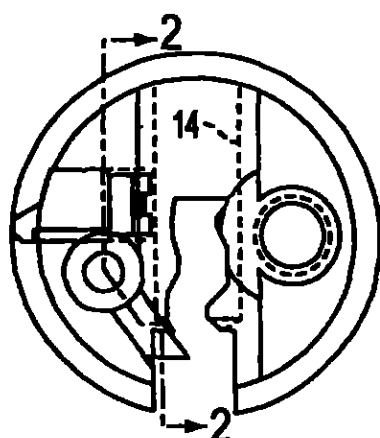
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Published:

- with international search report
- with amended claims

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.

(54) Title: ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR CONTROL



(57) Abstract: A twisting tumbler lock with a side bar (16, 16') is provided with additional levels of security by a axially reciprocable slider (24, 24') which is normally positioned to block operation of the side bar (16, 16') but is moved by a specially configured key (34, 34') to free operation of the side bar (16, 16'). This provides a third level of locking security. It also allows master keying. The unique key (34, 34') has a portion of a rib (40) formed to cooperate with the slider (24, 24') to further allow key control.

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ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR CONTROL**REFERENCE TO RELATED APPLICATIONS**

This application is a continuation-in-part of application
5 Serial No. 09/776,929 filed February 6, 2001.

BACKGROUND OF THE INVENTION**1. Field of the Invention**

This invention relates to improvements in rotating pin
10 tumbler side bar locks and keys therefor.

2. Background and Prior Art

Rotating or twisting tumbler locks with side bar control
of the tumblers and keys for operating such locks are well
known in the prior art and have been manufactured and sold by
15 Medeco Security Locks, Inc. Of Salem, Virginia for over twenty
years. Examples are in the following patents assigned to
Medeco Security Locks, Inc. 3,499,302 Spain et al (1970)
3,722,240 Spain et al (1973), 4,635,455 Oliver (1987),
5,289,709 Field (1994), 5,419,168 Field (1995), 5,570,601
20 Field (1996), 5,615,565 Field (1997) and 6,023,954 Field
(2000).

Security is a necessary feature of a lock and additional
security that could be applied to twisting tumbler locks with
dual mechanisms would be highly desirable.

25 A further and extremely desirable feature of a high
security lock is the capability for master keying. Providing
additional security and utilizing such provision for master
keying provides capability for master keyed systems.

It is also advantageous to have a unique key and key blank for locks of the type in order to provide the additional security that key control can accomplish.

5 SUMMARY OF THE INVENTION

This invention relates to improvements to enhance the security of the basic twisting tumbler dual locking mechanism lock known as the Medeco type lock and can be applied to any Medeco type lock with a side bar mechanism including the
10 original Medeco cylinder lock, the Medeco cam lock, the Medeco Biaxial® lock, and the Medeco Bi-Level® lock with offset tip tumbler pins. The invention utilizes a sliding member which slides generally axially in the cylinder of the lock and has a pr jection for contact with an end of a rib on a key blade.
15 The key thus positions the slider which controls the side bar to allow the side bar to move to an unblocked position. The slider control of the side bar and the unique key and key blade provide further degrees of security, allow master keying and key control.

20 BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a end elevation view of the cylinder or plug of a twisting tumbler lock having a side bar;

FIG. 2 is a longitudinal section view taken along line 2-
25 2 of FIG. 1;

FIG. 3 is a horizontal section view taken along line 3-3 of FIG. 2;

FIG. 4 is a plan view of a key blank of this invention;

FIG. 5 is an end elevation view similar to FIG. 1 with the lock in unblocked position;

FIG. 6 is a longitudinal sectional view taken along lines 6-6 of FIG. 5;

5 FIG. 7 is a longitudinal sectional view taken along lines 7-7 of FIG. 6;

FIGS. 8, 9, 10 and 11 are alternative embodiments showing a cut key of this invention with the slider superposed thereon to illustrate the possibilities of master keying.

10 FIG. 12 is a sectional elevation view of the prior art, Medeco cylinder lock, to show the setting of this invention.

FIG. 13 is a sectional view taken along line 13-13 of FIG. 12.

15 FIG. 14 is an end elevational view of the cylinder of a twisting tumbler lock having a side bar and showing a further embodiment of embodiment of this invention.

FIG. 15 is a longitudinal sectional view taken along line 15-15 of FIG. 14.

20 FIG. 16 is a horizontal view taken along line 16-16 of FIG. 15.

FIG. 17 is an end elevational view of the cylinder shown in FIG. 14 showing the components of the cylinder in their locked position.

25 FIG. 18 is a longitudinal section view taken along line 18-18 of FIG. 17.

FIG. 19 is a horizontal sectional view taken along line 19-19 of FIG. 18.

FIG. 20 is a plan view of a key blank for key of this invention.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

As shown in FIGS. 1-3 a cylinder or plug 10 has a keyway 12 as is conventional in Medeco locks. Tumbler holes 14 are provided for rotating, reciprocating, i.e., twisting tumblers 10 11 (FIG. 12) which have configurations 13 on their side for reception of a side bar 16 as taught and shown in the prior art Medeco constructions and patents identified above, see FIGS. 12 and 13. Because remaining portions of such Medeco locks are known, for the sake of simplicity they have not been 15 shown, except for the illustration of prior art in FIGS. 12 and 13.

The side bar 16 is positioned to reciprocate transverse to the axis of the cylinder plug 10 and biased by springs away from the plug to provide a further level of locking control 20 for the lock, as is known. The side bar has a cam 18 for cooperating with a cam groove 19 on the inside of the casing, also as is conventional in Medeco locks, see FIG. 13. When the plug is attempted to be rotated by the key the cam groove 19 allows the side bar to be forced inwardly toward the center 25 of the cylinder. The side bar has projections 20 for engaging the configurations 13 on the tumblers 11 to allow the side bar

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to move toward the axis of the plug and clear the casing when the tumblers are rotated by the key to a correct position, as in known Medeco locks.

5 In the present invention, the side bar also has spaced slots 22 positioned along its lower surface as shown in FIGS. 1 and 2. Projections 23 are defined by the spaces between the slots.

10 Positioned in an axial hole 30 in the cylinder plug is a slider 24 which can slide on an axis parallel to the axis of the rotatable cylinder plug. The slider itself has a projection 26 at one end which extends into the keyway 12 for engagement with proper key as will be described. A spring 28 is provided for biasing the slider axially in hole 30 in a duration toward the front or key entry point of the lock.

15 The slider 24 also has spaced tangs 32 on its surface as shown in FIGS. 1, 2 and 3. These tangs are of sufficient size and length to either fit in the slots 22 of the side bar when the slider is properly positioned, or interfere with the projections 23 on the side bar when not properly positioned.
20 As shown in FIG. 2, the tangs 32 on the slider and projections 23 on the side bar 16 interact thus preventing the side bar from moving inwardly, thus blocking operation of the side bar and hence the lock.

25 As shown in FIG. 6 when the slider spring 28 has been compressed and the tangs 32 on the slider are positioned within the slots 22 of the side bar, the side bar is allowed

to operate as shown in FIGS. 5 and 6. Thus, the slider provides a third level of lock control in addition to the reciprocation and rotation of the tumblers.

A unique key blank 34 may be provided with proper bitting 5 35 for operating the lock. The key blank has a bow 36 and a blade 38. The blade has a profile which conforms to the profile of the keyway 12. On the side of the key blank (and the key) there is a rib 40 having a contact surface 42 formed for contacting the projection 26 on the slider 24. As shown 10 in FIG. 6, when the key is inserted and rib end 42 contacts projection 26 it compresses spring 28 and positions the slider so as to not to interfere with operation of the side bar.

FIGS. 8, 9, 10 and 11 show other embodiments having different configurations of the contact surface 42 on key rib 15 40 and showing the slider 24 superimposed, the slider projection 26 having a surface complimentary to the contact surface 42. FIG. 8 is the same as the FIGS. 1-7 embodiment, but in the open position of FIG. 6. In FIG. 9 the slider projection as a step 44 for receiving a similarly configured 20 key rib end 42a. FIG. 10 has a slanting surface 46 for cooperating with a slant surface 42b on the distal end of key rib 40. FIG. 11 has a tooth shaped surface 48 on projection 26 for cooperating with a complimentary shaped rib surface 42. To illustrate master keying possibilities, the key of FIG. 8 25 will correctly position the slider shown in FIG. 8 and the key of FIG. 11 will correctly operate the slider in FIG. 11. The

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key in FIG. 8 will also correctly position the slider of FIG. 11. However, the key of FIG. 11 will push the slider of FIG. 8 too far and the lock will not open. Similarly, the key of FIG. 8 will not operate with a slider configured as in FIG. 9 or as in FIG. 10 because it would push the slider too far and the lock will not open. By providing different keys with differently configured distal ends of the key rib, and providing different cylinders with differently configured slider projections, the cylinders can be selectively operated by the different keys.

FIGS. 14-20 show an alternative embodiment in which the blocking member or slider instead of being a rod insertable into the end of the cylinder is in the form of a block which is insertable from the bottom of the keyway. This is shown in more detail with reference to FIGS. 14, 15 and 16 showing the slider in position to not block the side bar. As shown the plug 10 has its keyway 12 open at the bottom. The side bar 16' has spaced slots 22' which will allow the sidebar to either clear or be blocked by the slider as will be described below. As with the prior described embodiment, the invention is in the environment of the Medeco twisting tumbler locks as shown in FIGS. 12 and 13 in which the side bar 16 reciprocates transverse to the axis of the cylinder plug to provide a higher level of locking and the side bar is biased inwardly by springs to either be held by or passed over and out of cam groove 19 on the inside of the casing which cooperates with

cam 18 on the side bar as shown in FIGS. 16 and 19 and as is conventional in Medeco locks. When the plug is attempted to be rotated by a key, the cam 18 causes the side bar 16' to be forced inwardly toward the center of the cylinder. The side
5 bar has projections 20' for cooperating with the twisting cylinders as is known in the art. The side bar also has spaced slots 22' positioned along its side surface.

The slider in this embodiment is a block shaped member
24' shaped to fit within the cylinder shell and to be inserted
10 from the open bottom of the keyway 12. A spring 28' is provided by biasing the slider toward the bow of the key as shown in FIGS. 15 and 18. The slider moves axially of the key in space 30'. The plug shaped slider has spaced tangs 32' on its upper surface as shown in FIGS. 15 and 18. These tangs
15 can move into slots 22 in the side bar when the slider is positioned by the key as shown in FIGS. 15 and 16. However, as shown in FIG. 18, when the key is not moving the slider, the tangs 32' intersect with the portions of the side bar outside the slots 22' as indicated by interference points 33
20 and this prevents the side bar from moving axially inwardly and prevents the lock from being operated to accomplish unlocking. This would happen at all times except when a proper key such as key 34' shown in FIG. 20 is inserted into keyway 12 to move the slider member 24' from the normal
25 position of FIG. 18 to the unlocking position of FIG. 15. This is accomplished by a further projection 35 on the slider

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24' which extends into the keyway so as to intersect with the profile of the key blade 38'. The key blade has a stop 42' which contacts projection 35 and compresses the spring 28' when the key is inserted to allow the side bar to operate when the tangs 32' are in the grooves 22' as shown in FIG. 15.

In operation the key 34' is inserted into the keyway 12 to move the slider 24' against the bias of spring 28' and when the projections 32' are in the position to cooperate with grooves 22', the side bar 16' can operate to allow the key to turn the plug and operate the lock. Unless the portion 42' of the key 34' contacts the projection of 35, the slider or block 24' will block operation of the lock.

The keys of FIGS. 8-11 could also be used with this embodiment.

The advantage of this construction is that it allows master keying and provides further security because it does not require the conventional pin and tumbler master keying techniques to be used to configure the locks with the selective master keying capability. When used to supplement conventional master keying techniques, it provides additional capability thus offering the customer the most secure system.

Although the present invention has been described with reference to the particular embodiments disclosed, it is understood that these embodiments are merely illustrated of the application and principles of the invention. Numerous other configurations can be made and other arrangements can

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be devised without departing from the spirit and scope of the invention as defined in the appended claims.

We claim:

1. A cylinder lock of the type having a rotatable cylinder with an axis and a keyway, the lock being controlled by rotatable reciprocating tumblers which are selectively
5 contacted by a side bar under control of a key, with the improvements comprising;

a moveable member operable by contact with the key and cooperating with the side bar to control movement of the side bar and control operation of the lock.

10

2. A cylinder as defined in claim 1, wherein the moveable member is a slider which slides in the cylinder parallel to the axis of the cylinder.

15 3. A cylinder lock as defined in claim 2, wherein the slider is biased in a direction parallel to the axis of the cylinder.

20 4. A cylinder lock as defined in claim 3, wherein the bias is provided by a spring in the cylinder to force the slider in a direction toward an entrance of the keyway.

25 5. A cylinder lock as defined in claim 3, wherein the slider has an extension which extends into the keyway for contacting the key.

6. A cylinder lock as defined in claim 5 wherein the extension is a projection shaped to cooperate with a portion of a key when inserted into the keyway.

5 7. A cylinder lock as defined in claim 3 wherein the slider is insertable into the lock through a keyway opening therein.

10 8. A cylinder lock as defined in claim 3 wherein the slider is insertable longitudinally through an opening in the end of the plug.

15 9. A key for a cylinder lock of the type defined in claim 1, the key fitting into the keyway, a rib on the key, a portion of the rib positioned to contact and control the locking movement of the movable member when the key is inserted into the keyway.

20 10. A key blank for a cylinder lock of the type defined in claim 1, the key blank fitting into the keyway, a rib on the key blank, a portion of the rib positioned to contact a contact portion of the slider and control the locking movement of the slider when the key blank is inserted into the keyway.

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11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim 7, the keys having different configurations on the contact portions of the rib and slider so that one key will operate to control and
5 another key will not control operation the slider.

12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the lock being controlled by rotatable reciprocating tumblers which contact
10 and further control a side bar with the improvements comprising,

a slider carried by the cylinder,

a spring for biasing the slider to a position toward entrance of the keyway,

15 the slider having spaced tangs,

the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of it spring until the tangs
20 of the slider are within spaces between the side bar projections,

the slider having a projection with a contact surface which extends into the keyway, and

a key configured for insertion into the keyway, the key
25 having a contact surface for contacting the contact surface projection on the slider and moving the slider against the

bias of the spring to a position where the tangs on the slides clear the projection on the side bar.

13. A cylinder lock combination as in claim 10 wherein
5 the slider is insertable into the lock through a bottom of the keyway.

14. A cylinder lock combination as in claim 10 wherein
the slider is insertable longitudinally into the lock through
10 a hole in the end of the plug.

15. A key blank for forming a key for a cylinder lock having a rotatable cylinder with an axis and a keyway, rotatable reciprocating tumblers, a movable side bar for
15 contacting the tumblers and a slider for controlling operation of the side bar, a projection on the slider extending into the keyway, the key blank comprising a key bow, a key blade with grooves providing a profile complimentary to the configuration of the profile of the keyway, with at least one rib on the key
20 blank, and a contact surface on the rib for cooperating with the projection and moving the slider to unblock the side bar.

16. A key for a cylinder lock having a rotatable
cylinder with an axis and a keyway, rotatable reciprocating
25 tumblers, a movable side bar for contacting the tumblers and a slider for controlling operation of the side bar, a projection

on the slider extending into the keyway, the key comprising a key bow, a key with grooves with a profile complimentary to the configuration of the profile of the keyway, at least one rib on the key, and a contact surface on the rib for

5 cooperating with the projection and moving the slider to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an axis and a keyway therein, the lock being controlled by
10 rotatable reciprocating tumblers which contact and control a side bar, with the improvement comprising,

a slider carried by the cylinder,

a spring for biasing the slider toward the entrance to the keyway,

15 the slider having spaced tangs,

the side bar having spaced projections,

the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of it' spring until the tangs of the slider are within spaces between the side bar projections, and

the slider having a projection with a contact surface which extends into the keyway for cooperation and activation by a proper key insertable into the keyway.

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18. A cylinder lock as defined in claim 13 wherein the contact surface on the slider projection is shaped to cooperate with various shaped contact surfaces on keys for the lock to provide master keying.

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19. A key blank for a cylinder lock of the type defined in claim 1, the key blank shaped to fit into a keyway, a rib on the key blank, a portion of the rib positioned to contact and configured to control the locking movement of the slider when the key blank is inserted into the cylinder.

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[Received by the International Bureau on 10 July 2002 (10.07.02):
original claims 1, 3, 8, 9, 11-14 and 16-18 replaced by amended claims 1, 3, 8, 9,
11-14 and 16-18 ; claims 2, 10, 15 and 19 are cancelled]

1. A cylinder lock of the type having a rotatable cylinder with an axis and a keyway, the lock being controlled by rotatable reciprocating tumblers which are selectively contacted by a side bar under control of a key, with the improvements comprising;

a moveable member separate from the tumblers and operable by contact with the key and cooperating with the side bar to control locking movement of the side bar and control operation of the lock,

wherein the moveable member is a slider which slides in the cylinder parallel to the axis of the cylinder.

3. A cylinder lock as defined in claim 1, wherein the slider is biased in a direction parallel to the axis of the cylinder.

4. A cylinder lock as defined in claim 3, wherein the bias is provided by a spring in the cylinder to force the slider in a direction toward an entrance of the keyway.

5. A cylinder lock as defined in claim 3, wherein the slider has an extension which extends into the keyway for contacting the key.

6. A cylinder lock as defined in claim 5 wherein the extension is a projection shaped to cooperate with a portion of a key when inserted into the keyway.

7. A cylinder lock as defined in claim 3 wherein the slider is insertable into the lock through a keyway opening therein.

8. A cylinder lock as defined in claim 3 wherein the

slider is insertable longitudinally into the end of the cylinder.

9. A key for use in combination with a cylinder lock as defined in claim 1, the key fitting into a keyway of the cylinder, a rib on the key, a portion of the rib positioned to contact and control locking movement of the movable member when the key is inserted into the keyway.

11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim 9, the keys having different configurations on the key and slider so that one key will operate to control and another key will not control operation of the slider.

12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the cylinder being controlled by rotatable reciprocating tumblers which contact and further control a side bar with the improvements comprising,

a slider carried by the cylinder,
a spring for biasing the slider to a position toward entrance of the keyway,

the slider having spaced tangs,
the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between the side bar projections,

the slider having a projection with a contact surface which extends into the keyway, and

a key configured for insertion into the keyway, the key having a contact surface for contacting the contact surface of the projection on the slider and moving the slider against the

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bias of the spring to a position where the tangs on the slider clear the projections on the side bar.

13. A cylinder lock combination as in claim 12 wherein the slider is insertable into the lock through a bottom of the keyway.

14. A cylinder lock combination as in claim 12 wherein the slider is insertable longitudinally into the lock through an opening in the end of the cylinder.

16. A key for a cylinder lock having a rotatable cylinder with an axis and a keyway, rotatable reciprocating tumblers, a movable side bar for contacting the tumblers and a slider for controlling operation of the side bar, a projection on the slider extending into the keyway, the key comprising a key bow, a key blade with a profile complimentary to the configuration of the profile of the keyway, at least one rib on the key, and a contact surface on the rib for cooperating with the projection and moving the slider in the cylinder parallel to the axis of the cylinder to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an axis and a keyway therein, the lock being controlled by rotatable reciprocating tumblers which contact and control a side bar, with the improvement comprising,
a slider carried by the cylinder,
a spring for biasing the slider toward the entrance to the keyway,
the slider having spaced tangs,
the side bar having spaced projections,
the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between

the side bar projections, and

the slider having a projection with a contact surface which extends into the keyway for cooperation and activation by a proper key insertable into the keyway.

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18. A cylinder lock as defined in claim 17 wherein the contact surface on the slider projection is shaped to cooperate with various shaped contact surfaces on keys for the lock to provide master keying.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1888-484.PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US02/02211	International filing date (day/month/year) 28 JANUARY 2002	Priority date (day/month/year) 06 FEBRUARY 2001
International Patent Classification (IPC) or national classification and IPC IPC(7): E05B 19/08, 27/04 and US Cl.: 70/409,491,494,495		
Applicant MEDECO SECURITY LOCKS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of <u>4</u> sheets. ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>4</u> sheets.	3. This report contains indications relating to the following items: I ☒ Basis of the report II ☐ Priority III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability IV ☐ Lack of unity of invention V ☒ Reasoned statement under Article 35(B) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement VI ☐ Certain documents cited VII ☐ Certain defects in the international application VIII ☐ Certain observations on the international application
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Date of submission of the demand 29 AUGUST 2002	Date of completion of this report 27 SEPTEMBER 2002
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20591	Authorized officer  LLOYD A. GALL
Facsimile No. (703) 505-8290	Telephone No. (703) 505-0828

Form PCT/IPEA/409 (cover sheet) (July 1998)*

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/09911

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. statement

Novelty (N)

Claims 1,3-9,11-14,16-18

YES

Claims none

NO

Inventive Step (IS)

Claims 1,3-9,11-14,16-18

YES

Claims none

NO

Industrial Applicability (IA)

Claims 1,3-9,11-14,16-18

YES

Claims none

NO

2. citations and explanations (Rule 70.7)

Claims 1, 3-9, 11-14 and 16-18 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the slider which slides in a direction parallel to the axis of the cylinder to cooperate with the rotatable reciprocating tumblers and the sidebar. The lock and keys have industrial applicability to provide a high security tumbler lock.

NEW CITATIONS
NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/03211

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

This report has been drawn on the basis of the description,
page(s) 1-10, as originally filed.
page(s) NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the claims,
page(s) NONE, as originally filed.
page(s) 11,14, as amended under Article 19.
page(s) NONE, filed with the demand.
and additional amendments:
Pages 12 and 13, filed with the letter of 27 September 2002.

This report has been drawn on the basis of the drawings,
page(s) 1-7, as originally filed.
page(s) NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the sequence listing part of the description:
page(s) NONE, as originally filed.
pages(s) NONE, filed with the demand.
and additional amendments:
NONE

We claim:

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1. A cylinder lock of the type having a rotatable cylinder with an axis and a keyway, the lock being controlled by rotatable reciprocating tumblers which are selectively contacted by a side bar under control of a key, with the improvements comprising;

a moveable member separate from the tumblers and operable by contact with the key and cooperating with the side bar to control locking movement of the side bar and control operation of the lock,

wherein the moveable member is a slider which slides in the cylinder parallel to the axis of the cylinder.

3. A cylinder lock as defined in claim 1, wherein the slider is biased in a direction parallel to the axis of the cylinder.

4. A cylinder lock as defined in claim 3, wherein the bias is provided by a spring in the cylinder to force the slider in a direction toward an entrance of the keyway.

5. A cylinder lock as defined in claim 3, wherein the slider has an extension which extends into the keyway for contacting the key.

6. A cylinder lock as defined in claim 5 wherein the extension is a projection shaped to cooperate with a portion of a key when inserted into the keyway.

7. A cylinder lock as defined in claim 3 wherein the slider is insertable into the lock through a keyway opening therein.

8. A cylinder lock as defined in claim 3 wherein the

slider is insertable longitudinally into the end of the cylinder.

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9. A key for use in combination with a cylinder lock as defined in claim 1, the key fitting into a keyway of the cylinder, a rib on the key, a portion of the rib positioned to contact and control locking movement of the movable member when the key is inserted into the keyway.

11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim 9, the keys having different configurations on the key and slider so that one key will operate to control and another key will not control operation of the slider.

12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the cylinder being controlled by rotatable reciprocating tumblers which contact and further control a side bar with the improvements comprising,

a slider carried by the cylinder,
a spring for biasing the slider to a position toward entrance of the keyway,

the slider having spaced tangs,
the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between the side bar projections,

the slider having a projection with a contact surface which extends into the keyway, and

a key configured for insertion into the keyway, the key having a contact surface for contacting the contact surface of the projection on the slider and moving the slider against the

PCT/US02/02211 29082002
bias of the spring to a position where the tangs on the slider
clear the projections on the side bar.

13. A cylinder lock combination as in claim 12 wherein
the slider is insertable into the lock through a bottom of the
keyway.

14. A cylinder lock combination as in claim 12 wherein
the slider is insertable longitudinally into the lock through
an opening in the end of the cylinder.

16. A key for a cylinder lock having a rotatable
cylinder with an axis and a keyway, rotatable reciprocating
tumblers, a movable side bar for contacting the tumblers and a
slider for controlling operation of the side bar, a projection
on the slider extending into the keyway, the key comprising a
key bow, a key blade with a profile complimentary to the
configuration of the profile of the keyway, at least one rib
on the key, and a contact surface on the rib for cooperating
with the projection and moving the slider in the cylinder
parallel to the axis of the cylinder to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an
axis and a keyway therein, the lock being controlled by
rotatable reciprocating tumblers which contact and control a
side bar, with the improvement comprising,

a slider carried by the cylinder;

a spring for biasing the slider toward the entrance to
the keyway,

the slider having spaced tangs,

the side bar having spaced projections,

the tangs on the slider and the projections on the side
bar interfering with each other to prevent operation of the
side bar unless the slider is moved against the bias of the
spring until the tangs of the slider are within spaces between

the side bar projections, and

the slider having a projection with a contact surface which extends into the keyway for cooperation and activation by a proper key insertable into the keyway.

5

18. A cylinder lock as defined in claim 17 wherein the contact surface on the slider projection is shaped to cooperate with various shaped contact surfaces on keys for the lock to provide master keying.



UNITED STATES
PATENT AND
TRADEMARK OFFICE

2590

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JANUARY 07, 2002

PTAS
ROTHWELL, FIGG, ERNST & MANBECK JAN 11 2002
G. FRANKLIN ROTHWELL, ESQ.
555 13TH ST., N.W.
SUITE 701-EAST
WASHINGTON, D.C. 20004

Chief Financial Officer and Chief Administrative Officer
Washington, DC 20231
www.uspto.gov

1233-464



101887976A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/19/2001

REEL/FRAME: 012278/0974
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
FIELD, PETER H.

DOC DATE: 10/05/2001

ASSIGNOR:
PERKINS, ANDY E.

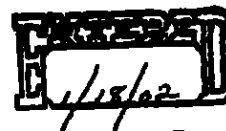
DOC DATE: 10/05/2001

ASSIGNEE:
MEDECO SECURITY LOCKS, INC.
P.O. BOX 3075
SALEM, VIRGINIA 24153-0330

SERIAL NUMBER: 09981801
PATENT NUMBER:

FILING DATE: 10/19/2001
ISSUE DATE:

MARCUS KIRK, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



10-29-2001

U.S. Department of Commerce
Patent and Trademark Office
PATENT101887976
RECORDATION FORM COVER SHEET
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

- ☒ New
☐ Resubmission (Non-Recordation)
Document ID# _____
☐ Correction of PTO Error
Reel # _____ Frame # _____
☐ Corrective Document
Reel # _____ Frame # _____

Conveyance Type

- ☒ Assignment
☐ License
☐ Merger
☐ Security Agreement
☐ Change of Name
☐ Other _____

Conveying Party(ies)

Name (line 1) FIELD, Peter H.
Name (line 2)

☐ Mark if additional names of conveying parties attached

Execution Date
October 5, 2001

Second Party

Name (line 1) PERKINS, Andy E.
Name (line 2)

Execution Date
October 5, 2001

Receiving Party

Name (line 1) Medeco Security Locks, Inc.
Name (line 2) Corporation of the Commonwealth of Virginia
Address (line 1) P.O. Box 3075
Address (line 2)
Address (line 3) Salem, Virginia 24153-0330

☐ Mark if additional names of receiving parties attached

☐ If document to be recorded
is an assignment and the
receiving party is not
domiciled in the U.S.,
an appointment of domestic
representative is attached.

Domestic Representative Name and Address

Enter for the First Receiving Party only.

Name: G. Franklin Rothwell, Esq.
Address (line 1): Rothwell, Figg, Ernst & Manbeck
Address (line 2): 555 13th St., N.W.
Address (line 3): Suite 701-East
Address (line 4): Washington, D.C. 20004

FOR OFFICE USE ONLY

Correspondent Name and Address

Area Code and Telephone Number: 202/783-8040

Name: G. Franklin Rothwell, Esq.
Address (line 1): Rothwell, Figg, Ernst & Manbeck
Address (line 2): 555 13th St., N.W.
Address (line 3): Suite 701-East
Address (line 4): Washington, D.C. 20004

Pages

Enter the total number of pages of the attached conveyance document
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1

Application Number(s) or Patent Number(s)

[] Mark if additional numbers attached

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Patent Application Number(s):

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If this document is being filed together with a new Patent Application, enter the date of the patent
application was signed by the first named executing inventor.

October 5, 2001

Patent Cooperation Treaty (PCT)

Enter PCT application Number
only if a U.S. Application Number
has not been assigned

PCT

Number of Properties

Enter the total number of properties involved. # 1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$40.00

Method of Payment: ☒ Enclosed ☐ Deposit Account ☐ Credit Card

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: 02-2135

Authorization to charge additional fees: Yes ☒ No ☐

Statement and Signature

*To the best of my knowledge and belief, the foregoing information is true and correct and any
attached copy is a true copy of the original document. Charges to deposit account are authorized,
as indicated herein.*

G. Franklin Rothwell

Name of Person Signing

Signature

October 19, 2001

Date

Registration No. 18,125

Docket No. 1233-464

ASSIGNMENT

WHEREAS, WE, Peter H. Field, a citizen of the United States, with a postal address of P.O. Box 104, Salem, Virginia 24153 and Andy E. Perkins, a citizen of the United States, residing at 2401 Gardner Street, Lafayette, Virginia 24087, are the inventors of an invention in ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR CONTROL for which we have executed an application for Letters Patent of the United States, of even date herewith; and

WHEREAS, MEDECO SECURITY LOCKS, INC., incorporated in the state of Virginia, with a postal address of P.O. Box 3075, Salem, Virginia 24153-0330, is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we the said Peter H. Field and Andrew E. Perkins have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said MEDECO SECURITY LOCKS, INC., its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said MEDECO SECURITY LOCKS, INC., its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said MEDECO SECURITY LOCKS, INC., its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said MEDECO SECURITY LOCKS, INC., its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 05 Oct 01 2001 Peter H. Field L.S.
Peter H. Field

Date 05 OCT 01 2001 Andy E. Perkins L.S.
Andy E. Perkins

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PCT REQUEST

1233-464.PCT

Original (for SUBMISSION) - printed on 28.01.2002 11:10:09 AM

0	For receiving Office use only	
0-1	International Application No.	
0-2	International Filing Date	
0-3	Name of receiving Office and "PCT International Application"	
0-4	Form - PCT/ROM101 PCT Request	
0-4-1	Prepared using	PCT-EASY Version 2.92 (updated 01.01.2002)
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	United States Patent and Trademark Office (USPTO) (RO/US)
0-7	Applicant's or agent's file reference	1233-464.PCT
I	Title of Invention	ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR CONTROL
II	Applicant	
II-1	This person is:	applicant only
II-2	Applicant for	all designated States except US
II-4	Name	MEDECO SECURITY LOCKS, INC.
II-5	Address:	P.O. Box 3075 Salem, VA 24153-0330 United States of America
II-6	State of nationality	US
II-7	State of residence	US
II-8	Telephone No.	(540) 380-1654
II-9	Facsimile No.	(540) 380-1714
III-1	Applicant and/or Inventor	
III-1-1	This person is:	applicant and inventor
III-1-2	Applicant for	US only
III-1-4	Name (LAST, First)	FIELD, Peter, H.
III-1-5	Address:	P.O. Box 104 Salem, VA 24153 United States of America
III-1-6	State of nationality	US
III-1-7	State of residence	US

PCT REQUEST

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1233-464.PCT

Original (for SUBMISSION) - printed on 28.01.2002 11:10:09 AM

III-2	Applicant and/or inventor	
III-2-1	This person is:	applicant and inventor
III-2-2	Applicant for	US only
III-2-4	Name (LAST, First)	PERKINS, Andy, E.
III-2-5	Address:	2401 Gardner Street Lafayette, VA 24087 United States of America
III-2-6	State of nationality	US
III-2-7	State of residence	US
IV-1	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
IV-1-1	Name (LAST, First)	ROTHWELL, G., Franklin
IV-1-2	Address:	Rothwell, Figg, Ernst & Manbeck, P.C. 555 13th Street, N.W., Suite 701-E Washington, DC 20004 United States of America
IV-1-3	Telephone No.	202 783 6040
IV-1-4	Facsimile No.	202 783 6031
IV-1-5	Agent's registration No.	18,125
IV-2	Additional agent(s).	additional agent(s) with same address as first named agent
IV-2-1	Name(s)	FIGG, E., Anthony (27,195); ERNST, Barbara, G. (30,377); MANBECK, JR., Harry, F. (17,348); REPPER, George, R. (31,414); NEWLAND, Bart, G. (31,282); DELUCA, Vincent, M. (32,408); HYNDIS, Joseph, A. (34,627); BOWDITCH, Mark, I. (40,315); JONDLE, Robert, J. (33,915); KERR, Don, M. (22,720); IHMEN, Jeffrey, L. (28,957); SAXE, Stephen, A. (38,609); KARTA, Glenn, E. (30,649); CASSIDY, Martha (44,066); JANSEN, Gregg, L. (46,799); WYDEVEN, Richard (39,881); MCKIERNAN, Thomas, E. (37,889); SHAPIRO, Jason, M. (35,354); MORAN, Michael, J. (42,013); MORRIS, Nancy, T. (42,017); ULDRICH, Lisa, A. (38,875); GIFFORD, C., Nichole (44,122); SULLIVAN, Michael (35,377)

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V	Designation of States	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	AP: GH GM KE LS MW ME SD SL SE TZ UG ZM ZW and any other State which is a Contracting State of the Harare Protocol and of the PCT EA: AM AZ BY KG KZ MD RU TJ TM and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR and any other State which is a Contracting State of the European Patent Convention and of the PCT OA: BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG and any other State which is a member State of OAPI and a Contracting State of the PCT
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	AE AG AL AM AT AU AZ BA BB <u>BC</u> BR BY BZ CA CH&LI CN CO CR CU <u>CF</u> DE DK DM DE EC EE ES FI GB GD GE GH GM HN HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX ME NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
V-3	Precautionary Designation Statement In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.8(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-3 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 18 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	
V-4	Exclusion(s) from precautionary designations	NONE
VI-1	Priority claim of earlier national application	
VI-1-1	Filing date	06 February 2001 (06.02.2001)
VI-1-2	Number	09/776,929
VI-1-3	Country	US

PCT REQUEST

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1233-484.PCT

Original (for SUBMISSION) - printed on 28.01.2002 11:10:09 AM

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VI-2	Priority claim of earlier national application		
VI-2-1	Filing date	19 October 2001 (19.10.2001)	
VI-2-2	Number	09/981,801	
VI-2-3	Country	US	
VI-3	Priority document request		
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1, VI-2	
VII-1	International Searching Authority Chosen	United States Patent and Trademark Office (USPTO) (ISA/US)	
VIII	Declarations	Number of declarations	
VIII-1	Declaration as to the identity of the inventor	-	
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	-	
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	-	
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	-	
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	-	
IX	Check list	number of sheets	electronic file(s) attached
IX-1	Request (including declaration sheets)	5	-
IX-2	Description	10	-
IX-3	Claims	6	-
IX-4	Abstract	1	EZABST00.TXT
IX-5	Drawings	7	-
IX-7	TOTAL	29	
	Accompanying items	paper document(s) attached	electronic file(s) attached
IX-8	Fee calculation sheet	✓	-
IX-11	Copy of general power of attorney	reference no. 1233	-
IX-17	PCT-EASY diskette	-	Diskette
IX-19	Figure of the drawings which should accompany the abstract	1	
IX-20	Language of filing of the international application	English	
X-1	Signature of applicant, agent or common representative	G. F. Rothwell	
X-1-1	Name (LAST, First)	ROTHWELL, G., Franklin	

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10-1	Date of actual receipt of the purported international application	
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PCT REQUEST

1233-454.PCT

Original (for SUBMISSION) - printed on 28.01.2002 11:10:09 AM

10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/US
10-6	Transmittal of search copy delayed until search fee is paid	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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1233.464.PCT
GFR/MSD:law

INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY

In re International application of)
)
Medeco Security Locks, Inc.)
)
Int'l. Application No.: PCT/US02/02211) **BOX: PCT**
)
Int'l. Filing Date: 28 January 2002)
)
For: ROTATING PIN TUMBLER SIDE)
BAR LOCK WITH SIDE BAR)
CONTROL)

International Preliminary Examining Authority
United States Patent and Trademark Office
Washington, D.C. 20231

27 September 2002

AMENDMENT OF INTERNATIONAL APPLICATION UNDER PCT ARTICLE 34

Dear Sirs:

Please amend the claims of the above-referenced PCT application under Article 34 as follows:

- Claim 9, line 1: delete the phrase "for use"
- Claim 16, line 1: replace the term "for" with -and-
- Claim 16, line 6: replace the term "complimentary" with -complementary-

Replacement pages 12 and 13 are attached hereto. The amendments are intended to make the claims consistent with the claims in the U.S. application. No new matter is added.

Respectfully submitted,

By: 

Monica S. Davis, Reg. No. 44,492
Attorney for Applicant
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
1425 K Street, N.W., Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

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slider is insertable longitudinally into the end of the cylinder.

5 9. A key in combination with a cylinder lock as defined in claim 1, the key fitting into a keyway of the cylinder, a rib on the key, a portion of the rib positioned to contact and control locking movement of the movable member when the key is inserted into the keyway.

10 11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim 9, the keys having different configurations on the key and slider so that one key will operate to control and another key will not control operation of the slider.

15 12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the cylinder being controlled by rotatable reciprocating tumblers which contact and further control a side bar with the improvements comprising,

20 a slider carried by the cylinder,
a spring for biasing the slider to a position toward entrance of the keyway,

25 the slider having spaced tangs,
the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between the side bar projections,

30 the slider having a projection with a contact surface which extends into the keyway, and

35 a key configured for insertion into the keyway, the key having a contact surface for contacting the contact surface of the projection on the slider and moving the slider against the

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bias of the spring to a position where the tangs on the slider clear the projections on the side bar.

13. A cylinder lock combination as in claim 12 wherein the slider is insertable into the lock through a bottom of the keyway.

14. A cylinder lock combination as in claim 12 wherein the slider is insertable longitudinally into the lock through an opening in the end of the cylinder.

16. A key and a cylinder lock having a rotatable cylinder with an axis and a keyway, rotatable reciprocating tumblers, a movable side bar for contacting the tumblers and a slider for controlling operation of the side bar, a projection on the slider extending into the keyway, the key comprising a key bow, a key blade with a profile complementary to the configuration of the profile of the keyway, at least one rib on the key, and a contact surface on the rib for cooperating with the projection and moving the slider in the cylinder parallel to the axis of the cylinder to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an axis and a keyway therein, the lock being controlled by rotatable reciprocating tumblers which contact and control a side bar, with the improvement comprising,

a slider carried by the cylinder,

a spring for biasing the slider toward the entrance to the keyway,

the slider having spaced tangs,

the side bar having spaced projections,

the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between

PATENT COOPERATION TREATY

LADAS & PARRY

SEP 24 2002

RECEIVED
L.A. OFFICEFrom the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:
G. FRANKLIN ROTHWELL
ROTHWELL, FIGG, ERNST & MANBECK, P.C.
555 13TH STREET, N.W. SUITE 701-E
WASHINGTON, DISTRICT OF COLUMBIA 20004

NOTIFICATION OF RECEIPT
OF DEMAND BY COMPETENT INTERNATIONAL
PRELIMINARY EXAMINING AUTHORITY(PCT Rules 59.3(e) and 61.1(b), first sentence
and Administrative Instructions, Section 601(a))Date of mailing
(day/month/year) 19 SEP 2002

Applicant's or agent's file reference

1233-484 PCT

IMPORTANT NOTIFICATION

International application No.

PCT/US02/02211

International filing date (day/month/year)

28 JAN 02

Priority date (day/month/year)

08 FEB 01

Applicant

MEDECO SECURITY LOCKS, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

29 AUGUST 02(29.08.02)

2. That date of receipt is:

- ☒ the actual date of receipt of the demand by this Authority (Rule 61.1(b)).
☐ the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).
☐ the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

3. ☐ **ATTENTION:** That date of receipt is AFTER the expiration of 19 months from the priority date. Consequently, the election(s) made in the demand does (do) not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)). Therefore, the acts for entry into the national phase must be performed within 20 months from the priority date (or later in some Offices) (Article 22). For details, see the PCT Applicant's Guide, Volume II.

- ☐ (If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

4. Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/ :
Assistant Commissioner for Patent
Box PCT
Washington, D.C. 20231 Attn:RO/US
Facsimile No. 703-305-3230

Authorized officer:
W CLAYBROOKS, TRICE

Telephone No. 703-308-8330

Form PCT/IPEA/402 (July 1998)

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PATENT COOPERATION TREATY

42#2

PCT

INFORMATION CONCERNING ELECTED
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

ROTHWELL, G., Franklin
Rothwell, Figg, Ernst & Manbeck,
P.C.
1425 K Street, N.W., Suite 800 3 2002
Washington, DC 20005
United States of America

GER
1233-464-PCT

Date of mailing (day/month/year) 20 October 2002 (20.10.02)		
Applicant's or agent's file reference 1233-464.PCT		IMPORTANT INFORMATION
International application No. PCT/US02/02211	International filing date (day/month/year) 28 January 2002 (28.01.02)	Priority date (day/month/year) 06 February 2001 (06.02.01)
Applicant MEDECO SECURITY LOCKS, INC. et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
National : AU, BG, CA, CN, DE, GB, IL, JP, KP, KR, MN, NO, PL, RO, RU, SK, US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

AP : GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW
EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
OA : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
National : AE, AG, AL, AM, AT, AZ, BA, BB, BR, BY, BZ, CH, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GD, GE, GH, GM, HR, HU, ID, IN, IS, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, MX, MZ, NZ, OM, PH, PT, SD, SE, SG, SI, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the International application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the International preliminary examination report (Article 39(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer: R.BEN GHACHEM (Fax 338-8995)
Facsimile No. (41-22) 740.14.96	Telephone No. (41-22) 338.83.38

PATENT COOPERATION TREATY

WO 02/066773
PCT/US02/02211

43 KB

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

ROTHWELL, G., Franklin
Rothwell, Figg, Ernst & Manbeck,
P.C.
1425 K Street, N.W., Suite 800
Washington, DC 20005
ETATS-UNIS D'AMERIQUE

SEP 12 2002

RECEIVED/DOCKETED

FILE NO.

1233-464 PCT

IMPORTANT NOTICE

Date of mailing (day/month/year) 29 August 2002 (29.08.02)		
Applicant's or agent's file reference 1233-464.PCT		
International application No. PCT/US02/02211	International filing date (day/month/year) 28 January 2002 (28.01.02)	Priority date (day/month/year) 06 February 2001 (06.02.01)
Applicant MEDECO SECURITY LOCKS, INC. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:
KP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OA, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 29 August 2002 (29.08.02) under No. WO 02/066773

4. TIME LIMITS for filing a demand for international preliminary examination and for entry into national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 18 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of the designated Office. For further details, see PCT Gazette No. 44/2001 of 1 November 2001, pages 18828, 18832 and 18834, as well as the PCT Newsletter, October and November 2001 and February 2002, issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette, the PCT Newsletter and the PCT Applicant's Guide, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the PCT Applicant's Guide, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.91.11

PATENT COOPERATION TREATY

44 24

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

ROTHWELL, G., Franklin MAY 7 2002
 Rothwell, Figg, Ernst & Manbeck,
 P.C.
 1425 K Street, N.W., Suite 800
 Washington, DC 20005
 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 29 April 2002 (29.04.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 1233-464.PCT	
International application No. PCT/US02/02211	International filing date (day/month/year) 28 January 2002 (28.01.02)

1. The following indications appeared on record concerning:									
☐ the applicant	☐ the inventor								
☒ the agent	☐ the common representative								
Name and Address ROTHWELL, G., Franklin Rothwell, Figg, Ernst & Manbeck, P.C. 555 13th Street, N.W., Suite 701-E Washington, DC 20004 United States of America	<table border="1"> <tr> <td>State of Nationality</td> <td>State of Residence</td> </tr> <tr> <td colspan="2">Telephone No. 202 783 6040</td> </tr> <tr> <td colspan="2">Facsimile No. 202 783 6031</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality	State of Residence	Telephone No. 202 783 6040		Facsimile No. 202 783 6031		Teleprinter No.	
State of Nationality	State of Residence								
Telephone No. 202 783 6040									
Facsimile No. 202 783 6031									
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 ROTHWELL, G., Franklin Rothwell, Figg, Ernst & Manbeck, P.C. 1425 K Street, N.W., Suite 800 Washington, DC 20005 United States of America	<table border="1"> <tr> <td>State of Nationality</td> <td>State of Residence</td> </tr> <tr> <td colspan="2">Telephone No. 202 783 6040</td> </tr> <tr> <td colspan="2">Facsimile No. 202 783 6031</td> </tr> <tr> <td colspan="2">Teleprinter No.</td> </tr> </table>	State of Nationality	State of Residence	Telephone No. 202 783 6040		Facsimile No. 202 783 6031		Teleprinter No.	
State of Nationality	State of Residence								
Telephone No. 202 783 6040									
Facsimile No. 202 783 6031									
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 Miguel CORBEIRA
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

RECEIVED
ROTHWELL FIGG ERNST & MANBECKROTHWELL, G., Franklin
Rothwell, Figg, Ernst & Manbeck, 2002
P.C.
555 13th Street, N.W., Suite 701-E
Washington, DC 20004
ETATS-UNIS D'AMERIQUE

APR 26 2002

GFR/ISA

1233-464-PCT

Date of mailing (day/month/year)
15 April 2002 (15.04.02)Applicant's or agent's file reference
1233-464.PCT

IMPORTANT NOTIFICATION

International application No.
PCT/US02/02211International filing date (day/month/year)
28 January 2002 (28.01.02)International publication date (day/month/year)
Not yet publishedPriority date (day/month/year)
06 February 2001 (06.02.01)

Applicant

MEDECO SECURITY LOCKS, INC. et al

1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
3. 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). In such a case, the attention of the applicant is directed to Rule 17.1(a) 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.
4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(a) 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.

Priority date	Priority application No.	Country or regional Office or PCT receiving Office	Date of receipt of priority document
06 Febr 2001 (06.02.01)	09/776,929	US	28 Marc 2002 (28.03.02)
19 Octo 2001 (19.10.01)	09/981,801	US	28 Marc 2002 (28.03.02)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

S. Mandallaz

Facsimile No. (41-22) 740.14.35

Telephone No. (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

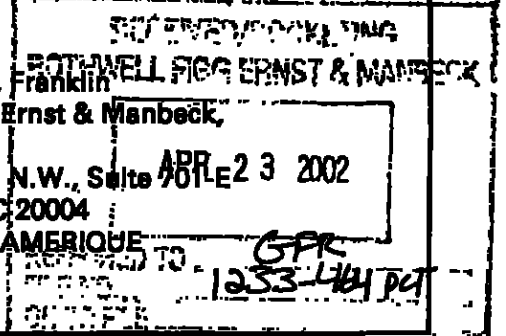
NOTIFICATION OF RECEIPT OF
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

ROTHWELL, G., Franklin
Rothwell, Figg, Ernst & Manbeck,
P.C.
555 13th Street, N.W., Suite 401
Washington, DC 20004
ETATS-UNIS D'AMERIQUE



Date of mailing (day/month/year) 09 April 2002 (09.04.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 1233-464.PCT	International application No. PCT/US02/02211

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

MEDECO SECURITY LOCKS, INC. (for all designated States except US)
FIELD, Peter, H. et al (for US)

International filing date : 28 January 2002 (28.01.02)
Priority date(s) claimed : 06 February 2001 (06.02.01)
19 October 2001 (19.10.01)

Date of receipt of the record copy
by the International Bureau : 28 March 2002 (28.03.02)

List of designated Offices :

AP : GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW
EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
OA : BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG
National : AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ,
EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer: Miguel CORBEIRA Telephone No. (41-22) 338.83.38
--	---

Form PCT/IB/301 (April 2002)

NOTIFICATION OF RECEIPT OF RECORD COPY

27 47

Date of mailing (day/month/year) 09 April 2002 (09.04.02)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 1233-464.PCT	International application No. PCT/US02/02211

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- ☒ time limits for entry into the national phase - see updated important information (as of April 2002)
- ☐ confirmation of precautionary designations (if applicable)
- ☒ requirements regarding priority documents (if applicable)

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

X8

INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated on the cover sheet of this Notification by paying national fees and furnishing translations, as prescribed by Articles 22 and 39 and the applicable national laws. In addition, the applicant may also have to comply with other special requirements applicable in certain Offices. It is the applicant's responsibility to ensure the necessary steps to enter the national phase are taken in a timely fashion. Most Offices do not issue reminders to applicants in connection with the entry into the national phase.

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office where a demand for international preliminary examination is filed before the expiration of 18 months from the priority date (see Article 39(1)), but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see PCT Gazette No. 44/2001 of 1 November 2001, pages 18928, 18932 and 18934, as well as the PCT Newsletter, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the PCT Gazette ("Section IV" part published on a weekly basis), to the PCT Newsletter (on a monthly basis) and to the relevant National Chapters in Volume II of the PCT Applicant's Guide (the paper version of which is updated usually twice a year and the Internet version of which is updated usually on a weekly basis). Finally, a cumulative table of all applicable time limits for entering the national phase is available from WIPO's Internet site, via links from various pages the site including those of the Gazette, Newsletter and Guide, at <http://www.wipo.int/pct/en/index.html>.

Information about the requirements for filing a demand for international preliminary examination is set out in the PCT Applicant's Guide, Volume I/A, Chapter IX. Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

CONFIRMATION OF PRECAUTIONARY DESIGNATIONS

This notification lists only specific designations made under Rule 4.9(a) in the request. It is important to check that these designations are correct. Errors in designations can be corrected where precautionary designations have been made under Rule 4.9(b). The applicant is hereby reminded that any precautionary designations may be confirmed according to Rule 4.9(c) before the expiration of 15 months from the priority date (this time limit may not be extended). If it is not confirmed, it will automatically be regarded as withdrawn by the applicant. There will be no reminder and no invitation. Confirmation of a designation consists of the filing of a notice specifying the designated State concerned (with indication of the kind of protection or treatment desired) and the payment of the designation and confirmation fees. The Notice of confirmation and payment must reach the receiving Office within the 15-month time limit.

REQUIREMENTS REGARDING PRIORITY DOCUMENTS

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 18 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 18-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 18-month time limit and may be subjected by the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided 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 the time limit which is reasonable under the circumstances.

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 18-month time limit is the filing date of the earliest application whose priority is claimed.

* The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The name or two-letter code of that Authority may be indicated on the line below:
IPEA/ US

PCT

CHAPTER II

DEMAND

under Article 31 of the Patent Cooperation Treaty:
The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty, and hereby elects all eligible States (except where otherwise indicated).

For International Preliminary Examining Authority use only

Identification of IPEA	Date of receipt of DEMAND
------------------------	---------------------------

Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION		Applicant's or agent's file reference 1233-464.PCT
International application No. PCT/US02/02211	International filing date (day/month/year) 28 January 2002	(Earliest) Priority date (day/month/year) 6 February 2001

Title of invention ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR CONTROL
--

Box No. II APPLICANT(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.) MEDECO SECURITY LOCKS, INC. P.O. Box 3075 Salem, Virginia 24153-0330 United States of America	Telephone No. 540 - 380 - 1654
	Facsimile No. 540 - 380 - 1714
	Teleprinter No.
	Applicant's registration No. with the Office

State (that is, country) of nationality: US	State (that is, country) of residence: US
--	--

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.) FIELD, Peter H. P.O. Box 104 Salem, Virginia 24153 United States of America	
--	--

State (that is, country) of nationality: US	State (that is, country) of residence: US
--	--

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.) PERKINS, Andy E. 2401 Gardner Street Lafayette, Virginia 24087 United States of America	
--	--

State (that is, country) of nationality: US	State (that is, country) of residence: US
--	--

[] Further applicants are indicated on a continuation sheet.	
---	--

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J-5
50**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESSES FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.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.)*ROTHWELL, G. Franklin
Rothwell, Figg, Ernst & Manbeck, P.C.
1425 K Street, N.W., Suite 800
Washington, D.C. 20005
United States of America

Telephone No.

202 783 6040

Facsimile No.

202 783 6031

Teleprinter No.

Agent's registration No. with the Office

18,125

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ The international application is originally filedthe description ☒ as originally filed☐ as amended under Article 34the claims ☐ as originally filed☒ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34the drawings ☒ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 months from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). *(This check-box may be marked only where the time limit under Article 19 has not yet expired.)*

* Where no check-box is marked, international preliminary examination will start on the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendment of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: English

☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☐ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**The applicant hereby elects all eligible States *(that is, all States which have been designated and which are bound by Chapter II of the PCT)*

excluding the following States which the applicant wishes not to elect:

87
51

Supplemental Box. *If the supplemental box is not used, this sheet need not be included in the demand.*

ROTHWELL, G. Franklin, Reg. No. 18,125
FIGG, E. Anthony, Reg. No. 27,195
ERNST, Barbara G., Reg. No. 30,377
MANBECK, Harry F., Jr., Reg. No. 17,348
REPPER, George R. Repper R., Reg. No. 31,414
DELUCA, Vincent M., Reg. No. 32,408
HYNDS, Joseph A., Reg. No. 34,627
BOWDITCH, Mark L., Reg. No. 40,315
KERR, Don M., Reg. No. 22,720
IHEN, Jeffrey L., Reg. No. 28,957
KART, Glenn E., Reg. No. 30,649
CASSIDY, Martha, Reg. No. 44,066
WYDEVEN, Richard, Reg. No. 39,881
MCKIERNAN, Thomas E., Reg. No. 37,889
MORAN, Michael J., Reg. No. 42,013
GIFFORD, G. Nichole, Reg. No. 44,122
BHATT, Minakshi, Reg. No. 35,447
SULLIVAN, Michael G., Reg. No. 35,377
DAVIS, Monica S., Reg. No. 44,492
ZOLTICK, Martin M., Reg. No. 35,745
ROSENBLOOM, Brian S., Reg. No. 41,276
SKACEL, Patrick, Reg. No. 47,948

All members of the law firm of Rothwell, Figg, Ernst & Manbeck, P.C. at the address, telephone and telefacsimile numbers indicated in Box No. III.

Box No. VI CHECK LIST

The demand is accompanied by the following elements, in the language referred to in Box No. IV, of the purposes of international preliminary examination:

- | | | | |
|--|---|---|--------|
| 1. translation of international application | : | | sheets |
| 2. amendments under Article 34 | : | | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | 8 | sheets |
| 4. copy (or, where required, translation) of statement under Article 19 | : | | sheets |
| 5. letter | : | 1 | sheets |
| 6. other (specify) | : | | sheets |

For International Preliminary
Examining Authority use only

received	not received
[]	[]
[]	[]
[]	[]
[]	[]
[]	[]
[]	[]

The demand is also accompanied by the item(s) marked below

- | | |
|---|--|
| 1. ☒ fee calculation sheet | 5. ☐ statement explaining lack of signature |
| 2. ☐ original separate power of attorney | 6. ☐ sequence listing in computer readable form |
| 3. ☐ original general power of attorney | 7. ☐ other (specify): |
| 4. ☐ copy of general power of attorney;
reference number, if any: | |

Box No. VII 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 demand).



G. Franklin Rothwell
Attorney for Applicant

For International Preliminary Examining Authority use only

- | | |
|--|---|
| 1. Date of actual receipt of DEMAND: | |
| 2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b): | |
| 3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply. | ☐ The applicant has been informed accordingly. |
| 4. ☐ The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5. | |
| 5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82. | |

For International Bureau use only

Demand received from IPEA on:

F3
53

LAW OFFICES
ROTHWELL, FIGG, ERNST & MANBECK

A PROFESSIONAL CORPORATION

1425 K STREET, N.W.

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July 10, 2002

VIA FACSIMILE

CONFIRMATION VIA FEDERAL EXPRESS

400-3256331
VIA-

International Bureau of WIPO
34 chemin des Colombettes
1211 Geneva 20
SWITZERLAND

Re: International Application No. PCT/US02/02211
Applicant: MEDECO SECURITY LOCKS, INC.
ROTATING PIN TUMBLER SIDE BAR LOCK WITH SIDE BAR
CONTROL
Our Ref: 1233-464.PCT

Dear Sirs:

AMENDMENT UNDER ARTICLE 19

In response to the International Search Report mailed on May 31, 2002, please amend the claims of the above-referenced international application by substituting the attached replacement pages 11-14 for pages 11-16 as originally filed.

EXPLANATION OF CLAIM AMENDMENTS

Amended claims 1, 3, 8, 9, 11-14 and 16-18 replace originally-filed claims 1, 3, 8, 9, 11-14 and 16-18; claims 2, 10, 15 and 19 are canceled; and all other claims are unchanged.

DIFFERENCES BETWEEN THE CLAIMS AS FILED AND AS AMENDED

Material inserted is indicated by underlining (insertions) and material deleted is indicated by brackets ([deletions]).

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1. A cylinder lock of the type having a rotatable cylinder with an axis and a keyway, the lock being controlled by rotatable reciprocating tumblers which are selectively contacted by a side bar under control of a key, with the improvements comprising;

a moveable member separate from the tumblers and operable by contact with the key and cooperating with the side bar to control locking movement of the side bar and control operation of the lock,

wherein the moveable member is a slider which slides in the cylinder parallel to the axis of the cylinder.

3. A cylinder lock as defined in claim [2] 1, wherein the slider is biased in a direction parallel to the axis of the cylinder.

8. A cylinder lock as defined in claim 3 wherein the slider is insertable longitudinally [through an opening in] into the end of the [plug] cylinder.

9. A key for use in combination with a cylinder lock [of the type] as defined in claim 1, the key fitting into [the] a keyway of the cylinder, a rib on the key, a portion of the rib positioned to contact and control [the] locking movement of the movable member when the key is inserted into the keyway.

11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim [7] 9, the keys having different configurations on [the contact portions of] the [rib] key and slider so that one key will operate to control and another key will not control operation of the slider.

12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the [lock] cylinder being controlled by rotatable reciprocating tumblers which contact and further control a side bar with the improvements comprising,

a slider carried by the cylinder,

a spring for biasing the slider to a position toward entrance of the keyway,

the slider having spaced tangs,

the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of [it] the spring until the tangs of the slider are within spaces between the side bar projections,

the slider having a projection with a contact surface which extends into the keyway, and

a key configured for insertion into the keyway, the key having a contact surface for contacting the contact surface of the projection on the slider and moving the slider against the bias of the spring to a position where the tangs on the [slides] slider clear the [projection] projections on the side bar.

13. A cylinder lock combination as in claim [10] 12 wherein the slider is insertable into the lock through a bottom of the keyway.

14. A cylinder lock combination as in claim [10] 12 wherein the slider is insertable longitudinally into the lock through [a hole] an opening in the end of the [plug] cylinder.

16. A key for a cylinder lock having a rotatable cylinder with an axis and a keyway, rotatable reciprocating tumblers, a movable side bar for contacting the tumblers and a slider for controlling operation of the side bar, a projection on the slider extending into the keyway, the key comprising a key bow, a key blade with [grooves with] a profile complimentary to the configuration of the profile of the keyway, at least one rib on the key, and a contact surface on the rib for cooperating with the projection and moving the slider in the cylinder parallel to the axis of the cylinder to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an axis and a keyway therein; the lock being controlled by rotatable reciprocating tumblers which contact and control a side bar, with the improvement comprising,

a slider carried by the cylinder,
a spring for biasing the slider toward the entrance to the keyway,

the slider having spaced tangs,
the side bar having spaced projections,
the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of [it] the spring until the tangs of the slider are within spaces between the side bar projections, and

the slider having a projection with a contact surface which extends into the keyway for cooperation and activation by a proper key insertable into the keyway.

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18. A cylinder lock as defined in claim [13] 17 wherein the contact surface on the slider projection is shaped to cooperate with various shaped contact surfaces on keys for the lock to provide master keying.

STATEMENT UNDER ARTICLE 19

The present Amendments amend claims 1, 3, 8, 9, 11-14 and 16-18, and maintain the original claims with the exception of cancelled claims 2, 10, 15 and 19, all of which are in correspondence with the U.S. priority application, serial no. 09/981,801.

Respectfully submitted,

By 
Monica S. Davis
Attorney for Applicant
Registration No. 44,492
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
1425 K. Street, N.W.
Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040

Attachment - New pages 11-14

1233-464.PCT1

We claim:

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5X

1. A cylinder lock of the type having a rotatable cylinder with an axis and a keyway, the lock being controlled by rotatable reciprocating tumblers which are selectively contacted by a side bar under control of a key, with the improvements comprising;

a moveable member separate from the tumblers and operable by contact with the key and cooperating with the side bar to control locking movement of the side bar and control operation of the lock,

wherein the moveable member is a slider which slides in the cylinder parallel to the axis of the cylinder.

3. A cylinder lock as defined in claim 1, wherein the slider is biased in a direction parallel to the axis of the cylinder.

4. A cylinder lock as defined in claim 3, wherein the bias is provided by a spring in the cylinder to force the slider in a direction toward an entrance of the keyway.

5. A cylinder lock as defined in claim 3, wherein the slider has an extension which extends into the keyway for contacting the key.

6. A cylinder lock as defined in claim 5 wherein the extension is a projection shaped to cooperate with a portion of a key when inserted into the keyway.

7. A cylinder lock as defined in claim 3 wherein the slider is insertable into the lock through a keyway opening therein.

8. A cylinder lock as defined in claim 3 wherein the

slider is insertable longitudinally into the end of the cylinder.

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5 9. A key for use in combination with a cylinder lock as defined in claim 1, the key fitting into a keyway of the cylinder, a rib on the key, a portion of the rib positioned to contact and control locking movement of the movable member when the key is inserted into the keyway.

10 11. A master keying system comprising a cylinder lock as defined in claim 1 and keys as defined in claim 9, the keys having different configurations on the key and slider so that one key will operate to control and another key will not control operation of the slider.

15 12. A cylinder lock combination, including a rotatable cylinder with an axis and a keyway therein, the cylinder being controlled by rotatable reciprocating tumblers which contact and further control a side bar with the improvements comprising,

20 a slider carried by the cylinder,

a spring for biasing the slider to a position toward entrance of the keyway,

the slider having spaced tangs,

25 the side bar having spaced projections, the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between the side bar projections,

30 the slider having a projection with a contact surface which extends into the keyway, and

35 a key configured for insertion into the keyway, the key having a contact surface for contacting the contact surface of the projection on the slider and moving the slider against the

bias of the spring to a position where the tangs on the slider clear the projections on the side bar.

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13. A cylinder lock combination as in claim 12 wherein the slider is insertable into the lock through a bottom of the keyway.

14. A cylinder lock combination as in claim 12 wherein the slider is insertable longitudinally into the lock through an opening in the end of the cylinder.

16. A key for a cylinder lock having a rotatable cylinder with an axis and a keyway, rotatable reciprocating tumblers, a movable side bar for contacting the tumblers and a slider for controlling operation of the side bar, a projection on the slider extending into the keyway, the key comprising a key bow, a key blade with a profile complimentary to the configuration of the profile of the keyway, at least one rib on the key, and a contact surface on the rib for cooperating with the projection and moving the slider in the cylinder parallel to the axis of the cylinder to unblock the side bar.

17. A cylinder lock having a rotatable cylinder with an axis and a keyway therein, the lock being controlled by rotatable reciprocating tumblers which contact and control a side bar, with the improvement comprising,

a slider carried by the cylinder;

a spring for biasing the slider toward the entrance to the keyway,

the slider having spaced tangs,

the side bar having spaced projections,

the tangs on the slider and the projections on the side bar interfering with each other to prevent operation of the side bar unless the slider is moved against the bias of the spring until the tangs of the slider are within spaces between

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the side bar projections, and

the slider having a projection with a contact surface which extends into the keyway for cooperation and activation by a proper key insertable into the keyway.

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18. A cylinder lock as defined in claim 17 wherein the contact surface on the slider projection is shaped to cooperate with various shaped contact surfaces on keys for the lock to provide master keying.

PATENT COOPERATION TREATY

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From the INTERNATIONAL SEARCHING AUTHORITY

To: G. FRANKLIN ROTHWELL ROTHWELL, FIGO, ERNST & MANBECK, P.C. 555 15TH STREET, N.W., SUITE 701-E WASHINGTON, DC 20004
JUN 4 2002 GFR/ISA

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 1233-464-PCT	Date of Mailing (day/month/year) 31 MAY 2002
International application No. PCT/US02/02211	International filing date (day/month/year) 28 JANUARY 2002
Applicant MEDECO SECURITY LOCKS, INC.	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20591	Authorized officer LLOYD A. GALL <i>Diane Smith</i>
Facsimile No. (703) 805-3220	Telephone No. (703) 805-0822

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty and of the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the letter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended ?

The claims only.

The description and the drawings may only be amended during international preliminary examination under Chapter II.

When ? Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that this amendment will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 44.1).

Where not to file the amendments ?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 44.2).

Where a demand for international preliminary examination has been/is filed, see below.

How ? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

What documents must/may accompany the amendments ?

Letter (Section 265(h)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confounded with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

PATENT COOPERATION TREATY

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From the INTERNATIONAL SEARCHING AUTHORITY

To: G. FRANKLIN ROTHWELL
ROTHWELL, FIGG, ERNST & MANBECK, P.C.
888 15TH STREET, N.W., SUITE 701-E
WASHINGTON, DC 20004

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 1888-404.PCT	Date of Mailing <i>(day/month/year)</i> 31 MAY 2002
International application No. PCT/US02/02211	International filing date <i>(day/month/year)</i> 28 JANUARY 2002
Applicant MEDECO SECURITY LOCKS, INC.	

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:
 The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes
 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.
☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box FOT Washington, D.C. 20531 Facsimile No. (703) 805-9880	Authorized officer LLOYD A. GALL <i>Diane Amute</i> Telephone No. (703) 805-0828
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

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Applicant's or agent's file reference 1234-456.PCT	FOR FURTHER ACTION <i>see Notification of Transmittal of International Search Report (Form PCT/ISA/280) as well as, where applicable, item 5 below.</i>
International application No. PCT/US02/08811	International filing date <i>(day/month/year)</i> 28 JANUARY 2002 (Earliest) Priority Date <i>(day/month/year)</i> 08 FEBRUARY 2001
Applicant MEDECO SECURITY LOCKS, INC.	

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 28.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 58.6(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

NEW ABSTRACT

A twisting tumbler lock with a side bar (16,16') is provided with additional levels of security by a axially reciprocable slider (24,24') which is normally positioned to block operation of the side bar (16,16') but is moved by a specially configured key (34,34') to free operation of the side bar (16,16'). This provides a third level of locking security, it also allows master keying. The unique key (34,34') has a portion of a rib (40) formed to cooperate with the slider (24,24') to further allow key control.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/08811

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :E05B 19/06, 27/04

US CL :70/409,401,404,495

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 70/409,401,495,404,495,496

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,499,302 A (SPAIN ET AL) 10 March 1970 (10/03/70), see figure 1.	1
X	US 5,615,566 A (BRANDT) 01 April 1997 (01/04/97), see figures 13-15.	9-11, 15, 16, 19

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	* I	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	* X	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"F" earlier document published on or after the international filing date	* Y	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	* G	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

09 APRIL 2002

Date of mailing of the international search report

31 MAY 2002

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20531

Facsimile No. (703) 305-3280

Authorized officer

LLOYD A. GALL

Telephone No. (703) 308-0888

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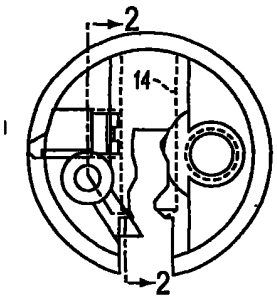


FIG. 1

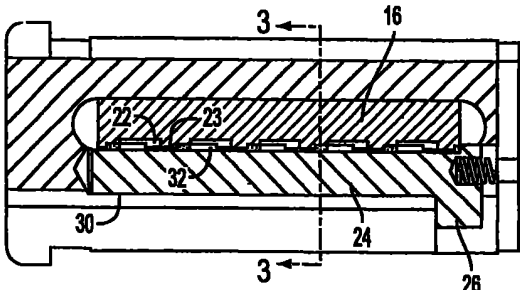


FIG. 2

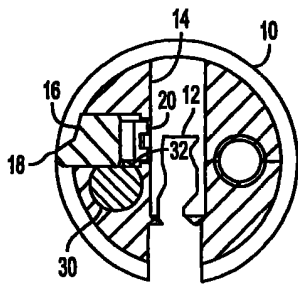


FIG. 3

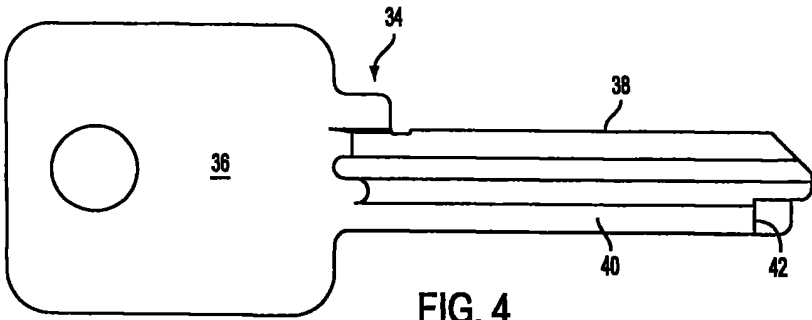


FIG. 4

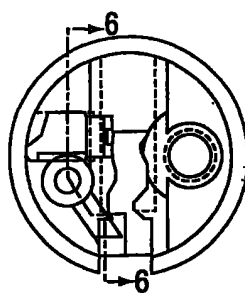


FIG. 5

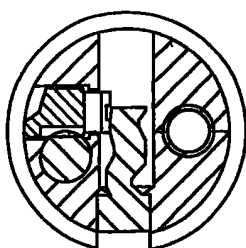


FIG. 7

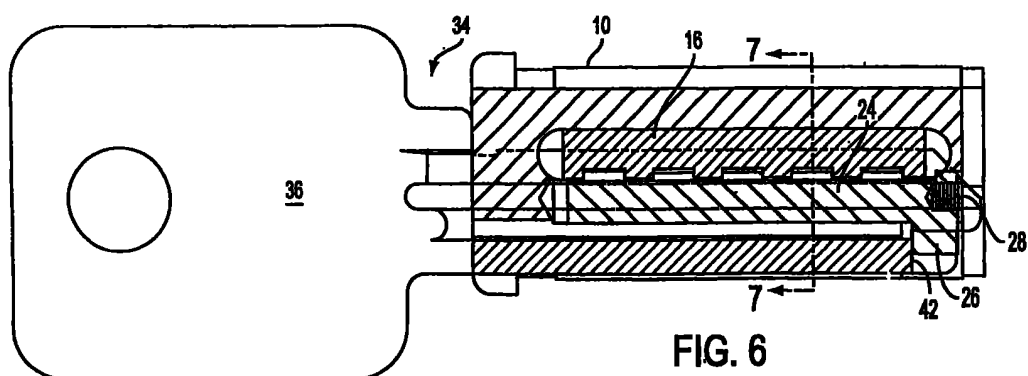


FIG. 6

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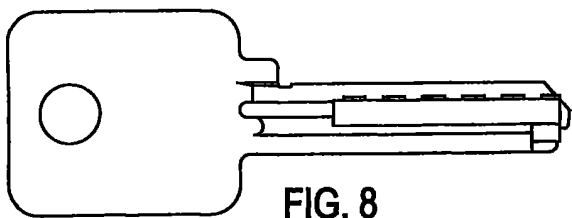


FIG. 8

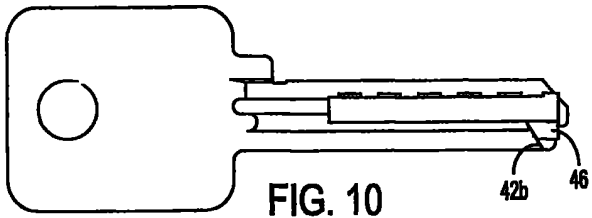


FIG. 10

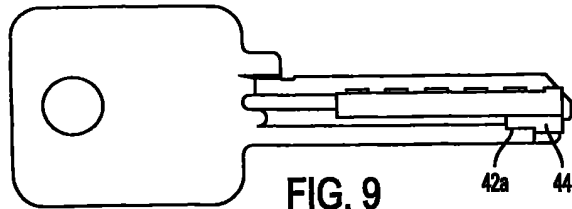


FIG. 9

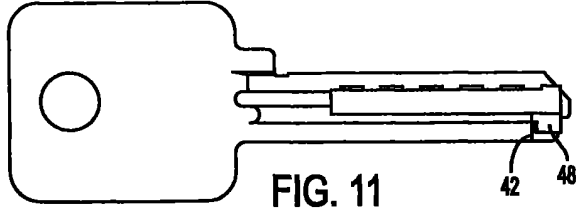


FIG. 11

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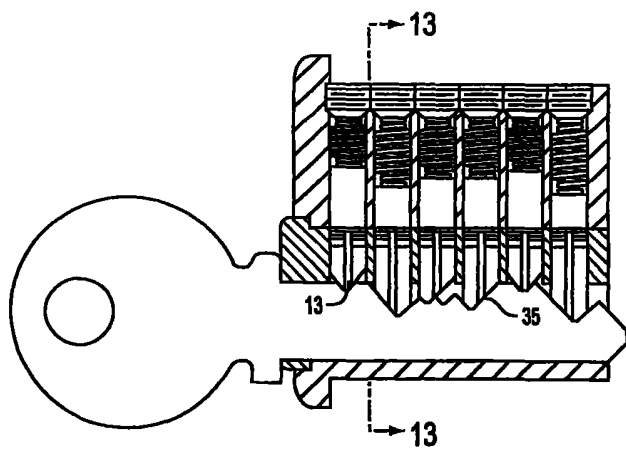


FIG. 12
(PRIOR ART)

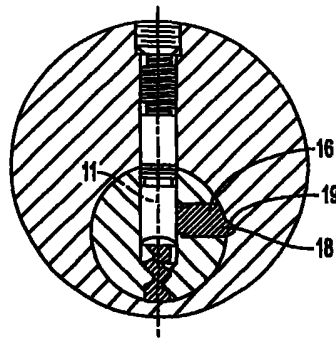


FIG. 13
(PRIOR ART)

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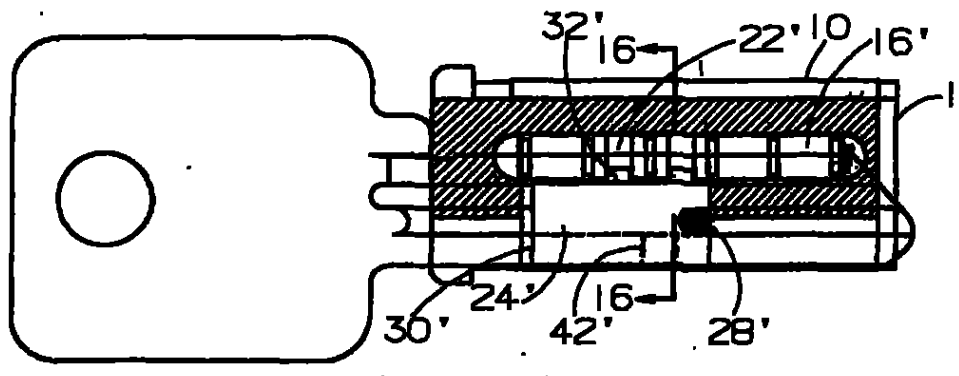


Fig. 15

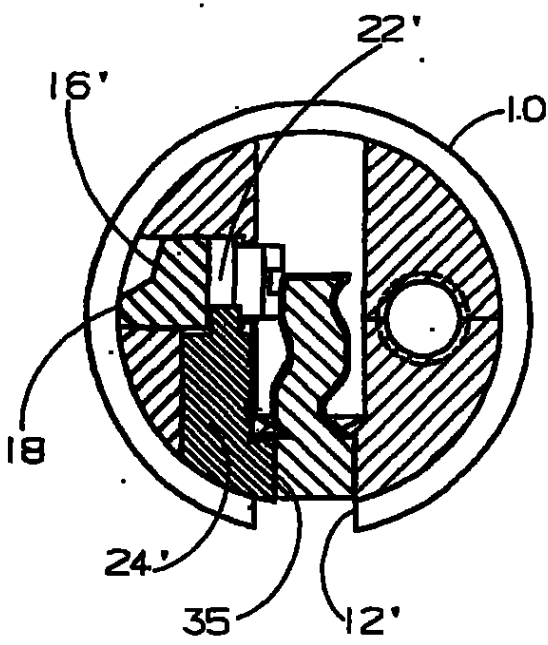


Fig. 16

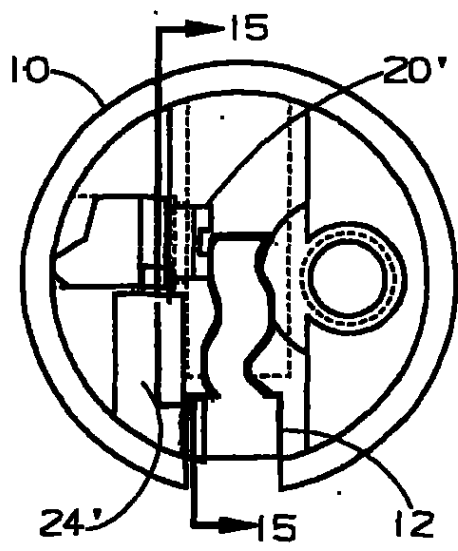


Fig. 14

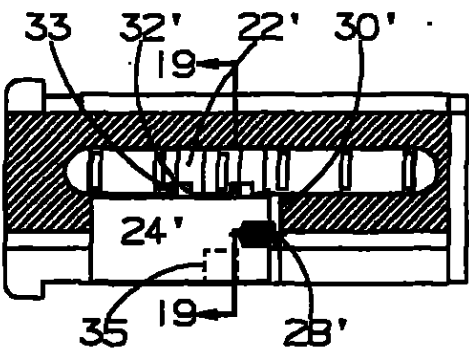


Fig. 18

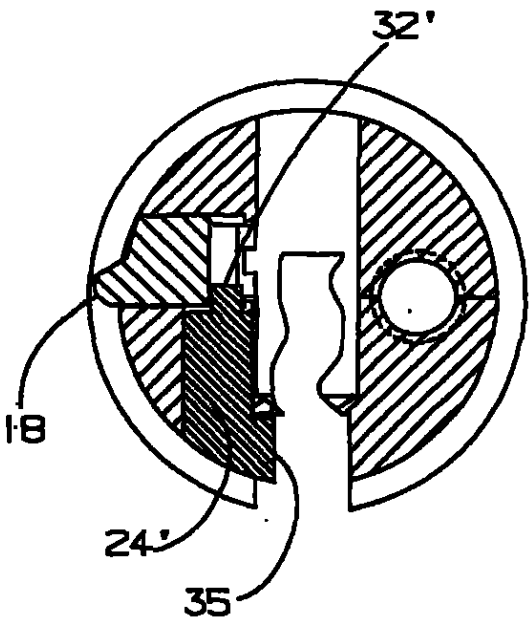


Fig. 19

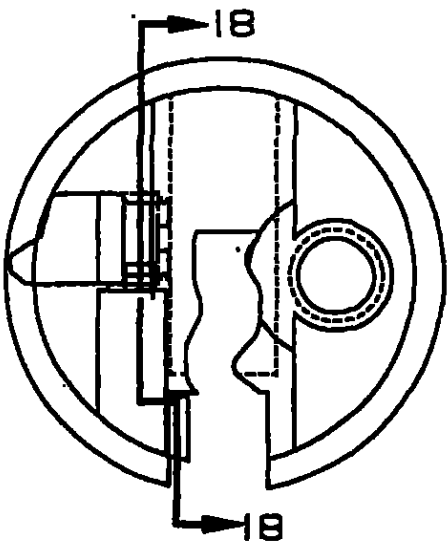


Fig. 17

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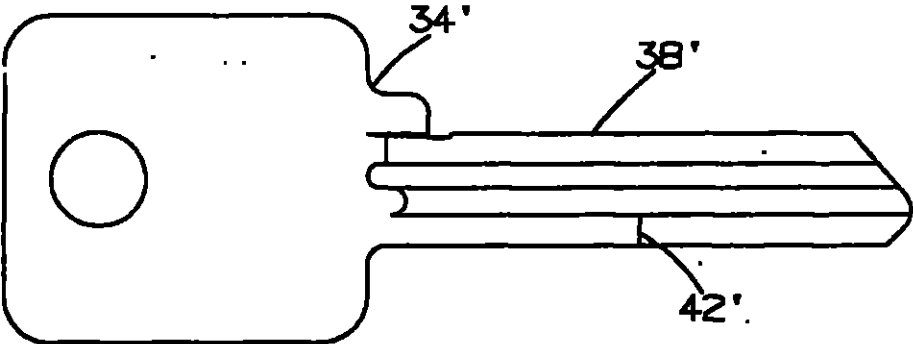


Fig. 20

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CERRADURA DE TAMBOR DE PASADORES GIRATORIO CON BARRA
LATERAL CON CONTROL DE BARRA LATERAL

REFERENCIA A SOLICITUDES RELACIONADAS

Esta solicitud es una continuación en parte de la solicitud serie No. 09/776,929 presentada en febrero 6, 2001.

ANTECEDENTES DE LA INVENCION

1. Campo de la Invención

Esta invención se relaciona con mejoras en las cerraduras de tambor de pasador giratorio de barra lateral y llaves para el mismo.

2. Antecedentes y Estado de la Técnica

Las cerraduras con tambor de torcimiento o giratorio con control de barra lateral de los tambores y llaves para operar tales cerraduras son bien conocidos en el estado de la técnica y han sido fabricados y vendidos por Medeco Security Locks, Inc. de Salem, Virginia durante

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más de veinte años. Ejemplos están en las siguientes patentes otorgadas a Medeco Security Locks Inc. 3,499,302 Spain et al (1970) 3,722,240 Spain et al (1973), 4,635,455 Oliver (1987), 5,289,709 Field (1994), 5,419,168 Field (1995), 5,570,601 Field (1996), 5,615,565 Field (1997) y 6,023,954 Field (2000).

La seguridad es una característica necesaria de una cerradura y la seguridad adicional que pudiera aplicarse a las cerraduras de tambor giratorio con mecanismos dobles sería altamente deseable.

Una característica adicional y extremadamente deseable de una cerradura de alta seguridad es la capacidad de llave maestra. Suministrando una seguridad adicional y utilizando tal provisión para una codificación maestra suministra capacidades para sistemas de codificación maestra.

También es ventajoso tener una única llave y un blando de llave para las cerraduras de este tipo para poder suministrar la seguridad adicional que el control de llave puede llevar a cabo.

RESUMEN DE LA INVENCION

Esta invención se relaciona con mejoras para promover la seguridad de la cerradura de mecanismo de bloqueo dual de tambor giratorio básico como la cerradura tipo Medeco y puede ser aplicada a cualquier cerradura tipo Medeco con un mecanismo de barra lateral que incluye la cerradura de cilindro original de Medeco, la cerradura de leva Medeco, la cerradura biaxial Medeco® y la cerradura bi-nivel® Medeco con pasadores de tambor de punta desplazada. La invención utiliza un miembro de deslizamiento que se desliza generalmente axialmente en el cilindro de la cerradura y tiene una proyección para entrar en contacto con un extremo de una costilla sobre la cuchilla de la llave. La llave por lo tanto posiciona el deslizador el cual controla la barra lateral para permitir que la barra lateral se mueva a una posición no bloqueada. El control del deslizador de la barra lateral y la llave única y la cuchilla de llave única suministran grados adicionales de seguridad, permiten una codificación maestra y un control de llave.

BREVE DESCRIPCIÓN DE LOS DIBUJOS

La figura 1 es una vista en elevación de extremo de un cilindro o tambor de una cerradura de tambor giratoria que tiene una barra lateral;

La figura 2 es una vista en sección longitudinal tomada a lo largo de la línea 2-2 de la figura 1.

La figura 3 es una vista en sección horizontal tomada a lo largo de la línea 3-3 de la figura 2;

La figura 4 es una vista en planta de un blando de llave de la presente invención;

La figura 5 es una vista en elevación de extremo similar a la de la figura 1, con la cerradura en la posición no bloqueada;

La figura 6 es una vista seccional longitudinal tomada a lo largo de la línea 6-6 de la figura 5;

La figura 7 es una vista en sección longitudinal tomada a lo largo de la línea 7-7 de la figura 6;

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Las figuras 8, 9, 10 y 11 son modalidades alternativas que muestran una llave cortada de la presente invención con el deslizador superpuesto allí para ilustrar las posibilidades de la codificación maestra.

La figura 12 es una vista en elevación seccional del estado de la técnica, de la cerradura de cilindro Medeco, para mostrar las posturas de esta invención.

La figura 13 es una vista seccional tomada a lo largo de la línea 13-13 de la línea 12.

La figura 14 es una vista en elevación de extremo del cilindro de una cerradura de tambor de giro que tiene una barra lateral y muestra una modalidad adicional de la modalidad de esta invención.

La figura 15 es una vista seccional longitudinal tomada a lo largo de la línea 15-15 de la figura 14.

La figura 16 es una vista horizontal tomada a lo largo de la línea 16-16 de la figura 15.

La figura 17 es una vista en elevación de extremo del cilindro mostrada en la figura 14 que muestra los componentes del cilindro en su posición bloqueada.

La figura 18 es una vista en sección longitudinal tomada a lo largo de la línea 18-18 de la figura 17.

La figura 19 es una vista seccional horizontal tomada a lo largo de la línea 19-19 de la figura 18.

La figura 20 es una vista en planta de un blanco de llave para la llave de esta invención.

DESCRIPCIÓN DETALLADA DE LAS MODALIDADES PREFERIDAS

Como se muestra en las figuras 1 a 3, un cilindro o tambor 10 tiene un trayecto o un camino de llave 12 como es convencional en las cerraduras Medeco. Los agujeros del tambor 14 están provistos para girar, alternar, y por ejemplo, torcer los tambores 11 (figura 12) que tienen las configuraciones 13 sobre sus lados para la recepción de una barra lateral 16 como se enseña y se muestra en el estado de la técnica de las construcciones Medeco y las

patentes identificadas anteriormente, ver figuras 12 y 13. Debido a las porciones restantes de tales cerraduras Medeco que son conocidas, para efectos de simplicidad no han sido mostradas excepto por la ilustración del estado de la técnica en las figuras 12 y 13.

La barra lateral 16 está posicionada para alternar transversal al eje del tambor del cilindro 10 y siendo empujado por los resortes lejos del tambor para suministrar un nivel adicional de control de bloqueo para la cerradura como es conocido. La barra lateral tiene una leva 18 que coopera con una ranura de leva 19 sobre la parte interior de la carcaza, también como es convencional en las cerraduras Medeco, ver figura 13. Cuando el tambor se intenta girar por la llave la ranura de leva 19 permite que la barra lateral sea forzada hacia adentro hacia el centro del cilindro. La barra lateral tiene proyecciones 20 que enganchan con las configuraciones 13 sobre los tambores 11 para permitir que la barra lateral se mueva hacia el eje del tambor y deje libre la carcaza cuando los tambores son girados por la llave hasta una posición correcta, como es conocido en las cerraduras Medeco.

En la presente invención, la barra lateral también tiene ranuras espaciadas 22 posicionadas a lo largo de su superficie inferior como se muestra en las figuras 1 y 2. Las proyecciones 23 están definidas por los espacios entre las ranuras.

Posicionado en el agujero axial 30 en el tambor del cilindro se encuentra un deslizador 24 que puede deslizar sobre un eje paralelo al eje del tambor de cilindro giratorio. El deslizador mismo tiene una proyección 26 en un extremo que se extiende dentro del trayecto de llave 12 para engancharse con la llave apropiada como será descrito. Un resorte 28 se ha suministrado para empujar al deslizador axialmente en el agujero 30 en una duración hacia la parte frontal o punto de entrada de la llave de la cerradura.

El deslizador 24 también tiene unas lengüetas espaciadas 32 sobre su superficie como se muestra en las figuras 1, 2 y 3. Estas lengüetas son de suficiente tamaño y longitud para sea ajustarse en las ranuras 22 de la barra lateral cuando el deslizador está posicionado apropiadamente, o para interferir con las proyecciones 23 sobre la barra lateral cuando no está posicionada

apropiadamente. Como se muestra en la figura 2, las lengüetas 32 del deslizador y las proyecciones 23 sobre la barra lateral 16 interactúan impidiendo así que la barra lateral se mueva hacia adentro, y por lo tanto bloqueando la operación de la barra lateral y por lo tanto la cerradura.

Como se muestra en la figura 6 cuando el resorte del deslizador 28 ha sido comprimido y las lengüetas 32 sobre el deslizador están posicionadas dentro de las ranuras 22 de la barra lateral, la barra lateral se le permite operar como se muestra en las figuras 5 y 6. Así, el deslizador suministra un tercer nivel de control de cerradura en adición a la alternación y rotación de los tambores.

Un único blanco de llave 34 puede ser suministrado con muescas apropiadas 35 para operar la cerradura. El blanco de llave tiene un arco 36 y una cuchilla 38. La cuchilla tiene un perfil que se conforma al perfil del trayecto de llave 12. Sobre el lado del blanco de llave (y la llave) hay una costilla 40 que tiene una superficie de contacto 42 formada para poner en contacto la proyección 26 sobre el deslizador 24. Como se muestra en

la figura 6, cuando la llave es insertada y el extremo de la costilla 42 hace contacto con la proyección 26 esta comprime el resorte 28 y posiciona el deslizador de modo que no interfiera con la operación de la barra lateral.

Las figuras 8, 9, 10 y 11 muestran otras modalidades que muestran configuraciones diferentes de la superficie de contacto 42 sobre la costilla de llave 40 y muestra el deslizador 24 sobreimpuesto, la proyección de deslizador tiene una superficie complementaria a la superficie de contacto 42. La figura 8 es la misma que la modalidad de las figuras 1 a 7, pero en la posición abierta de la figura 6. En la figura 9, la proyección de deslizador tiene un escalón 44 para recibir un extremo de costilla de llave configurada de manera similar 42a. La figura 10 tiene una superficie inclinada 46 que coopera con una superficie inclinada 42b sobre el extremo distal de la costilla de llave 40. La figura 11 tiene una superficie en forma de diente 48 sobre la proyección 26 para cooperar sobre una superficie en forma de costilla complementaria 42. Para ilustrar las posibilidades de codificación maestra, la llave de la figura 8 posicionará de manera correcta al deslizador mostrado en la figura 8 y la llave de la figura 11 operará de manera correcta al

deslizador en la figura 11. La llave en la figura 8 también posicionará correctamente al deslizador de la figura 11. Sin embargo, la llave de la figura 11 empujará el deslizador de la figura 8 tan lejos y la cerradura no abrirá. Similarmente, la llave de la figura 8 no operará con un deslizador configurado como en la figura 9 o como en la figura 10 porque este empujará el deslizador demasiado lejos y la cerradura no abrirá. Por medio de suministrar diferentes llaves con diferentes extremos distales configurados de la costilla de llave, y suministrando diferentes cilindros con proyecciones de deslizador configuradas de manera diferente, los cilindros pueden ser operados selectivamente por llaves diferentes. Las figuras 14 a 20 muestran una modalidad alternativa en la cual el miembro de bloqueo o deslizador en lugar de ser una varilla insertable dentro del extremo del cilindro está en la forma de un bloque que es insertable desde la parte inferior del trayecto de llave. Esto es mostrado en más detalle con referencia a las figuras 14, 15 y 16 en donde se muestra el deslizador en posición de no bloqueo de la barra lateral. Como se muestra el cilindro 10 tiene su trayecto de llave 12 abierto en la parte inferior. La barra lateral 16' tiene las ranuras espaciadas 22' las cuales permitirán que la

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barra lateral quede libre o sea bloqueada por el deslizador como será descrito más adelante. Igual que en la modalidad anteriormente descrita, la invención está en el ambiente de las cerraduras de tambor de giro Medeco como se muestra en las figuras 12 y 13 en las cuales la barra lateral 16 alterna en dirección transversal al eje del tambor del cilindro para suministrar un mayor nivel de bloqueo y la barra lateral es empujada hacia adentro por resortes sea para sostenerla o para traspasarla y ponerla fuera de la ranura de leva 19 sobre la parte interior de la carcasa que coopera con la leva 18 sobre la barra lateral como se muestra en las figuras 16 y 19 y como es convencional en la cerraduras Medeco. Cuando el tambor se intenta girar por una llave, la leva 18 causa que la barra lateral 16' sea forzada hacia adentro hacia el centro del cilindro. La barra lateral tiene proyecciones 20' que cooperan con los cilindros giratorios como se muestra en la técnica. La barra lateral también tiene ranuras espaciadas 22' posicionadas a lo largo de su superficie lateral.

El deslizador en esta modalidad es un miembro en forma de bloque 24' formado para ajustarse dentro de la concha del cilindro y para ser insertado desde el fondo

abierto del trayecto de llave 12. Un resorte 28' se ha suministrado por medio de empujar el deslizador hacia el arco de la llave como se muestra en las figuras 15 y 18. El deslizador se mueve axialmente con respecto a la llave en el espacio 30'. El deslizador en forma de cilindro tiene lengüetas espaciadas 32' sobre su superficie superior como se muestra en las figuras 15 y 18. Estas lengüetas se pueden mover dentro de las ranuras 22 en la barra lateral cuando el deslizador está posicionado por la llave como se muestra en las figuras 15 y 16. Sin embargo, como se muestra en la figura 18, cuando la llave no mueve el deslizador, las lengüetas 32' intersectan con las porciones de la barra lateral exteriores a las ranuras 22' como se indicó por puntos de interferencia 33 y esto impide que la barra lateral se mueva axialmente hacia adentro e impide que la cerradura sea operada para llevar a cabo el bloqueo. Esto sucedería en todos los momentos excepto cuando la llave apropiada tal como la llave 34' mostrada en la figura 20 es insertada dentro del trayecto de llave 12 para mover el miembro deslizador 24' de su posición normal de la figura 18 a la posición de desbloqueo de la figura 15. Esto se lleva a cabo por una proyección adicional 35 sobre el deslizador 24' que se extiende dentro del trayecto de llave de modo que

intersecta con el perfil de la cuchilla de llave 38'. Esta cuchilla de llave tiene un retén 42' que hace contacto con la proyección 35 y comprime el resorte 28' cuando la llave es insertada para permitir que la barra lateral opere cuando las lengüetas 32' están en las ranuras 22' como se muestra en la figura 15.

En operación la llave 34' es insertada dentro del trayecto de llave 12 para mover el deslizador 24' contra el empuje del resorte 28' y cuando las proyecciones 32' están en la posición para cooperar con las ranuras 22', la barra lateral 16' puede operar para permitir que la llave gire el cilindro o tambor y opere la cerradura. A menos que la porción 42' de la llave 34' haga contacto con la proyección de 35, el deslizador o bloqueo 24' bloqueará la operación de la cerradura.

Las llaves de las figuras 8 a 11 también pueden ser usadas con esta modalidad.

La ventaja de esta construcción es que permite una codificación maestra y suministra una seguridad adicional debido a que no requiere las técnicas de codificación maestra de tambores y pasadores convencionales para

configurar las cerraduras con las capacidades de codificación maestra selectiva. Cuando se han usado para suplementar las técnicas de codificación maestra convencional, esta suministra unas capacidades adicionales por lo tanto ofrecen al usuario un sistema más seguro.

Aunque la presente invención ha sido descrita con referencia a las modalidades particulares descritas, debe entenderse que estas modalidades son simplemente ilustrativas de la solicitud y principios de la invención. Otras numerosas configuraciones pueden ser hechas y otras disposiciones pueden ser visualizadas sin salirse del espíritu y alcance de la invención como se define en las siguientes reivindicaciones adjuntas.

REIVINDICACIONES

1. una cerradura de cilindro del tipo que tiene un cilindro giratorio con un eje y un trayecto de llave, la cerradura está controlada por tambores que alternan giratoriamente los cuales entran en contacto selectivamente por una barra lateral bajo control de una llave, con la mejora que comprende: un miembro movable operable por el contacto con la llave y que coopera con la barra lateral para controlar el movimiento de la barra lateral y controlar la operación de la cerradura.
2. Un cilindro según se definió en la reivindicación 1, en donde el miembro movable es un deslizador que desliza en el cilindro paralelo al eje del cilindro.
3. Una cerradura de cilindro según se definió en la reivindicación 2, en donde el deslizador es empujado en una dirección paralela al eje del cilindro.

4. Una cerradura de cilindro según se definió en la reivindicación 3, en donde el empuje es suministrado por un resorte en el cilindro para forzar el deslizador en una dirección hacia una entrada del trayecto de llave.
5. La cerradura de cilindro según se definió en la reivindicación 3, en donde el deslizador se extiende dentro del trayecto de llave para entrar en contacto con la llave.
6. Una cerradura de cilindro según se definió en la reivindicación 5 en donde la extensión es una proyección formada para cooperar con una porción de una llave cuando es insertada dentro del trayecto de llave.
7. La cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es insertable dentro de la cerradura a través de un trayecto de llave abierto allí.
8. Una cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es

insertable longitudinalmente a través de una abertura en el extremo de un tambor.

9. Una llave para una cerradura de cilindro del tipo que se definió en la reivindicación 1, la llave casa en el trayecto de llave, una costilla sobre la llave, una porción de la costilla posicionada para entrar en contacto y controlar el movimiento de bloqueo del miembro movable cuando la llave es insertada dentro del trayecto de llave.

10. Un blanco de llave para una cerradura de cilindro del tipo que se definió en la reivindicación 1, el blanco de llave casa dentro del trayecto de llave, una costilla sobre el blanco de llave, una porción de la costilla posicionada para entrar en contacto con una porción de contacto con una porción de contacto deslizador y controlar el movimiento de bloqueo del deslizador cuando el blanco de llave es insertado dentro del trayecto de llave.

11. Un sistema de codificación maestro que comprende una cerradura de cilindro según se definió en la

reivindicación 1 y llaves según se definió en la reivindicación 7, las llaves tienen diferentes configuraciones sobre las porciones de contacto de la costilla y el deslizador de modo que una llave operará para controlar y otra llave no operará para controlar el deslizador.

12. Una combinación de cerradura de cilindro, que incluye un cilindro giratorio con un eje y un trayecto en él, la cerradura es controlada por medio de tambores alternantes giratorios que entran en contacto y controlan adicionalmente una barra lateral con las mejoras que comprende,

Un deslizador portado por el cilindro,

Un resorte para empujar el deslizador hacia una posición hacia la entrada del trayecto de llave,

El deslizador tiene lengüetas espaciadas,

La barra lateral tiene proyecciones espaciadas, las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con otra para

impedir la operación de la barra lateral a menos que el deslizador es movido contra el empuje de este resorte hasta que las lengüetas del deslizador están dentro de espacios entre las proyecciones de la barra lateral,

El deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave, y

Una llave configurada para ser insertada dentro del trayecto de llave, la llave tiene una superficie de contacto para entrar en contacto con la proyección de la superficie de contacto sobre el deslizador y mover el deslizador contra el empuje del resorte hasta una posición en donde las lengüetas sobre el deslizador dejan la vía libre para las proyecciones sobre la barra lateral.

13. Una combinación de cerradura y cilindro según la reivindicación 10 en donde el deslizador es insertable dentro de la cerradura por medio de un fondo del trayecto de llave.

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14. La combinación de cerradura cilindro según la reivindicación 10 en donde el deslizador es insertable longitudinalmente dentro de la cerradura por medio de un agujero en el extremo del tambor.

15. Un blanco de llave para formar una llave para una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave, tambores alternativos giratorios, una barra lateral movable para entrar en contacto con los tambores y un deslizador para controlar la operación de la barra lateral, una proyección sobre el deslizador se extiende dentro del trayecto de llave, el blanco de llave comprende un arco de llave, una cuchilla de llave con ranuras que suministran un perfil complementario a la configuración del perfil del trayecto de llave, con por lo menos una costilla sobre el blanco de llave, y una superficie de contacto sobre la costilla para cooperar con la proyección y mover el deslizador para desbloquear la barra lateral.

16. Una llave para una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave, tambores alternantes giratorios, una barra lateral movable para entrar en contacto con los tambores y un deslizador para controlar la operación de la barra lateral, una proyección sobre el deslizador que se extiende dentro del trayecto de llave, la llave comprende un arco de llave, una llave con ranuras con un perfil complementario para la configuración del perfil del trayecto de llave, por lo menos una costilla de llave y una superficie de contacto sobre la costilla para cooperar con la proyección y mover el deslizador para desbloquear la barra lateral.

17. Una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave en él, la cerradura es controlada por tambores alternantes giratorios que entran en contacto y controlan una barra lateral, con la mejora que comprende,

18. Un deslizador portado por el cilindro, un resorte para empujar el deslizador hacia la entrada de un trayecto de llave,

El deslizador tiene lengüetas espaciadas,

La barra lateral tiene proyecciones espaciadas,

Las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con la otra para impedir la operación de la barra lateral a menos que el deslizador sea movido contra el empuje del resorte hasta que las lengüetas del deslizador están dentro de espacios dentro de las proyecciones de la barra lateral, y

El deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave para cooperación y activación por una llave apropiada aceptable dentro del trayecto de llave.

18. Una cerradura de cilindro según se definió en la reivindicación 13 en donde la superficie de

contacto sobre la proyección del deslizador está formada para cooperar con varias superficies de contacto formadas sobre la llave para el bloqueo de la cerradura para suministrar una codificación maestra.

19. Un blanco de llave para una cerradura de cilindro del tipo definido en la reivindicación 1, el blanco de llave está formado para casar dentro de un trayecto de llave, un a costilla sobre el blanco de llave, una porción de la costilla posicionada para entrar en contacto y configurada para controlar el movimiento de bloqueo del deslizador cuando el blanco de llave es insertado dentro del cilindro.

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ALGUNAS MODIFICACIONES

[Recibido de la oficina internacional el 10 Julio de 2002 (10.07.02): Reivindicaciones originales 1, 3, 8, 9, 11-14 y 16-18 reemplazadas por las reivindicaciones modificadas 1, 3, 8, 9, 11-14 y 16-18; las reivindicaciones 2, 10, 15 y 19 son canceladas]

1. Una cerradura de cilindro del tipo que tiene un cilindro giratorio con un eje y un trayecto de llave, la cerradura es controlada por tambores alternantes giratorios los cuales entran en contacto selectivamente con una barra lateral bajo control de una llave, con las mejoras comprende:

Un miembro movable separado de los tambores y operable para entrar en contacto con la llave y cooperar con la barra lateral para controlar el movimiento de bloqueo de la barra lateral y controlar la operación de la cerradura,

HOJAS MODIFICADAS (Artículo 19)

En donde el miembro movibles es un deslizador que se desliza en el cilindro paralelo al eje del cilindro.

3. Una cerradura de cilindro según se definió en la reivindicación 1, en donde el deslizador es empujado en una dirección paralela al eje del cilindro.

4. Una cerradura de cilindro según se definió en la reivindicación 3, en donde el empuje es suministrado por un resorte en el cilindro para forzar el deslizador en una dirección hacia la entrada del trayecto de llave.

5. La cerradura de cilindro según se definió en la reivindicación 3, en donde el deslizador tiene una extensión que se extiende dentro del trayecto de llave para entrar en contacto con la llave.

6. Una cerradura de cilindro según se definió en la reivindicación 5 en donde la extensión es una proyección formada para cooperar con una porción de una llave cuando es insertada dentro del trayecto de llave.

HOJAS MODIFICADAS (Artículo 19)

7. La cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es insertable dentro de la cerradura por medio de un trayecto de llave abierto allí.

8. Una cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es inestable longitudinalmente dentro del extremo del cilindro.

9. Una llave para uso en combinación con una cerradura de cilindro según se definió en la reivindicación 1, la llave ajusta dentro de un trayecto de llave de cilindro, una costilla sobre la llave, una porción de la costilla posicionada para entrar en contacto y controlar el movimiento de bloqueo del miembro movable cuando la llave es insertada dentro del trayecto de llave.

11. Un sistema de codificación maestro que comprende una cerradura de cilindro según se definió en la reivindicación 1 y llaves según se definió en la reivindicación 9, las llaves tienen configuraciones

HOJAS MODIFICADAS (Artículo 19)

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diferentes sobre la llave y el deslizador de modo que una llave operará para controlar y otra llave no operará para controlar la operación del deslizador.

12. Una combinación de cerradura y cilindro incluye un cilindro giratorio con un eje y un trayecto de llave allí, el cilindro es controlado por tambores alternantes giratorios que entran en contacto y controlan adicionalmente una barra lateral con las mejoras que comprende,

un deslizador portado por el cilindro,

un resorte para empujar el deslizador hasta una posición hacia la entrada de un trayecto de llave,

el deslizador tiene lengüetas espaciadas,

la barra lateral tiene proyecciones espaciadas, las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con la otra para impedir la operación de la barra lateral a menos que el deslizador sea movido contra el empuje

HOJAS MODIFICADAS (Artículo 19)

del resorte hasta que las lengüetas del deslizador están dentro de espacios entre las proyecciones de la barra lateral,

el deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave, y

una llave configurada para insertarse dentro del trayecto de llave, la llave tiene una superficie de contacto para entrar en contacto con la superficie de contacto de la proyección sobre el deslizador y mover el deslizador contra el empuje del resorte a una posición en donde la lengüeta sobre el deslizador quedan libres de las proyecciones sobre la barra lateral.

13. Una combinación de cerradura y cilindro según la reivindicación 12 en donde el deslizador es insertable dentro de la cerradura por medio de un fondo del trayecto de llave.

14. Una combinación de cerradura y cilindro según la reivindicación 12 en donde el deslizador es insertable longitudinalmente dentro de la cerradura por medio de una abertura en el extremo del cilindro.

16. Una llave para una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave, tambores alternantes giratorios, una barra lateral movable para entrar en contacto con los tambores y un deslizador para controlar la operación de la barra lateral, una proyección sobre el deslizador se extiende dentro del trayecto de llave, la llave comprende un arco de llave, una cuchilla de llave con un perfil complementario a la configuración del perfil del trayecto de llave, por lo menos una costilla sobre la llave, y una superficie de contacto sobre la costilla para cooperar con la proyección y mover el deslizador en el cilindro paralelo al eje del cilindro para desbloquear la barra lateral.

HOJAS MODIFICADAS (Artículo 19)

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17. una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave en él, la cerradura es controlada por tambores alternantes giratorios que entran en contacto y controlan una barra lateral, con la mejora que comprende,

un deslizador portado por el cilindro,

un resorte para empujar el deslizado hacia la entrada del trayecto de llave,

el deslizador tiene lengüetas espaciadas,

la barra lateral tiene proyecciones espaciadas,

las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con la otra para impedir la operación de la barra lateral a menos que el deslizador sea movido contra el empuje del resorte hasta que las lengüetas del deslizador están dentro de espacios entre las proyecciones de la barra lateral, y

HOJAS MODIFICADAS (Artículo 19)



el deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave para cooperar y ser activado por la llave apropiada insertable dentro del trayecto de llave.

18. Una cerradura de cilindro según se definió en la reivindicación 17 en donde la superficie de contacto sobre la proyección del deslizador está formada para cooperar con varias superficies de contacto formadas sobre las llaves para el bloqueo para la cerradura para suministrar una codificación maestra.

REIVINDICAMOS

1. Una cerradura de cilindro del tipo que tiene un cilindro giratorio con un eje y un trayecto de llave, la cerradura es controlada por tambores alternantes giratorios los cuales entran en contacto selectivamente con una barra lateral bajo control de una llave, con las mejoras comprende:

Un miembro movable separado de los tambores y operable para entrar en contacto con la llave y cooperar con la barra lateral para controlar el movimiento de bloqueo de la barra lateral y controlar la operación de la cerradura,

En donde el miembro movable es un deslizador que se desliza en el cilindro paralelo al eje del cilindro.

3. Una cerradura de cilindro según se definió en la reivindicación 1, en donde el deslizador es empujado en una dirección paralela al eje del cilindro.

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4. Una cerradura de cilindro según se definió en la reivindicación 3, en donde el empuje es suministrado por un resorte en el cilindro para forzar el deslizador en una dirección hacia la entrada del trayecto de llave.

5. La cerradura de cilindro según se definió en la reivindicación 3, en donde el deslizador tiene una extensión que se extiende dentro del trayecto de llave para entrar en contacto con la llave.

6. Una cerradura de cilindro según se definió en la reivindicación 5 en donde la extensión es una proyección formada para cooperar con una porción de una llave cuando es insertada dentro del trayecto de llave.

7. La cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es insertable dentro de la cerradura por medio de un trayecto de llave abierto allí.

8. Una cerradura de cilindro según se definió en la reivindicación 3 en donde el deslizador es inestable longitudinalmente dentro del extremo del cilindro.

9. Una llave para uso en combinación con una cerradura de cilindro según se definió en la reivindicación 1, la llave ajusta dentro de un trayecto de llave de cilindro, una costilla sobre la llave, una porción de la costilla posicionada para entrar en contacto y controlar el movimiento de bloqueo del miembro movable cuando la llave es insertada dentro del trayecto de llave.

11. Un sistema de codificación maestro que comprende una cerradura de cilindro según se definió en la reivindicación 1 y llaves según se definió en la reivindicación 9, las llaves tienen configuraciones diferentes sobre la llave y el deslizador de modo que una llave operará para controlar y otra llave no operará para controlar la operación del deslizador.

12. Una combinación de cerradura y cilindro incluye un cilindro giratorio con un eje y un trayecto de llave allí, el cilindro es controlado por tambores

alternantes giratorios que entran en contacto y controlan adicionalmente una barra lateral con las mejoras que comprende,

un deslizador portado por el cilindro,

un resorte para empujar el deslizador hasta una posición hacia la entrada de un trayecto de llave,

el deslizador tiene lengüetas espaciadas,

la barra lateral tiene proyecciones espaciadas, las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con la otra para impedir la operación de la barra lateral a menos que el deslizador sea movido contra el empuje del resorte hasta que las lengüetas del deslizador están dentro de espacios entre las proyecciones de la barra lateral,

el deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave, y

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una llave configurada para insertarse dentro del trayecto de llave, la llave tiene una superficie de contacto para entrar en contacto con la superficie de contacto de la proyección sobre el deslizador y mover el deslizador contra el empuje del resorte a una posición en donde la lengüeta sobre el deslizador quedan libres de las proyecciones sobre la barra lateral.

13. Una combinación de cerradura y cilindro según la reivindicación 12 en donde el deslizador es insertable dentro de la cerradura por medio de un fondo del trayecto de llave.

14. Una combinación de cerradura y cilindro según la reivindicación 12 en donde el deslizador es insertable longitudinalmente dentro de la cerradura por medio de una abertura en el extremo del cilindro.

16. Una llave para una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave, tambores alternantes giratorios, una barra lateral movable para entrar en contacto con los



tambores y un deslizador para controlar la operación de la barra lateral, una proyección sobre el deslizador se extiende dentro del trayecto de llave, la llave comprende un arco de llave, una cuchilla de llave con un perfil complementario a la configuración del perfil del trayecto de llave, por lo menos una costilla sobre la llave, y una superficie de contacto sobre la costilla para cooperar con la proyección y mover el deslizador en el cilindro paralelo al eje del cilindro para desbloquear la barra lateral.

17. una cerradura de cilindro que tiene un cilindro giratorio con un eje y un trayecto de llave en él, la cerradura es controlada por tambores alternantes giratorios que entran en contacto y controlan una barra lateral, con la mejora que comprende,

un deslizador portado por el cilindro,

un resorte para empujar el deslizado hacia la entrada del trayecto de llave,

el deslizador tiene lengüetas espaciadas,

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la barra lateral tiene proyecciones espaciadas,

las lengüetas sobre el deslizador y las proyecciones sobre la barra lateral interfieren una con la otra para impedir la operación de la barra lateral a menos que el deslizador sea movido contra el empuje del resorte hasta que las lengüetas del deslizador están dentro de espacios entre las proyecciones de la barra lateral, y

el deslizador tiene una proyección con una superficie de contacto que se extiende dentro del trayecto de llave para cooperar y ser activado por la llave apropiada insertable dentro del trayecto de llave.

18. Una cerradura de cilindro según se definió en la reivindicación 17 en donde la superficie de contacto sobre la proyección del deslizador está formada para cooperar con varias superficies de contacto formadas sobre las llaves para el bloqueo para la cerradura para suministrar una codificación maestra.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 1998-484.PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US02/02211	International filing date (day/month/year) 28 JANUARY 2002	Priority date (day/month/year) 08 FEBRUARY 2001
International Patent Classification (IPC) or national classification and IPC IPC(7): E05B 19/06, 27/04 and US Cl.: 70/409,491,494,495		
Applicant MEDECO SECURITY LOCKS, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

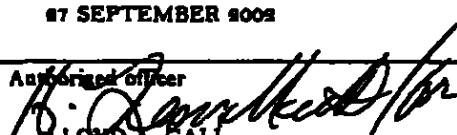
2. This REPORT consists of a total of 4 sheets.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 28 AUGUST 2002	Date of completion of this report 27 SEPTEMBER 2002
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20531	Authorized officer  LLOYD A. GALL
Facsimile No. (703) 305-3990	Telephone No. (703) 305-0888

Form PCT/IPEA/409 (cover sheet) (July 1998)*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/02211

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L Basis of the report

1. With regard to the elements of the international application:**

☐ the international application as originally filed☒ the description:

pages (See Attached)

, as originally filed

pages , filed with the demand

pages , filed with the letter of

☒ the claims:

pages (See Attached)

, as originally filed

pages , as amended (together with any statement) under Article 19

pages , filed with the demand

pages , filed with the letter of

☒ the drawings:

pages (See Attached)

, as originally filed

pages , filed with the demand

pages , filed with the letter of

☒ the sequence listing part of the description:

pages (See Attached)

, as originally filed

pages , filed with the demand

pages , filed with the letter of

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in printed form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☒ The amendments have resulted in the cancellation of:☒ the description, pages NONE☒ the claims, Nos. NONE☒ the drawings, sheets/fig. NONE5. ☐ This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(e)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

**Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/02211

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability, citations and explanations supporting such statement

1. statement

Novelty (N)	Claims	<u>1,3-9,11-14,16-18</u>	YES
	Claims	<u>none</u>	NO
Inventive Step (IS)	Claims	<u>1,3-9,11-14,16-18</u>	YES
	Claims	<u>none</u>	NO
Industrial Applicability (IA)	Claims	<u>1,3-9,11-14,16-18</u>	YES
	Claims	<u>none</u>	NO

2. citations and explanations (Rule 70.7)

Claims 1, 3-9, 11-14 and 16-18 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest the slider which slides in a direction parallel to the axis of the cylinder to cooperate with the rotatable reciprocating tumblers and the sidebar. The lock and keys have industrial applicability to provide a high security tumbler lock.

NEW CITATIONS
NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US02/02311

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

I. BASIS OF REPORT:

This report has been drawn on the basis of the description,
page(s) 1-10, as originally filed.
page(s) NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the claims,
page(s) NONE, as originally filed.
page(s) 11,14, as amended under Article 19.
page(s) NONE, filed with the demand.
and additional amendments:
Pages 12 and 13, filed with the letter of 27 September 2002.

This report has been drawn on the basis of the drawings,
page(s) 1-7, as originally filed.
page(s) NONE, filed with the demand.
and additional amendments:
NONE

This report has been drawn on the basis of the sequence listing part of the description:
page(s) NONE, as originally filed.
pages(s) NONE, filed with the demand.
and additional amendments:
NONE

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TRATADO DE COOPERACIÓN DE PATENTES**PCT****REPORTE DE REPORTE DE EXAMEN PRELIMINAR INTERNACIONAL****(Artículo 36 y Regla 70 PCT)****Archivo de referencia del agente o solicitante****1233-464.PCT****PARA ACCIÓN COMPLEMENTARIA****Ver Notificación de Reporte de Examen Preliminar
Internacional (del PCT/IPEA/416)****Solicitud Internacional No.****PCT/US02/02211****Fecha de presentación internacional (día/mes/año)****28 enero 2002****Fecha de Prioridad (día/mes/año)****06 febrero 2001****Clasificación de Patente Internacional (IPC) o clasificación
nacional e IPC****IPC(7): E05B 19/06, 27/04 y US Cl.: 70/409,491,494,495****Solicitante****MEDECO SECURITY LOCKS, INC.**

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1. Este Reporte de Examen Preliminar Internacional ha sido preparado por esta Autoridad Examinadora Preliminar Internacional y se remite al solicitante de acuerdo con el Artículo 36.
2. Este REPORTE consiste de un total de 4 hojas, incluyendo esta hoja de portada.

☐ Este reporte también se acompaña por ANEXOS, es decir hojas de la descripción, reivindicaciones y/o dibujos que han sido corregidos y son la base para este reporte y/o hojas que contienen rectificaciones hechas antes a esta Autoridad (ver Regla 70.16 y Sección 607 de las Instrucciones Administrativas de acuerdo con el PCT).

Estos anexos consisten de un total de 4 hojas.

3. Este Reporte contiene indicaciones relacionadas con los siguientes ítems:

- | | | |
|-----|-------------------------------------|---|
| I | ☒ | Base del Reporte |
| II | ☐ | Prioridad |
| III | ☐ | Concepto de sin fundamento con respecto a novedad, nivel inventivo y aplicabilidad industrial |
| IV | ☐ | Falta de unidad de invención |

V ☒ Declaración motivada de acuerdo con el Artículo 35.2 con respecto a novedad, nivel inventivo o aplicabilidad industrial; las citaciones y explicaciones ayudan a dicha declaración

VI ☐ Ciertos documentos citados

VII ☐ Ciertos defectos en la solicitud internacional

VIII ☐ Ciertas observaciones sobre la solicitud internacional

Fecha de presentación de la petición

29 Agosto 2002

fecha de terminación de este reporte

27 Septiembre 2002

Nombre y dirección de correspondencia del IPEA/US

Commissioner of Patentes and Trademarks
Box PCT
Washington, D.C. 20231

Facsímil No. (703) 305-3230

Oficial Autorizado
LLOYD A. GALL

Teléfono No. (703) 308-0828

Del PCT/IPEA/409 (hoja de portada) (Julio 1998)★

páginas _____, presentadas con la petición

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páginas _____, presentadas con la carta de_

☒ los dibujos:

páginas _____ (ver adjunto) _____, como se presentó

originalmente

páginas _____, presentadas con la petición

páginas _____, presentadas con la carta de_

☐ el listado de secuencias parte de la descripción:

páginas _____ (ver adjunto) _____, como se presentó

originalmente

páginas _____, presentadas con la petición

páginas _____, presentadas con la carta de_

2. Con respecto al idioma, todos los elementos marcados anteriormente estuvieron disponibles o fueron suministrados a esta Autoridad en el idioma en el que la solicitud internacional se presentó, a menos que se indique lo contrario de acuerdo con este ítem.

Estos elementos estuvieron disponibles o fueron suministrados a esta Autoridad en el siguiente idioma _____ que es:

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☐ el idioma de una traducción suministrada para propósitos de búsqueda internacional (de acuerdo con la regla 23.1(b)).

☐ el idioma de publicación de la solicitud internacional (de acuerdo con la regla 48.3(b)).

☐ el idioma de la traducción suministrado para propósitos de examen preliminar internacional (de acuerdo con la regla 55.2 y/o 55.3).

3. Con respecto a cualquier **secuencia de ácido amino y/o nucleótido** descrito en la solicitud internacional, el concepto escrito se emitió sobre la base de la lista de **secuencia:**

☐ Contenida en la solicitud internacional en forma impresa

☐ Presentada junto con la solicitud internacional en forma legible por computador

☐ Suministrada posteriormente a esta Autoridad en forma escrita

☐ Suministrada posteriormente a esta Autoridad en forma escrita forma legible por computador

☐ La declaración de que el listado de secuencias escrito suministrado posteriormente no va más allá de la descripción en la solicitud internacional como se presentó ha sido suministrada.

☐ La declaración de que la información registrada en forma legible por computador es idéntica al listado de secuencias escrito que se ha suministrado.

4. ☒ Las correcciones tienen como resultado la cancelación de:

☒ la descripción, páginas NINGUNO

☒ las reivindicaciones, Nos. NINGUNO

☒ Los dibujos, hojas/~~figuras~~ NINGUNO

5. ☐ Este concepto ha sido emitido como si (algunas de) las correcciones no hubieran sido hechas, ya que ellas han sido consideradas que van más allá de la descripción como se presentó, como se indicó en la casilla complementaria (regla 70.2(c)).

** Las hojas de reemplazo que han sido suministradas a la Oficina de recepción en respuesta a una invitación de acuerdo con el Artículo 14 se refieren a este reporte*

como "presentadas originalmente" y no se anexan a este reporte ya que ellas no contienen correcciones (Reglas 70.16 y 70.17).

** Cualquier hoja de reemplazo que contenta tales correcciones se debe anexar a este reporte de acuerdo con el ítem 1 y anexadas a este reporte.

Del PCT/IPEA/409 (Casilla I) (Julio 1998)★

REPORTE DE EXAMEN
PRELIMINAR INTERNACIONAL

Solicitud Internacional No.

PCT/US02/02211

V. Declaración motivada de acuerdo con el Artículo 35.2 con respecto a novedad, nivel inventivo o aplicabilidad industrial; las citaciones y explicaciones ayudan a dicha declaración

1. DECLARACIÓN

Novedad (N)

Reivindicaciones

1, 3-9, 11-14, 16-18 SI

Reivindicaciones

NINGUNA NO

Nivel inventivo (IS)

Reivindicaciones

1, 3-9, 11-14, 16-18 SI

Reivindicaciones

NINGUNA NO

Aplicabilidad Industrial (IA)

Reivindicaciones

1, 3-9, 11-14, 16-18 SI

Reivindicaciones

NINGUNA NO**2. CITACIONES Y EXPLICACIONES (Regla 70.7)**

Las reivindicaciones 1, 3-9, 11-14, 16-18 presentan el criterio establecido en el Artículo 33(2)-(4), ya que la técnica anterior no enseña o sugiere claramente la corredera que se desliza en una dirección paralela al eje del cilindro para cooperar con los seguros recíprocos rotables y sus barras laterales. La cerradura y llaves tienen aplicabilidad industrial para mejorar una cerradura de seguros de alta seguridad.

----- NUEVAS CITACIONES -----

Ninguna

Del PCT/IPEA/409 (Casilla V) (Julio 1998)★

REPORTE DE EXAMEN
PRELIMINAR INTERNACIONAL

Solicitud Internacional No.

PCT/US02/02211

Casilla Complementaria

(Para ser usada cuando el espacio en cualquiera de las casilla anteriores no es suficiente)

Continuación de: Casillas I - VIII

Hoja 10

I. Bases del Reporte

Este reporte se ha emitido sobre la base de la descripción,
Página(s) 1-10, como se presentó originalmente.

Página(s) NINGUNA presentadas con la petición.

Y correcciones adicionales:

NINGUNA

Este reporte se ha emitido sobre la base de las
reivindicaciones,

Página(s) NINGUNA, como se presentó originalmente.

Página(s) 11-14 como se corrigió de acuerdo con el Artículo 19. Página(s) NINGUNA presentadas con la petición. Y correcciones adicionales:

Páginas 12 y 13, presentadas con la carta de Septiembre 12 de 2002.

Este reporte se ha emitido sobre la base de los dibujos,

Página(s) 1-7, como se presentó originalmente.

Página(s) NINGUNA, presentadas con la petición.

Y correcciones adicionales:

NINGUNA

Este reporte se ha emitido sobre la base de la lista de secuencia parte de la descripción:

Página(s) NINGUNA, como se presentó originalmente.

Página(s) NINGUNA presentadas con la petición.

Y correcciones adicionales:

NINGUNA

Del PCT/IPEA/409 (Casilla Complementaria) (Julio 1998)★

NIT : 800176089-2

SUPERINDUSTRIA Y COMERCIO

Radicacion : 03077337 00000000

Folios: 12

Fecha (AM): 2003-09-04 17:10:51

Tramite : 011 PCT-PATENT 379 FASE NACI 411 PRESENT
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

RECIBO OFICIAL DE CAJA : 03 - 59,902
FECHA : AGOSTO 25 DE 2003

***** CONSIGNACION *****

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PGO	Vr. PAGO
CAVELIER ABOGADOS	CONSIGNACION	BANCO POPULAR	050-00110-6	15534375	25/08/2003	72,770,000.00

***** CONCEPTO *****

CANT. RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1 50005-01-01 SOLICITUDES	1 TRAMITES DE SOL. DE PATENTE DE IN	400,000.00
	TOTAL :	\$ 400,000.00

SON: CUATROCIENTOS MIL PESOS



RESPONSABLE : _____

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

Colo 04967-841-001-7



FORMATO DE DIGITALIZACION
RELACION DE ANEXOS



Royal
Technologies S.A.
Integración Tecnológica y Gestión

Expediente No		No de Folio
03077337		130
Item	No de unidades	
1	CD	
2	DVD	
3	REVISTA	
4	LIBRO	
5	PERIODICO	
6	DISQUETES	
7	SOBRE DE MANILA	
8	SOBRE BLANCO TAMAÑO CARTA	
9	SOBRE BLANCO TAMAÑO OFICIO	
10	OTROS:	
Observaciones: contiene 1 figura		

REQUISITOS NECESARIOS PARA PRESENTACION Y AGILIZACION DEL TRAMITE

	USUARIO	RADICADOR
PATENTE DE INVENCION	()	()
- Indicación de que se solicita la concesión de una patente.	()	()
- Datos de identificación del solicitante o de la persona que se presenta la solicitud.	()	()
- Descripción de la invención.	()	()
- Dibujos de ser estos pertinentes.	()	()
- Comprobante de Pago de las tasas establecidas.	()	()

COMPLETA () INCOMPLETA ()

DISEÑO INDUSTRIAL ()

- Indicación de que se solicita el registro de Diseño Industrial	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica y fotográfica del Diseño Industrial o muestra del Material que incorpora el diseño.	()	()
- Comprobante de pago de las tasas establecidas	()	()

COMPLETA () INCOMPLETA ()

ESQUEMA DE TRAZADO ()

- Indicación de que solicita el registro de un Esquema de trazado.	()	()
- Datos de identificación del solicitante o de la persona que presenta La solicitud.	()	()
- Representación gráfica del esquema de trazado	()	()
- Comprobante de pago de las tasas establecidas.	()	()

COMPLETA () INCOMPLETA ()

Firma Responsable:



Fecha:

SUPERINDUSTRIA Y COMERCIO
Radicación : 03077337 00000000 Folios: 121
Fecha (HH): 2003-09-04 17:10:51
Trámite : 011 PCT-PATENT 379 FASE NACI 411 PRESENTI
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES



132

Folio 130

2020
Bogotá DC

Doctor(a)
EMILIO FERRERO
Apoderado(a)
MEDECO SECURITY LOCKS, INC.

REFERENCIA:	Radicación No.	03-77337
	Solicitud Internacional	PCT/US2002/02211
	Fecha inicio fase nacional	6/09/2003
	Trámite	011
	Evento	379
	Actuación	416
	Oficio No.	1079
	Folios	001

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en la Decisión 486 de la Comisión de la Comunidad Andina, el Tratado de Cooperación en Materia de Patentes (PCT), el Reglamento y la Circular Unica de la Superintendencia de Industria y Comercio, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC, 02 OCT. 2003


ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones

202053