

CAVELIER

ABOGADOS

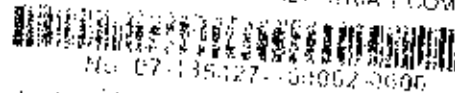
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Señora Jefe de la
DIVISION DE NUEVAS CREACIONES
Superintendencia de Industria y Comercio
E. S. D.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



REGISTRACION DE PATENTES DE INVENCION
DEPOSITO

Trámite : 002

Evento : 001

Actuación : 444

Referencia : Expediente No. 07.135.427
Asunto : SOLICITUD DE PATENTE PARA
ACOPLAMIENTO DE IMPULSIÓN AJUSTABLE
PARA CUBIERTAS ARQUITECTONICAS
ADYACENTES
Solicitante : HUNTER DOUGLAS INDUSTRIES B.V.
Clase : E06B 009/042

Fecha de solicitud : Diciembre 21, 2007

1. Yo, Emilio FERRERO, obrando como apoderado del solicitante en el asunto antes identificado, doy respuesta al oficio No. 795, notificado por fijación en lista de fecha 24 de Enero de 2008.

2. Mediante el oficio No. 795 se puso en conocimiento del solicitante el resultado del examen de forma realizado por ese Despacho, requiriéndole para completar el siguiente requisito:

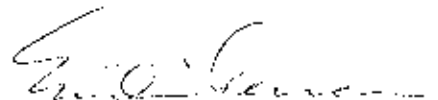
2.1 Cesión de Inventor: Presento junto con este escrito el documento de cesión del derecho a la patente otorgado por los dos (2) inventores al solicitante, debidamente legalizado, junto con su respectiva traducción oficial.

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2.2 Documento de Prioridad: Presento junto con este escrito la copia certificada de la solicitud de Patente de Invención Europea No. 06026520.4 de diciembre 21 de 2006. Este documento esta siendo presentado dentro del término legal, esto es Abril 21 de 2008, de acuerdo con los artículos 10 y 11 de la Decisión 486 de la Comunidad Andina.

3. Puesto que se han atendido a cabalidad las observaciones hechas por ese Despacho sobre la presente solicitud de patente, atentamente solicito que se continúe con su tramitación.

Señora Jefe,



EMILIO FERRERO

T.P.A. No. 31.929

COLO-13492-801-001-3

AHP\AHP\ID-120969\WPC13492

No. M-2008-120969\AHP

CAVELIER

374

ABOGADOS
EDIFICIO SISKI
CARRERA 4a N° 72-35
BOGOTÁ, 8 - COLOMBIA

CESION

Yo, (nosotros) abajo firmado (s)

1. Lars Koop; 2. Jörg Bohlen

domiciliado(s) en 1. Schiffdorfer Grenzweg 34 27574
Bremerhaven, Alemania 2. Am Ritzeberg 7 27607
Langen, Alemania

declaro(amos) bajo juramento ser único(s) y verdadero(s) inventor(es)

ACOPLAMIENTO IMPULSOR AJUSTABLE PARA CUBIERTAS
ARQUITECTONICAS ADYACENTES

declaro(amos) así mismo que cedo(amos) y transfiero(emos), sin
limitación, a favor de la sociedad

HUNTER DOUGLAS INDUSTRIES B.V.

constituida y existente de conformidad con las leyes de

Holanda

domiciliada en Piekstraat 2 NL-3071 EJ Rotterdam

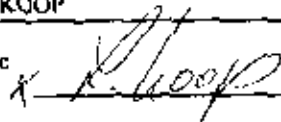
Holanda

todos los derechos inherentes a dicha invención y que la citada
Compañía queda facultada para solicitar en su nombre la patente de
invención correspondiente en la República de Colombia.

Dado y firmado hoy/Given and signed this 04-12-2007
en/in Bremerhaven

por/by Lars KOOP

Firma/Signature



ASSIGNMENT

I (we), the undersigned

(1) Lars KOOP; (2) Jörg BOHLEN

of (1) Schiffdorfer Grenzweg 34 27574 Bremerhaven Germany
(2) Am Ritzeberg 7 27607 Langen Germany

state(s) under oath to be sole and true inventor(s) of the invention:

ADJUSTABLE DRIVE COUPLING FOR ADJACENT
ARCHITECTURAL COVERINGS

state as well, that assign, without reservations or limitations in favour
of HUNTER DOUGLAS INDUSTRIES B.V.

a corporation constituted and existing in conformity with the laws of
Dutch body corporate

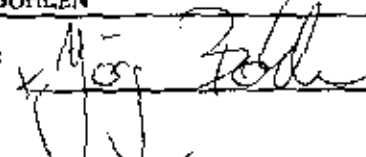
domiciled in Piekstraat 2 NL-3071 EJ Rotterdam The Netherlands

All rights inherent to said invention and that the above mentioned
company hereby is enabled to apply, in its name, for the
corresponding patent invention, in the Republic of Colombia

Dado y firmado hoy/Given and signed this 04-12-2007
en/in Bremerhaven

por/by Jörg BOHLEN

Firma/Signature

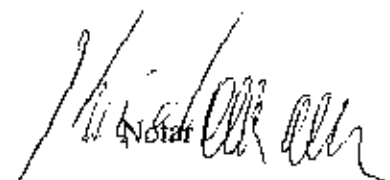


UR-Nr. 67/107

Die Frage der Vorbefassung wurde vor Beurkundung verneint.

In meiner Eigenschaft als Notar bescheinige ich, dass die Herren Lars Koop,
geboren am 15. 7. 1968, und Jörg Bohlen, geboren am 10. 8. 1965, mir beide von
Person bekannt, am 4. Dezember 2007 in D-27572 Bremerhaven, Heidacker 2,
vor mir in meiner Gegenwart ihre obigen Unterschriften geleistet haben.

Bremerhaven, den 4. 12. 2007




Kostenrechnung gem. §§ 141, 154 KostO
Wert: 10000,00 EUR

10/10 Geb. gem. § 50 I KostO	54,00 EUR
19 % MwSt.	<u>10,26 EUR</u>
Gesamtsumme	64,26 EUR

Kristin Müller
Notar

9101 E Nr. 367412007

APOSTILLE

(Convention de La Haye du 5 octobre 1961)

1. Diese Notariatsurkunde ist ausgestellt worden

2. ist unterschrieben von dem

Bernd Glitschmann

3. in seiner Eigenschaft als

Notar

4. sie ist versehen mit dem Siegel des (der) *Notars*

Bestätigt:

5. in Übereinstimmung mit dem

am *12. DEZ. 2007*

6. als Landgerichtspräsidentin

i. V. Gass



367412007

7. Unterschrift:

Gass

47
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La presente traducción oficial No. 002/08 fue elaborada por Hernando Torres Barrera, Traductor e Intérprete Oficial, según Resolución 01305 de 1998 del Ministerio de Justicia y del Derecho.

A continuación se traduce el protocolo notarial y la correspondiente apostilla en alemán, que acompañan a una CESIÓN.

Protocolo Notarial No. 67/07

No existe prohibición que le impida al notario realizar esta autenticación.

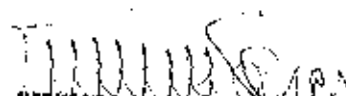
En mi calidad de notario certifico que los señores Lars Koop, con fecha de nacimiento 15.7.1968, y Jörg Bohlen, con fecha de nacimiento 10.8.1965, los dos conocidos personalmente por mí, estamparon en mi presencia el 4 de diciembre de 2007 en D-27572 Bremerhaven, Heidacker 2, las firmas autógrafas que anteceden.

Bremerhaven, 4. 12. 2007


Notario



SELLO: BERND KIRSCHENMANN * NOTARIO EN BREMERHAVEN *


HERNANDO TORRES BARRERA
TRADUCTOR E INTERPRETE OFICIAL
RES. No. 1305 MINJUSTICIA 1998

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Factura de gastos según Artículos 141,154 del Reglamento de Gastos (KostO)
Valor: 10000,00 EUROS

10/10 Tasas según Artículo 50 I KostO	54,00	EUROS
19 % IVA	10,26	EUROS
Total	64,26	EUROS

[Signature]
Notario

2008 ENE 15 A 10:22
DEFE DEL LEGAL
BOGOTÁ D.C.

MINISTERIO
DE LA PROTECCIÓN
DE LOS DERECHOS

9101 E No. 3674/2007

APOSTILLA

(Convention de la Haye du 5 octobre 1961)

1. País: **República Federal de Alemania**
Este documento público
2. está firmado por **Bernd Kirschenmann**
3. en su calidad de **Notario**
4. lleva el sello del **Notario**

Certificado

712410
[Signature]
FERNANDO TORRES



en Bremen

6. el 12 de diciembre de 2007

la Presidenta del Tribunal Regional En representación Gass

bajo el No. 2868/2007

seño/timbre

[Signature]
10. Firma

SELLO: TRIBUNAL REGIONAL DE BREMEN * CIUDAD HANSEÁTICA LIBRE DE BREMEN *

Bogotá, D.C., 14 de enero de 2008

[Signature]
FERNANDO TORRES BARRERA
ADUCTION E INTERPRETE OFICIAL
RES No. 1305 MINJUSTICIA 1998



Europäisches Patentamt

European Patent Office

Office européen des brevets

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49
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Bescheinigung

Certificate

Attestation

Die angehefteten Unterlagen stimmen mit der ursprünglich eingereichten Fassung der auf dem nächsten Blatt bezeichneten europäischen Patentanmeldung überein.

The attached documents are exact copies of the European patent application described on the following page, as originally filed.

Les documents fixés à cette attestation sont conformes à la version initialement déposée de la demande de brevet européen spécifiée à la page suivante.

Patentanmeldung Nr.

Patent application No.

Demande de brevet n°

06026520.4 / EP06026520

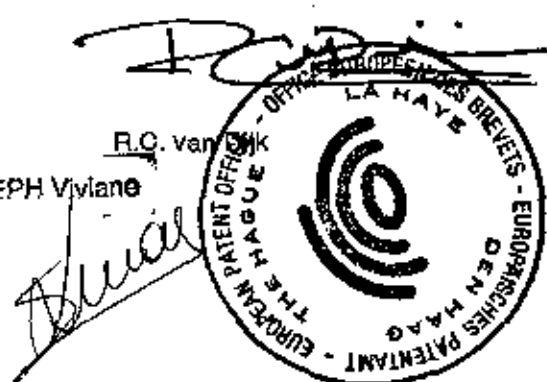
The organization code and number of your priority application, to be used for filing abroad under the Paris Convention, is EP06026520

Der Präsident des Europäischen Patentamts;
Im Auftrag

For the President of the European Patent Office

Le Président de l'Office européen des brevets
p.o.

R.C. van der
JOSEPH Viviane



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Anmeldung Nr.:
Application no.: 06026520.4
Demande no.:

Anmeldetag:
Date of filing: 21.12.06
Date de dépôt:

Anmelder/Applicant(s)/Demandeur(s):

HUNTER DOUGLAS INDUSTRIES B.V.
P.O. Box 5072
Piekstraat 2
3008 AB Rotterdam/NL

Bezeichnung der Erfindung/Title of the invention/Titre de l'invention:
(Falls die Bezeichnung der Erfindung nicht angegeben ist, siehe Beschreibung.
If no title is shown please refer to the description.
Si aucun titre n'est indiqué se référer à la description.)

Adjustable drive coupling for adjacent architectural coverings

In anspruch genommene Priorität(en) / Priority(ies) claimed / Priorité(s) revendiquée(s)
Staat/Tag/Aktenzeichen / State/Date/File no. / Pays/Date/Numéro de dépôt:

Internationale Patentklassifikation / International Patent Classification / Classification internationale de brevets:

E06B9/00

Am Anmeldetag benannte Vertragsstaaten / Contracting states designated at date of filing / Etats contractants désignées lors du dépôt:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

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IM-126-hp-10hp

Adjustable drive coupling for adjacent architectural coverings

The present invention relates to a coupling for drivingly coupling winding devices of adjacent architectural coverings. More in particular the invention relates to such force transmitting couplings that include a first coupling member, a second coupling member and engagement means between the first and second coupling members adapted to provide angular adjustment between the winding devices of the two adjacent architectural coverings.

It has been proposed in WO 2006/102894 to obtain angular fine adjustment between blind rollers by providing a wrap spring coupling between the two blind rollers, which normally is in frictional engagement, but which can be disengaged for making fine adjustments. While this arrangement has provided for accurate adjustment in aligning the lower blind edges of adjacent roller blinds, it has also offered little resistance against peak torques, that can occur during operation of the blinds, from disturbing the adjustments made. Such peak torques are due to inherent inertia in the blinds themselves as well as changes in operating direction and/or speed. It has thus been proposed, such as in DE 19546203, to resort to structural mating engagement between the adjustable drive coupling members to prevent the adjusted angular position from becoming disturbed by operating forces. However with larger blind units, such as often encountered in utility buildings, there have been cases where operating peak torques have completely ripped off the mating structural means that provided the positive engagement between the coupling members.

Accordingly it is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art. It is also an object of the present invention to provide alternative structures which are less cumbersome in assembly and operation and which moreover can be made relatively inexpensively. Alternatively it is an object of the invention to at least provide the public with a useful choice.

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To this end the present invention provides a force transmitting coupling for drivingly coupling winding devices of adjacent window coverings, the coupling including: a first coupling member; a second coupling member; mating engagement means on the first and second coupling members adapted to establish mating engagement between the first and second coupling member to transmit a drive force from one of the first and second coupling members to another of the first and second coupling members, wherein the second coupling member includes a hub and wherein the engaging means on the second coupling member are resiliently connected to the hub. Surprisingly it has been found that the resilient connection between the engaging means on one of the coupling members and its relevant hub effectively cushions the occurring peak torques and thereby successfully prevents any damage to the engagement means.

Other advantageous variations will become apparent from the below description and from the appended claims.

The invention will now be described in reference to the appended drawing Figures in which:

Figure 1 is a general perspective view of a set of adjacent window covering, having a common intermediate bearing bracket, which includes a coupling in accordance with the invention;

Figure 2 is an enlarged partial view of the set of window coverings of Figure 1, showing a suitable variant of an intermediate bearing and coupling;

Figure 3 is a longitudinal cross-section of the intermediate bearing and coupling of Figure 2;

Figure 4 is an exploded view of the partial assembly of Figures 2 and 3;

Figure 5 is a detailed perspective view of the first and second coupling members of the invention;

Figure 6 is a longitudinal cross-section of the intermediate bearing and coupling according to a further embodiment of the invention;

Figure 7 is an enlarged detail view based on Figure 6;

Figure 8A is an enlarged detail according to VIII-A in Figure 6;

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Figure 8B is an enlarged detail according to VIII-B in Figure 6;

Figure 9 is a detailed perspective view of the first and second coupling members of the further embodiment; and

Figure 10 is a detailed perspective view of the coupling members of the further embodiment, seen from a direction opposite to that of Figure 9.

Figure 1 shows a first window covering in the form of a first roller blind 1 and an adjacent second window covering also in the form of a second roller blind 2. The first roller blind 1 has a first winding device or blind roller 16 with its ends rotatably mounted between a left-hand end mounting bracket 10 and an intermediate mounting bracket 12. The second roller blind 2 has its winding device or second blind roller 18 rotatably mounted between the intermediate bracket 12 and a right-hand end mounting bracket 14. As is conventional the mounting brackets 10, 12, 14 serve to mount the roller blinds to a wall or ceiling surface (not shown). The roller blind 1 has a first shade member 4, shown partly rolled up on a winding device, such as a usually tubular blind roller 16. Similar, roller blind 2 as a second shade member 6 that is also partially rolled up on another winding device such as a usually tubular blind roller 18. While the window coverings shown are roller blinds it is also conceivable that one or both of the adjacent window coverings could be roman type or pleated shades that are retracted by lift cords. Such lift cords will then be wound onto roller 16 and /or roller 18 in stead of the shade member material 4,6. It is further seen in Figure 1 that the respective bottom edges 7, 9 of the shade member materials 4, 6, respectively, are provided with a pull-tab 17, 19 for operating the blinds.

Figure 2 shows an enlarged partial detail of the structure of the intermediate bracket 12. The intermediate bracket 12 has a first mounting flange 21, which is shown here in a position for mounting to an overhead surface, but in all other respects it represents the intermediate bracket 12 as shown in Figure 1. The intermediate mounting bracket 12 is preferably of a design that is similar to the end brackets 10, 14 so that stock keeping may be simplified. The first flange 21 has an appropriate series of

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slots, generally indicated with the numeral 23, 25, 27, for inserting mounting screws (not shown, but conventional).

On one side of a second, vertical flange 29 of the bracket 12, is positioned the coupling 30 that connects the winding device or roller 16 to the winding device or roller 18 on the opposite side of the vertical flange 29. The coupling 30 has first coupling member 31 that is drivingly connected to the first winding device 16 and a second coupling member 33 that is drivingly connected to the second winding device 18. The driving force from the second coupling member 33 is taken through a central bore in the second bracket flange 29 (not visible in Figure 2). The second member 33 drivingly engages an end plug 41 of the roller 18.

Figure 3 is a longitudinal cross-section of the enlarged detail shown in Figure 2. The same elements are indicated by the same reference numerals as used in Figure 2. As can be seen from Figure 3, the vertical second bracket flange 29 has a central aperture 47 best seen in Figure 4, and a pattern of radially arranged slots 45 around the central aperture 47. The pattern of radially arranged slots 45 can be used for mounting a drive unit to the bracket 12, when it is used as an end bracket rather than as an intermediate bracket. No further description is however deemed necessary here, as this aspect is not part of the present invention.

Referring back to Figure 3 it can be seen that the end plug 41 has a generally, cylindrical plug body 51 having an end wall 53 and thereby defining an axially extending central cavity. A cylindrical plunger 55 is accommodated within the central cavity of the body 51 for telescopically sliding movement. The telescopic movement of the plunger 55 is outwardly limited by retaining detents 57, 59 positioned on axially extending tongues 61, 63 which each extend through openings in the end wall 53. The plunger 55 is biased towards its outermost position by a compression spring 65. In principle this telescopic end plug 41 is similar in function to the end plug described in GB 2339820, except that its specific configuration allows the insertion of a coupling shaft 67.

This coupling shaft 67 can have a hexagonal cross-section or any other non-circular cross-section adapted to transmit torque by a mating form fit, rather than by being clampingly engaged. Further the plunger 55 on its outer end has a journal 69 by which

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it is rotatably journaled in the central opening 47. The coupling shaft 67 has one axial end fixed to a hub 71 of the second coupling member 33. The first coupling member 31 has a cylindrical sleeve 73 that snugly fits within the roller tube 16 in a torque transmitting member. To this end the inner circumference of the roller tube 16 and the outer circumference of the sleeve 73 preferably are provided with mating formations. Also the first coupling member 31 has a central aperture 75 to receive the hub 71 of the second coupling member 33. To guide the first coupling member 31 onto the second coupling member 33, the hub 71 preferably has a rounded end as shown in Figures 3 to 5. Similarly the central aperture 75 of the first coupling member 31 can have a rounded or chamfered entrance to assist guidance of the hub 71 there into. The roller tube 18 can have an arrangement similar to the right hand end of the roller tube 16, at its right hand end. The telescoping end plug 41 will then allow the roller tube 18 to be moved to the left in Figure 3 and engaged with a corresponding hub structure 71 on its right hand end. This is a conventional manner of mounting roller blind rollers between opposite brackets, such as those shown in Figure 1. Similarly the left hand end of roller tube 16 (in Figure 3) can have a telescoping end plug on its left hand end.

Referring now to Figures 4 and 5 it will be seen that the first coupling member 31 has first engagement means 81 on its face facing the second coupling member 33. The second coupling member 33 is provided with second complementary, mating engagement means 83 on its face facing the first coupling member 31.

Figure 5, now in more detail, shows that the first engagement means 81 of the first coupling member 31 are represented by a plurality of first teeth 85 formed at the perimeter of the first coupling member 31. The second engagement means on the second coupling member 33 are represented by a plurality of second teeth 87, structurally mating and complementary to the first teeth 85. In this manner the first and second coupling members 31, 33 can be axially engaged and disengaged, while providing rotational adjustment of the second coupling member 33 in respect of the first coupling member 31. Axial movement necessary for this engagement and disengagement will be provided by a telescoping end plug 41 on the opposite end of roller tube 16 (see Figure 4). A possibly great number of first teeth 85 and

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complementary second teeth 87 is preferred so as to obtain rotational adjustability at possibly small increments. The preference for possibly small increments of rotational adjustment is only set limits by the ability to make teeth that are both small enough but yet sufficiently strong to transmit torque from one coupling member to the other

5 coupling member.

As can also be seen in Figure 5, the second coupling member 33 has a perimeter rim 91, which here is provided on its exterior with optional manual gripping means in the form of ribs 93. The perimeter rim 91 and the plurality of second teeth 87 are connected to the hub 71 by a plurality of radial spokes 95. The spokes 95 are somewhat resilient and allow for cushioning of peak torque values that are transmitted between

10 the engagement means 81, 83 and the shaft 67.

Figure 6 is a longitudinal cross section similar to Figure 3 but showing a slightly different embodiment of the invention. Like parts will be numbered by numerals that are greater by exactly one hundred. An intermediate mounting bracket 112 has a first

15 horizontally extending mounting flange 121 and a vertically extending further bracket flange 129. This bracket 112 is in fact identical to the intermediate bracket already described. An end plug 141 has a generally cylindrical plug body 151 with an end wall 153, which together define an axially extending central cavity. A cylindrical plunger 155 is slidably received within this central cavity for telescopic movement. Detents 157, 159

20 on axially extending tongues 161, 163 limit the outward movement of the plunger 155. The plunger 155 is biased outwardly by a compression spring 165. A hexagonal coupling shaft 167 is non-rotatably received in the end plug 141. The left hand end of the coupling shaft 167 is again engaged with a hub part 171 of a modified form of second coupling member 133. A modified form of first coupling member 131 has a male torque

25 transmitting member 172 on its side facing the first winding tube 116. The male torque transmitting member is engaged for rotation with a hollow end plug 174, which is non-rotatably inserted into one longitudinal end of tube 116. The hollow end plug 174 has a female torque transmitting cavity 176 for receiving the male torque transmitting member 172 of the first coupling member 131. A preferred torque transmitting

30 arrangement between the male and female member 172 and 176 includes three equally

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spaced radially extending protrusions 178 (best seen in Figure 9) and three mating, equally spaced parallel grooves that extend axially of an inside peripheral wall of the female torque transmitting cavity. Such a torque transmitting arrangement will accommodate any slight degree of angular mismatch between the coupled blind roller tubes 116 and 118. In contrast with the embodiment of Figures 2 to 5, the embodiment of Figures 6 to 10 does not come apart when the roller tube 116 is removed from its brackets. As is best seen in the enlarged detail view of Figure 7, the hub part 171 of the second coupling member 133 has an annular groove 101. The male torque transmitting member 172 on an inner peripheral surface has an annular ridge 103 by which it is retained to the annular groove 101.

The annular groove 101 is sufficiently wide in relation to the ridge 103 to allow full axial disengagement of the first and second coupling members 131, 133. Because the first coupling member 131 in this embodiment cannot rely on any axial movement of the winding tube 116 for its axial disengagement, a compression spring 105 is positioned between the first and second coupling members 131, 133 to urge them apart. However, the force of spring 105 is chosen to be substantially less than the axial spring force acting on the winding tube 116, while keeping the coupling members 131, 133 engaged. As explained in relation to the embodiment of Figures 2 to 5 such axial spring force results from a telescopic end plug 141 acting on the opposite end of the first winding tube 116.

As best seen in Figures 8A, 8B, 9 and 10, the engagement means 181 of the first coupling member similar to the first embodiment, are represented by a plurality of first teeth 185 that are formed at the perimeter of the first coupling member 131. The engagement means 183 on the second coupling member 133 are represented by a plurality of second teeth 187, structurally mating and complementary to the first teeth 185. Figure 8A is an enlarged detail of the portion indicated as VIII-A in Figure 6 and Figure 8B is an enlarged detail of portion VIII-B in Figure 6. In Figure 8A one dent 185 of the first coupling member 131 is shown in elevation, while a dent 187 of the second coupling member 133 is sectioned.

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Figure 8B shows the opposite situation where a dent 187 of the second coupling member 133 is shown in elevation and the confronting dent of the first coupling member 131 is sectioned. Figure 8A also clearly shows how the teeth 185 of the first coupling member 131 are each supported from both a radial support surface 138 and from an axial support surface 140. Figure 8B shows how the teeth 187 of the second coupling member 133 are each supported from an inner peripheral surface of the perimeter rim 191, as well as from a radial surface 142. In this way the teeth 185, 187 can be dimensioned both small, for accurate rotational adjustability and sufficiently strong to transmit the necessary torque.

As more clearly seen in Figures 9 and 10, the perimeter rim section 191 which carries the torque transmitting teeth 187 is connected to the hub part 171 by a plurality of relatively flexible spokes 195. These spokes 195 cushion any excessive torque loads that may result in operation of the blind roller by inertia.

In use, the force transmitting couplings of Figures 2-5 and 6-10 allow the first and second winding roller 16 and 18, respectively 116 and 118, to be angularly adjusted with respect to one another. In the case of two adjacent roller shades as shown in Figure 1, this means that the bottom edges 7 and 9 can be accurately aligned, which can be desirable from an esthetic point of view. At the same time the engaging coupling parts 31 and 33, or 131 and 133 respectively, are prevented from becoming dislocated or damaged by peak loads which are thus effectively cushioned by the flexible spokes 95 or 195 respectively.

It is thus believed that the operation and construction of the present invention will be apparent from the foregoing description. The term comprising when used in this description or the appended claims should not be construed in an exclusive or exhaustive sense but rather in an inclusive sense. Expressions such as: "means for ...", should be read as: "component configured for ..." or "member constructed to ..." and are to be construed to include equivalents for the structures disclosed. The use of expressions like: "critical", "preferred", "especially preferred" etc., is not intended to limit the invention. Features which are not specifically or explicitly described or claimed

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may be additionally included in the structure according to the present invention without deviating from its scope.

The invention is further not limited to any embodiment herein described and, within the purview of the skilled person, modifications are possible which should be considered within the scope of the appended claims. Equally all kinematic inversions are
5 to be considered within the scope of the present invention.

Directional references (e.g., upper, lower, upward, downward, left, right, top, bottom, above, below, vertical, horizontal, axially, radially, tangentially, clockwise, or counterclockwise) are only used for identification purposes to assist in the
10 understanding of the present invention, and should not be construed to create limitations, as to position orientation, or use of the invention. Reference to axially, radially and tangentially is generally in relation to rotatable or cylindrical bodies of elements described. Reference to longitudinal or lateral is generally in reference to the
length or width directions respectively of elements which have an oblong appearance in
15 the accompanying drawings.

1006-196.00-1000

CLAIMS:

1. Force transmitting coupling for drivingly coupling winding devices
of adjacent architectural coverings, the coupling including:
5 a first coupling member;
a second coupling member;
mating engagement means on the first and second coupling members
adapted to establish mating engagement between the first and second
coupling member to transmit a drive force from one of the first and second
10 coupling members to another of the first and second coupling members,
wherein the second coupling member includes a hub and wherein the
engaging means on the second coupling member are resiliently connected to
the hub.
- 15 2. Coupling according to claim 1, wherein the annular engaging means are
positioned annularly on the second coupling members at a radial distance from
the hub.
3. Coupling according to claim 2, wherein the resilient connection is formed
20 integrally with the annular engaging means and the hub.
4. Coupling according to claim 3, wherein the resilient connection includes a
plurality of resilient spokes.
- 25 5. Coupling according to claim 4, wherein the flexible spokes are rectilinear.
6. Coupling according to any preceding claim, wherein the engaging means
include a plurality of axially engaging teeth which each are supported from
both axial and radial support surfaces on their respective first and second
30 coupling members.

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7. Coupling according to claim 6, wherein the axially engaging teeth of at least one of the first and second coupling members each have a rounded or pent-roof shape on their respective front faces.

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8. Coupling according to any preceding claim, wherein the outer circumference of the second coupling member has manual gripping means on its outer circumference.

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9. Coupling according to any preceding claim, wherein the winding devices are roller blind rollers and an aligned drive shaft rotates the roller blind rollers.

10. Coupling according to claim 8, wherein the first coupling member is an integral part of a roller blind end plug.

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11. Coupling according to claim 8 or 9, wherein the second coupling member co-operates with an intermediate mounting bracket to take the drive to a further roller.

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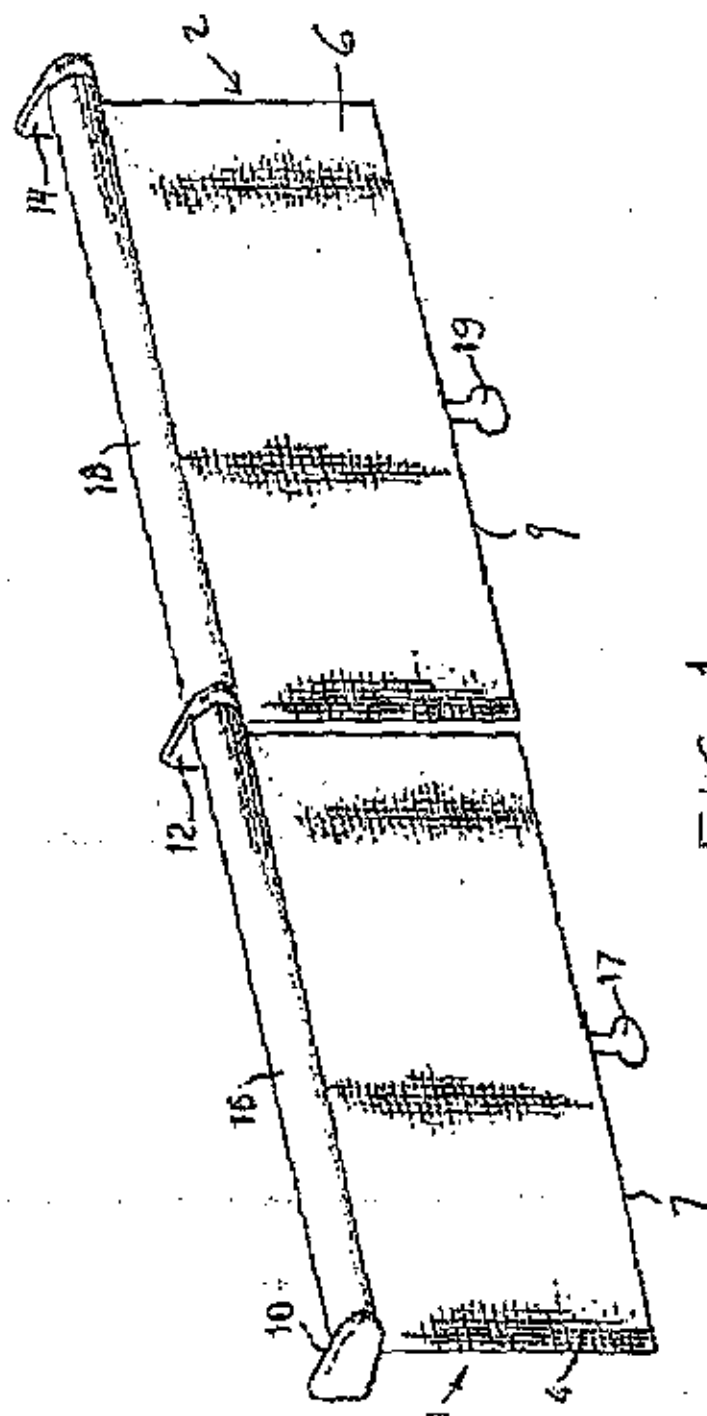
12. Coupling according to claim 11, wherein the second coupling member is connected for rotation with the aligned drive shaft.

13. Coupling according to any preceding claim, wherein angular indexing can be adjusted with the first and second coupling members axially disengaged.

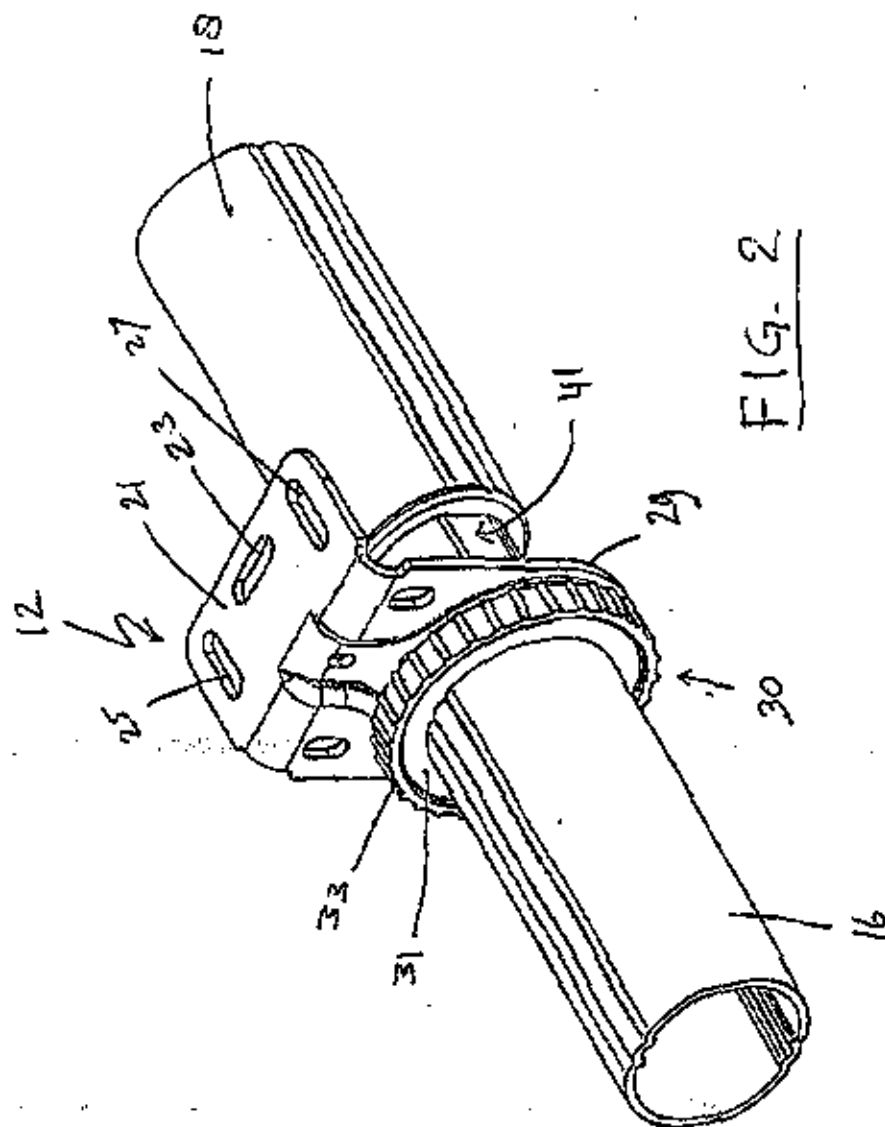
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14. Coupling according to any preceding claim, wherein the coupling includes a spring, between the first and second coupling members, urging the first and second coupling members out of engagement, when not otherwise held in engagement.

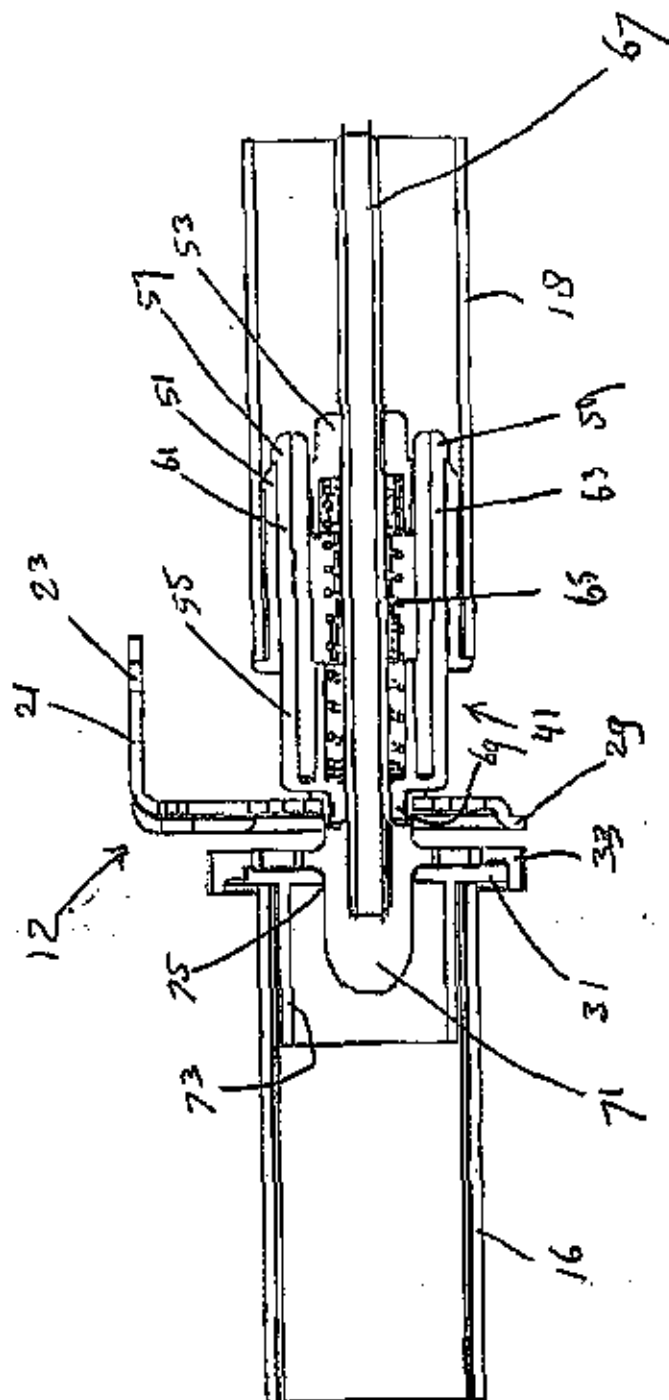
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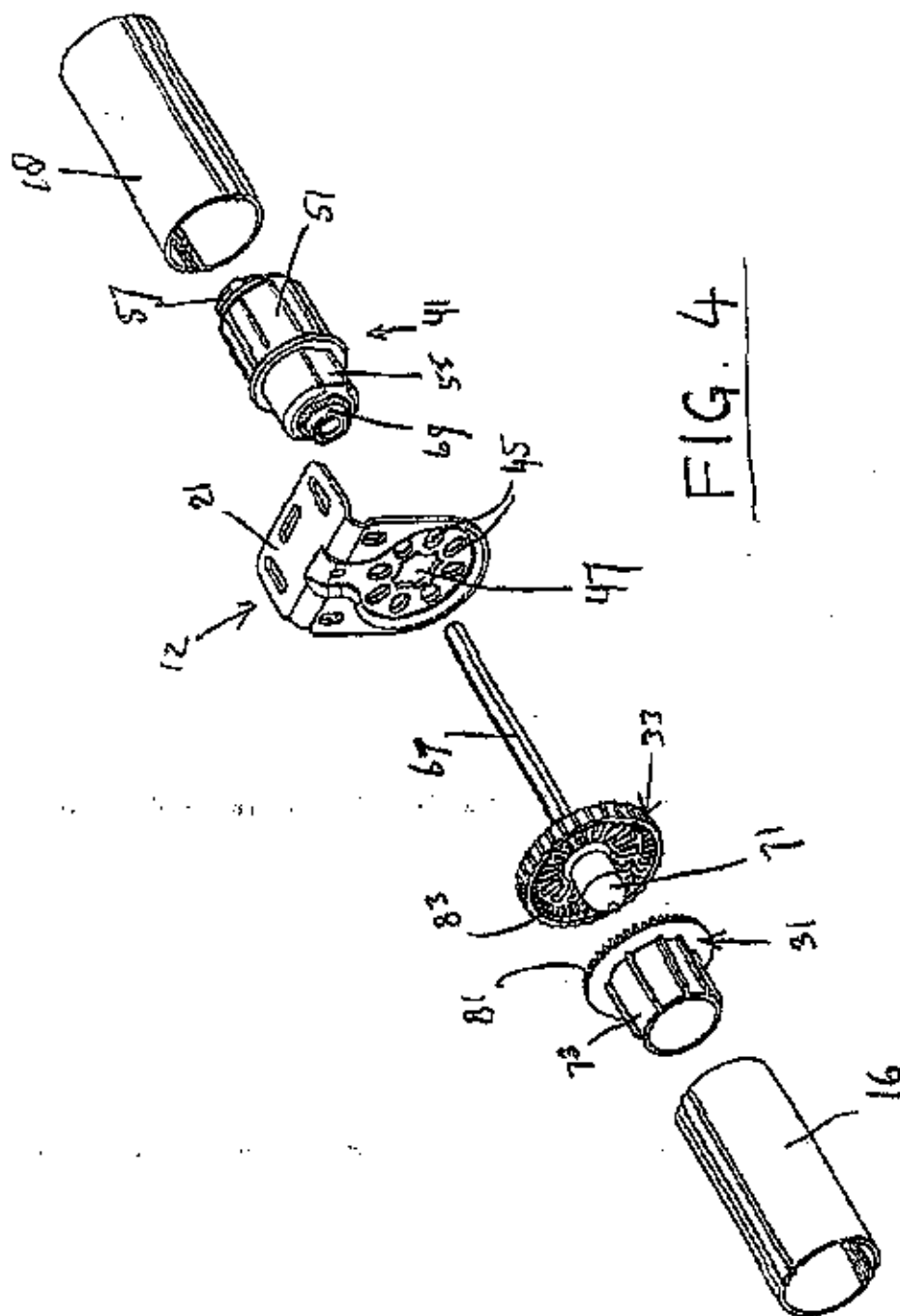
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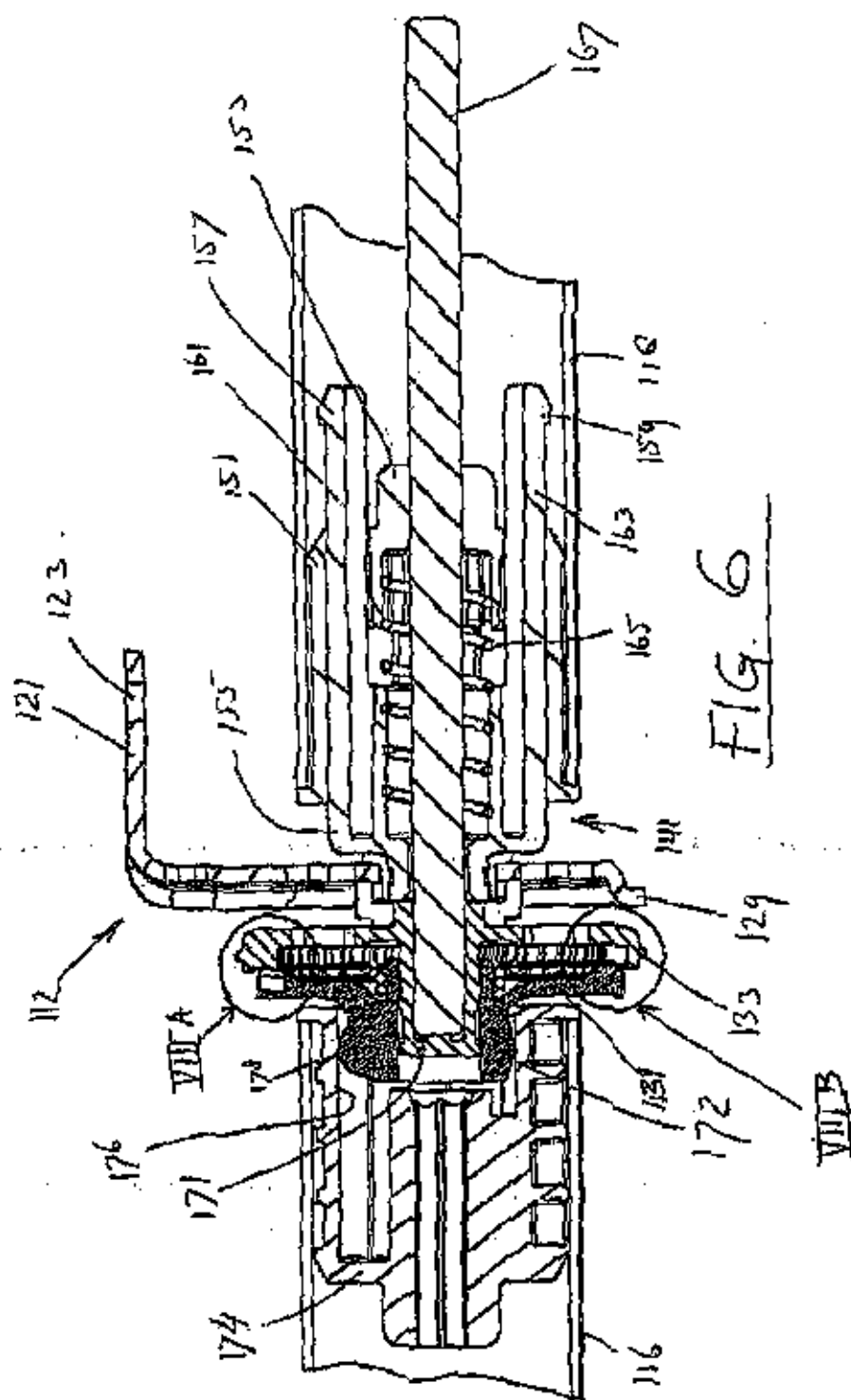
HM-196.00-100F



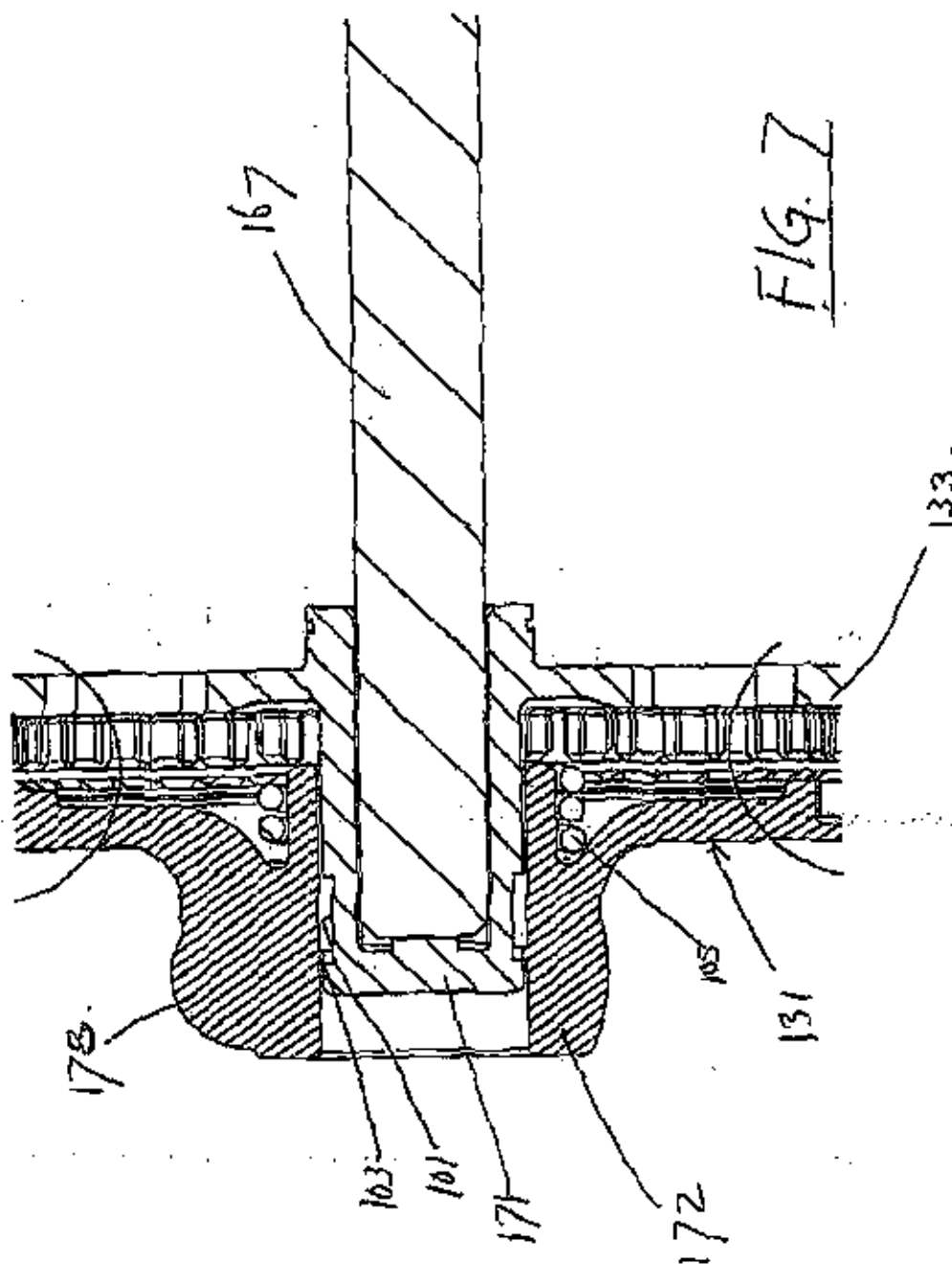
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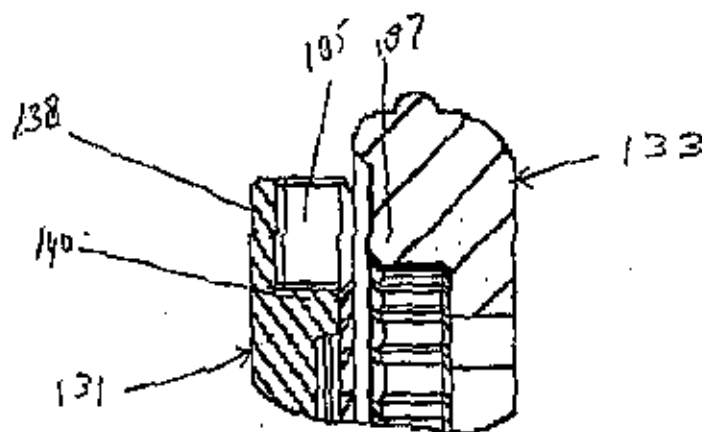
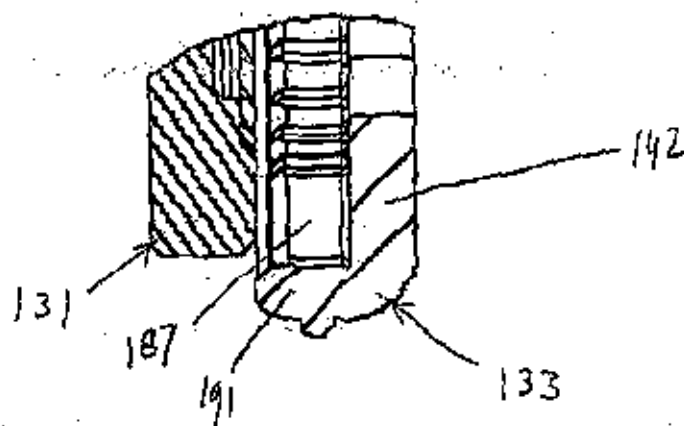


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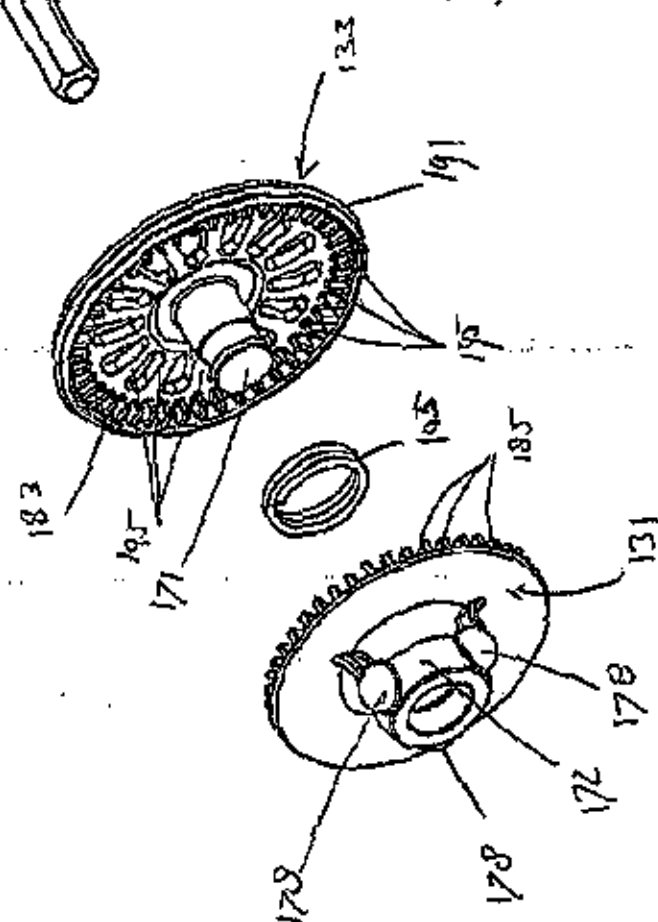


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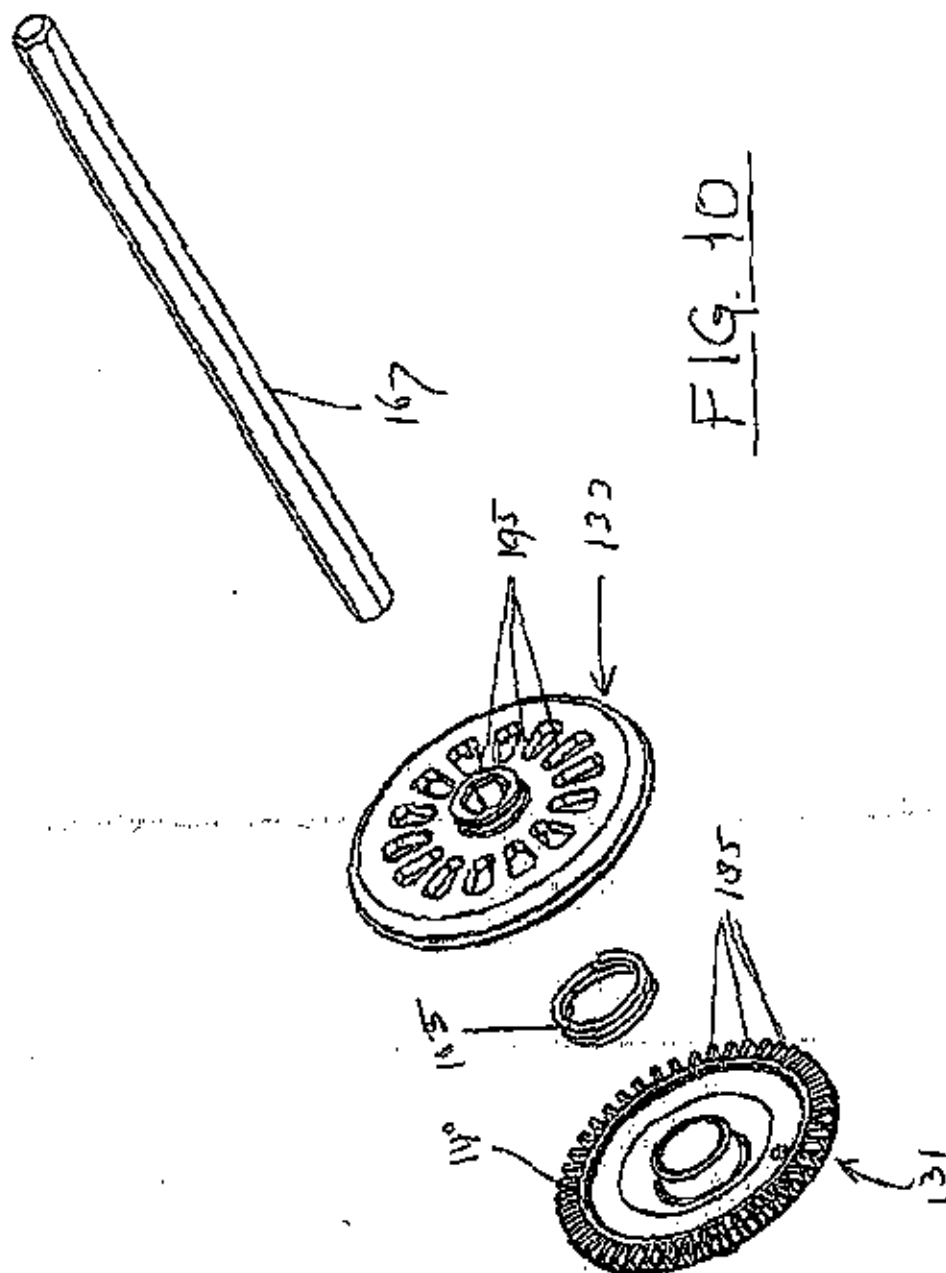
FIG. 8AFIG. 8B

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11/04/1996/07-1001P



TRADUCCION OFICIAL NO.1304/2007-.

EL TEXTO QUE SIGUE ES TRADUCCION FIEL Y COMPLETA DE UN DOCUMENTO ESCRITO EN INGLES LLEVA LA FIRMA Y EL SELLO DE HELENA URIBE DE LEMOINE, TRADUCTORA E INTERPRETE OFICIAL POR RESOLUCION NO. 3618 DEL MINISTERIO DE JUSTICIA DE COLOMBIA, DE FECHA 6 DE SEPTIEMBRE DE 1972.

OFICINA EUROPEA DE PATENTES

Los documentos adjuntos a la presente Certificación están conforme a la versión inicial depositada en la solicitud de patente europea especificada en la página que sigue:

Solicitud de Patente No. 06026520.4/EP06026520

El Código y número de la organización para su solicitud de prioridad, que debe ser utilizado para radicaciones en el exterior bajo la Convención de París es EP06026520

POR EL PRESIDENTE DE LA OFICINA EUROPEA DE PATENTES

R.C. VAN EJK: FIRMADO: JOSEPH VIVIANE.

HAY SELLO DE LA OFICINA EUROPEA DE PATENTES.

Solicitud No. 06026520.4

Fecha de Radicación : 21.12.06

Solicitante:

HUNTER DOUGLAS INDUSTRIES B.V.

P.O.BOX 5072

Piekstraat 2

3008 AB ROTTERDAM/NL

Si no se especifica un título, referirse a la descripción

Acople Ajustable para cubiertas arquitectónicas adyacentes

Prioridad reivindicada

Clasificación Internacional de Patentes

E06B9/00

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

LA TRADUCTORA OFICIAL

HELENA URIBE DE LEMOINE



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REIVINDICACIONES:

1. Acoplamiento que transmite fuerza para acoplar impulsadamente dispositivos de embobinado de cubiertas arquitectónicas adyacentes, el acoplamiento incluye:

Un primer miembro de acoplamiento;

Un segundo miembro de acoplamiento;

Medios de acoplamiento de case sobre el primer y segundo miembro de acoplamiento adaptado para establecer un acoplamiento de case entre el primer y segundo miembro de acoplamiento para transmitir una fuerza de impulsión desde uno de los primeros y segundos miembros de acoplamiento a otro de los primeros y segundos miembros de acoplamiento, en donde el segundo miembro de acoplamiento incluye un núcleo y en donde los medios de acoplamiento sobre el segundo miembro de acoplamiento están elásticamente conectados al núcleo.
2. Acoplamiento de acuerdo a la reivindicación 1, en donde los medios de acoplamiento anulares están ubicados anularmente sobre los segundos miembros de acoplamiento a una distancia radial del núcleo.
3. Acoplamiento de acuerdo a la reivindicación 2, en donde la conexión elástica se forma integralmente con los medios de acoplamiento anulares y el núcleo.
4. Acoplamiento de acuerdo a la reivindicación 3, en donde la conexión elástica incluye una pluralidad de rayos elásticos.

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5. Acoplamiento de acuerdo a la reivindicación 4, en donde los rayos flexibles son rectilíneos.
6. Acoplamiento de acuerdo a cualquier reivindicación precedente, en donde los medios de acoplamiento incluyen una pluralidad de dientes de acoplamiento axial acoplados que están cada uno sostenidos tanto por superficies de soporte axial como radial sobre sus respectivos primeros y segundos miembros de acoplamiento.
7. Acoplamiento de acuerdo a la reivindicación 6, en donde los dientes de acoplamiento axial de por lo menos uno de los primeros y segundos miembros de acoplamiento tienen cada uno una forma redondeada o de tejado colgadizo sobre sus respectivas caras frontales.
8. Acoplamiento de acuerdo a cualquier reivindicación precedente, en donde la circunferencia exterior del segundo miembro de acoplamiento tiene unos medios de agarre manuales en su circunferencia exterior.
9. Acoplamiento de acuerdo a cualquier reivindicación precedente, en donde los dispositivos de embobinado son rodillos de cortina de rodillo y un eje de impulsión alineado rota los rodillos de cortina de rodillo.
10. Acoplamiento de acuerdo a la reivindicación 8, en donde el primer miembro de acoplamiento es una parte integral de un conector de extremo de cortina de rodillo.

11. Acoplamiento de acuerdo a la reivindicación 8 o 9, en donde el segundo miembro de acoplamiento coopera con un apoyo montante intermedio para tomar el impulso para un rodillo adicional.
12. Acoplamiento de acuerdo a la reivindicación 11, en donde el segundo miembro de acoplamiento está conectado para rotación con el eje de impulsión alineado.
13. Acoplamiento de acuerdo a cualquier reivindicación precedente, en donde la indisación angular se puede ajustar con los primeros y segundos miembros de acoplamiento axialmente desacoplados.
14. Acoplamiento de acuerdo a cualquier reivindicación precedente, en donde el acoplamiento incluye un resorte, entre el primer y segundo miembros de acoplamiento empujando el primer y segundo miembros de acoplamiento hacia fuera de acoplamiento, cuando no se mantienen de otra manera en acoplamiento.

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RESUMEN

ACOPLAMIENTO DE IMPULSIÓN AJUSTABLE PARA CUBIERTAS

ARQUITECTÓNICAS ADYACENTES

Un acoplamiento que transmite fuerza para acoplar impulsadamente dispositivos de embobinado de cubiertas arquitectónicas adyacentes. El acoplamiento incluye un primer miembro de acoplamiento, un segundo miembro de acoplamiento, y medios de acoplamiento de case sobre los primeros y segundos miembros de acoplamiento adaptados para establecer un acoplamiento de case entre el primer y segundo miembro de acoplamiento para transmitir una fuerza de impulsión desde uno de los primeros y segundos miembros de acoplamiento a otro de los primeros y segundos miembros de acoplamiento. El segundo miembro de acoplamiento incluye un núcleo y los medios de acoplamiento sobre el segundo miembro de acoplamiento están elásticamente conectados al núcleo.

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REPUBLICA DE COLOMBIA
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

Folio 67

2020
Bogotá D.C.,

Doctor(a)
FERRERO EMILIO
Apoderado(a) y/o Representante de
HUNTER DOUGLAS INDUSTRIES B.V.

REFERENCIA	Radicación No. 07 135427
	Trámite 2
	Evento 1
	Actuación 416
	Oficio No. 6005
	Folios 1

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 los artículos 26 y 27 de la Decisión 486 de la Comisión de la Comunidad Andina, y en las demás disposiciones vigentes sobre la materia, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

De acuerdo con lo previsto por el artículo 40 de la Decisión 486/00, la publicación en este caso se hará a partir del día 21 del mes de Diciembre de 2008.

Cúmplase
Dado en Bogotá DC,

13 MAYO 2008

ALIX CARMENZA CESPEDES DE VERGEL
Jefe de la división de Nuevas Creaciones

adpal0