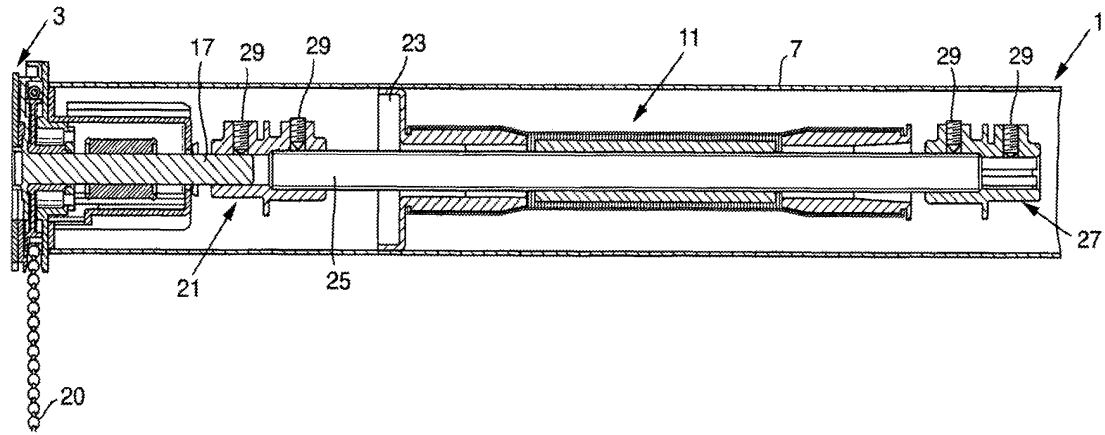


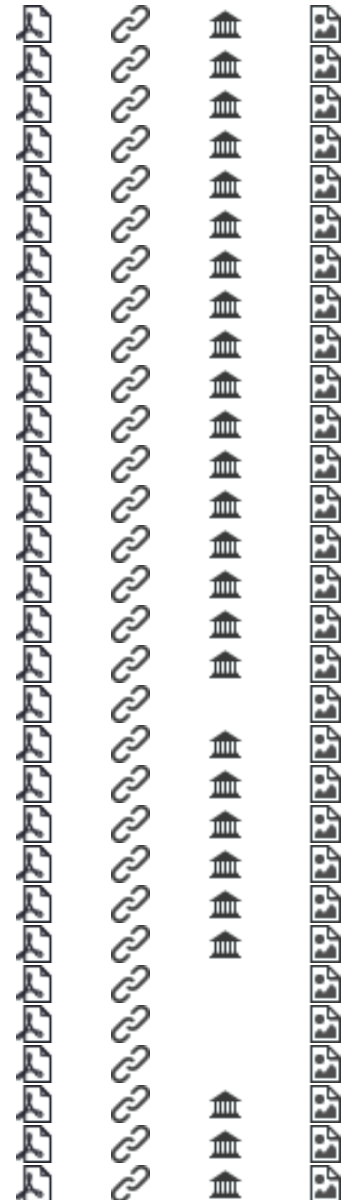
20 Documents

Publication numbers	Title	Current assignees
EP2394014 A1	Spring system for roller blinds	HUNTER DOUGLAS INDUSTRIES
EP2813449 A1	Roller shutter having two counter-rotating blinds and handling head equipped therewith for handling articles	KRONES
EP1989389 A1	Drive assembly for sun protection devices, such as roller blinds , awnings, and the like	PROVITA
EP3513028 A1	Adjustable spring system and method for roller blinds	BLINDWARE
EP3039217 A1	Device for adjusting fabric angle of double fabric blinds	COMFOTEX WINDOW FASHIONS
EP2558295 A2	A process and system for manufacturing a roller blind	HUNTER DOUGLAS
EP1081327 A2	Winding roller	PROSCH DIETER
CN105089482 A	Spring system for roller blinds	HUNTER DOUGLAS INDUSTRIES
EP1188591 A1	Window roller blind for curved or non rectangular window panes	BOS
EP2231988 A1	Operating unit for architectural coverings	HUNTER DOUGLAS INDUSTRIES
WO2012161242 A1	Winding misalignment adjustment member for roll blind, winding /closing device, roll blind, and method for producing or constructing roll blind	TACHIKAWA MANUFACTURING
DE29608727 U1	Roller blind for windows of vehicles	BALL WILFRIED
EP-637357 A1	Roller shutter usable as a venetian blind.	ERBER GUENTHER
EP-899412 A2	Bearing structure for roller shades	CHOU, TSER-WEN, ...
EP1904710 A1	Multiple choice shade system	WINTEC KOREA
KR20190090667 A	A safety device module for a hoist device and the hoist device using the same	JUNG, JAE-HYUN
KR20140029113 A	Manual driving wheel of sunshade driving device	TERASOLAR
EP2596196 A2	Dual roll blind	WINTEC KOREA
EP1923245 A2	Roller blind for roof	BOS
EP2977543 A1	Sunblind driving apparatus having returning function of driving wheel member	TERASOLAR

Images



BRPI1015804	B1	2019-09-17	BR201015804
US20190085628	A1	2019-03-21	US20190085628
AU2019200233	A1	2019-01-31	AU2019200233
US10138678	B2	2018-11-27	US10138678
AU2016262767	B2	2018-10-18	AU2016262767
US10030442	B2	2018-07-24	US10030442
CA2751202	C	2017-09-05	CA2751202
DK2394014	T3	2017-04-03	DK2394014T
EP2394014	B1	2016-12-28	EP2394014
AU2016262767	A1	2016-12-15	AU2016262767
AU2010211285	B2	2016-08-25	AU2010211285
US20160138333	A2	2016-05-19	US20160138333
BRPI1015804	A2	2016-02-16	BR201015804
CN102308056	B	2015-08-05	CN102308056B
US20140360684	A1	2014-12-11	US20140360684
US20140360685	A1	2014-12-11	US20140360685
US8776861	B2	2014-07-15	US8776861
SG2014009658	A	2014-05-29	SG2014009658
NZ603055	A	2014-04-30	NZ-603055
NZ594277	A	2013-03-28	NZ-594277
BRPI0924365	A1	2012-11-20	BR200924365
CN102308056	A	2012-01-04	CN102308056
EP2394014	A1	2011-12-14	EP2394014
US20110297334	A1	2011-12-08	US20110297334
AR078018	A1	2011-10-12	AR--78018
SG173542	A1	2011-09-29	SG-173542
MX2011008144	A	2011-09-06	MX2011008144
AU2010211285	A1	2011-08-18	AU2010211285
TW201033454	A	2010-09-16	TW201033454
CA2751202	A1	2010-08-12	CA2751202



WO2010/089118

A1

2010-08-12

WO201089118

**Abstract**

(EP2394014)

A **roller** blind including a **roller** of having a **roller** length and a **roller** outer diameter, a fabric attached to said **roller** for **winding** and unwinding from said **roller**. The fabric has a fabric length, a fabric weight, a fabric height, and fabric thickness. The blind includes a bottom bar having a bottom bar weight, and at least one spring operatively connected to the **roller** to drivingly rotate the **roller** in at least one direction of rotation. The spring is selected according to a Protocol such that its length ensures that it drives the **roller** with a constant operating force.

Inventors

BOHLEN JÖRG

KOOP LARS

Latest standardized assignees - inventors removed

HUNTER DOUGLAS INDUSTRIES

Family 2/20 - FAMPAT - ©Questel

Title

(EP2813449)

Roller shutter having two counter-rotating **blinds** and handling head equipped therewith for handling articles

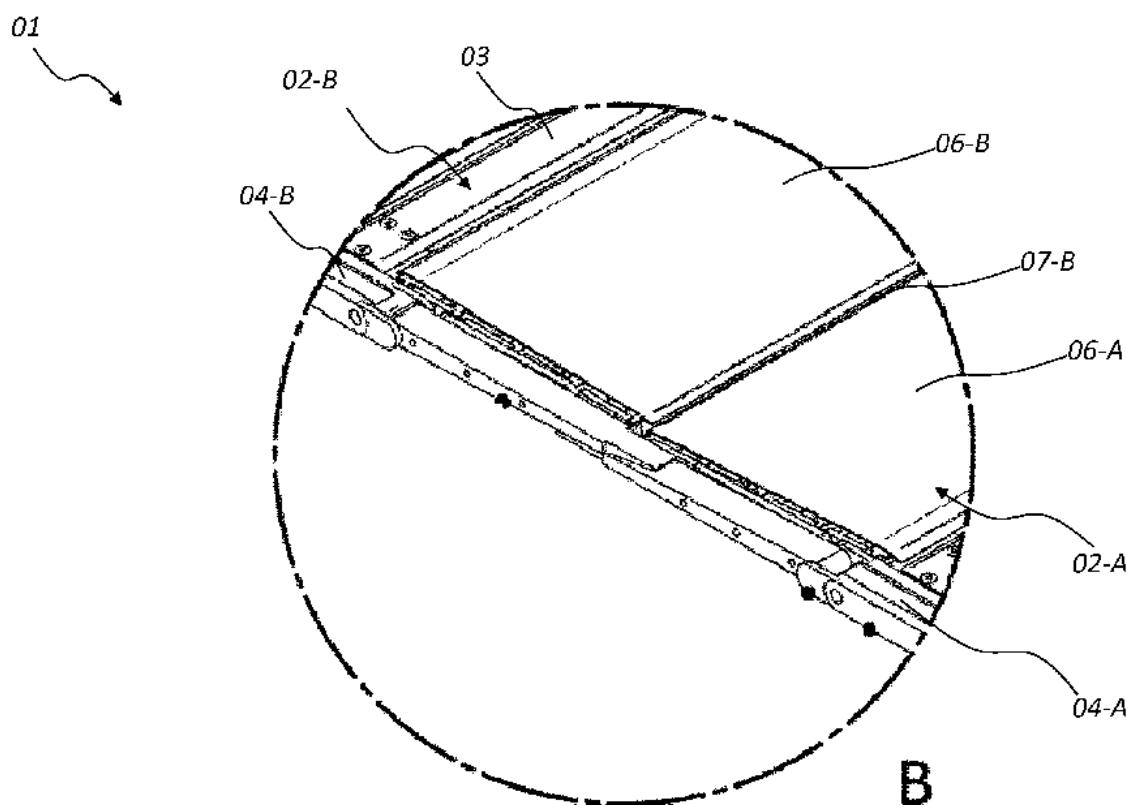
Images

Fig. 4

Publication numbers with kind code & date

CN104229488

B

2016-05-25

CN104229488B

EP2813449

B1

2015-12-02

EP2813449

CN104229488

A

2014-12-24

CN104229488

EP2813449

A1

2014-12-17

EP2813449

DE102013106013

A1

2014-12-11

DE102013106013

**Abstract**

(EP2813449)

the invention describes a roller shutter (01) having counter-rotating blinds and a handling head (30) equipped therewith for handling articles. The roller shutter (01) and the handling head (30). Formed or included is a profiled bar steel (06-A) of a first wedge including a front end of a first roller shutter (02-A), and a lower side is arranged on a plane formed in a close position arranged at the lower side of at least one part (56) of roller shutter (02). The profiled bar steel (06-A) of the first wedge is reduced gradually from a thickness of the roller shutter (02) from the rear side (10) of a sheet (03) of the first roller shutter (02-A) oriented to the front side of a front end (07-A) of the first roller shutter (02-A). A profiled bar steel (06-B) described in the specification of a second wedge including a front end (07-B) of a second roller shutter (02-B) is formed or included. In a closed position, two wedge profiled bar steels (06) are overlapped.

(From CN104229488 A)

Inventors

HAAS JOHANN

Latest standardized assignees - inventors removed

KRONES

Family 3/20 - FAMPAT - ©Questel

Title

(EP1989389)

Drive assembly for sun protection devices, such as roller blinds, awnings, and the like

Images

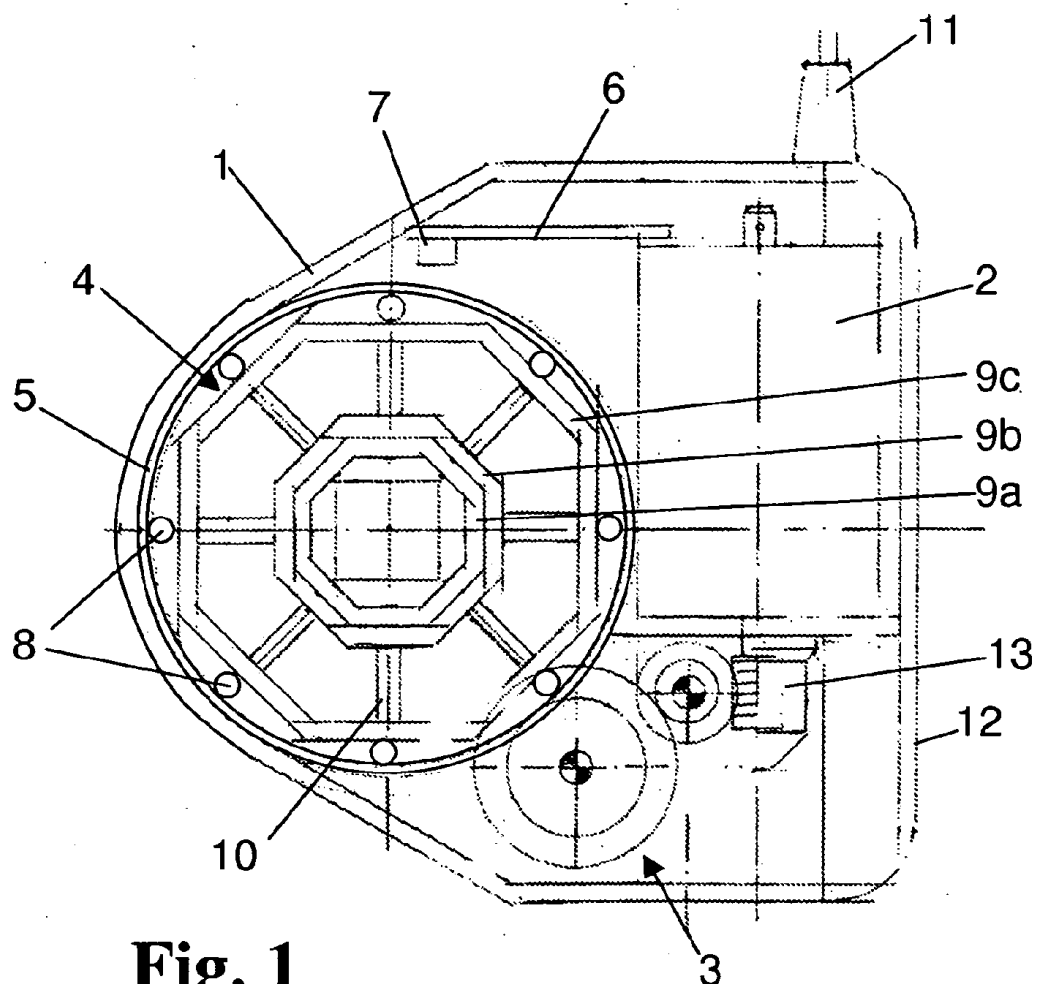


Fig. 1

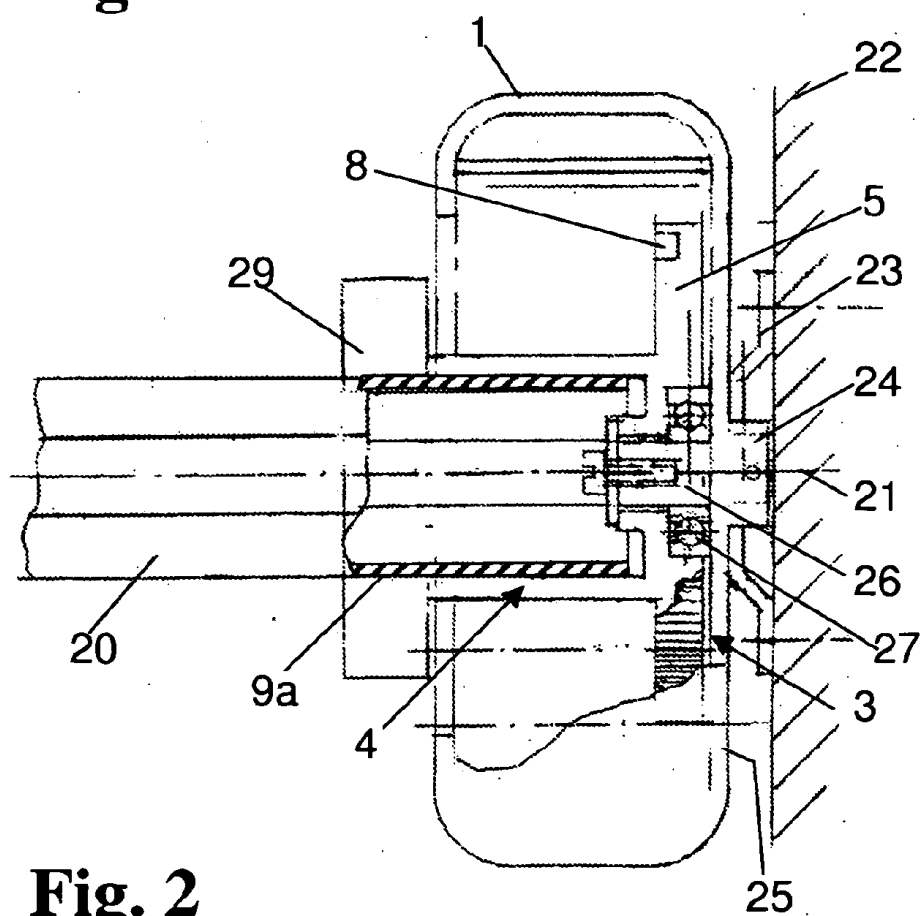
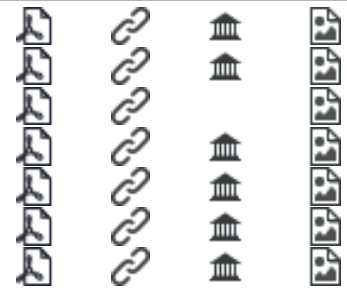


Fig. 2

ES2335552	T3	2010-03-29	ES2335552
DE502007001853	D1	2009-12-10	DE502007001853
AT447090	T	2009-11-15	ATE447090
EP1989389	B1	2009-10-28	EP1989389
EP1989389	A1	2008-11-12	EP1989389
DE102006032535	A1	2008-01-17	DE102006032535
WO2008/006758	A1	2008-01-17	WO200806758



Abstract

(EP1989389)

A drive assembly for sun protection devices is known, having a **winding** cylinder for **winding** a hanging up and down, the ends of the cylinder being rotationally supported within a frame, wherein the drive assembly comprises a DC voltage motor for rotating the **winding** cylinder about the longitudinal axis thereof, a reduction gear unit, a motor control unit, and an operating unit for switching the motor, wherein the motor and the reduction gear unit are disposed in a housing that is rotationally fixed in a frame. Based on this, in order to provide a drive assembly of a simple design having a direct drive for the **winding** cylinder, which can be utilized for a plurality of various **winding** cylinders, thus reducing storage costs, and which moreover is inexpensive and easy to install - even by a layman, the invention proposes that the drive connection to the **winding** cylinder comprises a drive gear wheel having a larger outer diameter than that of the **winding** cylinder, and that it further comprises an adapter that is rotationally supported in the housing, the adapter being provided with a plurality of **winding** cylinder carriers of various sizes - stepped for **winding** cylinders of various diameters - that bear against the cylinder lateral surface, or the adapter being configured to receive interchangeable **winding** cylinder carriers of various sizes.

Inventors

LOTT OSWALD

Latest standardized assignees - inventors removed

PROVITA

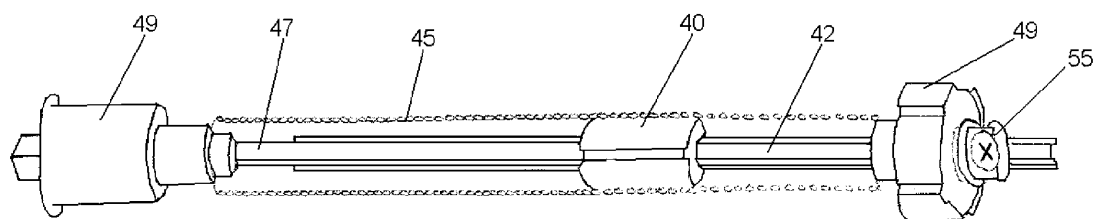
Family 4/20 - FAMPAT - ©Questel

Title

(EP3513028)

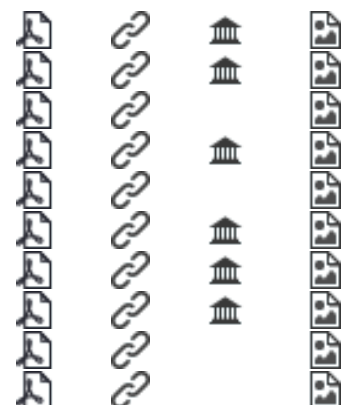
Adjustable spring system and method for **roller blinds**

Images

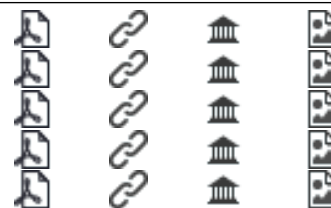


Publication numbers with kind code & date

EP3513028	A4	2020-04-29	EP3513028
JP2019531427	A	2019-10-31	JP2019531427
MX2019002824	A	2019-09-18	MX2019002824
US20190257146	A1	2019-08-22	US20190257146
CL2019000599	A1	2019-07-26	CL2019000599
EP3513028	A1	2019-07-24	EP3513028
CN109906302	A	2019-06-18	CN109906302
BR112019004712	A2	2019-05-28	BR112019004712
KR10-2019-0046959	A	2019-05-07	KR20190046959
SG11201901919U	A	2019-04-29	SG11201901919U



IN201937009606	A	2019-04-26	IN201937009606
AU2017326739	A1	2019-04-04	AU2017326739
BR112019004712	A1	2019-03-26	BR112019004712
CA3036287	A1	2018-03-22	CA3036287
WO2018/049462	A1	2018-03-22	WO201849462

**Abstract**

(EP3513028)

The present invention relates to a method for altering the spring constant (k) of a torsion spring for a **roller** blind, the method including (i) locating a dampener at a predetermined length along a longitudinal axis of the torsion spring, and (ii) tightening an end of the torsion spring against the dampener to increase the spring constant. The invention further relates to a **roller** blind system comprising a cylinder, a fabric attached to said cylinder for **winding** and unwinding from said cylinder, a torsion spring and a damper moveable along the longitudinal axis of the spring.

Inventors

NORTON GRANT RAYMOND

Latest standardized assignees - inventors removed

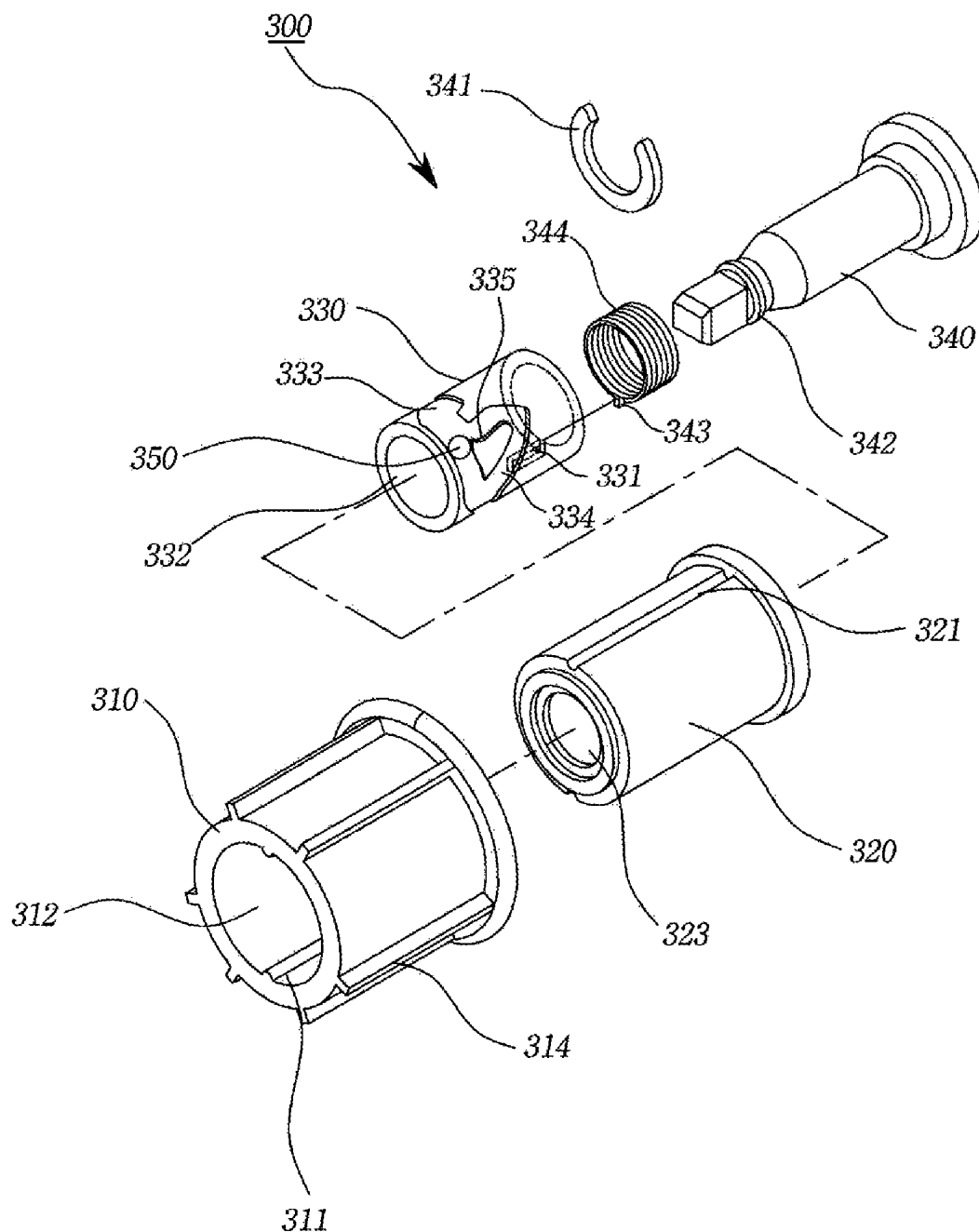
BLINDWARE

Family 5/20 - FAMPAT - ©Questel

Title

(EP3039217)

Device for adjusting fabric angle of double fabric **blinds****Images**

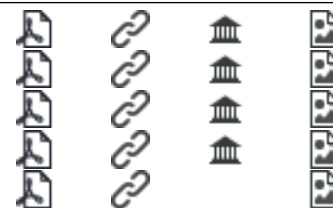


Publication numbers with kind code & date

AU2018208618	B2	2020-05-07	AU2018208618
US10208537	B2	2019-02-19	US10208537
MX361947	B	2018-12-19	MX-361947
EP3039217	B1	2018-11-21	EP3039217
AU2018208618	A1	2018-08-09	AU2018208618
AU2014311376	B2	2018-04-26	AU2014311376
CN105531437	B	2018-03-27	CN105531437B
EP3039217	A4	2017-06-14	EP3039217
US20160312531	A1	2016-10-27	US20160312531
US9410366	B2	2016-08-09	US9410366
EP3039217	A1	2016-07-06	EP3039217
CN105531437	A	2016-04-27	CN105531437
AU2014311376	A1	2016-03-17	AU2014311376
MX2014010295	A	2015-07-01	MX2014010295



US20150059991	A1	2015-03-05	US20150059991
WO2015/030349	A1	2015-03-05	WO201530349
WO2015/031329	A1	2015-03-05	WO201531329
CA2860957	A1	2015-02-27	CA2860957
KR101359513	B1	2014-02-07	KR101359513

**Abstract**

(EP3039217)

The present invention relates to double fabric **blinds** and, more particularly, to a device for adjusting a fabric angle of the double fabric **blinds**, which is capable of finely adjusting an degree of openness of a **front** sheet, wherein a plurality of balls are sequentially held in a holding groove, e.g., as four or eight balls, inserted into an insertion groove of a rotation component, wherein the plurality of balls are rotated in a guide groove of a stopper by approximately 90 degrees or 45 degrees, thereby improving safety and omitting the use of a conventional string.

Inventors

KWAK JAE SUK

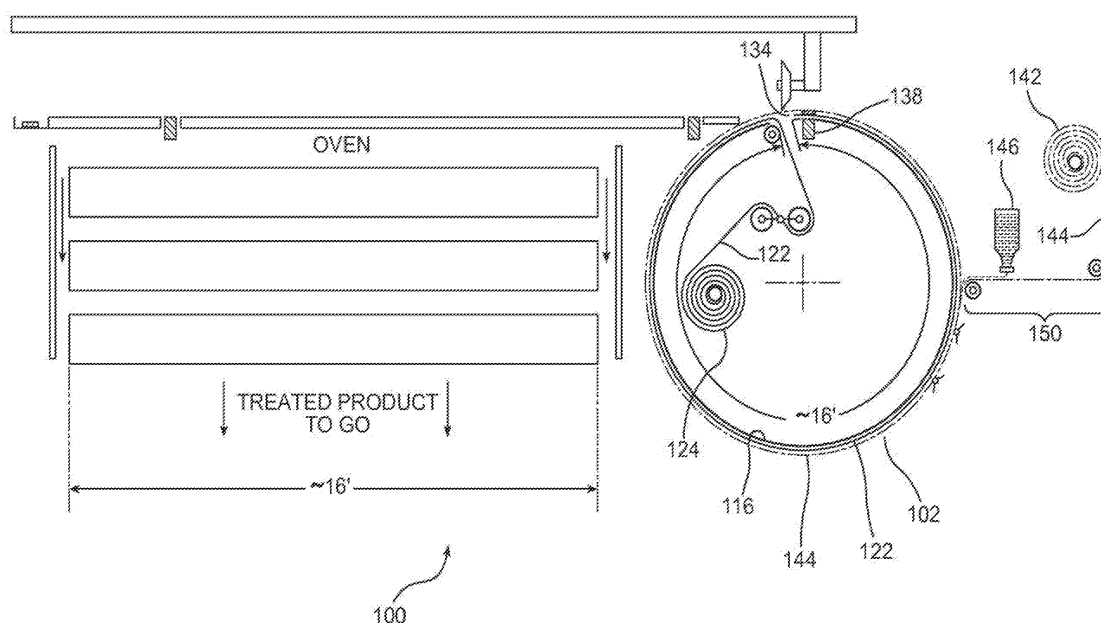
Latest standardized assignees - inventors removed

COMFOTEX WINDOW FASHIONS

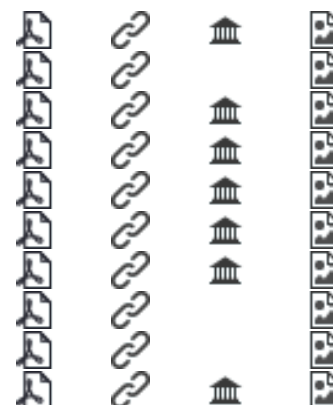
Family 6/20 - FAMPAT - ©Questel

Title

(EP2558295)

A process and system for manufacturing a **roller** blind**Images****Publication numbers with kind code & date**

CA2796455	C	2020-03-10	CA2796455
KR10-2060266	B1	2020-02-11	KR102060266
US20190358912	A1	2019-11-28	US20190358912
US10391719	B2	2019-08-27	US10391719
AU2019204728	A1	2019-07-18	AU2019204728
AU2017201802	B2	2019-04-04	AU2017201802
TWI655356	B	2019-04-01	TWI655356
KR10-2018-0131650	A	2018-12-10	KR20180131650
KR10-1926779	B1	2018-12-07	KR101926779
TW201821686	A	2018-06-16	TW201821686



CN105818366	B	2018-06-15	CN105818366B				
TWI620864	B	2018-04-11	TWI620864				
CL2016003193	A1	2017-06-16	CL201603193				
AU2017201802	A1	2017-04-06	AU2017201802				
MX346671	B	2017-03-29	MX-346671				
CL2016002598	A1	2017-03-17	CL201602598				
AU2011239502	B2	2016-12-22	AU2011239502				
US20160354972	A1	2016-12-08	US20160354972				
TW201636494	A	2016-10-16	TW201636494				
US9458663	B2	2016-10-04	US9458663				
CN103402767	B	2016-08-03	CN103402767B				
CN105818366	A	2016-08-03	CN105818366				
BR112012026322	A2	2016-07-12	BR112012026322				
TWI541426	B	2016-07-11	TWI541426				
EP2558295	A4	2015-03-04	EP2558295				
WO2011/130593	A3	2014-04-03	WO2011130593				
CN103402767	A	2013-11-20	CN103402767				
KR20130100233	A	2013-09-10	KR20130100233				
BR112012026322	A1	2013-07-02	BR112012026322				
CL2012002894	A1	2013-06-07	CL201202894				
MX2012011998	A	2013-05-06	MX2012011998				
US20130105094	A1	2013-05-02	US20130105094				
CO6640292	A2	2013-03-22	CO6640292				
EP2558295	A2	2013-02-20	EP2558295				
AU2011239502	A1	2012-11-08	AU2011239502				
TW201200709	A	2012-01-01	TW201200709				
CA2796455	A1	2011-10-20	CA2796455				
WO2011/130593	A2	2011-10-20	WO2011130593				

Abstract

(EP2558295)

A process and system for manufacturing **roller blinds** is provided which includes structure for performing plural steps including a first step of helically **winding** slat fabric about a drum, thereby forming a slat product. A second step includes moving the slat product from the drum to a platform. A third step includes **winding** the slat product about a **roller** tube to form a **roller** blind. A fourth step includes moving the blind from the platform to a heat treating device.

Inventors

COLSON WENDELL B

SWIZCZ PAUL G

HARTMAN DAVID P

STANCZYK MICHAEL ROBERT

Latest standardized assignees - inventors removed

HUNTER DOUGLAS

Family 7/20 - FAMPAT - ©Questel

Title

(EP1081327)

Winding roller**Images**

Fig.1

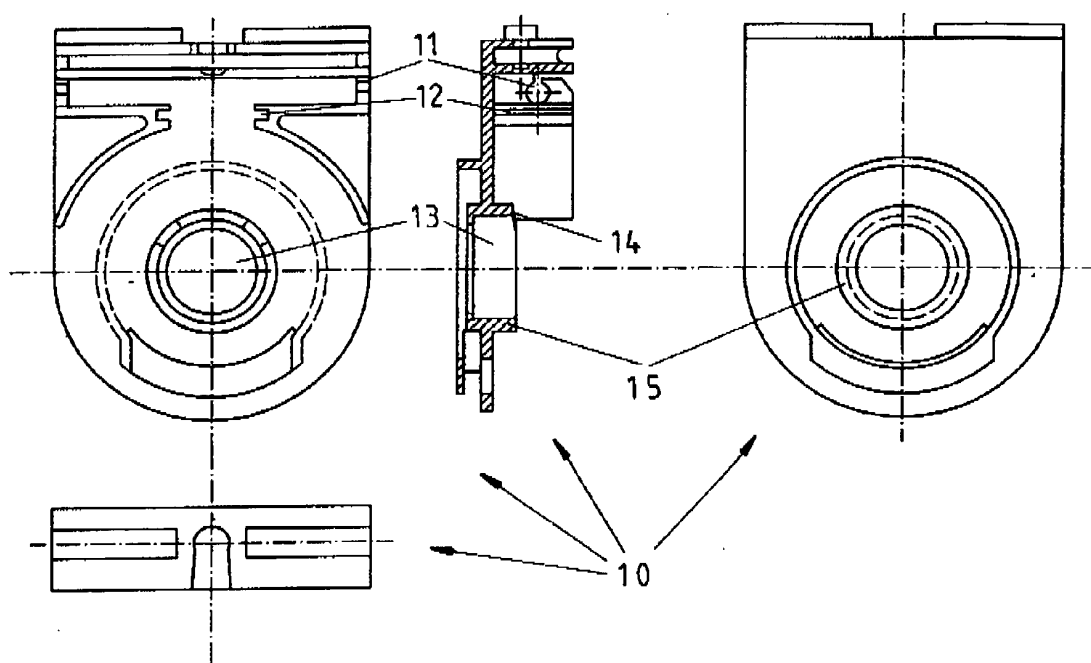
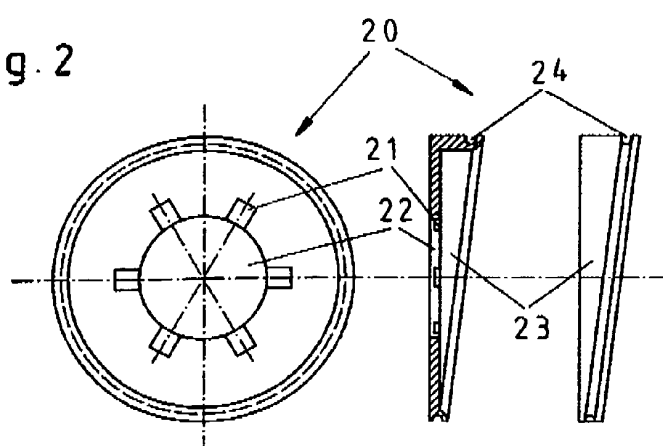


Fig. 2



Publication numbers with kind code & date

DE50013486	D1	2006-11-02	DE50013486
AT340301	T	2006-10-15	ATE340301
EP1081327	B1	2006-09-20	EP1081327
EP1081327	A3	2003-06-25	EP1081327
EP1081327	A2	2001-03-07	EP1081327
DE29915352	U1	2000-01-05	DE29915352



Abstract

(EP1081327)

The cord to be wound is guided onto the core (30) and its **axial** position depends upon the angle position of the core. The **roller** incorporates an eccentric disk (20) located rotatably movably coaxially to the **winding** core (30) and which has a cylinder surface (23) coaxial to the **winding** core. In the cylinder surface is an all-round guide groove (24) inclined to the axis of the **winding** core. A step gear is available, which converts the continuous rotary movement of the **winding** core into a staged linear movement of the cord guide member. The **winding** core has a bearing (33) for a driver component movable between rest and engagement positions, preferably an axially movable pin. The eccentric disk has at least one recess (12) in which the driver component secures in the engagement position.

Inventors

PROSCH DIETER

Latest standardized assignees - inventors removed

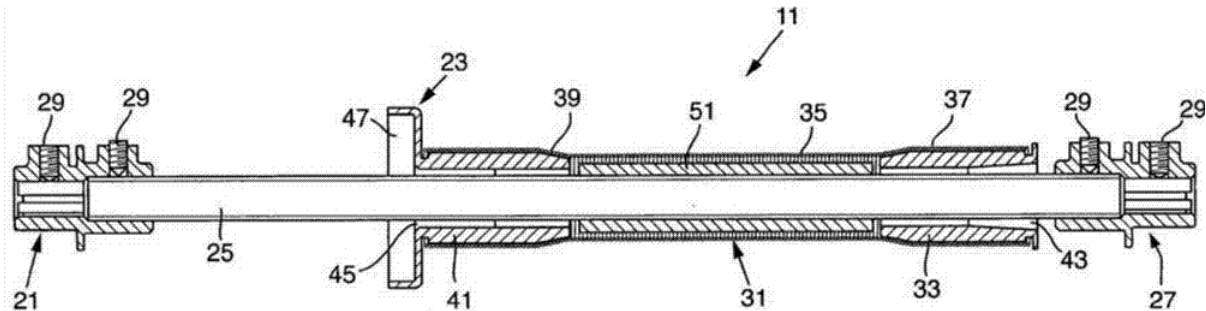
PROSCH DIETER

Family 8/20 - FAMPAT - ©Questel

Title

(CN105089482)

Spring system for roller blinds

Images**Publication numbers with kind code & date**

CN105089482	B	2017-07-28	CN105089482B
CN105089482	A	2015-11-25	CN105089482

**Abstract**

(CN105089482)

A spring assist module for window covering includes a stationary member, at least one torsion spring, and at least one rotatable member. The stationary member may be connectable to an operating member of the window covering. The at least one rotatable member may be keyable to a driven part of the window covering, such that rotation of the driven part rotates the at least one rotatable member. The at least one torsion spring may include a first end operatively coupled to the stationary member and a second end operatively coupled to the at least one rotatable member. During the use, once the rotatable member rotates in the rotation direction, the torsion spring can store the kinetic energy of the rotatable member, and once the rotatable member rotates in the direction opposite to the rotation direction, the kinetic energy stored by the torsion spring can be released to the rotatable member.

Inventors

BOHLEN JOERG

KOOP LARS

Latest standardized assignees - inventors removed

HUNTER DOUGLAS INDUSTRIES

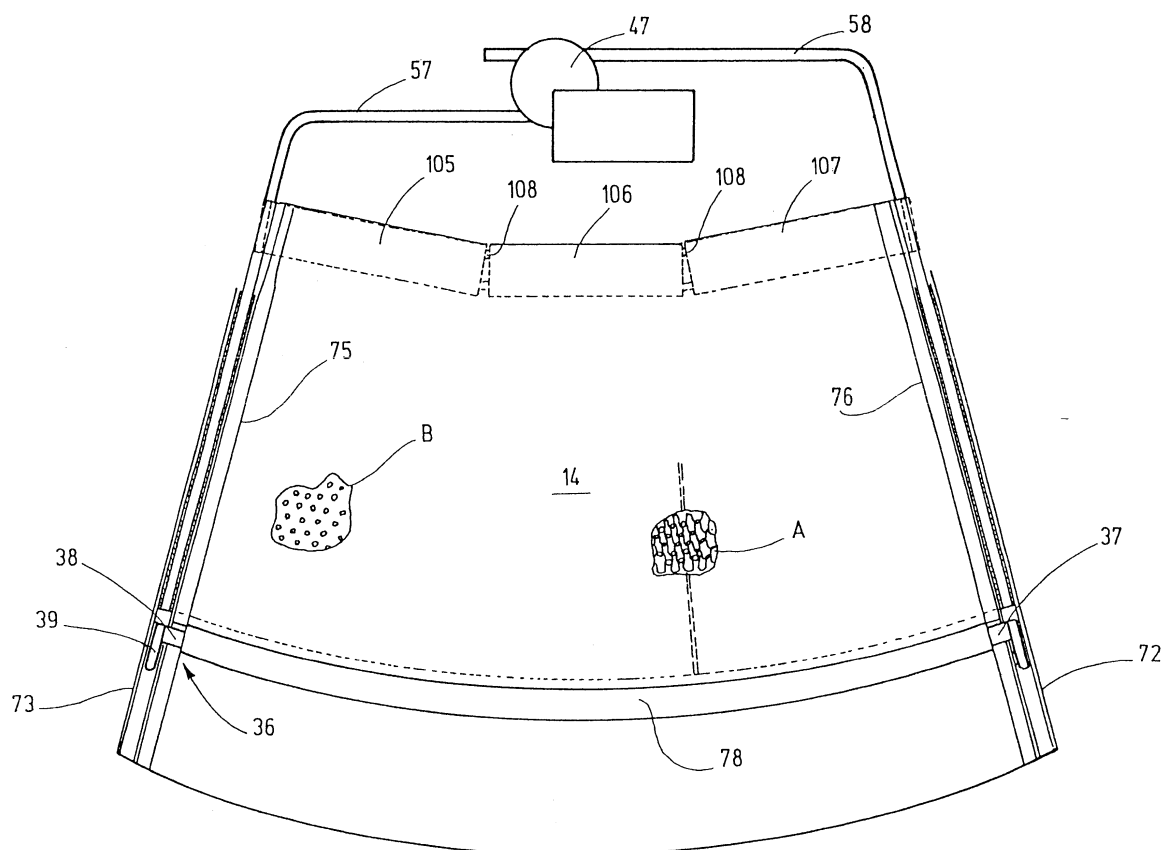
Family 9/20 - FAMPAT - ©Questel

Title

(EP1188591)

Window roller blind for curved or non rectangular window panes

Images



Publication numbers with kind code & date

JP4664547	B2	2011-01-14	JP4664547
DE50114957	D1	2009-08-06	DE50114957
EP1612071	B1	2009-06-24	EP1612071
KR100895206	B1	2009-05-06	KR100895206
DE50114717	D1	2009-04-02	DE50114717
EP1612070	B1	2009-02-18	EP1612070
KR20080013017	A	2008-02-12	KR20080013017
DE50109357	D1	2006-05-18	DE50109357
EP1188591	B1	2006-03-29	EP1188591
EP1612070	A3	2006-03-22	EP1612070
EP1612071	A3	2006-03-22	EP1612071
EP1612070	A2	2006-01-04	EP1612070
EP1612071	A2	2006-01-04	EP1612071
US6776211	B2	2004-08-17	US6776211
JP2002120558	A	2002-04-23	JP2002120558
DE10046553	A1	2002-04-04	DE10046553
KR20020022581	A	2002-03-27	KR20020022581
US20020033244	A1	2002-03-21	US20020033244
EP1188591	A1	2002-03-20	EP1188591



Abstract

(EP1188591)

The **roller** blind member is defined by two longitudinal edges (18, 19) running parallel or acutely to operating path. The **roller** blind member is variable in width, e.g. extends elastically widthwise so that any two points which each lie at the same height on different longitudinal edges change distance from each other as the blind is extended or retracted. The blind is moved by drives and the retracted blind is stored in a stowage area. The blind can be made from a perforated elastically extending foil web or mesh.

Inventors

includes a stationary base member (37), a rotatable driving member (39), a rotatable driven member (29) and a brake mechanism (71, 73, and 75). The brake mechanism (71, 73, and 75) automatically arrests rotation of the driven member (29) in respect of the stationary base member (37), when not rotated by the driving member (39). The brake mechanism includes a first wrap spring (73), adapted to yield a predetermined minimum brake force, and at least one second wrap spring (75), different in size from the first wrap spring (73) and adapted to yield a supplementary brake force, which together with the predetermined minimum brake force amounts to a predetermined maximum brake force.

Inventors

BOHLEN JÖRG

Latest standardized assignees - inventors removed

HUNTER DOUGLAS INDUSTRIES

Family 11/20 - FAMPAT - ©Questel

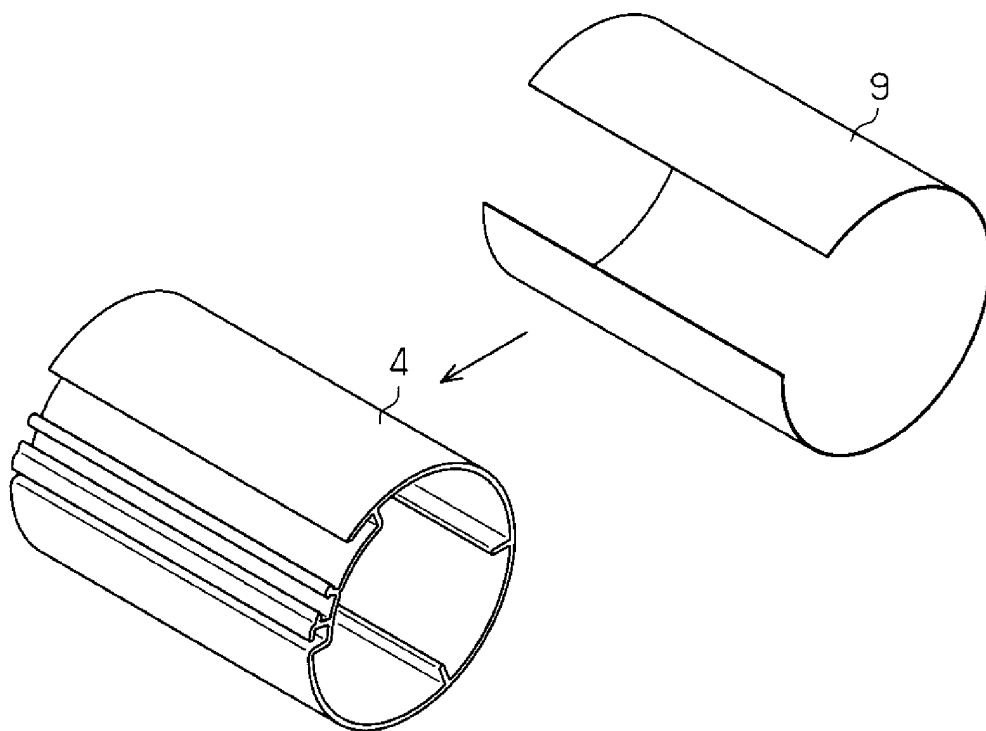
Title

(WO2012161242)

Winding misalignment adjustment member for roll blind, **winding**/closing device, roll blind, and method for producing or constructing roll blind

Images

[3]



Publication numbers with kind code & date

TWI553212	B	2016-10-11	TWI553212
CN103547762	B	2015-08-26	CN103547762B
JP5784983	B2	2015-07-31	JP5784983
JP5784994	B2	2015-07-31	JP5784994
JP5770531	B2	2015-07-03	JP5770531
CN103547762	A	2014-01-29	CN103547762
TW201303133	A	2013-01-16	TW201303133
JP2013002084	A	2013-01-07	JP2013002084
JP2012246635	A	2012-12-13	JP2012246635



JP2012246635	A	2012-12-13	JP2012246635				
JP2012246636	A	2012-12-13	JP2012246636				
WO2012/161242	A1	2012-11-29	WO2012161242				

Abstract

(WO2012/161242)

Provided is a **winding** misalignment adjustment member that can easily carry out the task of adjusting screen misalignment. A roll blind hangs and supports a screen from a **winding** shaft that is rotatably supported on a support bracket, the screen being wound onto or unwound from the **winding** shaft to raise and lower the screen, wherein an adjustment member (9) that can slide in the **axial** direction of the **winding** shaft (4) over an outer peripheral surface of the **winding** shaft (4) can be interlocked with the **winding** shaft (4) in the radial direction.

Inventors

YAMAGISHI KAZUTO

EBATO TAKENOBU

NAKAMURA HAJIME

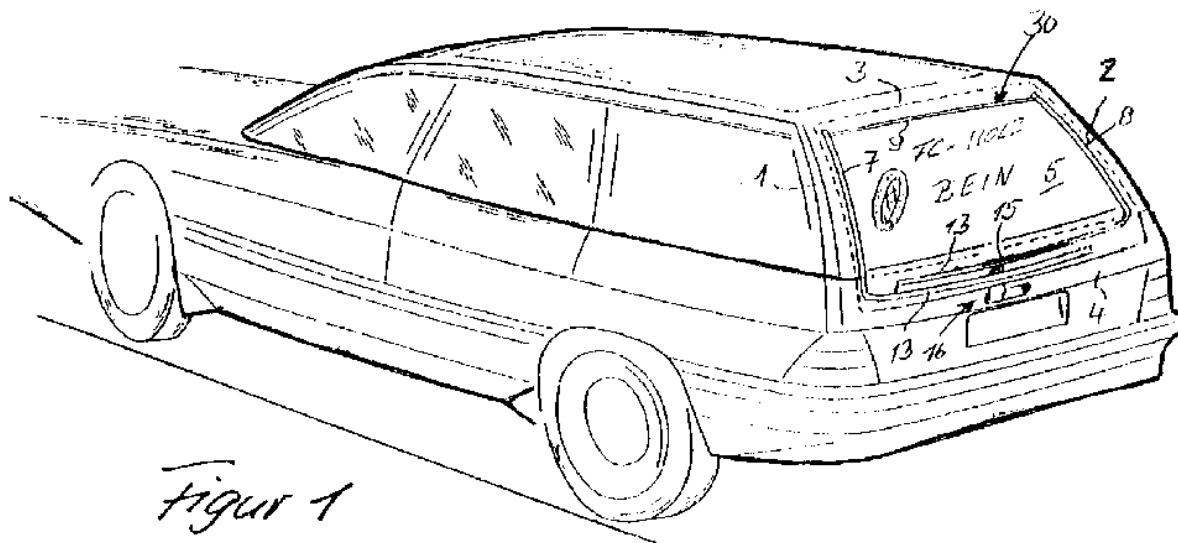
Latest standardized assignees - inventors removed

TACHIKAWA MANUFACTURING

Family 12/20 - FAMPAT - ©Questel

Title

(DE29608727)

Roller blind for windows of vehicles**Images****Publication numbers with kind code & date**

DE29608727	U1	1997-09-18	DE29608727
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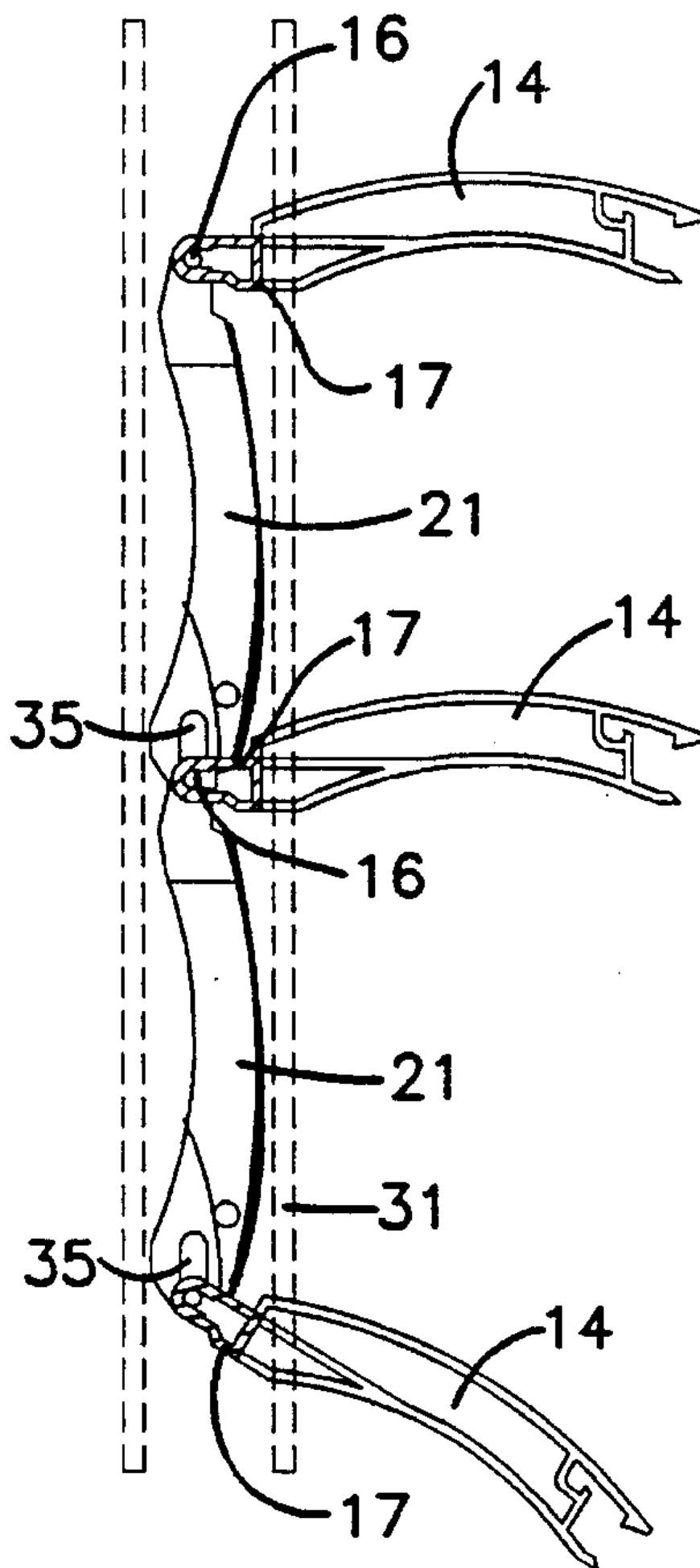
**Latest standardized assignees - inventors removed****BALL** WILFRIED

Family 13/20 - FAMPAT - ©Questel

Title

(EP-637357)

Roller shutter usable as a venetian blind.**Images**



Abstract

(EP0899412)

An improved bearing mechanism works in conjunction with the control rod of a vertical blind system (21) or a roller shade (101, 301) system to provide superior bearing and load handling capability. A series of cylindrical roller bearings (31, 187, 271, 333, 351), are supported within the grooves, and against a central rotational member having a conical bearing (151, 359, 391) for bearing against the rollers. a set screw (29) may be used to control the seating of the central rotational member within the conical bore (53), is used to make up any tolerance created through the manufacturing process, and can be used to increase the tension necessary to hold a roller shade in place. A balanced bearing system uses two sets of roller bearings (31, 187, 271, 333, 351), which may be frusto-conical, to make for a more stable, more secure, and more evenly balanced roller shade assembly. <IMAGE>

Inventors

TSER-WEN CHOU

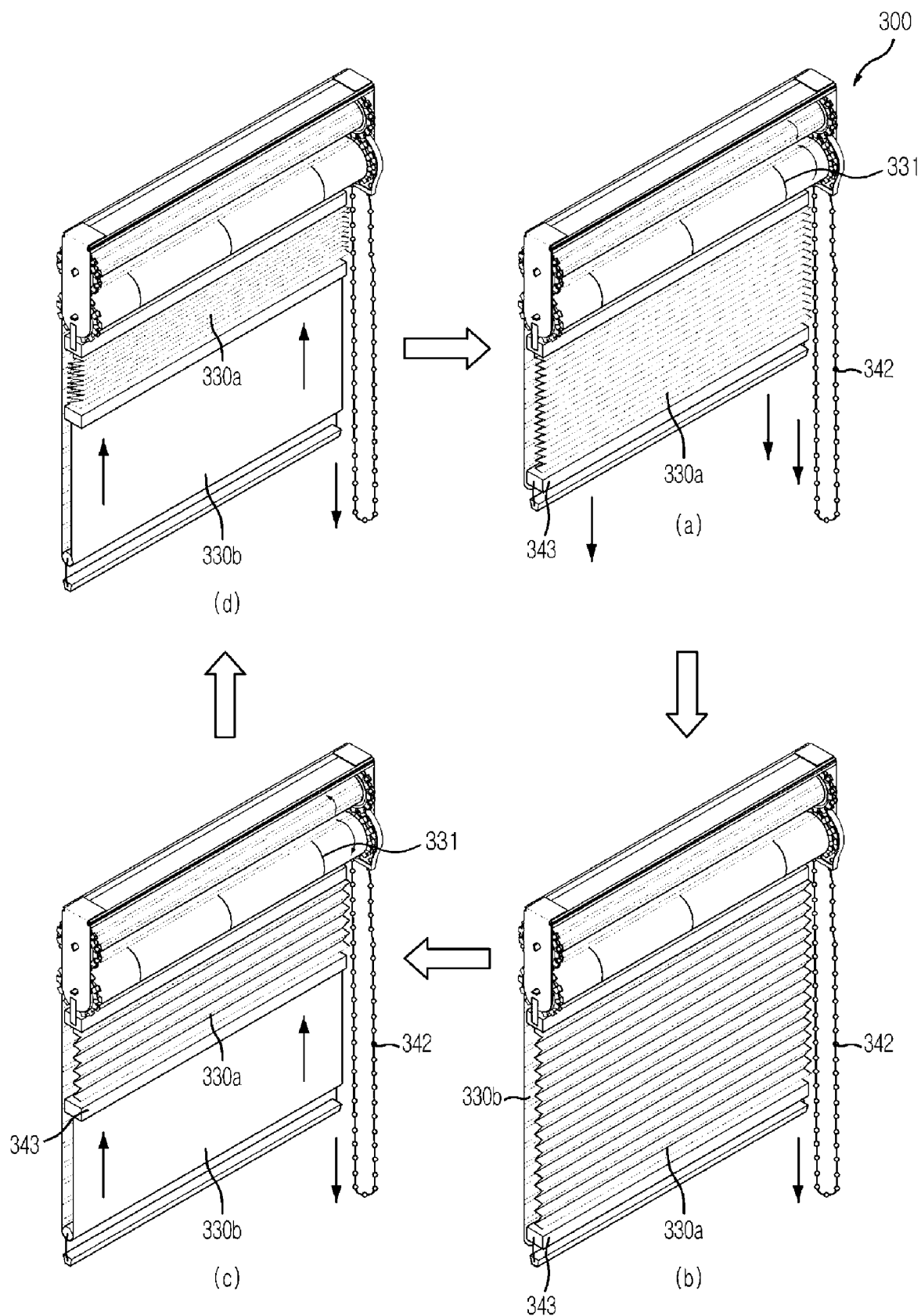
Family 15/20 - FAMPAT - ©Questel

Title

(EP1904710)

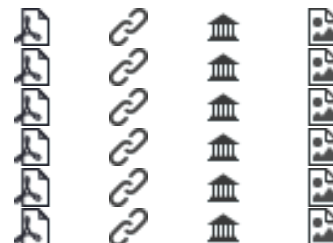
Multiple choice shade system

Images



Publication numbers with kind code & date

EP1904710	A4	2011-05-18	EP1904710
US7849907	B2	2010-12-14	US7849907
TWI310803	B	2009-06-11	TWI310803
JP2008545076	A	2008-12-11	JP2008545076
US20080190569	A1	2008-08-14	US20080190569
CN101213349	A	2008-07-02	CN101213349



EP1904710	A1	2008-04-02	EP1904710
TW200714792	A	2007-04-16	TW200714792
WO2007/004852	A1	2007-01-11	WO200704852



Abstract

(EP1904710)

A multiple choice shade system includes a main frame, a first **winding roller** rotatably supported on the main frame, a second **winding roller** rotatably supported on the main frame in a spaced-apart relationship with the first **winding roller**, a multiple choice shade element having a succession of screen sections, and an actuator for rotating at least one of the first **winding roller** and the second **winding roller**. The shade element has a first end fixedly secured to the first **winding roller** and a second end fixedly secured to the second **winding roller**. The shade element is suspended from the first **winding roller** and the second **winding roller** in such a manner that one of the screen sections is extended into or retracted from a target area as the first **winding roller** and the second **winding roller** are rotated by the actuator.

Inventors

JANG SEONG-RYONG

Latest standardized assignees - inventors removed

WINTEC KOREA

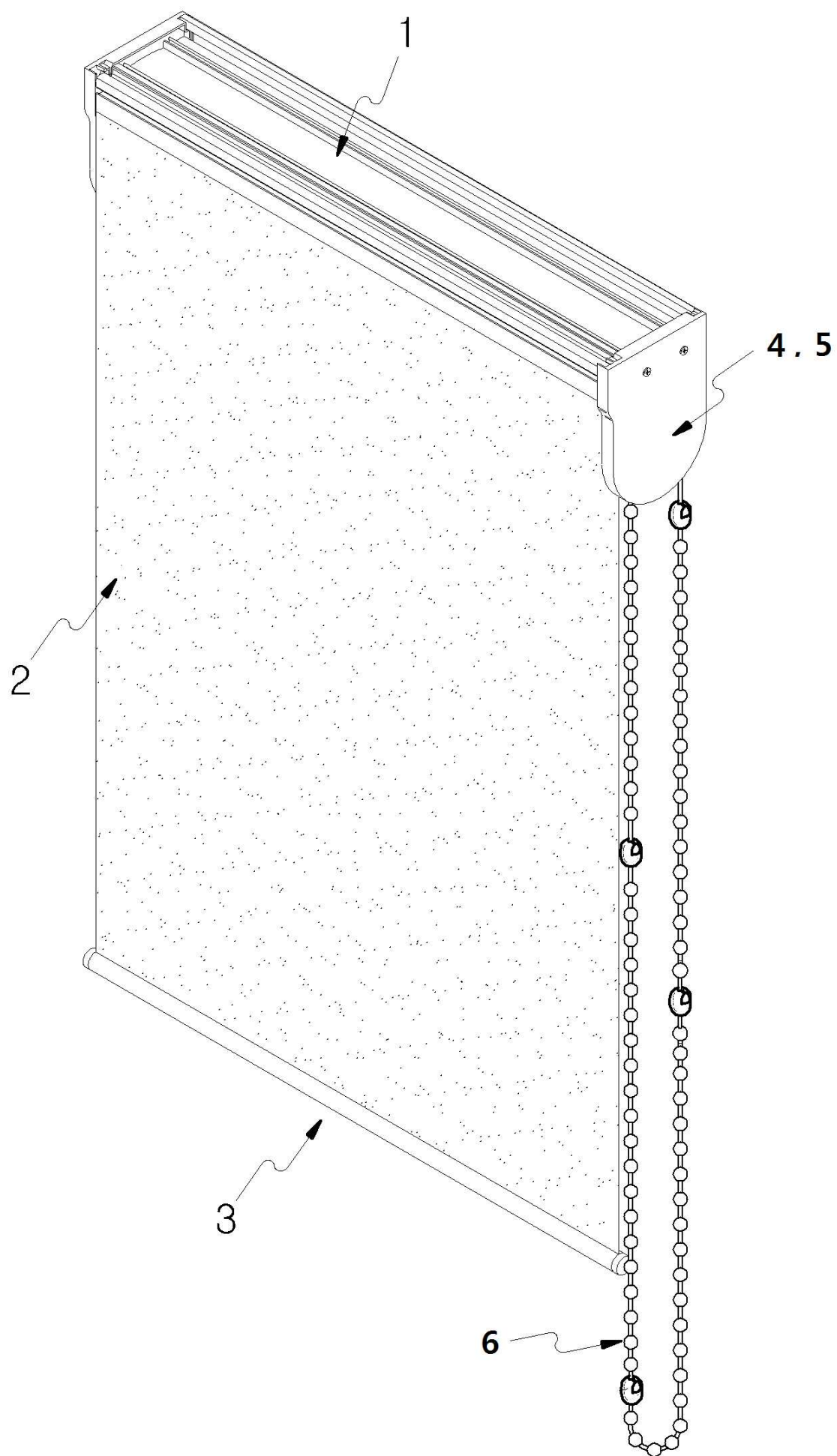
Family 16/20 - FAMPAT - ©Questel

Title

(KR20190090667)

A safety device module for a hoist device and the hoist device using the same

Images



Publication numbers with kind code & date

KR10-2019-0090667 A 2019-08-02 KR20190090667

**Abstract**

(KR10-2019-0090667)

The present invention provides a safety separation device module which is easily manufactured and economical and a hoist device having the same. The safety separation device module can respond to an emergency of an existing loop clutch. The safety separation device module comprises a module body (810), a driven pulley driver (820), and a driving pulley separation driver (830). The module body (810) individually includes each one among mounting rotation connection units. The module body (810) also individually includes: a driving gear individually having one side of a separation driving connection member; and a body gear coupling unit corresponding to each of the mounting rotation connection units of driven gears or the driving gear one to one in order for the driven gear to be connected by a gear. The driven pulley driver (820) includes: a driven pulley having a driven connection member connected to the driven connection member of the driven gear in the module body; and a fixing case including a cord assembly guide member for outside assembly of a rotation string or a **ball chain** commonly used and having a driven pulley mounting groove inside, wherein the fixing case also includes a fixing case having one among a load separation coupling unit and a fixing unit fixed to a fixing guide. The driving pulley separation driver (830) includes: the driving pulley installed to correspond to one side of the separation driving connection member connected to and separated from the other side of the separation driving connection member formed in the driving gear while the **ball chain** or the rotation string is wound; and a separation case including the mounting groove, the connection member, and the cord assembly guide member for the outside assembly of the rotation string or the **ball chain**. The separation case has one among the load separation coupling unit and a slide mounting unit mounted while being selectively connected to a slide guide to be linearly moved.

Inventors

JUNG, JAE-HYUN

JUNG, TAE ROK

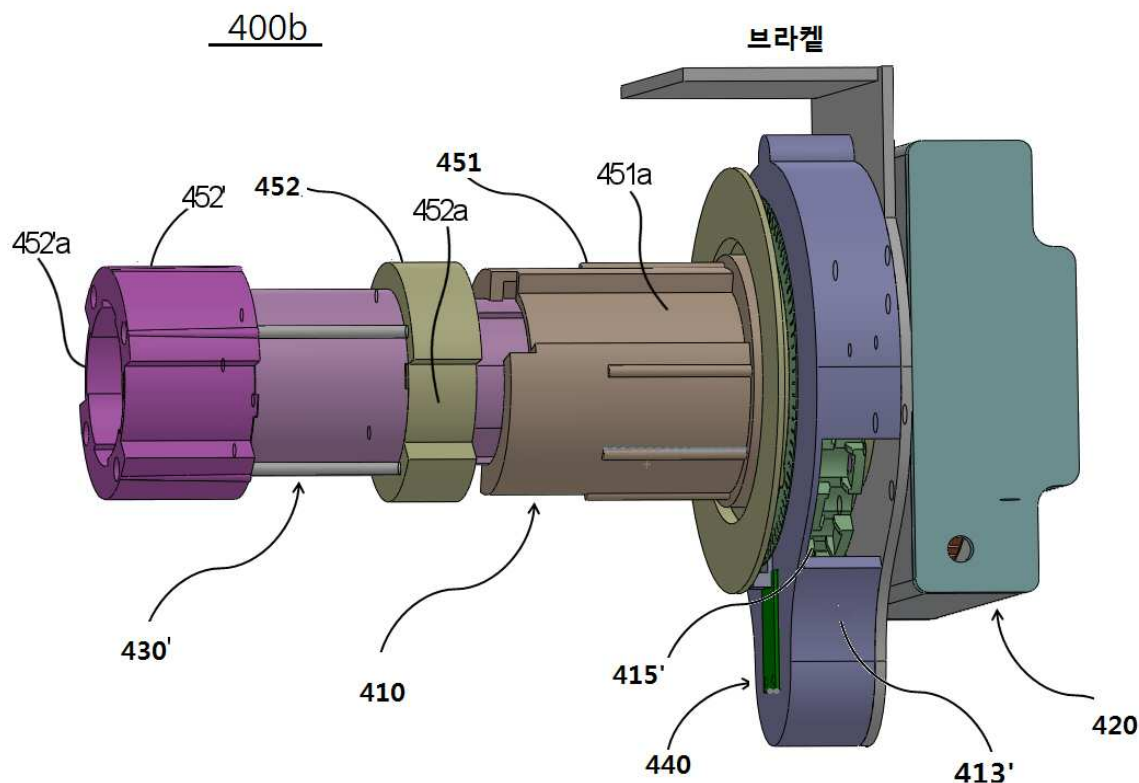
Family 17/20 - FAMPAT - ©Questel

Title

(KR20140029113)

Manual driving wheel of sunshade driving device

Images



Publication numbers with kind code & date

KR101469910	B1	2014-12-12	KR101469910
KR20140029102	A	2014-03-10	KR20140029102
KR20140029113	A	2014-03-10	KR20140029113
KR20140029117	A	2014-03-10	KR20140029117
KR101297719	B1	2013-08-20	KR101297719
KR101295684	B1	2013-08-14	KR101295684



Abstract

(KR20140029113)

The purpose of the present invention is to provide a driving wheel for protecting the safety of children via a method of **winding** and unwinding the end of one side of a **ball chain** or a rotating rope which is produced at low costs and operates silently. The manual driving wheel of the sunshade driving device including at least one pickup member for directly driving the sunshade rotating axis via a manual driving module and a wheel driving member having a manual driving wheel comprises a pulley body (415a'3) integrated with the wheel driving member (415'); a **winding** driving device (415a'1) combined with or integrated with the pulley body (415a'3) and including a first **winding** driving member (415a'1a); a first rotating rope (415a'2a) having one end fixed to one point of the first **winding** driving member (415a'1a) and wound around the bobbin of the first **winding** driving member (415a'1a) a predetermined number of times and having the other end withdrawn out of the **winding** driving device (415a'1) to be hung down by a predetermined length; and a restoring device for restoring the pulley body (415a'3) in an opposite direction if the pulley body (415a'3) is rotated in one direction. If the first rotating rope (415a'2a) is pulled downward, the first rotating rope (415a'2a) is withdrawn downward while the first **winding** driving member (415a'1a) continuously unwinds the first rotating rope (415a'2a) from the bobbin by rotating. [Reference numerals] (AA) Bobbin; (BB) Rope fixing device

Inventors

JUNG, TAE ROK

Latest standardized assignees - inventors removed

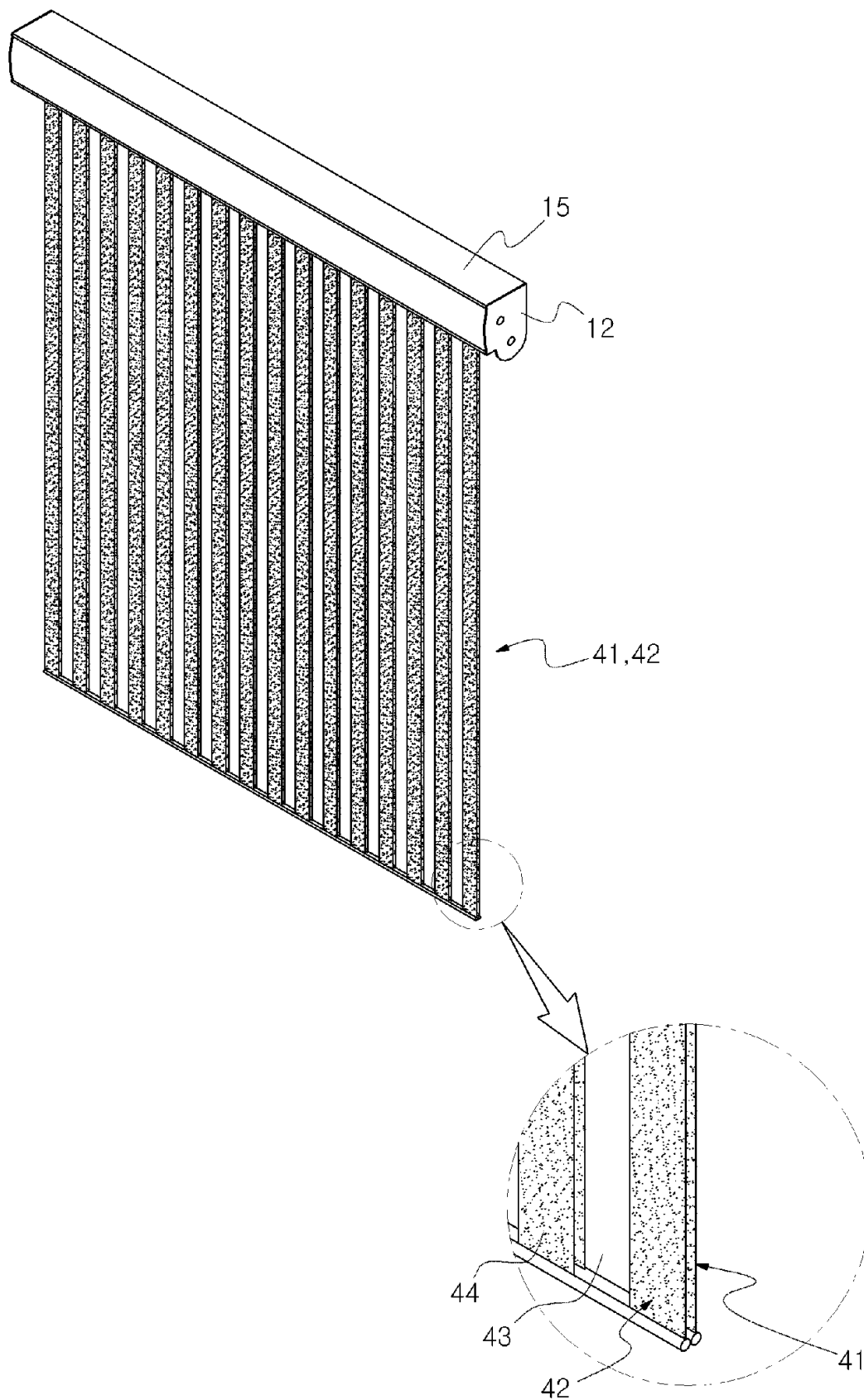
TERASOLAR

Family 18/20 - FAMPAT - ©Questel

Title

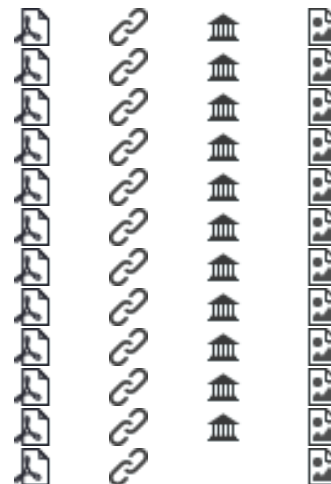
(EP2596196)

Dual roll blind

Images

Publication numbers with kind code & date

EP2596196	B1	2017-01-11	EP2596196
US9334687	B2	2016-05-10	US9334687
CN102985633	B	2015-05-27	CN102985633B
JP5662570	B2	2014-12-12	JP5662570
EP2596196	A4	2013-12-18	EP2596196
JP2013530327	A	2013-07-25	JP2013530327
EP2596196	A2	2013-05-29	EP2596196
US20130098564	A1	2013-04-25	US20130098564
CN102985633	A	2013-03-20	CN102985633
WO2012/011666	A3	2012-04-19	WO201211666
WO2012/011666	A2	2012-01-26	WO201211666
KR101023033	B1	2011-03-24	KR101023033

**Abstract**

(EP2596196)

The present invention relates to a dual roll blind enabling to control its light transmission amount and open and close with one **ball-chain**. The dual roll blind comprises a first screen and a second screen having light transmission portions and light shielding portions, respectively, a first **winding** bar and a second **winding** bar for respectively **winding** the firstscreen and the second screen, a first axis of rotation and a second axis of rotation to which the first **winding** bar and the second **winding** bar are respectively coupled, a first gear coupled to the first axis of rotation and rotationally driving the first **winding** bar, a second gear coupled to the second axis of rotation and rotating the second **winding** bar with rotating dependently on the first gear, a driving wheel rotating by a driving string and coupled to the first axis of rotation to transfer rotational force of the driving string to the first gear and the **winding** bar, a slide drive device engaging with the driving wheel to receive rotational force of the driving wheel and slide the first **winding** bar in a longitudinal direction of the first axis of rotation.

Inventors

JANG SEONG-RYONG

Latest standardized assignees - inventors removed

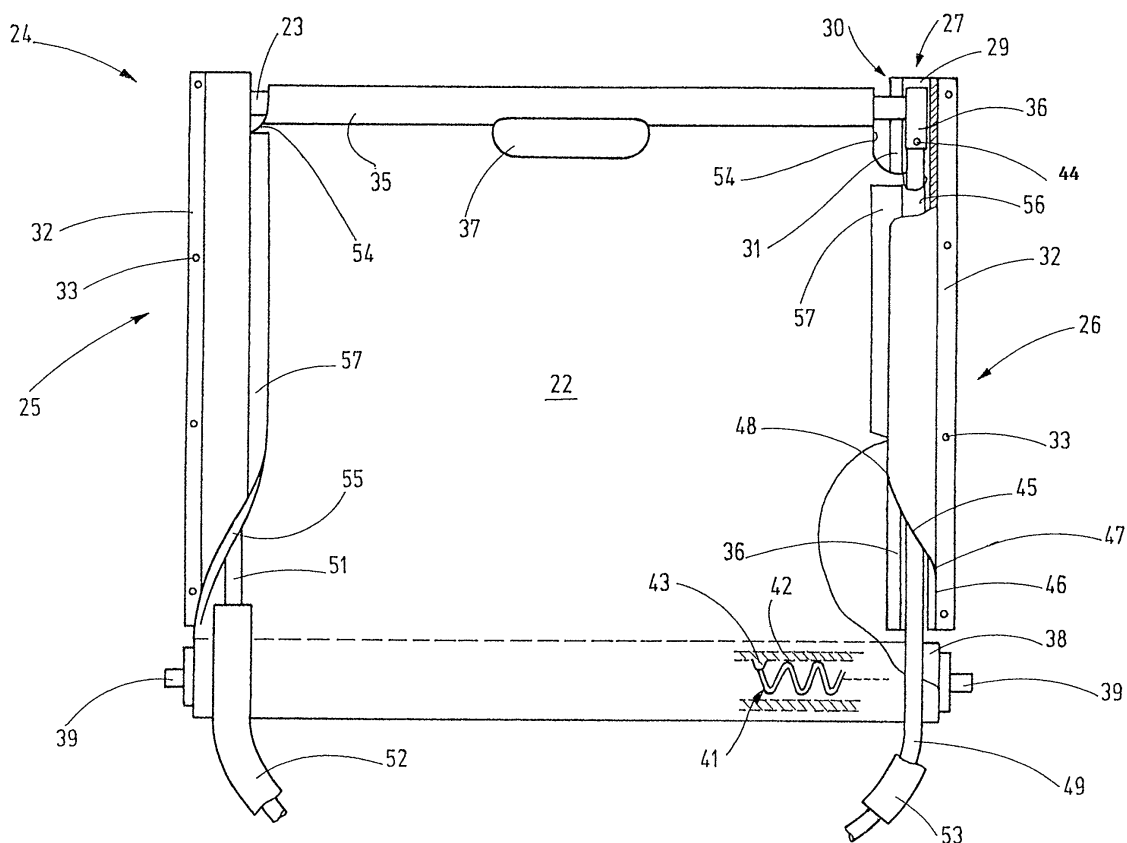
WINTEC KOREA

Family 19/20 - FAMPAT - ©Questel

Title

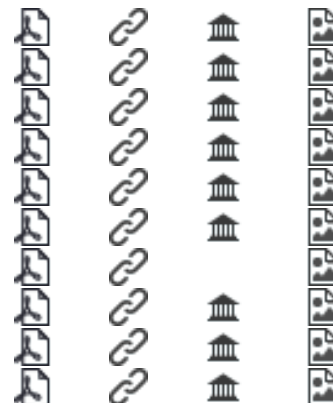
(EP1923245)

Roller blind for roof**Images**



Publication numbers with kind code & date

EP1923245	B1	2014-04-16	EP1923245
US7814958	B2	2010-10-19	US7814958
EP1923245	A3	2008-07-02	EP1923245
JP2008143515	A	2008-06-26	JP2008143515
US20080142172	A1	2008-06-19	US20080142172
CN101186178	A	2008-05-28	CN101186178
KR20080045621	A	2008-05-23	KR20080045621
DE102006054881	A1	2008-05-21	DE102006054881
EP1923245	A2	2008-05-21	EP1923245
DE202006019930	U1	2007-06-14	DE202006019930



Abstract

(EP1923245)

Roof-light **roller** blind for motor vehicle i.e. passenger car, has guide rails connected with tensile bar, where each rail forms inlet edge at end adjacent to **winding** shaft, and intermediate space of rails is smaller than breadth of web

The **roller** blind has two guide rails (25, 26) running parallel to each other on two sides of a clamped blind web (22), and two cylindrical piping units (49, 51) running in a guiding chamber (29) of the guide rails. The guide rails are connected with a tensile bar (23) in a tight manner or in a compression proof manner, where each of the guide rails forms an inlet edge (45) at an end, which is adjacent to a **winding** shaft (38). An intermediate space of the guide rails is smaller than the breadth of the blind web.

Inventors

HANSEN MELF

STARK WOLFGANG

Latest standardized assignees - inventors removed

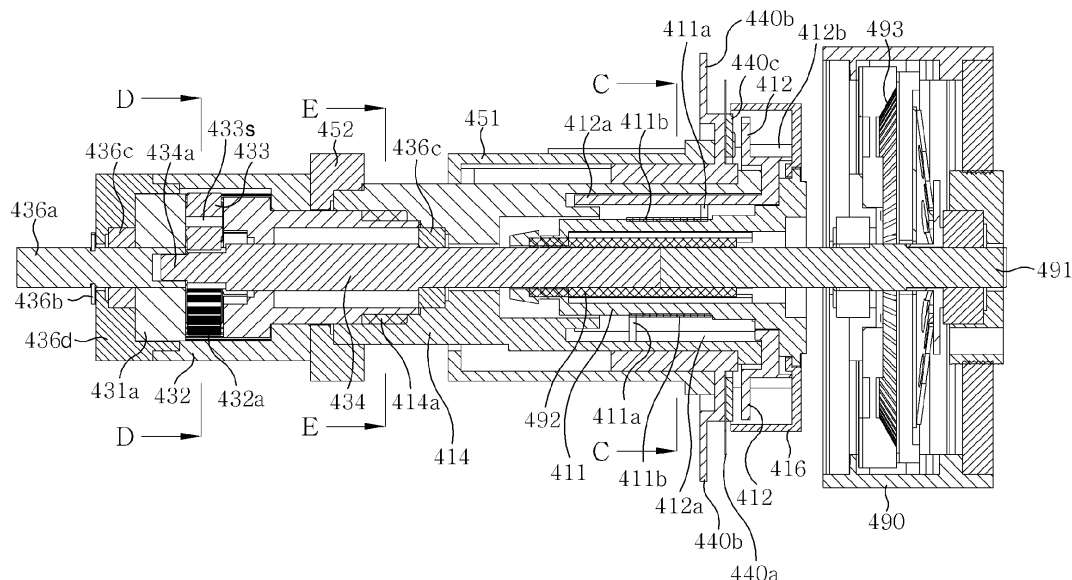
BOS

Family 20/20 - FAMPAT - ©Questel

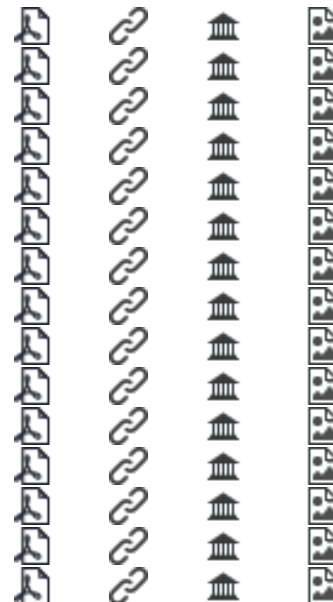
Title

(EP2977543)

Sunblind driving apparatus having returning function of driving wheel member

Images**Publication numbers with kind code & date**

JP6377638	B2	2018-08-22	JP6377638
EP2977543	B1	2018-06-20	EP2977543
AU2014207927	B2	2018-02-01	AU2014207927
CN104937207	B	2018-01-30	CN104937207B
CA2897958	C	2017-10-24	CA2897958
US9790738	B2	2017-10-17	US9790738
EP2977543	A4	2016-12-07	EP2977543
IN6707/DELNP/2015	A	2016-07-22	IN2015DN06707
JP2016510369	A	2016-04-07	JP2016510369
EP2977543	A1	2016-01-27	EP2977543
US20150330144	A1	2015-11-19	US20150330144
CN104937207	A	2015-09-23	CN104937207
AU2014207927	A1	2015-08-20	AU2014207927
CA2897958	A1	2014-07-24	CA2897958
WO2014/112837	A1	2014-07-24	WO2014112837

**Abstract**

(EP2977543)

The present invention relates to the sunshade driving device comprising that: a returning function of a manually driving module (410) is actuated by a **ball chain** or a rotating string; a rotating shaft (421) is attachable/detachable to the power drive means or the rotating shaft stopping means separated from a manual driving module; at least one pick-up member (452, 452') to directly drive the sunshade rotating shaft or driving the rotating shaft (421) by the manual drive module (410); a wheel driving member (415') having a manual pulley (415a) or a manual driving wheel (412b) being fitted the **ball chain** or rotating string; wherein the wheel drive member (415') will be engaged to the manual rotating wheel (412b) and the manual pulley (415a) for rotating together in one direction, and the wheel driving member (415') will disengaged the manual rotating wheel (412b) and the manual pulley (415a) for independently rotating each other in opposite direction activated by a bi-

directional driving clutch (415b).

Inventors

JUNG TAEROK

JUNG JAEHEUN

Latest standardized assignees - inventors removed

TERASOLAR