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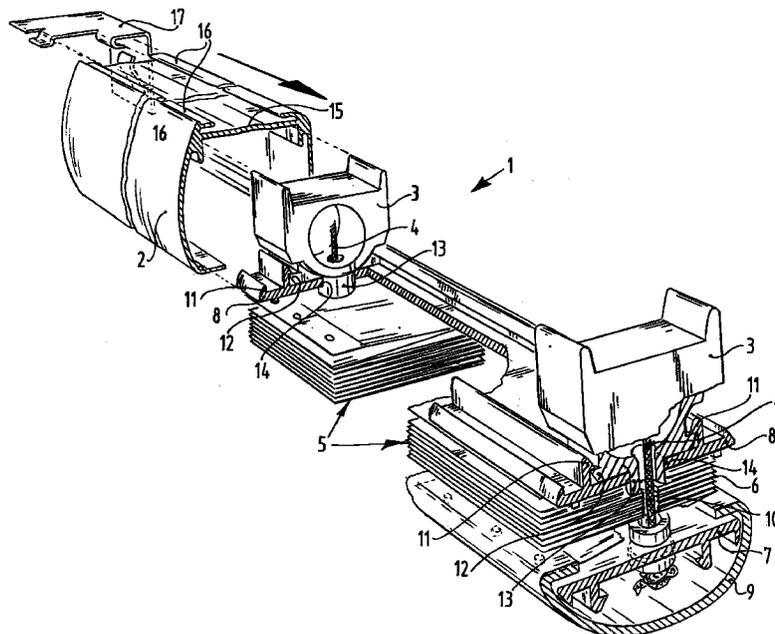
(54) Window covering and profile part

(57) The invention relates to a window covering for optionally either covering or leaving wholly or partially clear at least one window, comprising:

nism, wherein the drive mechanism comprises at least one cable reel which is rotatable round a shaft and which co-acts with a cord forming part of the screen means, which cable reel supports on the housing with interposing of at least one bearing block.

- displaceable screen means,
- a drive mechanism connected to the screen means for displacing the screen means,
- a housing for stationary mounting for the purpose of accommodating the drive mechanism, and
- operating means connected to the drive mecha-

The invention also relates to a profile part for fixing to screen means of such a window covering.



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Description

The invention relates to a window covering for optionally either covering or leaving wholly or partially clear at least one window, comprising:

- displaceable screen means,
- a drive mechanism connected to the screen means for displacing the screen means,
- a housing for stationary mounting for the purpose of accommodating the drive mechanism, and - operating means connected to the drive mechanism,

wherein the drive mechanism comprises at least one cable reel which is rotatable round a shaft and which co-acts with a cord forming part of the screen means, which cable reel supports on the housing with interposing of at least one bearing block. The invention also relates to a profile part for fixing to the screen means of such a window covering.

Existing window coverings of the type stated in the preamble represent a very common product for screening a window against for instance light incidence or to prevent people looking in. The screen means can herein consist for instance of a pleated fabric or a double-pleated fabric to which a lower profile is fixed at the bottom. The lower profile functions herein as weight to cause the screen means to hang vertically downward and also forms a point of engagement for the cord or cords with which the screen means can be moved upward respectively downward. It should be noted that in practice at least two cords are virtually always arranged in a window covering to hold the lower profile in a stable horizontal position.

Another embodiment of a window covering of the type referred to in the preamble is used to screen for instance a conservatory window. Such a conservatory window may be placed at an angle and, in the most extreme case, may be placed horizontally. The screen means, such as for instance a pleated fabric or a double-pleated fabric, are fixed on one side to a stationary housing. The window covering also comprises a drive mechanism for causing the screen means to move along the window. In order to guide and hold the screen means in position the window covering which is fixable at an angle is generally provided with guide profiles or guide cords.

The housing is formed by a profile part of substantially H-shaped cross section. On one side the profile part functions as housing for accommodating the drive mechanism, while the other side of the profile part functions as housing for receiving a profile connected to the screen means.

The assembly of a window covering with such a housing requires a relatively large amount of time.

The present invention has for its object to provide an improved window covering, assembly of which is comparatively simple and wherein the construction height of the housing is limited compared with construc-

tion height required in the prior art.

The present invention provides for this purpose a window covering of the type stated in the preamble, characterized in that a profile edge connected to the screen means engages directly on the bearing block. This can be realized for instance in that the housing has a substantially U-shaped cross section, the non-closed side of which is directed toward the screen means. The window covering according to the invention differs from the window coverings of this type known in the prior art in that no part of the housing is situated between the screen means and the drive mechanism. The absence of such a part of the housing limits the construction height; an element of the housing co-defining the height can after all be omitted. Another advantage of the housing of substantially U-shaped cross section is that it is closed at the top. The drive mechanism is hereby better protected from the environment whereby for instance dust will collect less quickly in the vicinity of the drive mechanism and/or the housing. A further advantage of a better protection of the mechanism is that noise caused by the drive mechanism is suppressed better. The window covering according to the invention will therefore also be quieter than window coverings applied heretofore. Another important advantage of the window covering according to the invention is that the time required for assembly can be reduced considerably and that the chance of errors and loss of material can be limited. An important reason herefor is that no passage openings for cords have to be arranged in the housing according to the invention. The fastening of the cord to drive mechanism and screen means is also simple to realize. The fastening of the cord to both said components can take place without the housing having to be present therein. In the prior art this must take place while the housing is situated between the two components.

A preferred embodiment of the window covering is characterized in that the profile edge connected to the screen means comprises integrally moulded coupling means for co-action with a bearing block. The thus effected connection can for instance be a snap, clamp or rotating connection. This step simplifies assembly to an even greater degree.

A guide for a cord is preferably included in the bearing block and a recess connecting onto the guide is arranged in the profile edge connected to the screen means. If the recess connects onto the guide the latter can also serve to guide the cord through the recess. Due to this step the quality of the recess is not subject to rigorous requirements; neither does a separate guide have to be arranged therein nor do the edges thereof have to be rounded to prevent damage to the cord, since the guide in the bearing block also functions as guide through the recess. This limits production costs to an even further extent.

The housing is preferably provided on the side located opposite the non-closed side with coupling means for anchoring the housing to a structural part.

This latter can for instance be formed by a ceiling or a frame. Due to the closed top part of the housing these coupling means can take a relatively simple form. An example hereof is for instance a recess in the wall part through which a screw or nail can engage on the structural part.

The invention also comprises a profile part fixed to screen means of the window covering as described above, characterized in that the profile part is provided on one side with integrally moulded coupling means for co-action with at least one bearing block. The advantage of such a profile part has already been explained with reference to the said advantages in respect of the window covering, wherein a simplified assembly is mentioned as the most significant advantage.

The present invention will be further elucidated with reference to the non-limitative embodiment shown in the annexed figure. The figure shows:

a three-dimensional view of a cut-away window covering 1 according to the invention. Window covering 1 comprises a housing 2 manufactured from a profile part of substantially U-shaped cross section. Such a housing 2 can be manufactured relatively inexpensively from metal or plastic, for instance by extrusion. In housing 2 can be fixed bearing blocks 3 for rotatably supporting a drive mechanism not shown in this figure. This drive mechanism (not shown) can be formed for instance by a winding mechanism with cord reels. The drive mechanism engages on the cords 4 with which screen means 5 can be lowered or pulled up as required. In the situation of screen means 5 shown here they are fully raised. Screen means 5 are manufactured from a pleated fabric 6 to which a lower profile 7 is fixed at the bottom and a profile part 8 is fixed at the top. Lower profile 7 is further covered by a protective cap 9. This latter has the purpose of concealing from view the underside of lower profile 7 and the fastening of cords 4 to profile part 7. Protective cap 9 can also serve for arrangement of weight. Both the lower profile 7 and profile part 8 can be fixed to the pleated fabric 6 by means of glueing or by means of mechanical coupling. The pleated fabric 6 shown in this figure is only used by way of illustration. The form thereof may also differ from the form chosen here. A double-pleated fabric 6 is for instance likewise possible. Continuous openings 10 are arranged in the pleated fabric 6 for passage of cords 4.

Characteristic for the present invention is the direct engagement of profile part 8 onto bearing blocks 3. By means of close-fitting coupling means 11 the profile part 8 can engage in very simple manner on coupling edges 12 arranged close to the underside of bearing blocks 3. Also shown here is that bearing blocks 3 comprise protruding cord guides 13 which co-act with recesses 14 in profile parts 8. The fitting of screen means 5 to bearing

blocks 3, the through-feed of cords 4 and the fastening of cords 4 to lower profile 7 and the drive mechanism (not shown) can take place remotely of housing 2. Only after assembly has taken place can the housing 2 be arranged. This simplifies assembly relative to the prior art.

In respect of housing 2 can be noted that the top side 15 is fully closed off, whereby the winding mechanism is well protected from the environment. Further situated on the top of housing 2 are coupling protrusions 16 which can co-act with a fixing bracket 17. Numerous alternatives can however be envisaged for this fixing construction.

15 Claims

1. Window covering for optionally either covering or leaving wholly or partially clear at least one window, comprising:
 - displaceable screen means,
 - a drive mechanism connected to the screen means for displacing the screen means,
 - a housing for stationary mounting for the purpose of accommodating the drive mechanism, and
 - operating means connected to the drive mechanism, wherein the drive mechanism comprises at least one cable reel which is rotatable round a shaft and which co-acts with a cord forming part of the screen means, which cable reel supports on the housing with interposing of at least one bearing block, **characterized in that** the profile edge connected to the screen means engages directly on the bearing block.
2. Window covering as claimed in claim 1, **characterized in that** the housing has a substantially U-shaped cross section, the non-closed side of which is directed toward the screen means.
3. Window covering as claimed in claim 1 or 2, **characterized in that** the profile edge connected to the screen means comprises integrally moulded coupling means for co-action with a bearing block.
4. Window covering as claimed in any of the foregoing claims, **characterized in that** a guide for a cord is received in the bearing block and a recess connecting onto the guide is arranged in the profile edge connected to the screen means.
5. Window covering as claimed in any of the foregoing claims, **characterized in that** the housing is provided on the side located opposite the non-closed side with coupling means for anchoring the housing to a structural part.
6. Profile part for fixing to screen means of a window

covering as claimed in any of the claims 1-5, **characterized in that** the profile part is provided on one side with integrally moulded coupling means for co-action with at least one bearing block.

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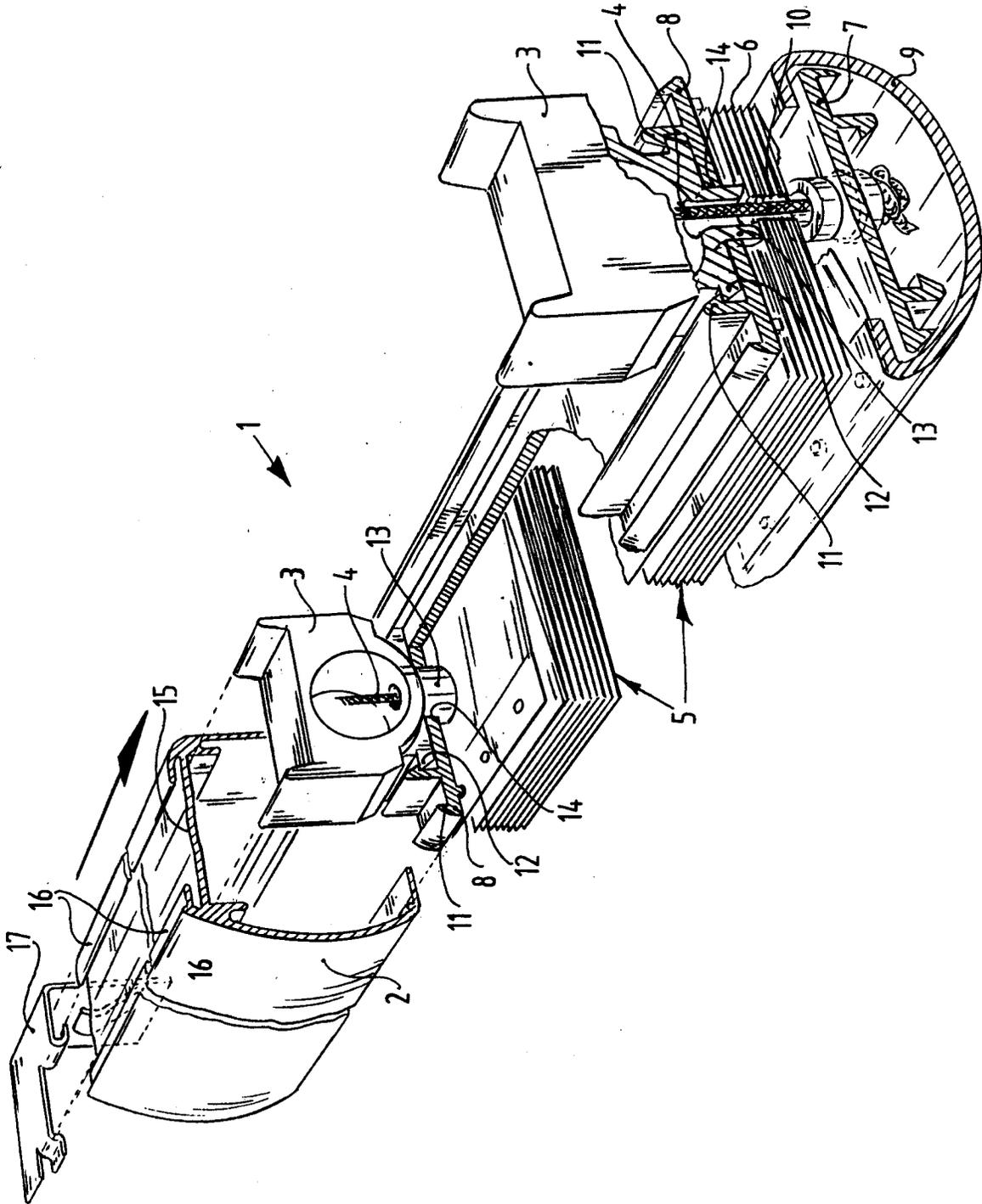
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EUROPEAN SEARCH REPORT

Application Number
EP 97 20 0992

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	BE 882 585 A (ZONWERING NIJMEGEN) 2 October 1980 * page 3, line 1 - page 4, line 1 * * page 6, last paragraph - page 7, paragraph 2; figures *	1,2,5	E06B9/323 E06B9/388
A	AU 24374 77 A (MASTER RECESSED SYTEMS) 26 October 1978 * page 12, line 10 - line 23; figure 2 *	1,2	
A	DE 92 00 503 U (WAREMA RENKHOFF) 16 April 1992 * claim 1; figure *	1,2	
A	US 2 320 852 A (DE FALCO) 1 June 1943 * column 1, line 20 - line 25 * * column 1, line 47 - line 49; figures *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E06B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		9 July 1997	Fordham, A
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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