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(54) **Device for cleaning blinds**

(57) The present invention relates to a device for cleaning door and window roller blinds which allows cleaning by brushing both the outer and the inner part by simply raising and/or lowering the same and which basically comprises two brushes, one outer brush (2) coupled in the upper part of the window frame (4) and another

inner (3) which is fixed close to the lower groove of the box (9) of the drum (10) through which the blind (1) exits, wherein said brushes have a length approximately equal to the width of the blind (1) and are placed such that the bristles of both come into contact with and brush against the outer and inner surface of the blind (1) cleaning it.

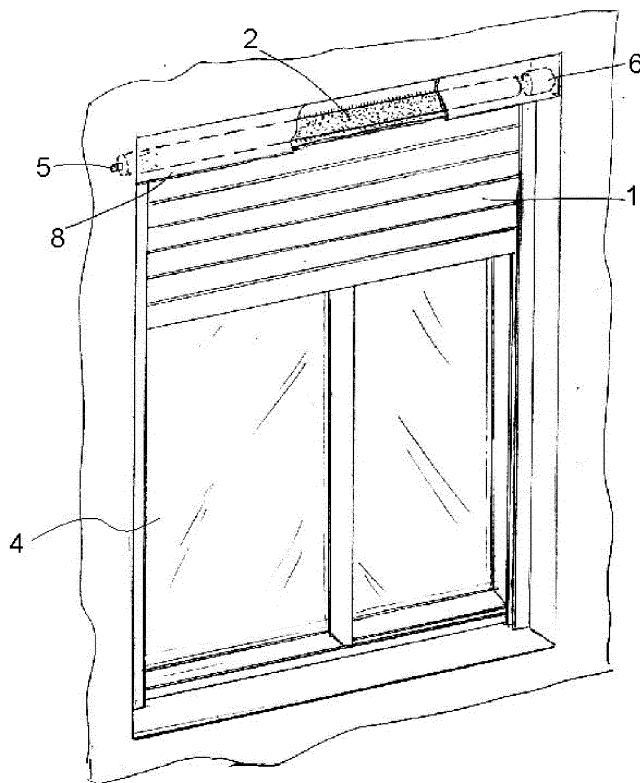


Fig. 1

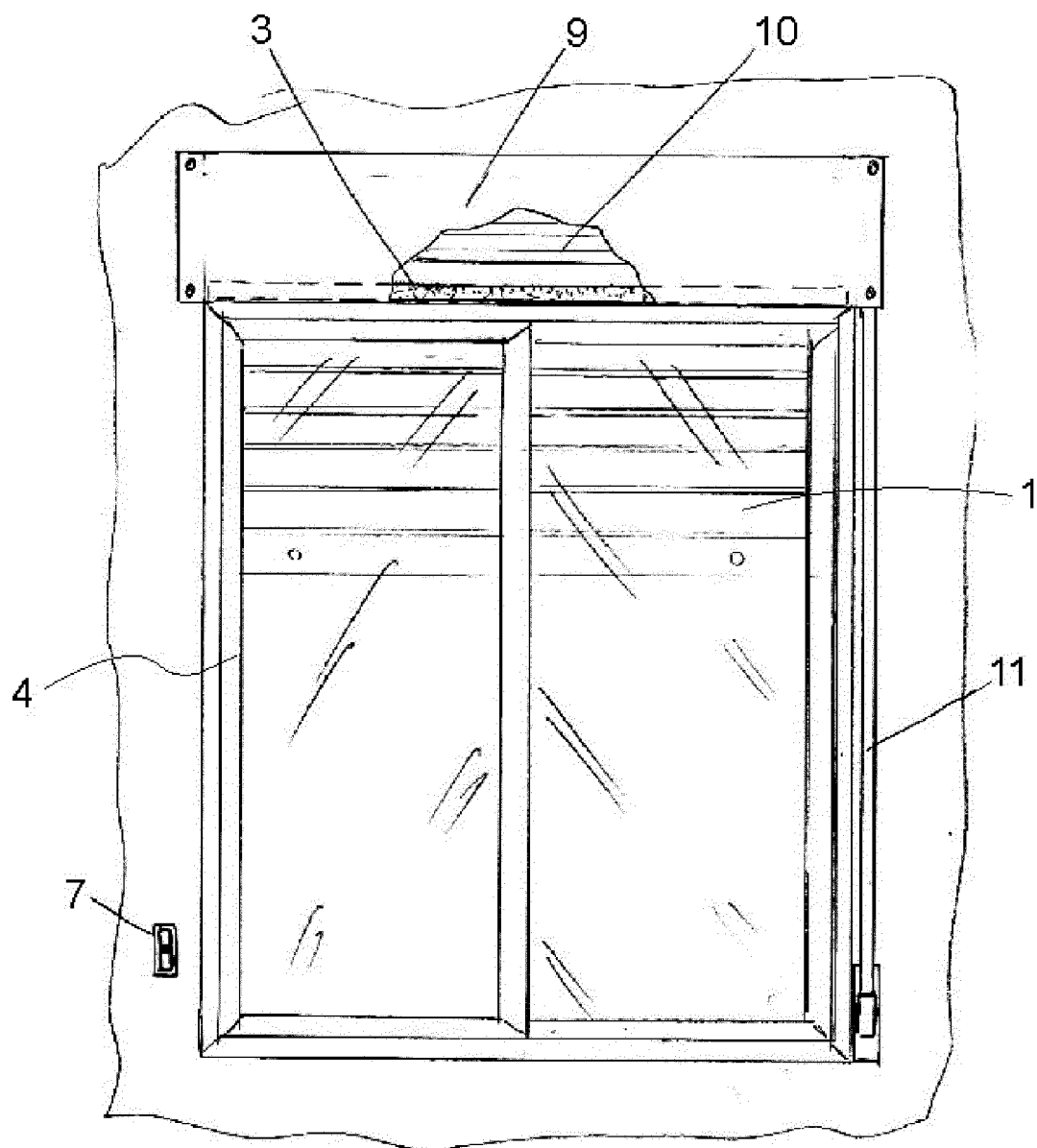


Fig. 2

Description

Object of the Invention

[0001] The invention, as the title of the present specification expresses, refers to device for cleaning blinds, the advantages and novel features of which will be subsequently described in detail, implying an innovative contribution to the current state of the art.

[0002] More specifically, the object of the invention focuses in a device made up essentially of a pair of rollers which is intended for cleaning both the inside and the outside of the door and window roller blinds in a practical and comfortable manner, it being applicable to be installed in the door or window itself producing a brushing of the same by simply raising or lowering it and it further allows incorporating a mechanism which can be driven every time an extra cleaning is desired.

Application Field of the Invention

[0003] The field of application of the present invention is encompassed within the sector of the industry dedicated to the manufacturing of mechanisms and devices for blinds.

Background of the Invention

[0004] As is known, roller blinds, especially those which are made up of slats attached to one another which are fitted between side guides, have the common problem of the difficult cleaning thereof, especially on its outer part if the window on which they are arranged is tall, as well as on the inner part when the window or door does not open completely.

[0005] Given the described difficulty in cleaning this type of blinds, it further occurs that such cleaning is usually performed only in a sporadic manner or, at least in an infrequent manner, therefore when it is carried out the dirt accumulated in the blind is greater and therefore more difficult and cumbersome to clean.

[0006] The objective of the present invention is to therefore provide to the state of the art a system which prevents said drawbacks, providing a continuous cleaning of the blinds every time they are raised or lowered, as well as an extra cleaning every time it is desired, without it involving any additional effort and can therefore be performed as frequently as desired, thus preventing dust or other elements from accumulating and adhering to the same, always keeping it perfectly clean both on its outer and on the inner part.

[0007] It must be further mentioned that although the existence of systems for cleaning blinds such as incorporating brushes in the slit where the blind lowers into is known, the existence of any other device, mechanism or invention with a similar application having technical, structural and constitutive features similar to those of the device for cleaning proposed herein, is unknown by the

applicant.

Description of the Invention

[0008] Thus, the device for cleaning blinds proposed by the present invention is configured as an outstanding novelty within its field of application in light of its implementation and specifically, the indicated objective for preventing the drawbacks of cleaning which the roller blinds have is satisfactorily achieved, the characterising details being those that make it possible and distinguish it from the one already known on the market, conveniently included in the final claims accompanying the present specification thereof.

[0009] To that end, and specifically, the device proposed by the invention is configured from respective brushes, one outer brush and another inner brush, arranged such that, they are fixed horizontally to the upper part of the window frame occupying the entire width thereof whereby, upon raising or lowering the blind, the bristles provided therein exert a brushing friction on the inner and outer surface of the slats of the blind.

[0010] Furthermore, one of or both said brushes are made up of rollers which can incorporate a rotation mechanism which, preferably, is electrically driven by means of incorporating a small electric motor duly connected to its corresponding switch, such that, in addition to the brushing produced every time the blind is raised or lowered, a more thorough cleaning can be performed by rotating said mechanism for a period of time in a specific area of the blind or along its entirety raising or lowering it while the rollers rotate.

[0011] It is therefore affirmed that the proposed device for cleaning blinds represents an innovative structure having structural and constitutive features unknown up until now for such purpose, reasons which together with its practical usefulness provide it with sufficient basis for obtaining the privilege of exclusivity applied for.

Description of the Drawings

[0012] To complement the description of the device object of the invention that is being made and for the purpose of aiding to better understand the features which distinguish it, a set of drawings is attached as an integral part of the present specification in which the following has been depicted with an illustrative and nonlimiting character:

Figure 1 shows a perspective view of the outer part of a window with roller blind to which the device object of the invention has been incorporated, the outer roller concealed behind a lid which has been depicted partially sectioned in order to show it can be seen therein.

Figure 2 shows a view similar to the above, in this case of the inner part of the window, the inner roller which the device according to the invention has can

be seen therein behind the box of the drum of the blind which has been depicted partially sectioned,.

Preferred Embodiment of the Invention

[0013] In view of the aforementioned figures, and according to the numbering used therein, how the proposed invention comprises the parts and elements which are indicated and described in detail below can be seen.

[0014] Thus, as observed in said figures, the device in question which has already been indicated is applicable to a blind (1) of the roller type, it is configured from two brushes, one outer brush (2) and another inner brush (3), which are provided with bristles, have a length approximately equal to the width of the blind (1) to which it is designed for and therefore to the width of the window frame (4) or door in which said blind is incorporated.

[0015] The outer brush (2) is coupled horizontally in the upper part of the window frame (4), being fixed on both sides of said frame by its ends at the required distance so that the bristles thereof come into contact with the outer surface of the blind (1) and brush against it. Therefore, every time the blind is raised or lowered, the outer brush (2) brushes the outer surface of the blind (1).

[0016] Optionally, this outer brush (2) as seen in Figure 1, is also a roller and one of the ends of its shaft (5) is coupled to a rotation mechanism which is driven by means of a small electric motor (6) conveniently connected to a three position (stop, forward, back) switch (7) provided in the inner part of the window (4), such that the outer roller (2) rotates in one direction or another, as desired, in order to perform a more efficient extra cleaning and independent to the action of raising or lowering the blind, whether it is a manual system for lifting by belt (11) or electric.

[0017] Lastly, it must be mentioned that the outer brush (2) is concealed behind a lid (8) which, fixed integrally in the window frame (4), covers it longitudinally protecting it from possible foreign elements which could block its operation as well as from the rain.

[0018] In turn, the inner brush (3) are also coupled in the upper part of the window frame (4) at the required distance so that the bristles thereof come into contact with the surface of the blind (1) and brush against it, in this case for the bristles to brush against the inner surface thereof, preferably being fixed close to the lower groove of said box (9) through which the blind exits given that the box (9) where the drum (10) of the blind (1) is housed is usually found in said inner area as seen in Figure 2, thus remaining concealed and protected.

[0019] Optionally, said inner brush (3) could also be a roller and incorporate a rotation mechanism, either associated to the same electric motor (6) of the roller of the outer brush (2) or to another individual one, but associated by means of the wiring corresponding to the same switch (7).

[0020] Having sufficiently described the nature of the present invention, as well as the way of carrying it out to

practice, a further explanation is not considered necessary for any person skilled in the art to understand the scope and advantages derived from it, it must be stated that it could be carried out into practice within its essentiality in other embodiments differing in detail from that indicated by way of example, which embodiments will also achieve the protection sought provided that the fundamental principle thereof is not altered, changed or modified.

Claims

1. Device for cleaning blinds specifically roller blinds, **characterised in that** it comprises two brushes, one outer brush (2) and another inner brush (3), having a length approximately equal to the width of the blind (1) to which it is designed for and therefore to the width of the window frame (4) or door in which said blind is incorporated, being coupled in the upper part of the window (4) fixed at the required distance so that the bristles of both brushes (2, 3), respectively, come into contact with and brush against the outer and inner surface of the blind (1).
2. Device for cleaning blinds according to claim 1, **characterised in that** the outer brush (2) are coupled in the upper part of the window frame (4), being fixed to both sides of said frame by its ends; and **in that** said outer brush (2) is concealed behind a lid (8) fixed integrally in the window frame (4) longitudinally covering it protecting it from possible foreign elements as well as from the rain.
3. Device for cleaning blinds according to claim 1 and 2, **characterised in that** the outer brush (2) is a roller and one of the ends of its shaft (5) is coupled to a rotation mechanism driven by means of a small electric motor (6) connected to a three position (stop, forward, back) switch (7) provided in the inner part of the window (4) for rotating the roller of the outer brush (2) in one direction or another, independently to the action of raising or lowering the blind.
4. Device for cleaning blinds according to claim 1, **characterised in that** the inner brush (3) is fixed close to the lower groove of the box (9) of the drum (10) through which the blind (1) exits.
5. Device for cleaning blinds according to claim 1 and 3 and 4, **characterised in that** the inner brush (3) is a roller incorporating a rotation mechanism associated to the same electric motor (6) of the roller of the outer brush (2).
6. Device for cleaning blinds according to claim 1 and 3 and 4, **characterised in that** the inner brush (3) is a roller incorporating a rotation mechanism asso-

ciated to an individual electric motor, different from the electric motor (6) of the outer roller (2), but associated by means of the corresponding wiring to the same switch (7) of said electric motor (6) of the outer roller.

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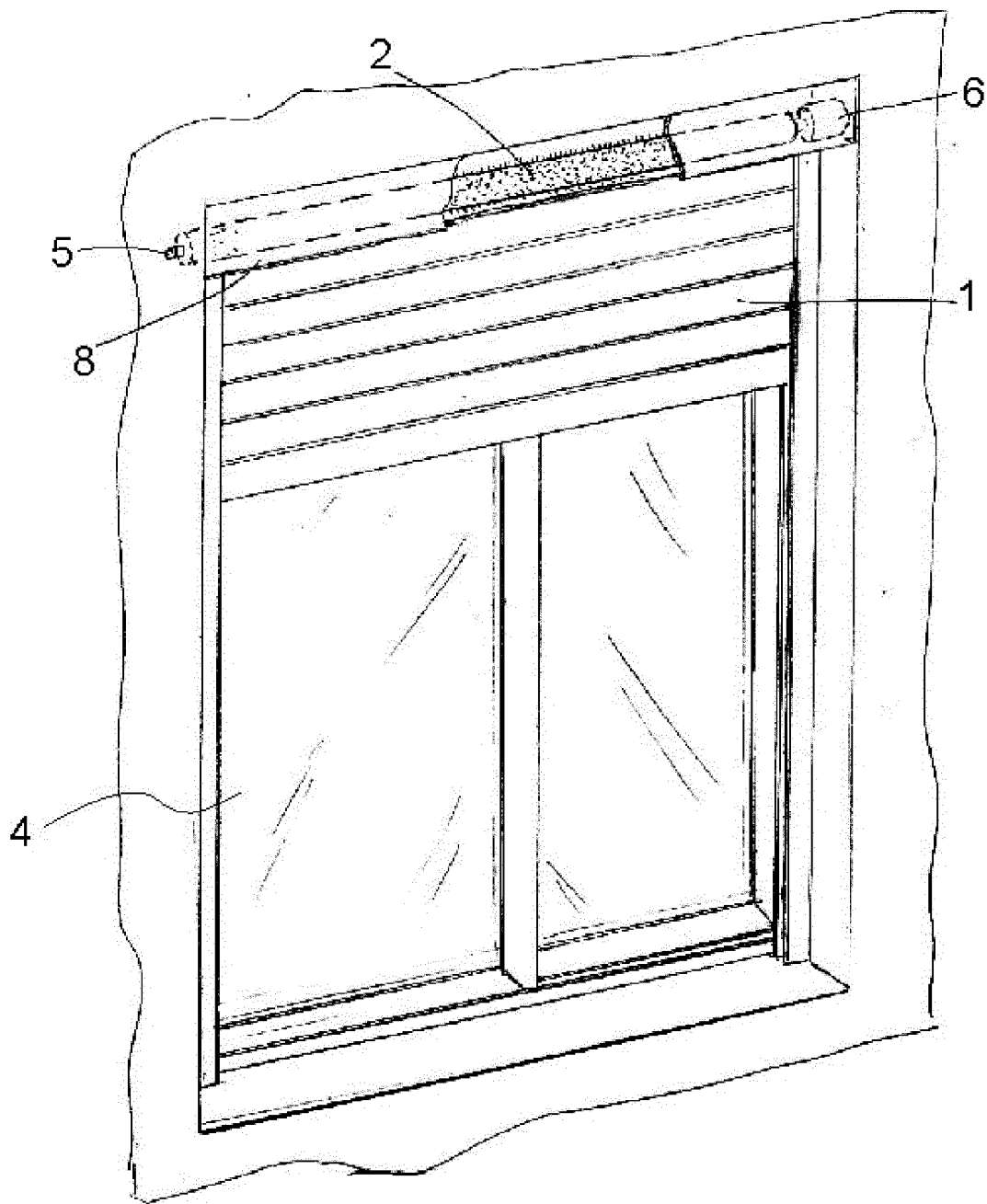


Fig. 1

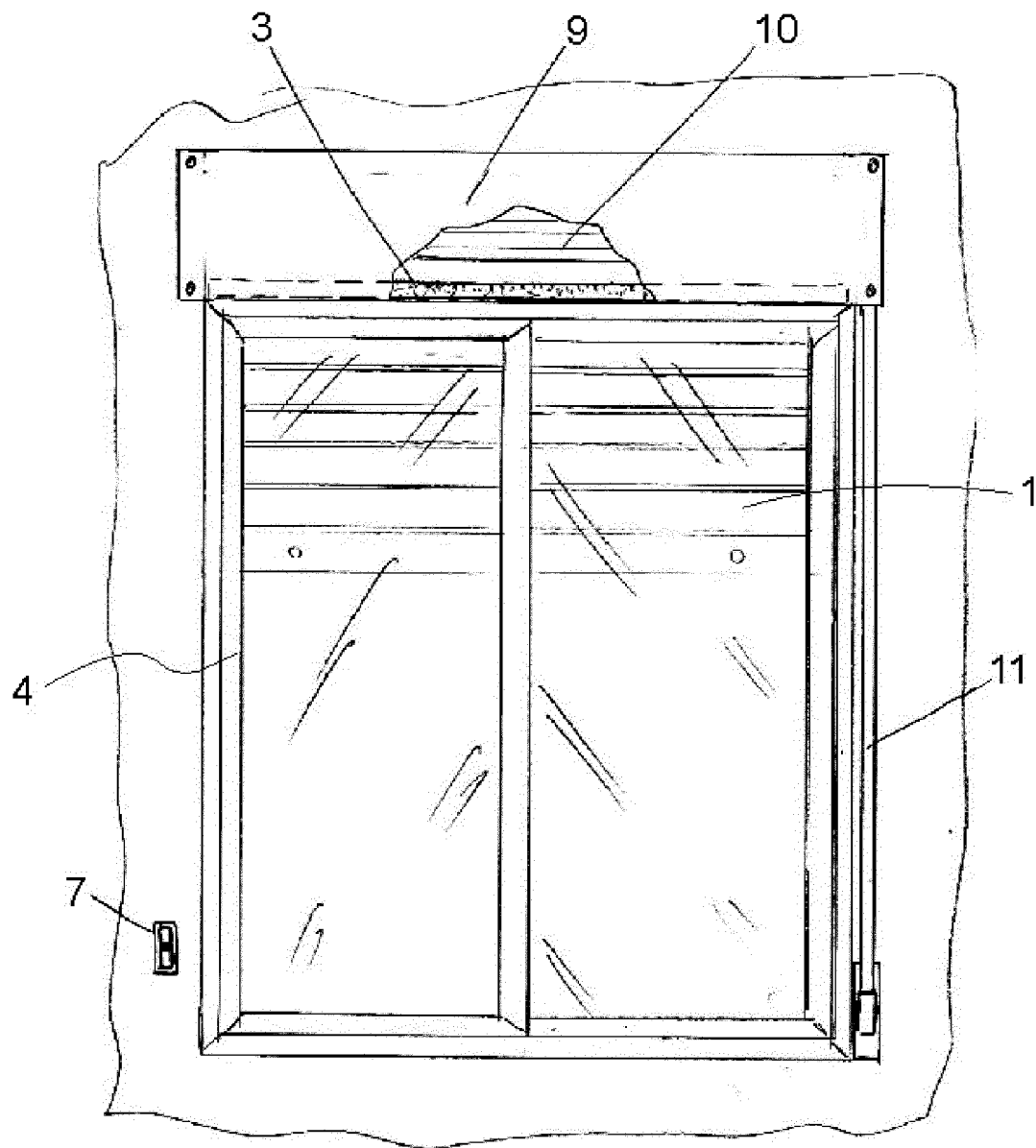


Fig. 2