

(19)



(11)

EP 2 226 202 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

08.09.2010 Bulletin 2010/36

(51) Int Cl.:

B44D 3/00 (2006.01)

(21) Application number: **10154912.9**

(22) Date of filing: **26.02.2010**

(84) Designated Contracting States:

**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL
PT RO SE SI SK SM TR**

Designated Extension States:

AL BA RS

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(30) Priority: **06.03.2009 ES 200900631**

(54) Device for cleaning paint rollers

(57) The invention relates to a device for cleaning paint rollers, consisting of an axially hollow cylindrical body (1), inside which there is included an element (2) provided with inwardly projecting protrusions (3), forming

a conduit through which the body of a paint roller can be introduced, for rubbing on it by means of an alternate longitudinal movement of the mentioned cylindrical body (1) of the device.

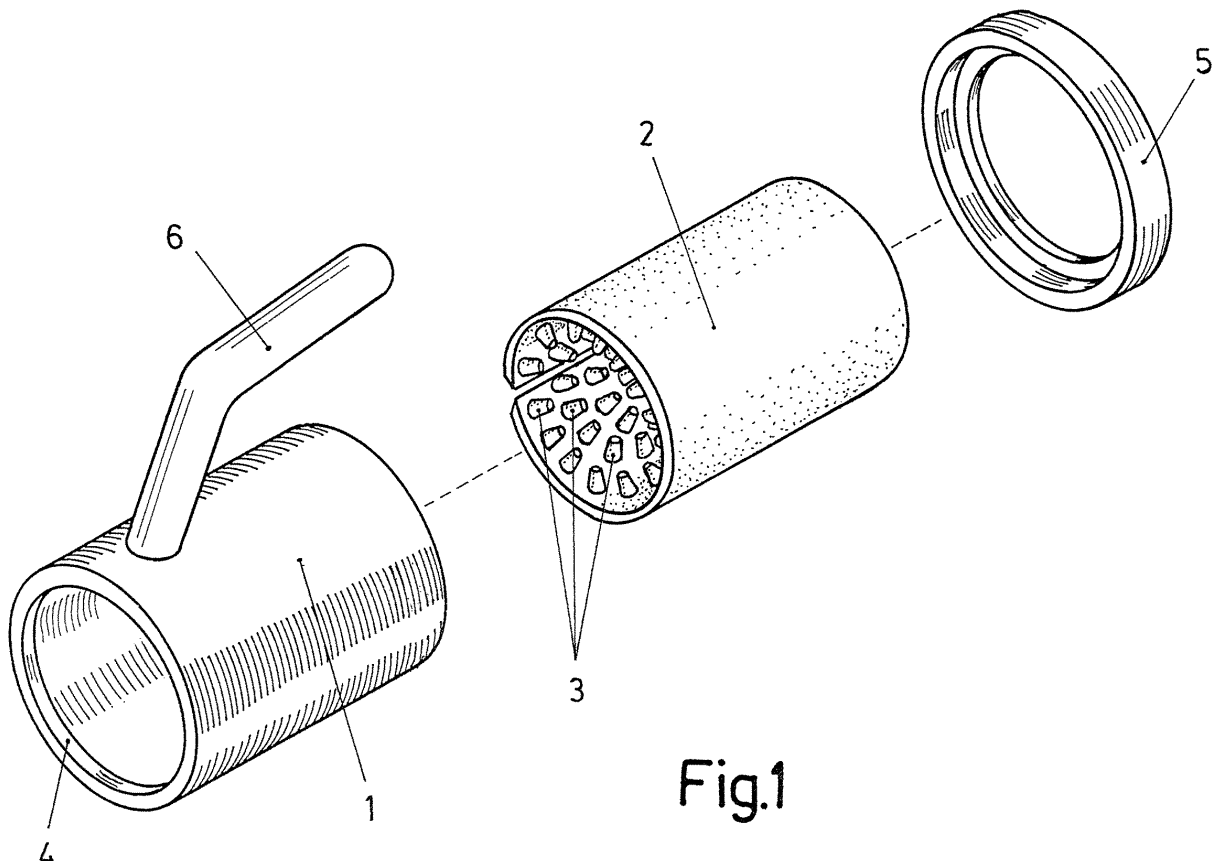


Fig.1

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Description

Field of the Art

[0001] The present invention relates to the field of painting and particularly to the cleaning of the elements used for said function, proposing a manually handled device for cleaning paint rollers.

State of the Art

[0002] Paint rollers are tools which are conventionally used to paint surfaces, such as walls, ceilings etc., in a quick, comfortable and effective manner. However, when the use is over it is necessary to clean said rollers to store them, which is usually carried out by rubbing the roller with the hand under the stream of water from a tap, an operation which is tiresome and furthermore entails a high consumption of water.

[0003] As a solution to that effect, automatic devices, like washers, for cleaning paint rollers and brushes have been developed, such devices being effective in relation to the cleaning function, but which are excessively expensive.

Object of the Invention

[0004] According to the present invention, a device for cleaning paint rollers manually is proposed, with which the operation of cleaning the rollers is facilitated and the consumption of water which it is necessary to use is reduced, said device having contractive and functional features making it easy and cost-effective to make.

[0005] This device object of the invention consists of a hollow cylindrical body which determines a conduit passing axially therein, through which the body of a paint roller is passed.

[0006] Inside the mentioned hollow cylindrical body of the device there is included an element provided with inwardly projecting protrusions, such that upon sliding the cylindrical body of the device forwards and backwards on the body of a paint roller introduced through the inside, a rubbing on the body of the roller occurs by means of the protrusions of the inner element of the device, allowing the extraction therefrom of the paint that it contains.

[0007] To facilitate the handling in the mentioned paint roller cleaning function, the hollow cylindrical body of the cleaning device is provided with an outer handgrip, which likewise prevents the user from getting paint on his hand when handling the device.

[0008] Therefore, with this device of the invention paint rollers can be cleaned comfortably and simply under a stream of water, the cleaning being quick and effective due to the rubbing of the body of the roller which is cleaned with the protrusions of the inner element of the device, in addition to the fact that the user, to that end, must carry out a much smaller effort than in the conven-

tional practice of cleaning by means of rubbing the rollers to be cleaned with the hand.

[0009] The proposed device furthermore is less expensive and simpler to make than known automatic devices with the same function, with the advantage that the inner element can easily be removed to clean the assembly or replace said inner element when necessary.

[0010] A device is thus obtained which is very advantageous due to its functional features, acquiring its own identity and a preferred character for the application function for which it is intended, solving the problem of cleaning paint rollers in an effective and practical manner.

Description of the Drawings

[0011]

Figure 1 shows an exploded perspective of the proposed device, according to an embodiment.

Figure 2 shows a perspective of the assembly of the previous figure assembled.

Figure 3 shows a longitudinal section of the device. Figures 4 and 5 show respective non-limiting examples of the accessory element of the inside of the device.

Figure 6 shows an application of use of the device. Figure 7 is a perspective of the device according to a one-piece embodiment.

Detailed Description of the Invention

[0012] The object of the invention relates to a device for cleaning paint rollers, with constructive and functional features which allow cleaning said rollers comfortably and quickly, furthermore allowing a considerable saving of water compared to cleaning the mentioned rollers directly with the hand.

[0013] The proposed device consists of an axially hollow cylindrical body (1), inside which there is included an accessory element (2) determining a surface with inwardly projecting protrusions (3), the assembly defining a longitudinal conduit through which the body of a paint roller can be axially passed.

[0014] The inner accessory element (2) determining the protrusions (3) can be an independent element, for example formed by a laminar body of flexible material, with bosses and/or flanges determining the protrusions (3) in one of its faces, as shown in Figure 4, said accessory element (2) being introduced in the cylindrical body (1) bent in a tubular form, as observed in Figure 1.

[0015] Likewise, without the concept of the invention being changed, the accessory element (2) can also be a linear element provided with projections like prongs emerging therefrom, as shown in Figure 5, being adapted in a helical arrangement for the introduction in the cylindrical body (1).

[0016] These examples of the accessory element (2) are not limiting examples, being able to be any other em-

bodiment defined by a base body with protuberances emerging therefrom and which can be adapted in a cylindrical form.

[0017] The cylindrical body (1) determines at one of its ends a stop (4), to prevent the accessory element (2) from coming out through that end, whereas at the opposite end there is a cover (5) in the form of a removable ring, by means of which the accessory element (2) is retained inside the mentioned cylindrical body (1), for the use of the device, with the possibility of extracting said accessory element (2), for its replacement or for cleaning the device, by removing the cover (5).

[0018] The cylindrical body (1) incorporates in the outer part a handgrip (6), which can have any shape which can be gripped with the hand, such that in the use of application said handgrip (6) allows the user to handle the device comfortably and without getting the paint of the paint rollers which are cleaned on his hand.

[0019] Thus, for the use of application of the device in cleaning a paint roller (7), the body of the roller (7) to be cleaned is axially introduced through the cylindrical body (1) and, under a stream of water (8), an alternative forward and backward movement of the mentioned cylindrical body (1) is performed along the body of the roller (7), as depicted in Figure 6, whereby the protrusions (3) of the element (2) inside the device perform a rubbing on said body of the roller (7), extracting the paint contained therein.

[0020] In a structural embodiment, within the concept of the invention, the assembly of the device can be made in a single part, i.e., with the cylindrical body (1) and the accessory element (2) integrated in one and the same constructive formation, the cylindrical body (1) itself defining in its inner part the protrusions (3) emerging from its wall.

4. The device for cleaning paint rollers according to claim 1, **characterized in that** the accessory element (2) is an independent element formed by a flexible linear body with conformations like prongs emerging therefrom, which is introduced bent in a helical form inside the cylindrical body (1).

5. The device for cleaning paint rollers according to claims 1, 3 and 4, **characterized in that** the cylindrical body (1) determines a stop (4) at an end, whereas at the other end it incorporates a cover (5) in the form of a removable ring for retaining the accessory element (2) inside said cylindrical body (1).

6. The device for cleaning paint rollers according to claim 1, **characterized in that** the cylindrical element (1) and the accessory element (2) are integrated in one and the same assembly of constructive formation, the cylindrical body (1) itself determining the protrusions (3) emerging from its wall.

Claims

1. A device for cleaning paint rollers, **characterized in that** it consists of an axially hollow cylindrical body (1), inside which there is included an accessory element (2) determining a surface with inwardly projecting protrusions (3), the assembly determining a longitudinal conduit through which the body of a paint roller can be axially passed.
2. The device for cleaning paint rollers according to claim 1, **characterized in that** the cylindrical body (1) incorporates in the outer part a handgrip (6) for handling the device in the use of application.
3. The device for cleaning paint rollers according to claim 1, **characterized in that** the accessory element (2) is an independent element formed by a flexible laminar body with protruding conformations in one of its faces, which is introduced bent in a cylindrical form inside the cylindrical body (1).

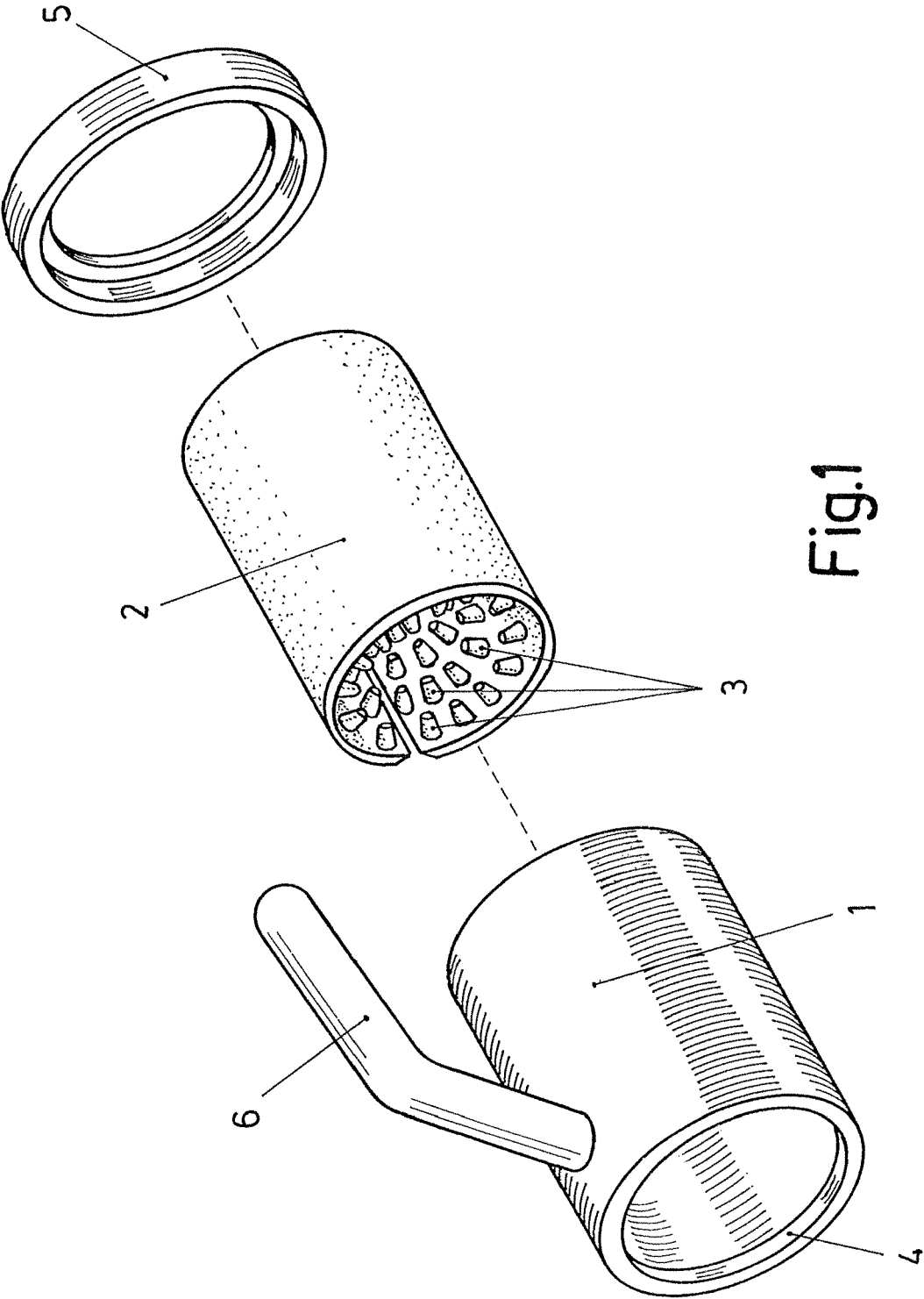
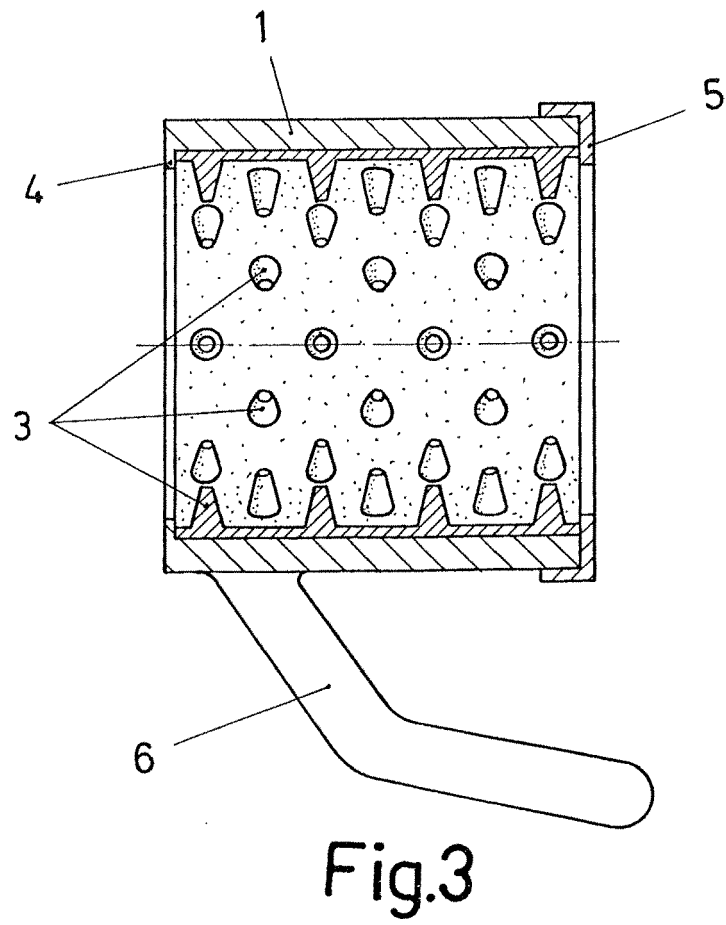
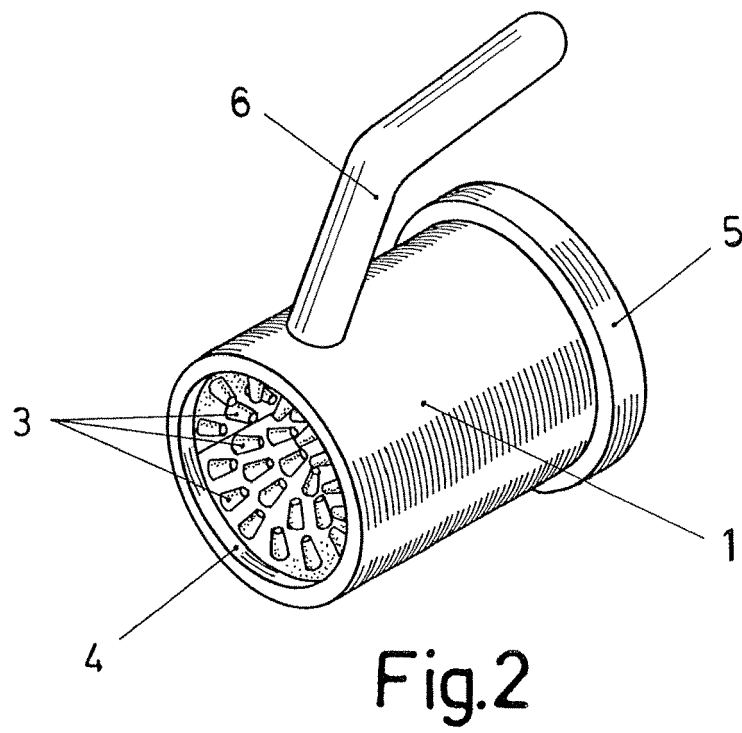


Fig.1



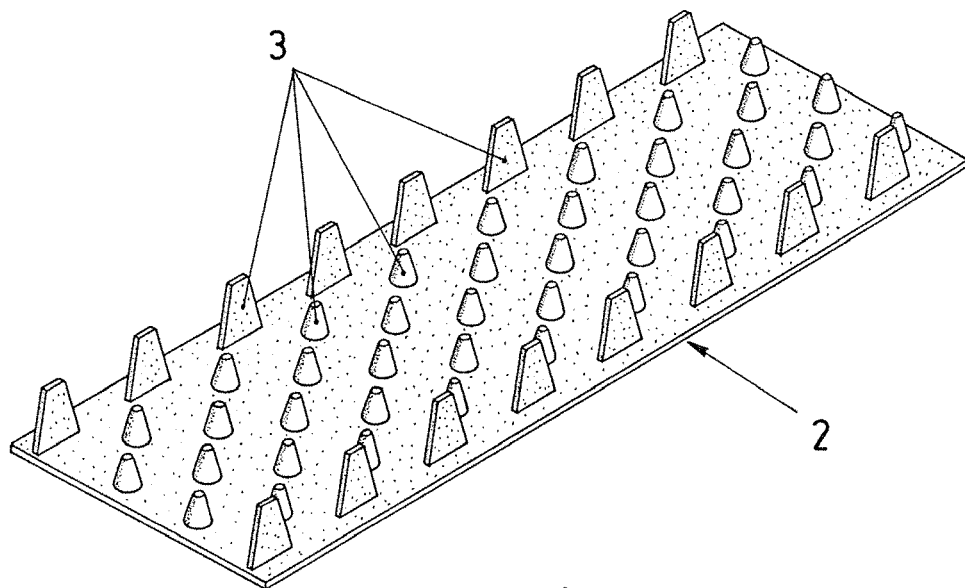


Fig. 4

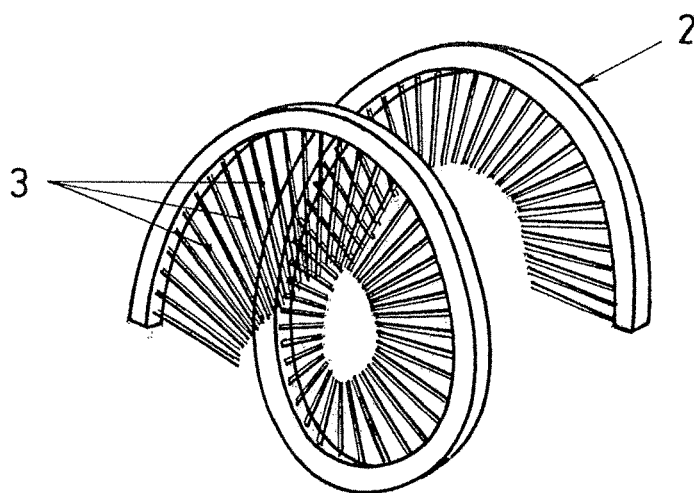


Fig. 5

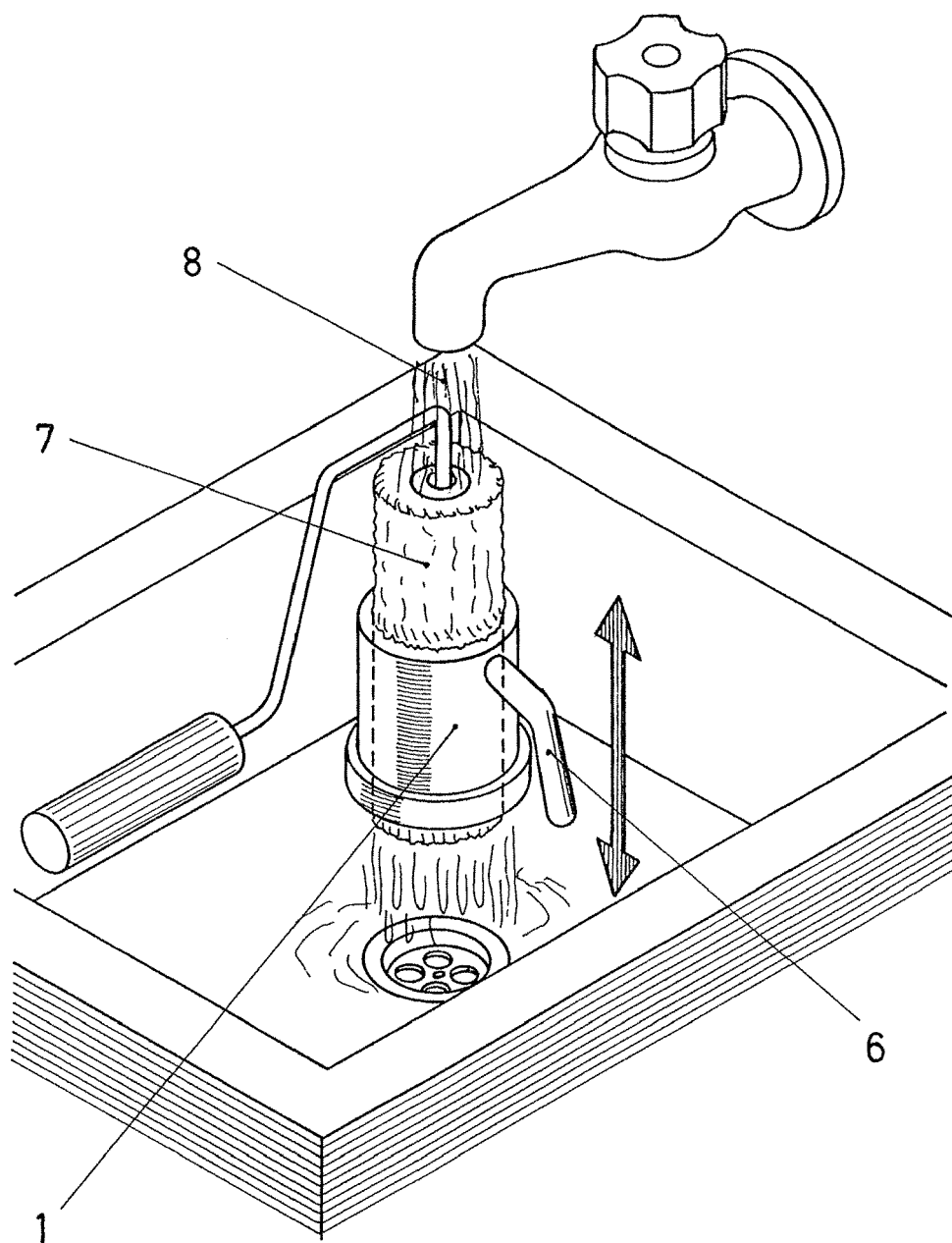


Fig.6

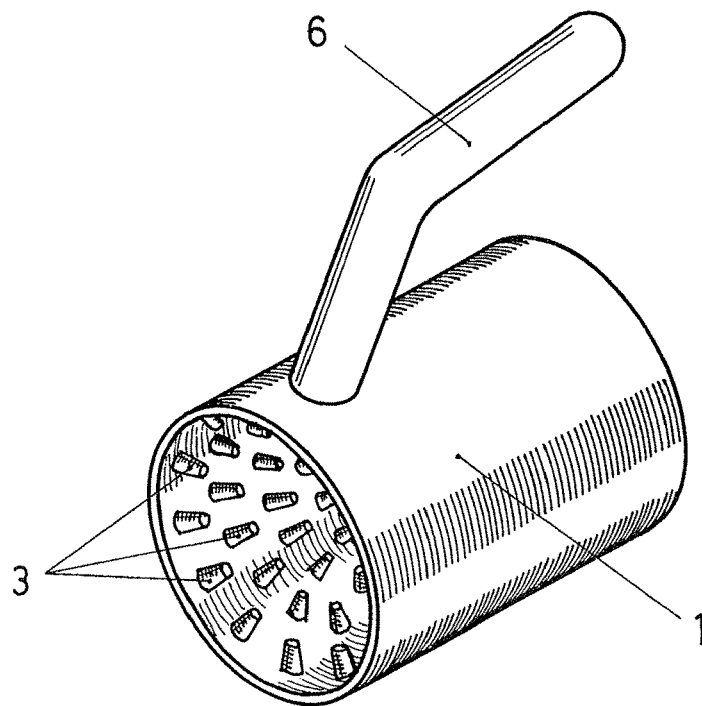


Fig.7



EUROPEAN SEARCH REPORT

Application Number
EP 10 15 4912

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 530 109 B1 (CASSEDY VICTOR C [US]) 11 March 2003 (2003-03-11) * column 1, line 66 - column 2, line 57; figures 1-7 *	1-6	INV. B44D3/00
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B44D
Place of search		Date of completion of the search	Examiner
Munich		21 July 2010	Sartor, Michele
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
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21-07-2010

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