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(54) **MOP HEAD**

(57) A mop head suitable for cleaning a wide variety of surfaces, such as floors with porous surfaces or the surfaces of bathroom elements, comprising a support piece (1) provided with coupling means to be coupled to a handle (2) for handling the mop head, from which a plurality of cords (3) protrude, made up of at least two clusters of strands twisted or interlaced around each other in a helical configuration and protruding from the support piece, being made of an absorbent material. Each of the cords (3) includes at least one additional cluster of strands made of a material with descaling properties and arranged in a twisted or similar form with respect to at least the cluster of strands made of absorbent material.

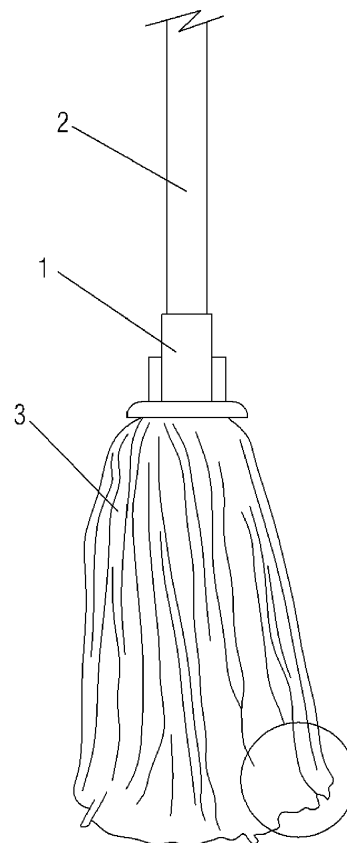


FIG. 1

Description

OBJECT OF THE INVENTION

[0001] The object of the present application is the registration of a mop head.

[0002] More specifically, the invention proposes the development of a mop head suitable for a wide variety of surfaces, such as floors with porous surfaces or the surfaces of bathroom elements, such as showers and bathtubs, having both absorbent and descaling properties.

BACKGROUND OF THE INVENTION

[0003] A wide variety of mop heads are known in the market, all of which are made with cords, clusters of strands or fringes, which are made of a water absorbing material.

[0004] On the other hand, for cleaning bathtub or shower surfaces, it is common to use wipes made of absorbent material, one of the faces thereof made of a different material with descaling properties in order to ensure a deeper cleaning of such surfaces, whereby the user must apply two actions in two different time intervals, one of which is descaling and the other absorption, in a way that requires a considerable amount of time. Moreover, the user must bend down to clean, therefore assuming postures that are often uncomfortable and may lead to back problems or injuries.

[0005] Also known in the state of the art is the use of brushes provided with bristles for cleaning porous surfaces, such as terraces, garages, parking lots, sidewalks, where the user must apply a considerable force to descale the dirt with the added drawback that it does not allow for the collection of the water applied.

[0006] The applicant is not currently aware of any invention provided with all the characteristics described in this specification.

DESCRIPTION OF THE INVENTION

[0007] The present invention has been developed for the purpose of providing a mop head configured as a novelty within the field of application, resolving the aforementioned drawbacks, and also providing additional advantages that will become apparent from the accompanying description here below.

[0008] Therefore, an object of the present invention is to provide a mop head, which comprises a support piece provided with coupling means to be coupled to a handle for handling the mop head, from which a plurality of cords protrude, made up of at least two clusters of strands twisted around each other in a helical or interlaced configuration protruding, for example, from a support piece, being made of an absorbent material and of a material with descaling properties.

[0009] In particular, the invention is characterized in

that each of the cords includes at least one additional cluster of strands, which is made of a material with descaling properties and arranged in twisted form with respect to at least the cluster of strands made of an absorbent material.

[0010] Thanks to these characteristics, a mop head is obtained, suitable for cleaning a wide variety of surfaces with respect to prior art, such as floors or surfaces bathroom elements, including showers and bathtubs, not only having absorbent properties but also descaling properties, thereby improving the cleaning finish. Another important advantage is that, when applied to complex bathtub and shower surfaces with the aim of eliminating incrustations, it prevents the user from adopting uncomfortable postures when cleaning with a cleaning cloth while at the same time facilitating the cleaning operation, thereby reducing the potential risk of back injuries, especially for elderly people.

[0011] It is worth mentioning that the mop head has suitable dimensions, especially with reference to the thickness of the strands, enabling the user to reach any corner or area of a facility or space and adapting it to the area to be cleaned.

[0012] In a preferred embodiment, the absorbent woven material is made of a plurality of microfiber strands.

[0013] Preferably, the two clusters of strands made of absorbent material correspond to a same group of strands that run in a closed loop, the two opposite ends thereof being fixed to the support piece. Thus, unlike the vast majority of mop heads available on the market, the cord does not fray, thereby increasing the durability and the descaling effect without having to apply high pressure during its application to a surface to be cleaned.

[0014] Other characteristics and advantages of the mop head, object of the present invention, will become apparent in light of the description of a preferred, though non-exclusive, embodiment, which, by way of a non-limiting example, is illustrated in the accompanying drawings, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

[0015]

Figure 1 shows a schematic elevation view of a mop provided with the mop head in accordance with the invention;

Figure 2 shows an enlarged detail view of a section of the mop head;

Figure 3 shows a schematic elevation view of a second embodiment of the mop of the invention; and Figure 4 is a detail view of a section of a cord that forms part of the mop head.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0016] In view of the aforementioned figures and, in accordance with the numbering adopted, an example of

a preferred embodiment of the invention can be observed therein, which comprises the parts and elements indicated and described in detail below.

[0017] The mop head comprising a support piece (1) made of an injectable plastic material which is provided with a blind hole, having an inner threading for the coupling thereof to a handle (2) for handling the mop head, from which a plurality of cords (3) protrude, made up of at least two clusters of strands (30) which extend longitudinally, preferably made of microfiber, twisted around each other in a helical configuration and protruding from the support piece, said cords being made of a material with a high liquid absorbing capacity.

[0018] As can be seen in greater detail in Figure 2, each of the cords (3) includes at least one additional cluster of strands (31) made of a material with high descaling properties and with a long useful life, which facilitates the extraction of the remains of dirt on the surface to be cleaned, the additional cluster (31) arranged in a twisted form with respect to at least the cluster of strands made of absorbent material.

[0019] The two clusters of strands of absorbent material (30) correspond to the same group of strands which run in a closed loop, the two opposite ends thereof being fixed to the support piece (1).

[0020] Figure 3 shows a second embodiment wherein the common parts have the same numeric references, differing from the embodiment described in Figures 1 and 2 in that it has a substantially shorter length.

[0021] The details, shapes, dimensions and other accessory elements used to manufacture the mop head of the invention may be suitably substituted for others which do not diverge from the scope defined by the claims included below.

run in a closed loop, the two opposite ends thereof being fixed to the support piece (1).

Claims

1. A mop head comprising a support piece (1) provided with coupling means to be coupled to a handle (2) for handling the mop head, from which a plurality of cords (3) protrude, made up of at least two clusters of strands twisted or interlaced around each other in a helical configuration and protruding from the support piece, being made of an absorbent material, **characterized in that** each of the cords (3) includes at least one additional cluster of strands made of a material with descaling properties and arranged in twisted or similar form with respect to at least the cluster of strands of absorbent material.
2. The mop head according to claim 1, **characterized in that** the clusters of absorbent material are made of a plurality of microfiber strands.
3. The mop head according to claim 1, **characterized in that** the two clusters of strands of absorbent material correspond to the same group of strands that

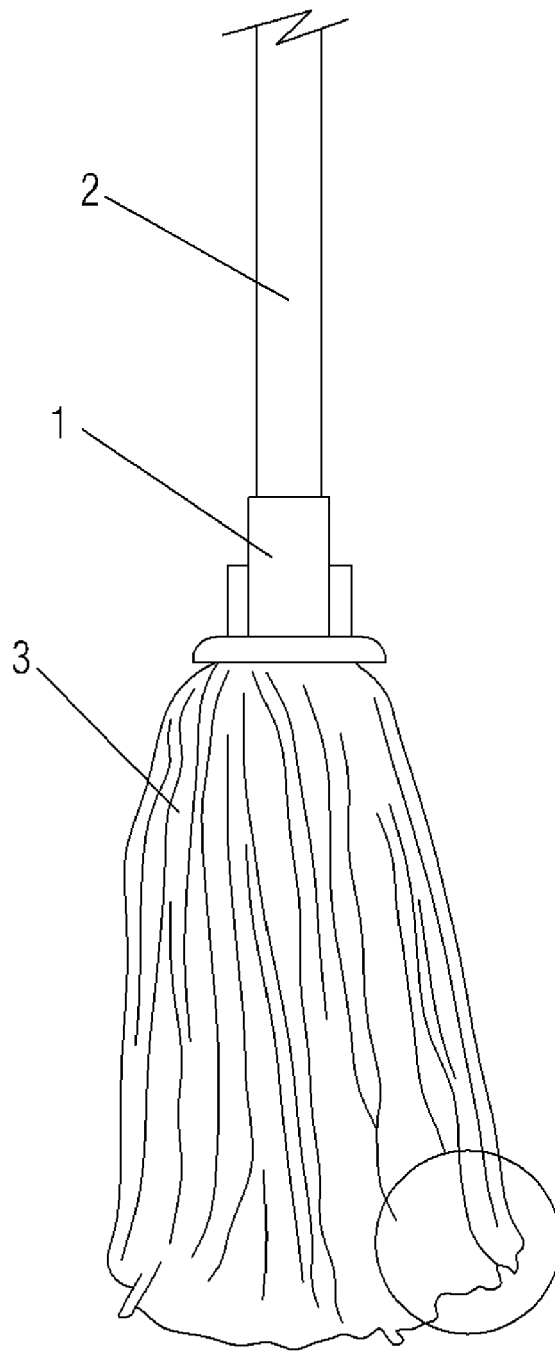
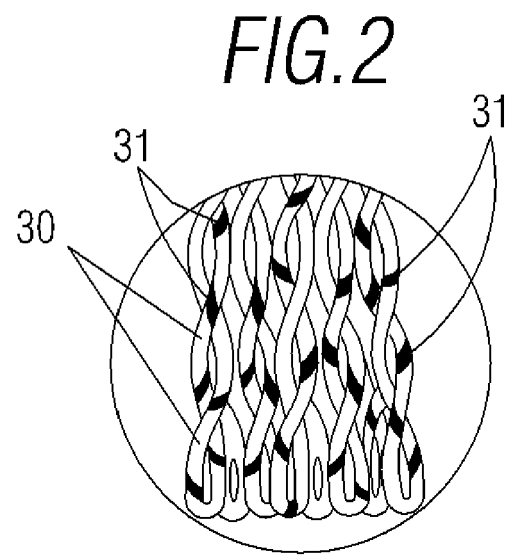


FIG. 1



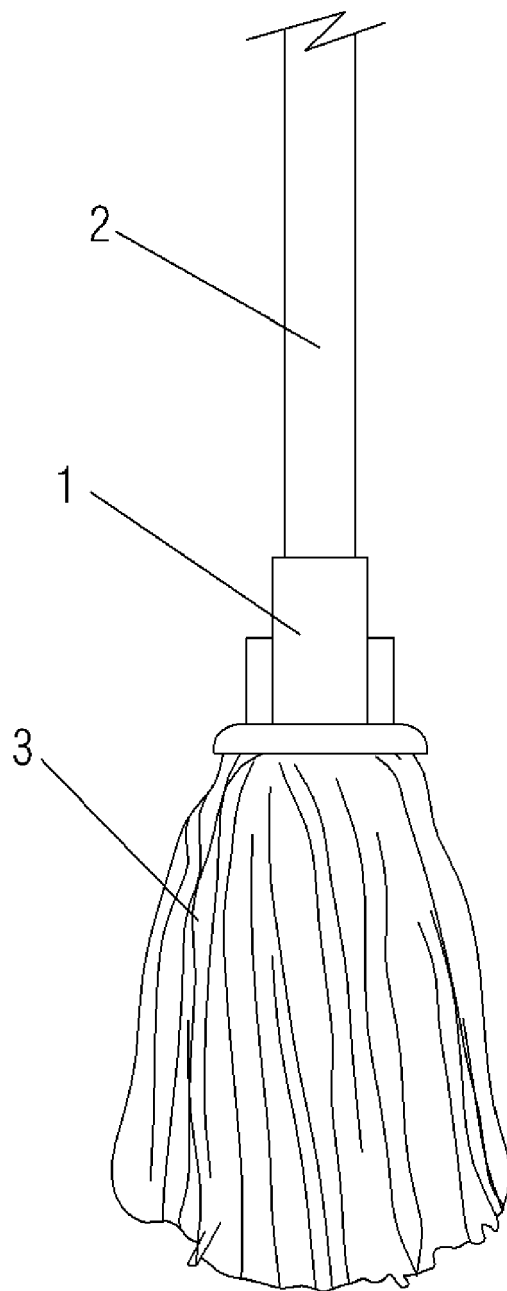
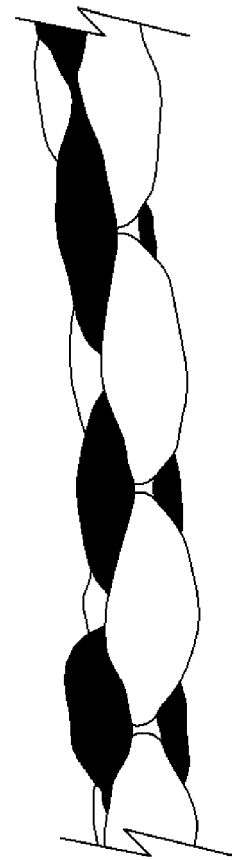


FIG. 3

FIG. 4





EUROPEAN SEARCH REPORT

Application Number
EP 17 38 2308

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2 825 914 A (MOSS THERON V) 11 March 1958 (1958-03-11)	1	INV. A47L13/20 A47L13/255
Y	* column 3, lines 34-37 *	1-3	
Y	EP 3 011 887 A1 (RUBBERMAID COMMERCIAL PRODUCTS [US]) 27 April 2016 (2016-04-27) * column 3, line 50 - column 4, line 5 *	1-3	
Y	ES 1 065 191 U (NEW MOP S L [ES]) 1 July 2007 (2007-07-01) * column 2, lines 48-60 *	1-3	
Y	US 3 817 004 A (MOSS T) 18 June 1974 (1974-06-18) * column 2, lines 19-23 *	1-3	
Y	US 3 520 017 A (MOSS THERON V) 14 July 1970 (1970-07-14) * figure 4 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A47L
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 31 October 2017	Examiner Eckenschwiller, 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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 17 38 2308

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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31-10-2017

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82