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(54) Title: WRIST-MOUNTABLE SOAP DISPENSER

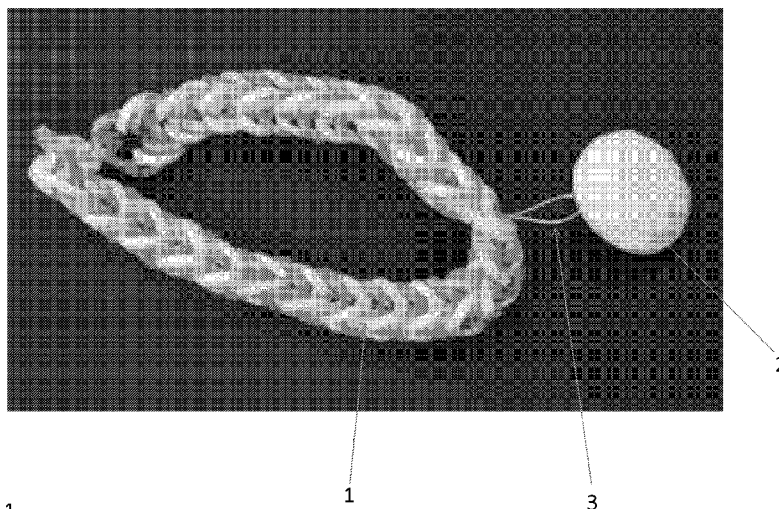


Fig 1

(57) Abstract: A wearable soap dispenser comprises a band; portion of soap; and an attachment means attaching the soap to the band; wherein said attachment means is user-breakable / frangible to release the soap from the band to enable at least one cleaning action.

WRIST-MOUNTABLE SOAP DISPENSER

DEVICE

The present invention provides a wrist-mountable soap dispenser.

- 5 The Centers for Disease Control recommends frequently washing of hands with soap and water and/or use of a hand sanitizer as an effective way to prevent the transmission of dangerous diseases.

If soap and water are not available, which is often the case; it is recommended to use a hand
10 sanitizer that contains at least 60 percent alcohol. The alcohol content kills many different kinds of bacteria, including antibiotic resistant bacteria and TB bacteria. It also has high viricidal activity against many different kinds of viruses, including enveloped viruses such as the flu virus, the common cold virus, and HIV. Various authorities on disease believe that alcohol rubs are approximately 100 times more effective against viruses than any form of hand washing. When
15 performing tasks that contain higher than usual risk, sanitizing the hands with increased frequency is advocated for effective disease control. Unfortunately many hand sanitizing dispensers are wall-mounted and may not be portable and thus are inconvenient to use.

As a solution, many consumers prefer to carry a cleaning means around with them. This could
20 mean carrying a small piece of bar soap in their purse, pocket or briefcase. Alternatively carrying a small bottle of hand sanitizer with them, again, in their purse, pocket or briefcase; however often times these items are not carried on the person, once again leaving the individual without easy access to sanitizing means. This may create unhealthy conditions especially for parents of young children, the elderly, or those with weak immune systems. A device is needed
25 that provides convenient access to a personal supply of hand sanitizer in virtually all circumstances.

Various attempts have been made to solve the above-mentioned problems such as those found in U.S. Pat. Nos. 7,316,332; 5,217,143; 4,736,876; 2008/0067193; 4,972,684; and
30 2004/0138631. This prior art is representative of hand sanitizer dispensers. None of the above

inventions and patents, taken either singly or in combination, is seen to describe the invention as claimed.

Thus, a need exists for a reliable portable system to provide an aesthetically-pleasing wrist-mountable soap dispenser and to avoid the above-mentioned problems.

According to a first aspect of the invention there is provided a wearable soap dispenser comprising:

a band;

10 portion of soap; and

an attachment means attaching the soap to the band;

wherein said attachment means is user- breakable / frangible to release the soap from the band to enable at least one cleaning action.

15 Preferably the soap dispenser is wrist-mountable.

Alternatively the soap dispenser could be attachable to an article of clothing (e.g. such as a belt), or to accessory items such as a purse, totebag, knapsack, school bag, briefcase, cover or sleeve for an electronic device (such as a cell phone, tablet computer), umbrella or hat. In a particularly advantageous embodiment, the soap dispenser is configured so that it can be af-

20 fixed to a part of an article which is used to store meals, such as a midday, or evening meal. Such include lunchboxes, lunch bags, as the presence of the dispensing article directly associated with such provides a visual indicator and reminder to the user to treat their hands and other topical services using a topical composition from one or more of the unit dose reservoirs
25 containing a treatment composition, immediately prior to enjoying a meal.

[Whilst the term wrist is used and is a preferred feature of the invention it is to be understood that the dispenser could be worn around / adjacent another body part of a user, such as an ankle or neck].

5 This novel device of the invention allows individuals of virtually any age that have concerns about cleanliness and / or bacteria / germs to keep their hands clean whenever they feel their personal hygiene has been compromised. The comfortable bracelet dispenser allows for freedom of movement and easy, convenient access to personal soap. The design can be tailored to promote popular sports teams, universities, businesses or other such establishments.

10

This item can be produced in a manner that allows it to be refillable or disposable. The bracelet design could be available in several sizes and in an assortment of colors to suit user preferences. Companies, sports teams, schools and other establishments could display their colors, name or other emblems / logos. In connection with this feature (and independently thereof) the
15 item may be used in a constructive yet creative / fun way as to encourage children to take part in regular hand washing.

20

The band may comprise any suitable material. However, for one or more of lightness, cost and comfort grounds preferably the band comprises a plastic material, e.g. polypropylene or polyethylene. The band may be formed of a plurality of (plastic) links, connected together. These may be connected by being interwoven or by some other mechanism such as gluing / welding. In this embodiment the links may be the same colour or may comprise a number of different colours styles to create an overall pattern on the band.

25

Generally the attachment means comprises a line of breakable / frangible plastic material. In order to make the separation process easy for a user the line of breakable / frangible plastic material may contain a pre-formed weakness at a portion along its length. Preferably the soap is moulded / formed around the attachment means so as to be connected to be the band.

Generally the soap comprises a portion of personal bar soap. The soap is primarily intended for a single use operation. As such it is preferred that the soap is dimensioned in the range of 0.1 to 20g. Preferably a single portion of soap is connected to the band. Alternatively a plurality of soap portions; e.g. from 2 to 10 soap portions maybe attached to the band.

5

According to a second aspect of the invention there is provided a method of use of a dispenser according to the first aspect of the invention comprising carrying the dispenser to a desired locus worn on a user; breaking the frangible attachment means to release the soap from the dispenser; and performing a (personal) washing operation.

10

It will be understood that features of the first aspect of the invention shall be taken to apply to the second aspect of the invention *mutandis mutatis*.

In the method of use a supply of water may be required or the soap may be self-lathering.

15

The invention is now further described with reference to the following non limiting figures in which:-

Fig 1 is a plan view of a device according to the invention.

20

In Fig.1 a device of the invention is shown which comprises a band (1) to which a portion of soap (2) is attached via a user- breakable / frangible attachment means (3).

The band (1) is formed of a plurality of plastic links which are woven together to make a suitably sized and comfortable band to be worn around a user's wrist.

25

CLAIMS

1. A wearable soap dispenser comprising:

5 a band;
 portion of soap; and
 an attachment means attaching the soap to the band;
 wherein said attachment means is user- breakable / frangible to release the soap from the band
 to enable at least one cleaning action.

10

2. The dispenser of claim 1 wherein said band comprises plastic.

3. The dispenser of claim 2, wherein said band is formed of a plurality of plastic links, connected
together.

15

4. The dispenser of any one of claims 1 to 3, wherein the attachment means comprises a line of
breakable / frangible plastic material.

5. The dispenser of claim 4, wherein the line contains a pre-formed weakness.

20

6. A dispenser of any one of claims 1 – 5, wherein the soap comprises a portion of personal bar
soap.

7. A dispenser according to claim 6, wherein the soap is dimensioned in the range of 0.1 to 20g.

25

8. A method of use of a dispenser according to any one of claims 1-7 comprising carrying the
dispenser to a desired locus worn on a user; breaking the frangible attachment means to re-
lease the soap from the dispenser; and performing a (personal) washing operation.

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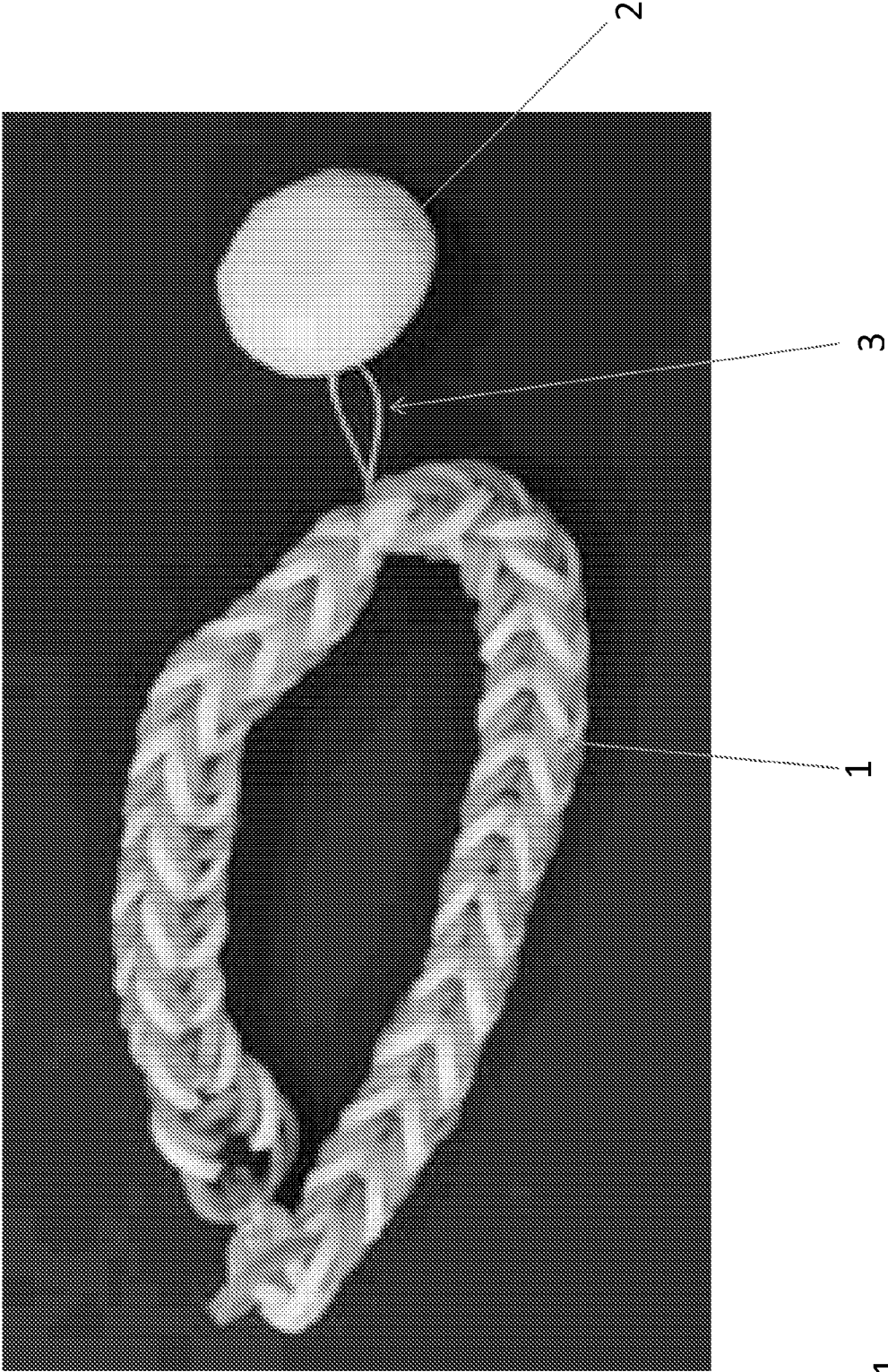


Fig 1

INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2016/050791

A. CLASSIFICATION OF SUBJECT MATTER

INV. A47K5/05

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A47K C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 8 536 104 B1 (ROMAN-BARCELO HECTOR [US]) 17 September 2013 (2013-09-17) column 2, lines 21-23 figure 2	1-4,6,7
X	DE 20 2006 018382 U1 (KOESCHINGER ANTON [DE]) 26 April 2007 (2007-04-26) figures 1, 2	1-4,6-8
X	EP 0 700 989 A1 (PROCTER & GAMBLE [US]) 13 March 1996 (1996-03-13) column 4, line 56 - column 5, line 2	1,4,5



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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