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## (54) Bath salt dispensing device for showers

(57)Bath salt dispensing device for showers, applicable for being incorporated between a shower tap and hose, the device comprising a receptacle (2) having, at least, one housing (3), suitable for containing bath salts, and having a lid (4) for introduction of the bath salts, and also having, a water inlet (5) and water outlet (6), suitable for coupling to the respective shower tap and hose connections (7), so that it may be incorporated between said tap and said hose while allowing the water to flow therethrough. The water inlet (5) and outlet (6) are disposed on the upper and lower ends of a tubular segment (8) attached to the housing (3) of the receptacle (2), having envisaged a shut-off valve (9) therebetween, which can be actuated by means of a key (10), for controlling the passage or non-passage of water towards the housing (3). The device further comprises a dense mesh (11) in the interior of the housing (3).

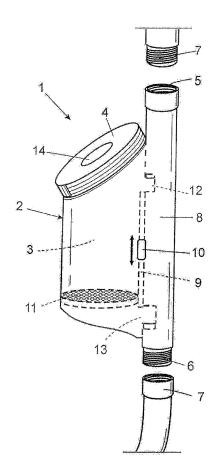


FIG. 1

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# Object of the invention

**[0001]** The invention, as expressed in the title of this specification, relates to a bath salt dispensing device for showers which offers, in accordance with the function for which it is destined, several advantages and innovative characteristics that shall be described in detail later in the text and which imply a significant novelty in their field of application.

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**[0002]** Specifically, the object of the invention focuses on a bath salt dispensing device for showers, of the type of salts consisting of inorganic substances which are added to a bath to be dissolved in the water in order to add aroma and other therapeutic, relaxing and/or cosmetic properties. The specific structural configuration of said device is specially designed to be used in the shower, offering skin the benefits of said salts dissolved in the water without need to fill the bathtub, but rather in a much faster and inexpensive manner, also controlling the temperature of the water with which they are mixed to ensure optimum dissolution.

#### Field of application of the invention

**[0003]** The field of application of the present invention falls within the industry sector dedicated to the manufacture of therapeutic products, hygiene products and bathroom accessories.

#### Background of the invention

**[0004]** As known in the state of the art, the use of bath salts has always been closely related to therapeutic, relaxing and/or cosmetic properties, often being synonymous of relaxation and luxury, as their preparation requires time and considerable consumption of water. However, given the great diversity of bath salts with different effects, their use does not always have to be related to a prolonged bath session, as the effects of many salts are just as beneficial with brief contact of the skin with the water in which they are dissolved, and it would be beneficial to be able to enjoy them often. The problem is that, in order to correctly dissolve the salts in the water, up until now there was no solution other than filling the bathtub with hot water and wait for the salts to dissolve therein.

**[0005]** Therefore, it would be desirable to have a system for dissolving the salts and enjoying the benefits of the water in which they are dissolved, without need to have a bath each time, as this requires time and constitutes a significant cost, both of which are not readily available to users on a daily basis.

**[0006]** The objective of the present invention is, therefore, the development of a device that will allow users to enjoy bath salts in their daily shower, by achieving the controlled dissolution thereof so that said dissolution oc-

curs or not on demand, when having a shower, even allowing control of the water temperature to optimise their use.

**[0007]** Further, it should be noted that, although the existence of multiple types of dispensers for all types of personal hygiene products is known, at least to the applicant, the existence of no other bath salt dispensing device for showers or any other invention of similar application having technical, structural and constituent characteristics similar to those of the device advocated and claimed herein is known in the state of the art.

#### Explanation of the invention

**[0008]** Therefore, the bath salt dispensing device for showers proposed by the invention is configured as a significant novelty within its field of application as, in light of its development and implementation, and in an exhaustive manner, its enabling and differentiating characteristics are conveniently expounded in the final claims that accompany this specification thereon.

**[0009]** The invention is a salt dispensing device configured as of a receptacle, preferably manufactured from plastic material, having a housing destined for containing bath salts with a lid for introduction thereof, also having a water inlet and a water outlet, suitable for coupling by screwing to the point of connection of the shower hose, thereby incorporating it between the tap and said shower hose as an additional accessory fixed to said tap.

[0010] Therefore, said water inlet and outlet of the device are adapted to the standard fittings of taps and shower hoses, so that the dosing device can be easily coupled to any tap and, in turn, to any shower hose having a standard thread.

[0011] Preferably, said water inlet and outlet are incorporated to the ends of a tubular segment that is connected to said housing for the salts by means of a shut-off mechanism or valve, the actuation of which allows or does not allows the user to decide whether the water will pass either directly through said tubular segment, thereby preventing the salts from being dissolved therein, or through the housing, thereby dissolving the salts therein.

[0012] The receptacle has, in the interior of the housing destined for containing the salts, a dense mesh that retains the undissolved salts and hampers the passage of the water, making it remain within said housing for a longer period of time and, consequently, giving rise to the greater dissolution of salts, prior to flowing towards the shower hose.

**[0013]** Also optionally, the dispenser has a thermometer indicative of the temperature of the water that circulates through its interior which, for example, is incorporated in the lid of the salt housing, thereby allowing the user to open the gate valve in the direction of said housing when the water temperature is adequate for the optimum dissolution of the salts, approximately 32°C.

**[0014]** Thus, the bath salt dispensing device for showers is a practical bath accessory that, simply, is connect-

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ed directly to the shower tap at the water inlet thereof and, in turn, is connected to the hose at the water outlet thereof and, while showering, if desired, the user may enjoy the benefits of the bath salts introduced in the dispenser housing through its lid, in which case on opening the gate valve the water will pass through said salts, slowly dissolving them and making enjoyment thereof possible without need to fill a bathtub or have the time to take a bath.

[0015] Therefore, the previously described bath salt dispensing device for showers constitutes an innovative structure having structural and constituent characteristics unknown to date for the purpose for which it is destined, reasons that, together with its practical use, give it sufficient grounds to obtain the exclusivity privilege being requested.

#### Description of the drawings

**[0016]** In order to complement the description being made and with the object of helping to better understand the characteristics of the invention, a set of drawings is attached to this specification as an integral part thereof, wherein the following has been represented in an illustrative and non-limiting manner:

Fig. 1 shows a perspective schematic view of an embodiment of the bath salt dispensing device for showers object of the invention, representing its constituent parts and elements, and the configuration and layout thereof.

#### Preferred embodiment of the invention

**[0017]** In light of the previously described, and single, figure 1, and in accordance with the numbering adopted, a preferred, but non-limiting, embodiment of the bath salt dispensing device can be observed therein, which comprises the parts and elements indicated and described in detail below.

**[0018]** Therefore, as observed in said figure 1, the salt dispenser (1) in question is configured as of a receptacle (2) having, at least, one housing (3), suitable for containing bath salts, and a lid (4) for introduction thereof, and also having a water inlet (5) on its upper part and a water outlet (6) on its lower part, both of which are adapted to the standard measurements for allowing coupling thereof to the respective female and male threaded connections (7) of a shower tap and hose (not represented), in such a manner that it may be incorporated between said tap and said hose, allowing the passage of water therethrough.

**[0019]** Preferably, the water inlet (5) and outlet (6) of the dispenser (1) are disposed on the upper and lower ends of a tubular segment (8) coupled to the housing (3) of the receptacle (2), having envisaged a shut-off valve (9) or similar mechanism therebetween, which can be actuated by means of a shut-off valve (10) or gate valve

that controls the passage or non-passage of water towards said housing (3) where the salts are incorporated. **[0020]** Optionally, in the interior of said housing (3), the dispenser (1) incorporates a dense mesh (11) for retaining the salts and hampering the passage of water, to which end openings connecting said housing (3) to the tubular segment (8) of the receptacle and which are controlled for being opened or closed by the key (10) that actuates the shut-off valve (9) are disposed on the lower part of the housing (3) under the water inlet opening (12) and above the outlet opening (13).

**[0021]** Lastly, and also optionally, the dispenser has a temperature indicator (14) which, for example, is disposed incorporated on the lid (4) of the housing (3), which is preferably a threaded lid.

**[0022]** Having sufficiently described the nature of the present invention, and the manner in which to put it into practice, we do not consider it necessary to extend its explanation further in order for any person skilled in the art to understand its scope and the advantages arising therefrom, indicating that, within its essentiality, it may be put into practice in other embodiments that differ in detail from that indicated by way of example, and which will likewise achieve the protection being requested, provided that its basic principle is not altered, changed or modified.

#### Claims

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- Bath salt dispensing device for showers, applicable
  for being incorporated between a shower tap and
  hose, characterised in that it is configured as of a
  receptacle (2) having, at least, one housing (3), suitable for containing bath salts, and having a lid (4) for
  introduction thereof, and also having, a water inlet
  (5) and water outlet (6), suitable for coupling to the
  respective shower tap and hose connections (7), so
  that it may be incorporated between said tap and
  said hose while allowing the water to flow therethrough.
- 2. Bath salt dispensing device for showers, according to claim 1, characterised in that the water inlet (5) and outlet (6) are disposed on the upper and lower ends of a tubular segment (8) attached to the housing (3) of the receptacle (2), having envisaged a shutoff valve (9) therebetween, which can be actuated by means of a key (10), for controlling the passage or non-passage of water towards the housing (3).
- 3. Bath salt dispensing device for showers, according to claim 1 or 2, **characterised in that** there is a dense mesh (11) in the interior of the housing (3).
- **4.** Bath salt dispensing device for showers, according to claim 2, **characterised in that** the housing (3) incorporates a dense mesh (11) in its interior under

the opening of the water inlet (12) and above the water outlet (13), said openings connecting the housing (3) with the tubular segment (8) of the receptacle and which are controlled by the key (10) actuated by the shut-off valve (9).

**5.** Bath salt dispensing device for showers, according to any of claims 1 to 4, **characterised in that** it has a temperature indicator (14).

**6.** Bath salt dispensing device for showers, according to claim 5, **characterised in that** the temperature indicator (14) is disposed incorporating the lid (4) of the housing (3).

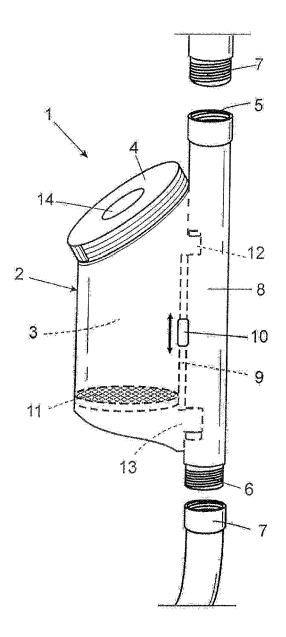


FIG. 1



## **EUROPEAN SEARCH REPORT**

Application Number EP 14 38 2222

		DOCUMENTS CONSID			
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4001)	Munich		22 October 2014	Faj	arnés Jessen, A
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# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 14 38 2222

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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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent family

13-02-2001 NONE

Publication

22-10-2014

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Patent document

US 6186988

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