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(71) Applicant: Poli-Box Italiana S.R.L. 26845 Codogno (LO) (IT)

(72) Inventors:

 Rosso, Leonardo 26845 CODOGNO LO (IT)

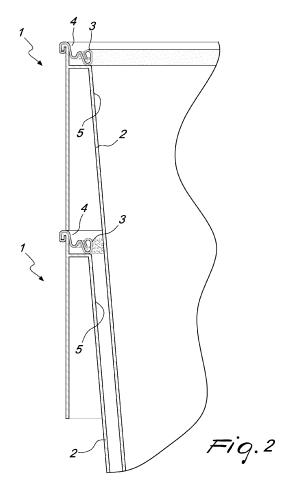
Rosso, Fabrizio
 26842 CASELLE LANDI LO (IT)

(74) Representative: Modiano, Micaela Nadia

Modiano & Partners Via Meravigli 16 20123 Milano (IT)

# (54) Container, particularly for water-based paints and the like

(57) A container (1), particularly adapted for water-based paints and the like, which comprises a body (2) made of plastic material, the body (2) being conical so that it can be stacked when empty and further comprising a metal ring (3) adapted to be crimped to the upper mouth (4) of the container so as to be flush with the inner wall (5) of the body (2) of the container (1).



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#### Description

**[0001]** The present invention relates to a container, particularly adapted for water-based paints and the like. More specifically, the invention relates to an improved container that can be stacked even when it is empty.

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**[0002]** As is known, containers, particularly adapted for paints and the like, are constituted by a body that is generally cylindrical with a hermetically-sealed lid. Conventional containers are not normally stackable on each other, since the cylindrical body does not allow the stacking operation when the container is empty.

[0003] Moreover, conventional containers have an inner band at the upper mouth of the container which protrudes inward from the walls of the body of the container. This does not normally make it possible for the container to be completely emptied, since the band or ring protruding toward the inside of the body of the container creates a collection point for the liquid and thus does not enable the user to completely empty the container when this is desired.

**[0004]** The aim of the present invention is to provide a container, particularly adapted for water-based paints and the like, which can be completely emptied of its contents.

**[0005]** Within this aim, an object of the present invention is to provide a container, particularly adapted for water-based paints and the like, which can be easily stacked, when empty, inside other, similar containers.

**[0006]** Another object of the present invention is to provide a container that does not permit the formation of rust within it owing to contact with the water-based contents of the container.

**[0007]** Another object of the present invention is to provide a container, particularly adapted for water-based paints and the like, that is highly reliable, easily and practically implemented and low-cost.

**[0008]** This aim and these and other objects which will become more apparent hereinafter are all achieved by a container, particularly adapted for water-based paints and the like, comprising a body made of plastic material, **characterized in that** said body is conical and in that it comprises a metal ring adapted to be crimped to the upper mouth of the container so as to be flush with the inner wall of the body of the container.

**[0009]** Further characteristics and advantages of the invention will become more apparent from the description of a preferred, but not exclusive, embodiment of the container according to the invention, which is illustrated by way of non-limiting example in the accompanying drawings wherein:

Figure 1 is a longitudinal sectional view of the container according to the invention;

Figure 2 is a longitudinal sectional view of two containers according to the invention, stacked;

Figure 3 is a perspective view of two containers according to the invention, stacked;

Figure 4 is a sectional view of the stacking of a plurality of containers according to the invention.

**[0010]** With reference to the figures, the container according to the invention, generally designated by the reference numeral 1, comprises a body 2 made of plastic material and conical in shape.

**[0011]** Conveniently, the container is provided with a metal ring 3, crimped to the upper mouth 4 of the container, which is made of tinplate band that is plastic-coated in order to prevent the formation of rust which inevitably would be created if the raw tinplate band were in direct contact with the water-based contents of the container.

**[0012]** The ring 3 is advantageously provided with a plastic-coated tinplate band at the region of the ring that faces the inside of the container, while the remaining part of the ring is painted.

**[0013]** The tinplate band 3 is advantageously arranged so as to be flush with the inner wall 5 of the container, in such a way that the complete emptying of the container is ensured since the band 3 does not constitute an obstacle to the outward flow of the liquid contents when the container is overturned.

[0014] In substance, thus, the presence of the tinplate band crimped to the upper mouth of the container on the one hand makes it possible to prevent the formation of rust and on the other hand enables the complete emptying of the container, which would not be possible if the band were protruding toward the inside of the container, i.e. not flush with the inner wall 5 of the container as in the present invention.

**[0015]** Moreover, the conical shape of the body of the container enables the stacking of identical containers, when these are empty, thus making it possible to reduce the storage volumes of the containers and at the same time facilitate the transport thereof.

**[0016]** In practice it has been found that the container according to the invention fully achieves the set aim and objects, in that it can be completely emptied and at the same time be rustproof, since the plastic-coated tinplate band crimped to the upper mouth of the container is not affected by contact with the water-based contents of the container.

45 [0017] The container, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

**[0018]** Moreover, all the details may be substituted by other, technically equivalent elements.

**[0019]** In practice the materials employed, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

**[0020]** The disclosures in Italian Patent Application No. MI2012A000211 from which this application claims priority are incorporated herein by reference.

**[0021]** Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increas-

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ing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

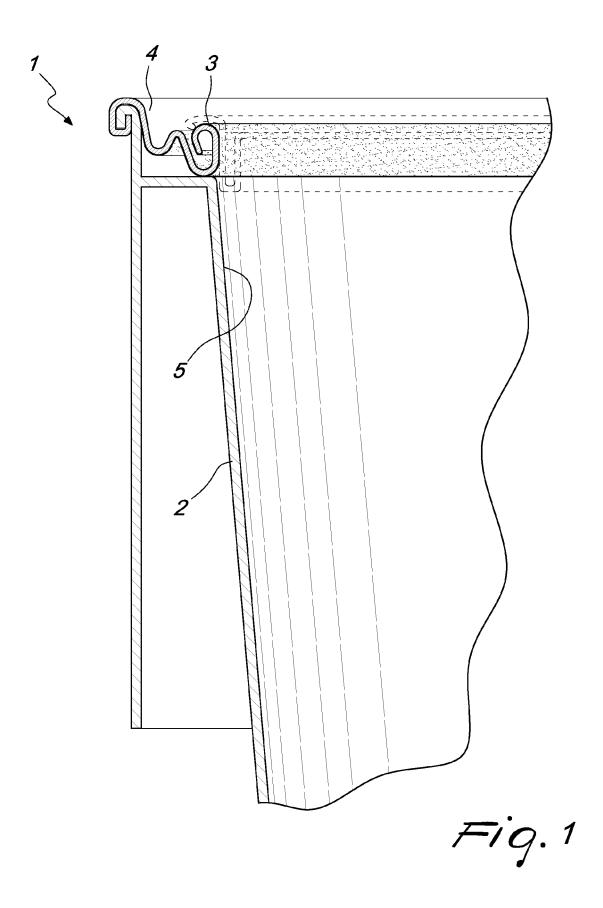
#### **Claims**

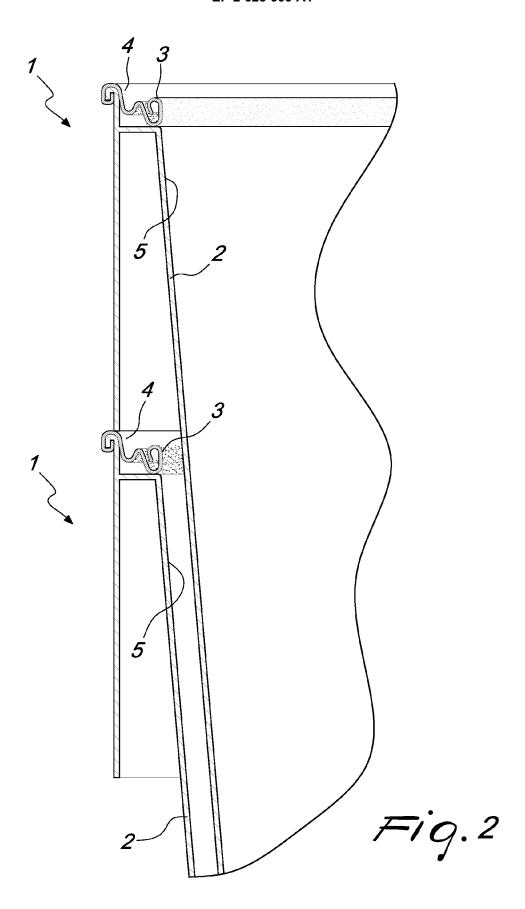
A container (1), particularly adapted for water-based paints and the like, comprising a body (2) made of plastic material, characterized in that said body (2) is conical and in that it comprises a metal ring (3) adapted to be crimped to the upper mouth (4) of the container so as to be flush with the inner wall (5) of the body (2) of the container.

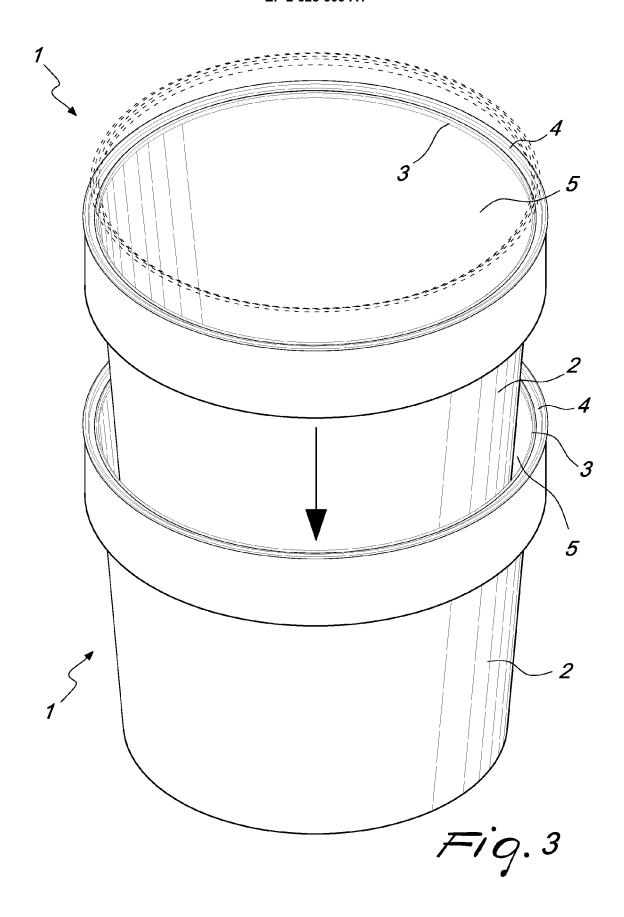
2. The container according to claim 1, **characterized** in that said metal ring (3) is a plastic-coated tinplate band.

3. The container according to claim 2, **characterized** in **that** said ring (3) is provided by a tinplate band which is plastic-coated at the region of the ring that is adapted to face the inside of the container.

4. The container according to claim 1, **characterized** in that said ring (3) is painted at the region of the ring that does not face the inside of said container.







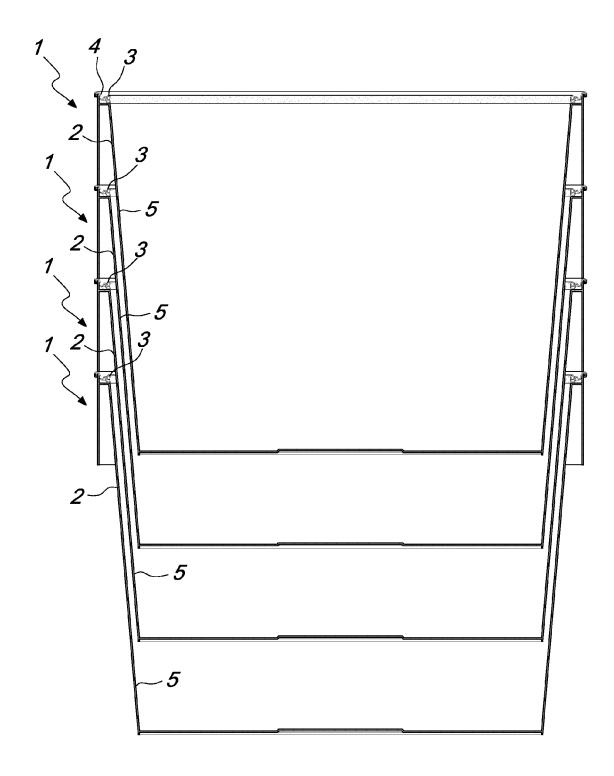


Fig. 4



# **EUROPEAN SEARCH REPORT**

Application Number EP 13 15 4763

	DOCUMEN IS CONSID	ERED TO BE RELEVANT				
Category	Citation of document with ir of relevant passa	idication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
Х	12 July 1988 (1988-	FACE JAMES [US] ET AL 07-12) - column 4, line 18;	1-4	INV. B44D3/12		
Х	31 May 1977 (1977-0	NCHARD RICHARD LEWIS) 5-31) - column 3, line 64;	1-4			
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	The present search report has be	peen drawn up for all claims  Date of completion of the search		Examiner		
	Munich	16 April 2013	Sa	rtor, 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		T : theory or print E : earlier patent after the filing D : document cite L : document cite	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			
O : non-written disclosure P : intermediate document		& : member of the document	& : member of the same patent family, corresponding			

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 13 15 4763

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.

16-04-2013

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## REFERENCES CITED IN THE DESCRIPTION

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• IT MI20120211 A [0020]