



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
13.04.2011 Bulletin 2011/15

(51) Int Cl.:
B44D 3/14 (2006.01)

(21) Application number: **10186508.7**

(22) Date of filing: **05.10.2010**

(84) Designated Contracting States:
AL 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 RS SE SI SK SM TR
Designated Extension States:
BA ME

(71) Applicant: **Nespoli Engineering KKFT**
H-1031 Budapest (HU)

(72) Inventor: **Nespoli, Alessandro**
20038 Seregno (MB) (IT)

(74) Representative: **Ripamonti, Enrico**
Giambrocono & C. S.p.A.,
Via Rosolino Pilo, 19/B
20129 Milano (IT)

(30) Priority: **07.10.2009 IT MI20091717**

(54) **Container for painting**

(57) The vessel (1) according to the invention comprises: A) a vessel body (2) that forms a bottom (5) and at least one side wall (6) that forms a cavity (3) designed to contain a quantity of paint, where the cavity (3) is open at the top in such a manner as to form a mouth (7); B) a handle (11) fastened to or produced in one piece with the vessel body (2). Using the handle (11), a user can hold the painting vessel (1) during use. The handle (11)

is provided with at least a first brush-holder seat (19) designed to secure the handle of a brush (P1, P2), holding it substantially upright with the bristles immersed in a liquid contained in the cavity (3). The vessel (1), which is simple and inexpensive, can be held in the hand stably and comfortably while painting, and can hold the brushes in an optimal position when they are immersed in a solvent.

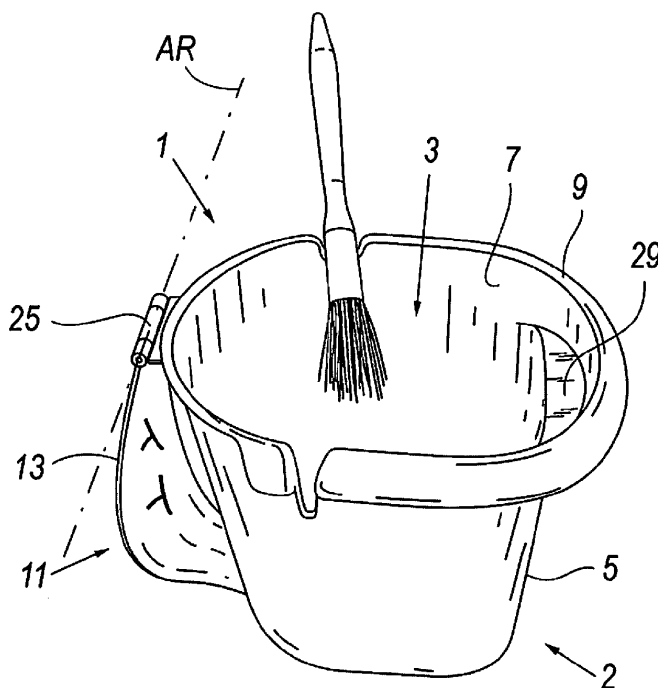


Fig. 1

Description

DESCRIPTION

Field of the invention

[0001] The present invention relates to a painting vessel, which allows an adequate quantity of paint to be held while painting by hand and also allows the brushes to be soaked effectively when they are not in use.

Background art

[0002] There are currently known painting vessels whose shape has been conceived with the intention of making the handle as stable and comfortable as possible for the user to hold while painting with a brush. An example of these vessels is described in the document EP1792834A2. On the other hand, in the field of painting by hand there exists the problem of keeping brushes with their bristles immersed in water or in an appropriate solvent during the night or between one use and the next.

[0003] An object of the present invention is to provide a painting vessel which is improved with respect to known vessels, with reference to comfortable and stable hold and to the possibility of keeping brushes, pads, rollers and other hand-held instruments immersed in water or another solvent contained in this vessel.

Summary of the invention

[0004] This object is achieved, according to a first aspect of the present invention, with a painting vessel having the characteristics according to claim 1.

[0005] In a particular embodiment, at least in the first configuration, the handle extends from or in proximity to the mouth towards the bottom.

[0006] In a particular embodiment the handle is designed to pass from the first to the second configuration rotating about a rotation axis AR lying in an ideal plane substantially normal to the axis of the vessel body and eccentric with respect to the mouth.

[0007] In a particular embodiment the rotation axis AR is external to the mouth.

[0008] The advantages achievable with the present invention will be more apparent to those skilled in the art from the following detailed description of some particular embodiments provided by way of non-limiting example, illustrated with reference to the following schematic drawings.

List of Drawings

[0009]

Fig. 1 shows, in a perspective view, a painting vessel according to a preferred embodiment of the present invention, in the handle configuration;

Fig. 2 shows, in a perspective view, an example of how the vessel of Fig. 1 can be held in the hand during normal use;

Fig. 3 shows, in a cross-section according to a vertical plane, a detail of fastening of the mobile band to the vessel body in the painting vessel of Fig. 1;

Fig. 4 shows, in a perspective view, the vessel of Fig. 1 in the brush washing configuration Detailed description

[0010] Figs. 1-4 relate to a first embodiment of the painting vessel according to the invention.

[0011] This vessel, indicated with the reference numeral 1, comprises a vessel body, indicated with the reference numeral 2, and which forms a cavity 3 designed to contain an adequate quantity of paint, for example from one quarter of a litre to 2 litres, and more preferably from one to 1.5 litres.

[0012] The receptacle body can be made, for example, of an appropriate injection moulded plastic material, for example polyethylene, and more in particular high density polyethylene.

[0013] The cavity 3 is delimited by a bottom 5 and by side walls 6. The cavity 3 is open at the top and forms an upper mouth 7 delimited by a first edge 9, in which the side walls 5 end. In the present example of embodiment, the cavity has slightly elongated cross sections.

[0014] The painting vessel 1 is provided on one side with a handle 11 designed to allow the vessel 1 to be held more stably and comfortably in the hand. The handle 11 comprises a band 13 and a relative fastener 15. (Figs. 1-3).

[0015] The band 13, indicated in this description also as "mobile band 13", is preferably made of one of the following materials: synthetic rubber or another relatively soft and flexible polymeric material, such as low density polyethylene, synthetic rubbers or resins with modulus of elasticity ranging from 170 to 350 MPa, synthetic rubbers or resins with Shore A hardness equal to or lower than 70, and more preferably equal to or lower than 60. The mobile band 13 substantially has the shape of a strip and is hinged to the first edge 9 in such a manner that it can rotate about a horizontal rotation axis AR, thereby passing from a handle configuration, shown in Fig. 2, to a brush washing configuration, shown in Fig. 4; in other embodiments not shown, the band 13 and/or handle 11 can be fastened more in general at or in proximity to the mouth 7, i.e. closer to this latter than to the bottom 5; in other embodiments, not shown, the rotation axis AR can not only be horizontal but, more in general, lie in an ideal plane substantially normal to the axis of the vessel body 2 and eccentric to the mouth 7.

[0016] In the embodiment of the accompanying figures, the rotation axis AR is external to the mouth 7; in other embodiments, not shown, the rotation axis AR can be more in general eccentric with respect to the mouth 7, therefore does not pass through the centre thereof.

[0017] In the embodiment of the accompanying fig-

ures, the fastener 15 is produced as a coupling pin or projection located on the lower outer part of the vessel 1 (Fig. 3) and, in the handle configuration, the band 13 is coupled - using appropriate through holes 17 - to the coupling pin or first coupling projection 15, in such a manner as to form a loop inside which the user can insert a hand to hold the vessel (Fig. 1); in this configuration the handle 11 extends from the mouth 7 towards the bottom 5.

[0018] As shown in Fig. 3, the coupling pin 15 has a thickened end to which the band 13 is substantially buttoned. According to an aspect of the invention, the band 13 is also provided with brush-holder openings 19 (Fig. 4) designed to receive one or more brush handles P1, P2 and hold them substantially upright and with the relative bristles immersed in the cavity 3 when the band 13 extends across the upper mouth 7, i.e. when the painting vessel is in the brush washing configuration; in this configuration the brush-holder openings 19 are advantageously designed to maintain the brushes P1, P2 suspended so that their bristles are not resting on the bottom of the cavity 3, preventing damage thereto caused by bending.

[0019] In the present description, "substantially upright" is intended as inclined with an angle, with respect to a horizontal plane, equal to or greater than 45°, more preferably equal to or greater than 60° and even more preferably equal to or greater than 70°.

[0020] Preferably, the brush-holder openings 19 are arranged in such a manner as to hold the brush handles P1, P2 substantially vertical and at a distance from the side walls 5 and from the first edge 9, indicatively in the central portion of the upper mouth 7, as shown in Fig. 4.

[0021] Advantageously, the edge of each brush-holder opening 19 forms one or more flaps in the form of a lobe 21, for example cusp shaped (Fig. 4), which allow better blocking of the handle of the brushes P1, P2, for example through friction, adapting to handles with considerably different diameters; in the present embodiment the various lobes 21 are arranged substantially radially and converge towards the centre of each brush-holder opening.

[0022] The mobile band 13 can be held stretched, substantially horizontally, across the upper mouth 7, coupling with a free end 16 to an appropriate fastening tooth 5 or other second fastening projection 23, for example produced on the edge 9, in a position more or less diametrically opposite the hinge 25.

[0023] Advantageously the band 13 couples to the tooth 23 using the same holes 17 with which it couples to the coupling pin or projection 15, making it simple and inexpensive to construct. With a very simple and inexpensive construction, the painting vessel 1 described above combines two different functions:

- a) it increases the stability and comfort of the handle of the vessel while painting;
- b) it uses the same vessel to soak the brushes, for example in a suitable solvent for paints, such as tur-

pentine or acetone, between uses, holding the brushes in an optimal position, fixed or in stable balance and simultaneously cleaning the inside of the vessel 1 with the solvent.

[0024] Advantageously, to increase the stability of the brushes secured in the seats 19, or more in general on the handle 11, this latter can have substantially flat cross sections. Advantageously, the first edge 9 forms one or more slots or other seats of suitable shape 27, designed to receive and hold in position various parts of other brushes, for example to receive the handle or, advantageously and as shown in Fig. 1, the ferrule: in this way, it is possible to hold the vessel 1 and the brush, for example during a short break, with one hand, while the other hand is free, for example, to clean an unwanted paint mark or to carry out other operations. It can be seen in Fig. 1 that the bristles of the brush are not immersed in the paint or in the solvent contained in the cavity 3. As shown in Fig. 3, the slot 27 is substantially V-shaped in such a manner as to be able to receive brushes of different sizes. Advantageously, the slot 27 has edges turned outwards and/or towards the inside of the cavity 3, in such a manner as to hold the brushes more stably. Advantageously, the vessel 1 is provided with a second edge 29, located inside the cavity 3, in proximity to the first edge 9; as shown in Fig. 1, the second edge 29 substantially forms a ledge against which the brush can be lightly squeezed after having been dipped in the paint, so that any excess runs directly into the cavity 3.

[0025] The examples of embodiment described above are susceptible to various modifications and variations without however departing from the scope of protection of the present invention. For example, the band 13 can also be made of different materials to synthetic resins, such as fabric made of animal or vegetable fibres.

[0026] The examples and lists of possible variants of the present application must be intended as non-limiting lists.

Claims

1. A painting vessel (1), comprising:

- a vessel body (2) that forms a bottom (5) and at least one side wall (6) that form a cavity (3) designed to contain a quantity of paint or other colouring substance adequate for painting, wherein the cavity (3) is open at the top in such a manner as to form a mouth (7) ;
- a handle (11) fastened to or formed in one piece by the vessel body (2), wherein:
 - using the handle (11), a user can hold the painting vessel (1) during use;
 - the handle (11) is provided with at least a first brush-holder seat (19) designed to secure a part of a brush (P1, P2), - for example the handle of

- the brush - and hold the brush substantially upright with the bristles immersed in a liquid contained in the cavity (3).
2. The vessel according to claim 1, wherein the handle (11) is designed to form a loop together with the vessel body (2), and wherein a user can insert one or more fingers into the loop to hold the painting vessel (1) in the hand during use. 5
 3. The vessel according to claim 1, where the handle (11) is designed for switching from a first configuration in which it extends along the side wall (6) in such a manner as to form said loop, to a second configuration in which it extends above and if necessary across the mouth (7). 10
 4. The vessel according to claim 3, wherein when the handle (11) extends above and if necessary across the mouth (7), the first brush-holder seat (19) is located over or in any case facing the mouth (7). 15
 5. The vessel according to claim 3, wherein the handle (11) is hinged to the rest of the painting vessel (1) and is designed for switching, by rotating, from the first to the second configuration. 20
 6. The vessel according to claim 1, wherein the handle (11) comprises a strip of material substantially more flexible than the material of which the vessel body (2) is made. 25
 7. The vessel according to claim 6, wherein the material of the strip is substantially rubber or elastomeric, and may have one or more of the following characteristics: 30
 - Shore A hardness substantially equal to or less than 70 degrees;
 - Shore A hardness substantially equal to or less than 60 degrees;
 - modulus of elasticity substantially equal to or less than 350 MPa. 35
 8. The vessel according to claim 5, wherein the handle (11) is hinged at or in proximity to the mouth (7). 40
 9. The vessel according to claim 3, wherein the handle (11) has a free end (14) designed to be reversibly fastened, in the first configuration, to the vessel body (2) in such a manner as to form said loop. 45
 10. The vessel according to claim 3, wherein the handle (11) has a free end (14) designed to be reversibly fastened, in the second configuration, to the vessel body (2) in such a manner as to extend above and if necessary across the mouth (7). 50
 11. The vessel according to claim 1, wherein the at least one first brush-holder seat (19) comprises a hole or other through opening through which the handle of a brush (P1, P2) can be inserted. 55
 12. The vessel according to claim 11, wherein the at least one first brush-holder seat (19) comprises one or more lobes and/or flaps (21) designed to deform when the handle of a brush (P1, P2) is inserted in the at least one first brush-holder seat (19), if necessary adhering to this handle.
 13. The vessel according to claim 3, wherein at least during passage from the first to the second configuration or vice versa, the handle (11) has at least one free end (14) not constrained to the vessel body (2).
 14. The vessel according to claim 1, wherein, when a part of a brush (P1, P2) is secured in the at least one first brush-holder seat (19), the handle (11) is designed to hold the brush upright with the bristles immersed in a liquid contained in the cavity (3), in a position fixed and/or with substantially stable balance.
 15. The vessel according to claim 14, wherein the handle (11) is designed to hold the brush upright with the bristles immersed in a liquid contained in the cavity (3), in a position fixed and/or with substantially stable balance at least in the second configuration.

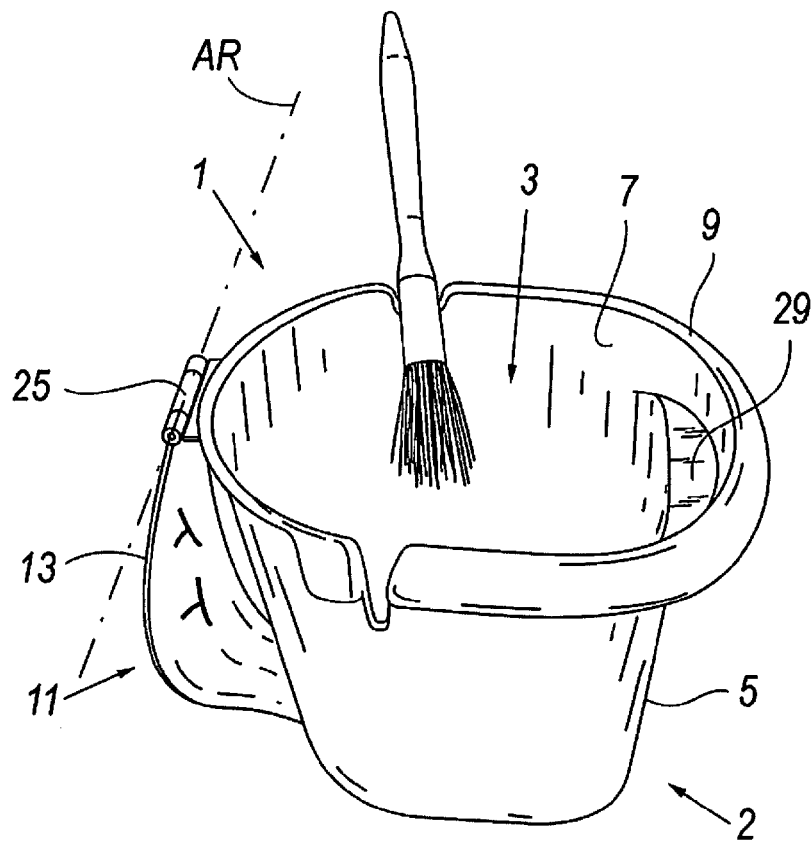


Fig. 1

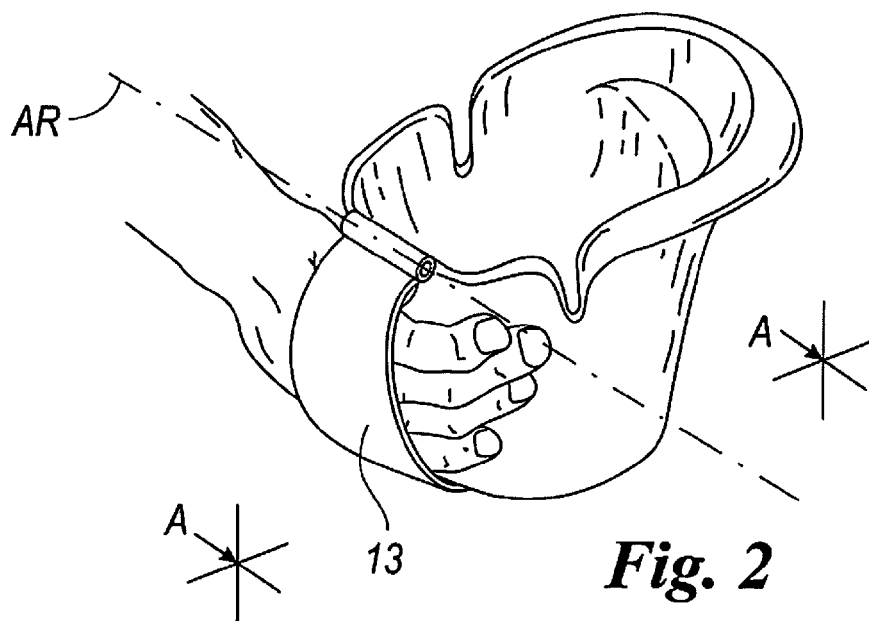
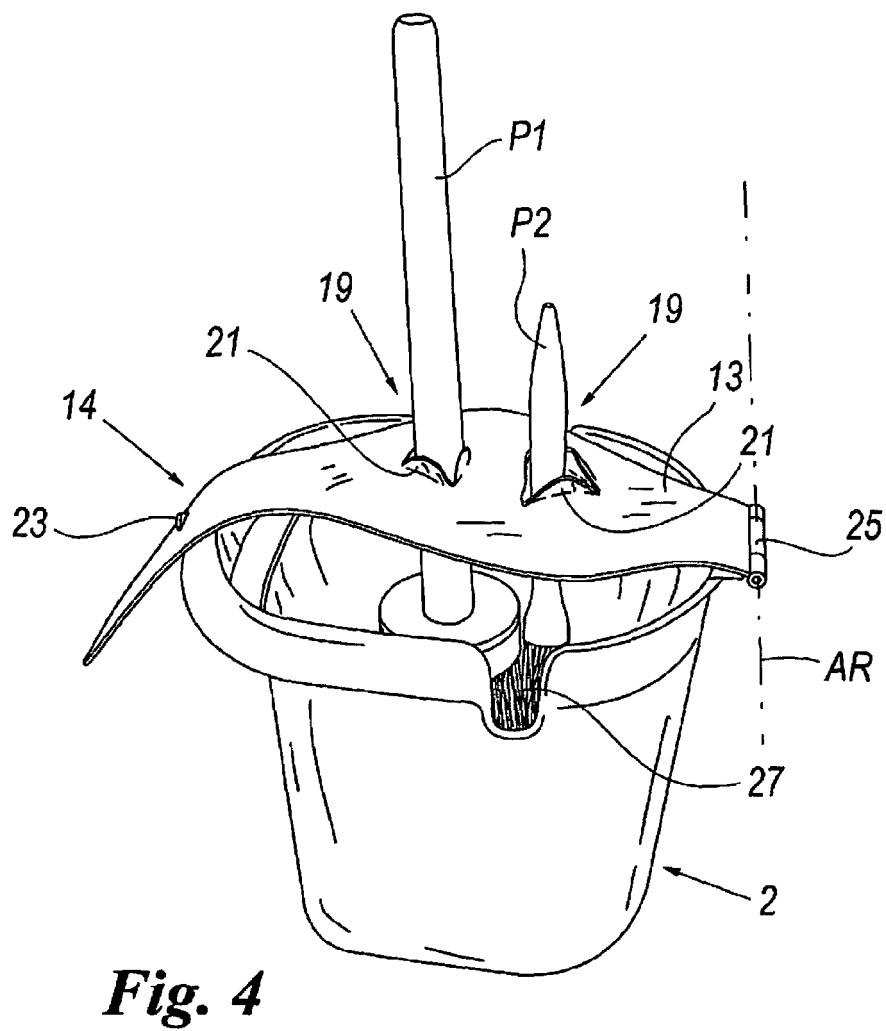
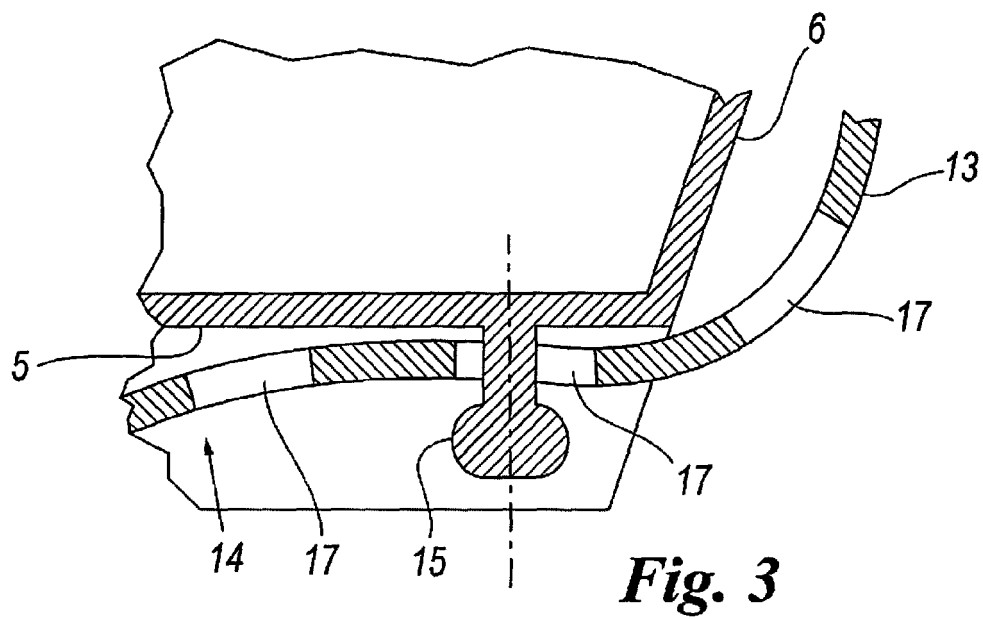


Fig. 2





EUROPEAN SEARCH REPORT

Application Number
EP 10 18 6508

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	GB 2 386 547 A (JONES GREGORY GRANVILLE [GB]; LUTHER JEFFREY ALAN [GB]) 24 September 2003 (2003-09-24)	1,6, 11-15	INV. B44D3/14
A	* the whole document *	2-5,7-10	
X	DE 19 28 321 A1 (CASSEL KARL) 10 December 1970 (1970-12-10)	1,2, 11-15	
A	* the whole document *	3-10	
X	GB 1 024 221 A (STANLEY DAVID MARSH) 30 March 1966 (1966-03-30)	1,2, 11-15	
A	* the whole document *	3-10	
X	US 2007/295768 A1 (GRINGER DONALD [US] ET AL) 27 December 2007 (2007-12-27)	1,6,7	TECHNICAL FIELDS SEARCHED (IPC) B44D
A	* paragraph [0064] - paragraph [0078]; figures 7,12,13 *	2-5,8-15	
X	GB 2 254 361 A (WHALE WILLIAM EDWARD; SMITH LESLIE SAMUEL WHALE WILLIAM EDWARD [GB]; S) 7 October 1992 (1992-10-07)	1,6,7	
A	* the whole document *	2-5,8-15	
X	US 3 448 956 A (KUHANECK MICHAEL JR) 10 June 1969 (1969-06-10)	1	
A	* the whole document *	2-15	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 7 February 2011	Examiner Sartor, Michele
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

3
EPO FORM 1503 03.82 (P04C01)

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

EP 10 18 6508

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.

07-02-2011

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2386547	A	24-09-2003	NONE	
DE 1928321	A1	10-12-1970	NONE	
GB 1024221	A	30-03-1966	NONE	
US 2007295768	A1	27-12-2007	NONE	
GB 2254361	A	07-10-1992	NONE	
US 3448956	A	10-06-1969	NONE	

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- EP 1792834 A2 [0002]