



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
22.08.2007 Bulletin 2007/34

(51) Int Cl.:
A62C 31/00 (2006.01) A62C 39/00 (2006.01)

(21) Application number: **07075098.9**

(22) Date of filing: **05.02.2007**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

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(30) Priority: **15.02.2006 NL 1031155**

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(54) **Spray nozzle for a hire hose**

(57) Spray nozzle for a fire-hose, comprising a connecting opening for a fire-hose in a first outer end of the spray nozzle, a spray aperture in the second outer end of the spray nozzle, a throughfeed channel connecting

the connecting opening for the fire-hose and the spray aperture, and a movable valve which can close the throughfeed channel, wherein the spray nozzle is provided with an at least partially phosphorescent outer surface.

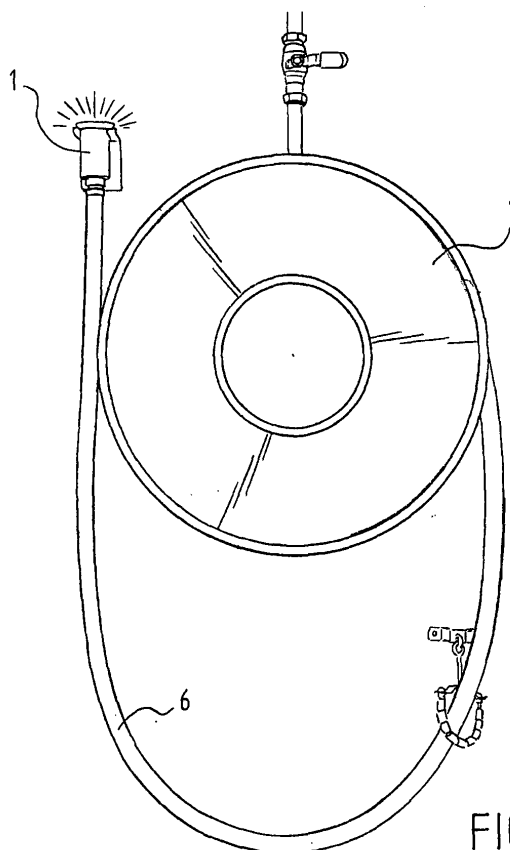


FIG. 1

Description

[0001] The invention relates to a spray nozzle for a fire-hose, comprising a connecting opening for a fire-hose in a first outer end of the spray nozzle, a spray aperture in the second outer end of the spray nozzle, a throughfeed channel connecting the connecting opening for the fire-hose and the spray aperture, and a movable valve which can close the throughfeed channel.

[0002] Such a spray nozzle for a fire-hose is generally known. Fire-hoses hang in many buildings, rolled up on reels, in for instance corridors and rooms. A problem which occurs here is that fire in a building often results in power failure. This can produce dangerous situations. The invention has for its object to combat these dangers.

[0003] For this purpose at least a part of the surface of the spray nozzle is provided with a phosphorescent material. Because a phosphorescent material continues to emit light for a considerable time after the ambient light has disappeared, people in the building can readily identify and find the outer end of the fire-hose in the dark.

[0004] The phosphorescent outer surface is preferably annular, and the phosphorescent outer surface is preferably the outer surface of a phosphorescent ring. It is not therefore necessary to manufacture the whole surface from phosphorescent material.

[0005] The phosphorescent outer surface preferably extends close to the spray aperture, and the phosphorescent outer surface more preferably encircles the spray aperture. It is in this way apparent where the outer end is situated.

[0006] The invention also relates to a fire-hose provided with a spray nozzle.

[0007] The invention will be further elucidated on the basis of an exemplary embodiment shown in figures, in which:

Figure 1 shows a fire-hose provided with a spray nozzle; and

Figure 2 shows the spray nozzle of Figure 1.

[0008] Spray nozzle 1, which according to Figure 1 is mounted on the outer end of a fire-hose 6 on a reel 7, has on a first outer end a connection 2 for fire-hose 6. Connection 2 is connected to internal parts (not shown) of spray nozzle 1 in which is located a water throughfeed channel. A rotatable handgrip 3 is placed over the internal parts of spray nozzle 1. Handgrip 3 is manufactured from a red plastic. Handgrip 3 is provided at the second outer end of the spray nozzle with a white-yellow phosphorescent plastic ring 4. Spray aperture 5 of the water throughfeed channel of the internal parts is situated in the opening of phosphorescent ring 4. By rotating handgrip 3 about its axis a valve in spray aperture 5 is either closed or opened such that the water throughfeed is completely closed or that a water jet or water mist is created as required.

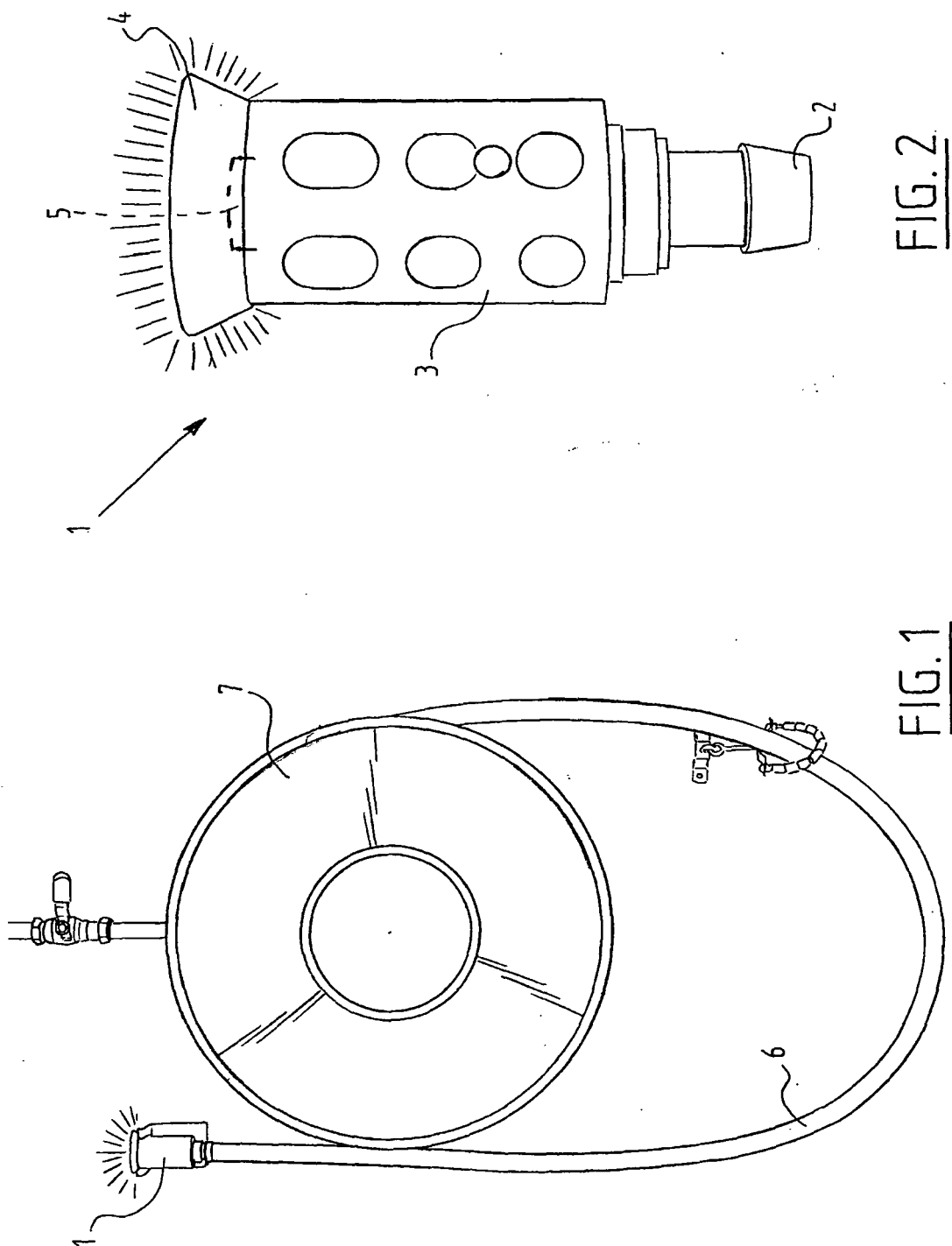
[0009] Ring 4 is for instance manufactured from an

epoxy incorporating a phosphorescent pigment. An example of a phosphorescent pigment is Luminova (TM) which is commercially available. More examples of phosphorescent pigments and suitable epoxies are described in US 6,005,024. Ring 4 will be luminescent in the dark if the light in the vicinity of fire-hose 6 fails. Spray nozzle 1 can hereby be readily found in the dark.

[0010] Although the invention is described here on the basis of one exemplary embodiment, the invention is not limited thereto. The scope of the invention is therefore defined solely by the appended claims.

Claims

1. Spray nozzle 1 for a fire-hose 6, comprising a connecting opening 2 for a fire-hose 6 in a first outer end of the spray nozzle 1, a spray aperture 5 in the second outer end of the spray nozzle, a throughfeed channel connecting the connecting opening 2 for the fire-hose 6 and the spray aperture 5, and a movable valve which can close the throughfeed channel, **characterized in that** at least a part 4 of the surface of the spray nozzle 1 is provided with a phosphorescent material.
2. Spray nozzle as claimed in claim 1, wherein the phosphorescent outer surface is annular.
3. Spray nozzle as claimed in claim 2, wherein the phosphorescent outer surface is the outer surface of a phosphorescent ring 4.
4. Spray nozzle as claimed in claim 1, 2 or 3, wherein the phosphorescent outer surface extends close to the spray aperture 5 of the spray nozzle 1.
5. Spray nozzle as claimed in claim 4, wherein the phosphorescent outer surface encircles the spray aperture 5.
6. Fire-hose 6 provided with a spray nozzle 1 as claimed in any of the foregoing claims.





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EUROPEAN SEARCH REPORT

Application Number
EP 07 07 5098

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 19 05 355 U (GLORIA-WERK H. SCHULTE-FRANKENFELD K.G) 26 November 1964 (1964-11-26) * page 2; figure *	1-6	INV. A62C31/00 A62C39/00
A	US 5 344 193 A (RIO ET AL) 6 September 1994 (1994-09-06) * column 3, line 63 - column 4, line 3; figure 2 *		
A	EP 0 993 844 A (I.V.G. COLBACHINI S.P.A) 19 April 2000 (2000-04-19) * abstract; figure 1 *		
A	DE 36 09 499 A1 (A. WERNER GMBH & CO SPEZIALFABRIK FUER FEUERLOESCHTECHNIK) 24 September 1987 (1987-09-24) * column 2, lines 16-58; figures *		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) A62B A62C
Place of search The Hague		Date of completion of the search 4 June 2007	Examiner van Bilderbeek, Henk
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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EPO FORM 1503 03.82 (P04C01)

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

EP 07 07 5098

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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04-06-2007

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
DE 1905355	U	26-11-1964	NONE		
US 5344193	A	06-09-1994	CA	2107254 A1	30-03-1995
EP 0993844	A	19-04-2000	IT	MI980681 U1	17-04-2000
DE 3609499	A1	24-09-1987	NONE		

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- US 6005024 A [0009]