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(54) **Reversible tip for high pressure air assisted spraying**

(57) A reversible tip is incorporated into a high pressure air assisted airless sprayer to allow cleaning of the

plugged tip without removal of the tip and yet provide enhanced atomisation in a compact package.

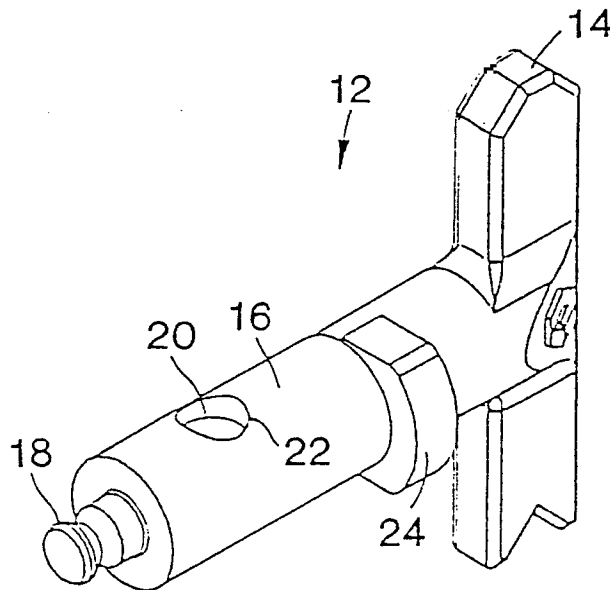


FIG. 5



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 2637

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	PATENT ABSTRACTS OF JAPAN vol. 017, no. 052 (C-1022), 2 February 1993 (1993-02-02) -& JP 04 265171 A (HONDA MOTOR CO LTD), 21 September 1992 (1992-09-21) * abstract; figures *	1,2	B05B15/02 B05B7/08 B05B15/00
A	EP 0 664 161 A (WAGNER INTERNATIONAL AG) 26 July 1995 (1995-07-26) * column 3, line 15-53; figures 1-3 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B05B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
MUNICH		5 April 2000	Innecken, A
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 97 30 2637

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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05-04-2000

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 04265171 A	21-09-1992	NONE	
EP 0664161 A	26-07-1995	DE 4401488 A JP 7213965 A	20-07-1995 15-08-1995

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82