



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**09.07.2008 Bulletin 2008/28**

(51) Int Cl.:  
**B05B 15/12 (2006.01)**

(43) Date of publication A2:  
**22.10.2003 Bulletin 2003/43**

(21) Application number: **03447093.0**

(22) Date of filing: **16.04.2003**

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

(72) Inventor: **De Mil, Herman**  
**9420 Erpe-Mere (BE)**

(74) Representative: **Luys, Marie-José A.H. et al**  
**Gevers & Vander Haeghen,**  
**Holidaystraat 7**  
**1831 Diegem (BE)**

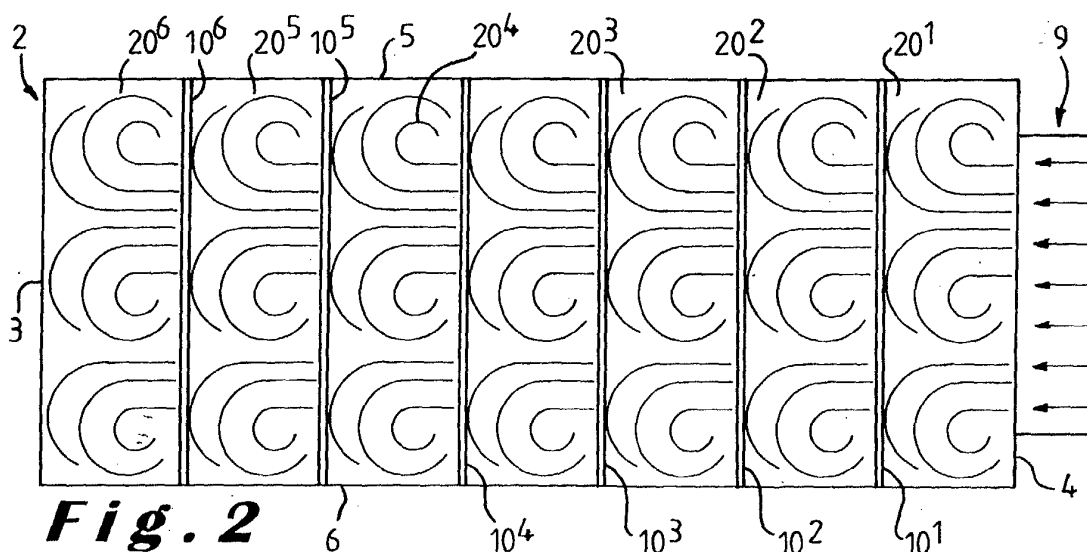
(30) Priority: **19.04.2002 EP 02447070**

(71) Applicant: **Garmat Europe**  
**9420 Erpe-Mere (BE)**

(54) **Air distribution system for paint spray booth**

(57) The present invention relates to an air distribution device (2) for supplying an air flow to a paint spray booth (1), the air distribution device (2) comprising a housing (11) having opposed first (3) and second (4) transverse side walls and opposed first (5) and second (6) longitudinal side walls, an upper wall (7) and a bottom wall (8), the bottom wall (8) allowing for an air flow from the housing (11) to the paint spray booth (1). At least one of the side walls of the housing (11) comprises an air inlet (9).  $n$  partition walls (10) divide the housing (11) into  $n+1$

compartments (20). The partition walls (10) extend in height direction of the housing (11) over part of the height thereof. The partition walls (10) are provided for guiding the air flow from the air inlet (9) throughout the housing (11) and for distributing the air flow over the compartments (20) in such a way that each compartment (20) allows for an air flow to the paint spray booth (2) which approximately corresponds to (the total air flow multiplied by (bottom surface area of the compartment/total bottom surface area)).



**Fig. 2**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 03 44 7093

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	DE 91 01 810 U1 (WOLF STAHLBAU GMBH U. CO KG, 8069 GEISENFELD, DE) 23 May 1991 (1991-05-23) * page 8, line 31 - page 9, line 13; figures 1,2 *	1,2,4, 6-10	INV. B05B15/12
X	----- US 5 855 509 A (WHITE WILLIAM H [US] ET AL) 5 January 1999 (1999-01-05) * column 4, line 9 - column 4, line 22; figures 1-6 *	1,2	
A	----- US 5 779 534 A (KUNEC RICHARD J [US]) 14 July 1998 (1998-07-14) * the whole document *	1	
A	----- US 5 762 548 A (MILOJEVIC DRAGOSLAV [DE] ET AL) 9 June 1998 (1998-06-09) * the whole document *	1	
A	----- EP 0 016 698 A (BUDZINSKI JEAN) 1 October 1980 (1980-10-01) * the whole document *	1	TECHNICAL FIELDS SEARCHED (IPC)
A	----- US 5 512 017 A (GORE ANTHONY R [US] ET AL) 30 April 1996 (1996-04-30) * the whole document *	1	B05B F24F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 May 2008	Examiner Menn, Patrick
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			

3  
EPO FORM 1503 03.82 (P04C01)

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

EP 03 44 7093

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.

22-05-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 9101810	U1	23-05-1991	NONE
US 5855509	A	05-01-1999	NONE
US 5779534	A	14-07-1998	NONE
US 5762548	A	09-06-1998	AT 179348 T 15-05-1999 AU 2564395 A 05-12-1995 BR 9507644 A 23-09-1997 CA 2190143 A1 23-11-1995 DE 4417188 A1 23-11-1995 WO 9531292 A1 23-11-1995 EP 0750529 A1 02-01-1997 JP 10500063 T 06-01-1998 PL 318467 A1 23-06-1997 RU 2145526 C1 20-02-2000
EP 0016698	A	01-10-1980	DE 3065496 D1 15-12-1983 FR 2451230 A2 10-10-1980
US 5512017	A	30-04-1996	AU 4230996 A 17-06-1996 BR 9510240 A 04-11-1997 CA 2205131 A1 30-05-1996 WO 9615856 A1 30-05-1996