

# (11) **EP 2 280 231 A3**

(12)

# **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 25.06.2014 Bulletin 2014/26

(51) Int Cl.: F24F 11/053 (2006.01)

F24F 13/14 (2006.01)

(43) Date of publication A2: 02.02.2011 Bulletin 2011/05

(21) Application number: 10382173.2

(22) Date of filing: 15.06.2010

(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 SE SI SK SM TR Designated Extension States:

BA ME RS

(30) Priority: 15.06.2009 ES 200930185

(71) Applicant: Koolair, S.A. 28936 Mostoles (Madrid) (ES)

(72) Inventor: Susarte Torrijos, José Tomás 28936 Mostoles (Madrid) (ES)

(74) Representative: Carpintero Lopez, Francisco et al Herrero & Asociados, S.L. Alcalá 35 28014 Madrid (ES)

## (54) Heat-adjustable diffuser for heating/air conditioning installations

(57) The invention relates to a heat-adjustable diffuser for heating/air conditioning installations, comprising a frame for fixing to a wall on which a pivoting finned core of an air diffuser is assembled for the automatic orientation of the outlet flow according to the temperature of said flow, wherein the automatic orientation of the diffuser is established by means of a heat-expandable element capable of impinging on a lever acting on the body with fins

to cause the pivoting, according to its expansion or contraction caused by the heating or cooling of the air, wherein on the frame for fixing there are fixed two L-shaped side plates integrally joined to one another by means of a transverse profile for the support of the automatic positioning mechanism; additionally comprising a graduation scale indicating the pivoting degrees of the body with fins and means for limiting the pivoting in both directions.

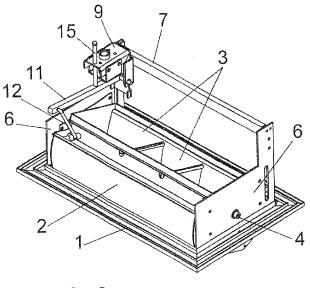


FIG. 3



## **EUROPEAN SEARCH REPORT**

Application Number EP 10 38 2173

	DOCUMENTS CONSIDE	ERED TO BE F	RELEVANT			
Category	Citation of document with in of relevant passa		opriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
Y,D	ES 1 067 472 U (K00 16 May 2008 (2008-09 * column 3, line 12 claims 1-4; figures	5-16) - column 6,		1-4	INV. F24F11/053 F24F13/14	
Y	GB 610 418 A (SIMON WATTS; OSWALD WELCH 15 October 1948 (1948) page 3, line 75 -	) 48-10-15)		1-4		
Υ	US 1 358 193 A (FUL 9 November 1920 (193 * page 1, line 81 - figures 1-4 *	20-11-09)	-	1-4		
A	US 2 057 494 A (LEII 13 October 1936 (193 * column 1, line 38 figures 1-3 *	36-10-13)	line 55;	1		
A	US 3 103 158 A (NOL 10 September 1963 ( * column 2, line 1 figures 1-2 *	1963-09-10)	line 38;	1	TECHNICAL FIELDS SEARCHED (IPC)	
A,D	ES 1 063 488 U (K00 1 November 2006 (200 * column 2, line 45	06-11-01)		1-4		
	The present search report has b	<u> </u>	claims		Examiner	
Munich  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with and document of the same category A: technological background		7 May 2014		An	conetani, Mirco	
			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 : document cited for other reasons			
O:non	-written disclosure mediate document		& : member of the sa document			

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

EP 10 38 2173

5

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.

07-05-2014

1	0	

15

20

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
ES 1067472 U	ı	16-05-2008	EP ES WO	2261573 A1 1067472 U 2009109670 A1	15-12-2010 16-05-2008 11-09-2009	
GB 610418 A	١	15-10-1948	NONE			
US 1358193 A	١ -	09-11-1920	NONE			
US 2057494 A	١	13-10-1936	NONE			
US 3103158 A	١ -	10-09-1963	NONE			
ES 1063488 U	)	01-11-2006	NONE			

25

30

35

40

45

50

55

FORM P0459

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