



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 967 443 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
27.09.2000 Bulletin 2000/39

(51) Int Cl.7: **F24F 1/01, F24F 13/24**

(43) Date of publication A2:
29.12.1999 Bulletin 1999/52

(21) Application number: **99850110.0**

(22) Date of filing: **22.06.1999**

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

(72) Inventor: **Biörklund, Staffan**
670 35 Gunnarskog (SE)

(74) Representative: **Lettström, Richard Wilhelm**
Albihns Patentbyrå Stockholm AB
P.O. Box 5581
114 85 Stockholm (SE)

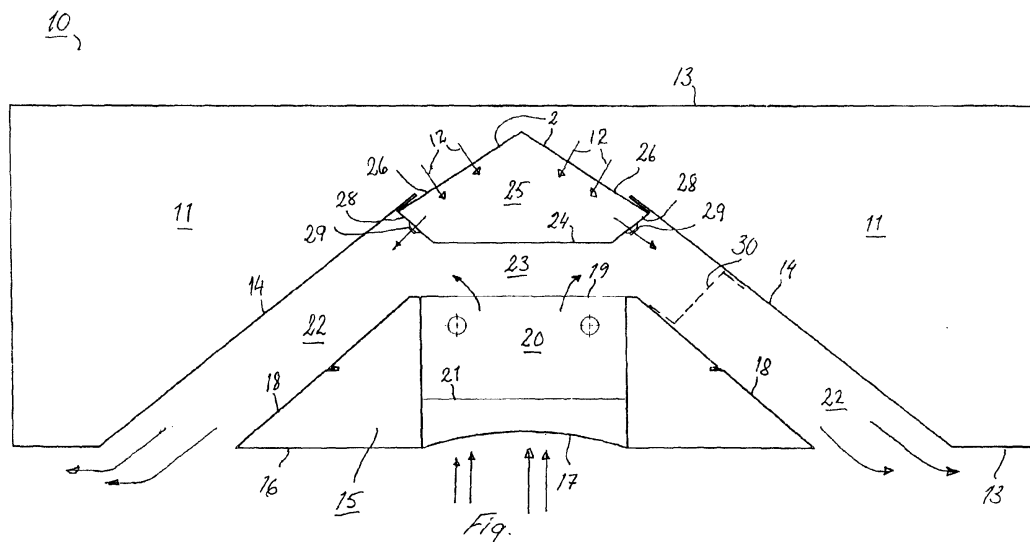
(30) Priority: **23.06.1998 SE 9802215**

(71) Applicant: **Stifab Farex AB**
671 29 Arvika (SE)

(54) **A room air cooling arrangement**

(57) A ceiling mounted room air cooling device comprises a longitudinal primary air channel, a room air cooling coil, a mixing chamber for mixing cooled room air and primary air, means for supplying primary air to the mixing chamber through the medium of an induction effect which serves to suck room air into the device and to pass said air through the cooling coil and into the mixing chamber, and one or more outlet channels through which a mixture of cooled room air and the supplied primary air exit from said device. The device is characterised in that the primary air channel is divided into two

spaces by a longitudinal air-permeable partition wall. The first space receives primary air from an external source and is delimited from the second space with respect to flow. The second space forms that part of the primary air channel in which the primary air supply means is arranged in a partition wall or partition walls delimiting the mixing chamber. The air-permeable partition wall preferably comprises perforated sheet metal. The partition wall or walls between the second space and the mixing chamber will conveniently extend generally transversely to the flow direction in the adjacent outlet channel.



EP 0 967 443 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 85 0110

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)
A	WO 98 09115 A (STIFAB FAREX AB ;BJOERKLUND STAFFAN (SE)) 5 March 1998 (1998-03-05) * abstract * * claim 1 * * figure 1 *	1	F24F1/01 F24F13/24
A	EP 0 287 546 A (FAREX AS) 19 October 1988 (1988-10-19) * abstract * * claims 1-3 * * figure 1 *	1	
A	US 5 725 427 A (KOERBER KEITH G) 10 March 1998 (1998-03-10) * column 2, line 12 - column 2, line 22 * * claim 9 * * figures 1-4 *	1	
A	US 3 824 909 A (HORNEFF J ET AL) 23 July 1974 (1974-07-23) * abstract * * claim 1 * * figures 1,2,4 *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F24F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		4 August 2000	CORREIA DOS REIS, I
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			

EPO FORM 1503 03/82 (P04C01)

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

EP 99 85 0110

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.

04-08-2000

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9809115	A	05-03-1998	EP	0857283 A	12-08-1998
			NO	981873 A	25-06-1998
			SE	9603070 A	27-02-1998

EP 0287546	A	19-10-1988	SE	460923 B	04-12-1989
			DE	3867519 A	20-02-1992
			DK	205888 A,B,	17-10-1988
			FI	881737 A,B	17-10-1988
			NO	881620 A,B,	17-10-1988
			SE	8701610 A	17-10-1988

US 5725427	A	10-03-1998	BR	9707184 A	29-06-1999
			CN	1209870 A	03-03-1999
			EP	0876574 A	11-11-1998
			JP 2000504101	T	04-04-2000
			WO	9727434 A	31-07-1997
			US	6059655 A	09-05-2000

US 3824909	A	23-07-1974	NONE		
