



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
23.11.2005 Bulletin 2005/47

(51) Int Cl.7: **F24F 1/00**

(43) Date of publication A2:
27.04.2005 Bulletin 2005/17

(21) Application number: **05001543.7**

(22) Date of filing: **12.10.2000**

(84) Designated Contracting States:
ES FR IT

(30) Priority: **14.10.1999 JP 29195699**
15.10.1999 JP 29319499
13.12.1999 JP 35276099

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
00122158.9 / 1 092 927

(71) Applicant: **SHARP KABUSHIKI KAISHA**
Osaka-shi Osaka (JP)

(72) Inventors:
• **Suzuki, Masakazu**
Yao-shi Osaka (JP)

- **Oka, Takanori**
Shiki-gun, Nara 636-0312 (JP)
- **Shiborino, Yoshinobu**
Kaizuka-shi Osaka (JP)
- **Iida, Hiroyuki**
Fujiidera-shi Osaka (JP)
- **Morikawa, Mamoru**
Yamatokoriyama-shi Nara (JP)

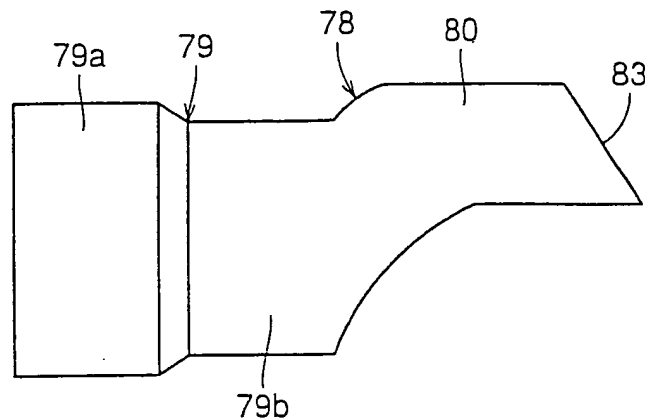
(74) Representative: **Müller - Hoffmann & Partner**
Patentanwälte,
Innere Wiener Strasse 17
81667 München (DE)

(54) **Air conditioner and humidifying/dehumidifying apparatus attached thereto**

(57) In an air conditioner, at an outdoor side end of a ventilation duct (75), an auxiliary duct (78) having an outlet side end (80) of an approximately semicircular shape twisted by about 90° with respect to a coupling portion (79) for the ventilation duct (75) is coupled. When the coupling portion (79) of the auxiliary duct (78)

is adapted to have cross sections of different diameters, it can be coupled to a ventilation duct (75) having a small diameter. Further, if the outlet side end opening (83) is cut obliquely, air circulation is not hindered even when it is in contact with a wall surface of the weather cover (81).

FIG. 19





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 00 1543

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.7)
A	EP 0 823 596 A (SHARP KABUSHIKI KAISHA) 11 February 1998 (1998-02-11) * column 19, line 38 - column 22, line 49; figures 5a,23-26 *	1-3	F24F1/00
A	----- PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05, 30 April 1998 (1998-04-30) -& JP 10 019303 A (DAIKIN IND LTD), 23 January 1998 (1998-01-23) * abstract *	1	
A	----- PATENT ABSTRACTS OF JAPAN vol. 017, no. 395 (M-1451), 23 July 1993 (1993-07-23) -& JP 05 071753 A (FUJITSU GENERAL LTD), 23 March 1993 (1993-03-23) * abstract *	1	
A	----- PATENT ABSTRACTS OF JAPAN vol. 016, no. 284 (M-1270), 24 June 1992 (1992-06-24) -& JP 04 073531 A (MITSUBISHI ELECTRIC CORP), 9 March 1992 (1992-03-09) * abstract *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) F24F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 4 October 2005	Examiner Gonzalez-Granda, C
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 03.02 (P04C01)

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

EP 05 00 1543

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.

04-10-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0823596	A	11-02-1998	CN 1178310 A	08-04-1998
			DE 69728095 D1	22-04-2004
			HK 1003184 A1	23-07-2004
			US 5896751 A	27-04-1999

JP 10019303	A	23-01-1998	NONE	

JP 05071753	A	23-03-1993	JP 2629665 B2	09-07-1997

JP 04073531	A	09-03-1992	NONE	
