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(11) **EP 1 416 228 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
07.06.2006 Bulletin 2006/23

(51) Int Cl.:
F24F 1/00 (2006.01) F24F 13/20 (2006.01)

(43) Date of publication A2:
06.05.2004 Bulletin 2004/19

(21) Application number: **03024882.7**

(22) Date of filing: **31.10.2003**

(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

(30) Priority: **02.11.2002 CN 02135761**

(71) Applicants:
• **Haier Group Corporation**
Qingdao 266101 (CN)
• **Qingdao Haier Air Conditioner Gen Corporation,**
Ltd.
Qingdao 266101 (CN)

(72) Inventors:
• **Chu, Renzhen**
Qingdao 266101 (CN)
• **Gu, Dongzhao**
Qingdao 266101 (CN)
• **Zhang, Shouxin**
Qingdao 266101 (CN)
• **Wang, Yong**
Qingdao 266101 (CN)

(74) Representative: **Goddard, Heinz J.**
FORRESTER & BOEHMERT
Pettenkoferstrasse 20-22
80336 München (DE)

(54) **Indoor unit of wall-mounted air conditioner**

(57) The present invention provides an indoor unit of a wall-mounted air conditioner comprising a housing including a front cover. A close decorative panel instead of a suction grill unit is fitted on a front side of the front cover, and air inlet ports are disposed at upper and lower sides of the close decorative panel. In this arrangement, a plurality of long narrow grills arrayed in the front suction

grill unit of a conventional indoor unit are replaced by a smooth close decorative panel, and air is sucked into the indoor unit from inlet ports disposed at the upper and lower sides of the close decorative panel. With this construction, dust is not likely to be accumulated on the decorative panel and can be easily cleaned, thus preventing air laden with dust from entering into the indoor unit.

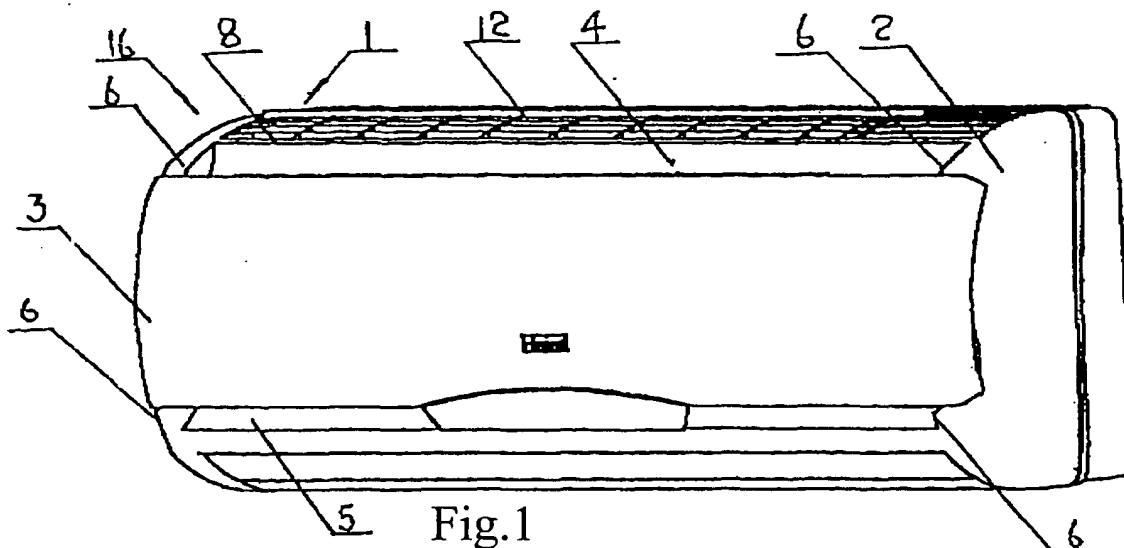


Fig.1

EP 1 416 228 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 03 02 4882

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	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03, 31 March 1997 (1997-03-31) -& JP 08 296867 A (HITACHI LTD), 12 November 1996 (1996-11-12) * abstract; figures 7,35b *	1-9	INV. F24F1/00 F24F13/20
X	GB 2 360 840 A (* HITACHI, LIMITED) 3 October 2001 (2001-10-03) * page 9, line 12 - line 20; figure 7 * * page 10, line 11 - line 24 *	1-9	
A	PATENT ABSTRACTS OF JAPAN vol. 016, no. 426 (M-1306), 8 September 1992 (1992-09-08) -& JP 04 143528 A (SANYO ELECTRIC CO LTD), 18 May 1992 (1992-05-18) * abstract *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 06, 4 June 2002 (2002-06-04) -& JP 2002 061877 A (HITACHI LTD), 28 February 2002 (2002-02-28) * abstract *	1	TECHNICAL FIELDS SEARCHED (IPC) F24F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 18 April 2006	Examiner González-Granda, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

1
EPO FORM 1503 03.02 (P04C01)

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

EP 03 02 4882

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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18-04-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 08296867	A	12-11-1996	CN 1147615 A	16-04-1997
			JP 3368717 B2	20-01-2003

GB 2360840	A	03-10-2001	CN 1308210 A	15-08-2001
			CN 1515837 A	28-07-2004
			JP 3168266 B1	21-05-2001
			JP 2001182958 A	06-07-2001

JP 04143528	A	18-05-1992	NONE	

JP 2002061877	A	28-02-2002	NONE	
