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SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 22 81 47 26

Classification of the application (IPC):
F24F 1/0007, F24F 13/20, F24F 13/08

Technical fields searched (IPC):
F24F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	JP H10311552 A (HITACHI LTD) 24 November 1998 (1998-11-24) * the whole document *	1-15
X	WO 2011016152 A1 (MITSUBISHI ELECTRIC CORP [JP]; IKEDA TAKASHI [JP] ET AL.) 10 February 2011 (2011-02-10) * the whole document *	1-15
X	US 6692223 B2 (MITSUBISHI ELECTRIC CORP [JP]) 17 February 2004 (2004-02-17) * the whole document *	1-15
X	US 10088176 B2 (MITSUBISHI ELECTRIC CORP [JP]) 02 October 2018 (2018-10-02) * the whole document *	1-15
X	US 5573059 A (HAMAMOTO SHOTARO [JP] ET AL) 12 November 1996 (1996-11-12) * the whole document *	1-15
X	JP 2003202119 A (HITACHI LTD) 18 July 2003 (2003-07-18) * the whole document *	1-15
X	US 7603873 B2 (XIANG S P A [IT]) 20 October 2009 (2009-10-20) * the whole document *	1-15
X	US 6086324 A (IKEDA TAKASHI [JP] ET AL) 11 July 2000 (2000-07-11) * the whole document *	1-15
X	EP 1707893 A1 (SHARP KK [JP]) 04 October 2006 (2006-10-04) * the whole document *	1-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 01 August 2024	Examiner Lienhard, Dominique
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CATEGORY OF CITED DOCUMENTS

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Application number:
EP 22 81 47 26

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A	CN 110617552 A (HISENSE GUANGDONG AIR CONDITIONING CO LTD) 27 December 2019 (2019-12-27) * the whole document *	1, 6, 13

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 01 August 2024	Examiner Lienhard, Dominique
------------------------------	--	---------------------------------

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP H10311552	A	24-11-1998	NONE	
WO2011016152	A1	10-02-2011	EP 2463599 A1	13-06-2012
			JP 5406930 B2	05-02-2014
			JP 5709965 B2	30-04-2015
			JP 2014052183 A	20-03-2014
			JP WO2011016152 A1	10-01-2013
			US 2012111045 A1	10-05-2012
			US 2015047815 A1	19-02-2015
			WO 2011016152 A1	10-02-2011
US 6692223	B2	17-02-2004	AU 767078 B2	30-10-2003
			CN 1392940 A	22-01-2003
			EP 1321721 A1	25-06-2003
			ES 2312458 T3	01-03-2009
			JP 3872012 B2	24-01-2007
			JP WO2002029331 A1	12-02-2004
			US 2002172588 A1	21-11-2002
			WO 0229331 A1	11-04-2002
US 10088176	B2	02-10-2018	CN 107076430 A	18-08-2017
			EP 3214378 A1	06-09-2017
			EP 3412979 A1	12-12-2018
			JP 6058242 B2	11-01-2017
			JP WO2016067408 A1	27-04-2017
			US 2017276379 A1	28-09-2017
			WO 2016067408 A1	06-05-2016
US 5573059	A	12-11-1996	CN 1106123 A	02-08-1995
			EP 0668473 A2	23-08-1995
			KR 950025361 A	15-09-1995
			US 5573059 A	12-11-1996
JP 2003202119	A	18-07-2003	NONE	
US 7603873	B2	20-10-2009	AU 2003250009 A1	02-02-2004
			CN 1668878 A	14-09-2005
			EP 1552222 A1	13-07-2005
			IT VI20020154 A1	12-01-2004
			US 2005160753 A1	28-07-2005
			WO 2004008033 A1	22-01-2004


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The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 6086324	A	11-07-2000	AU 738150 B2	13-09-2001
			CN 1224121 A	28-07-1999
			EP 0930472 A2	21-07-1999
			ES 2238751 T3	01-09-2005
			ID 21740 A	22-07-1999
			JP 3497073 B2	16-02-2004
			JP H11201081 A	27-07-1999
			TW 396247 B	01-07-2000
			US 6086324 A	11-07-2000
			EP 1707893	A1
EP 1707893 A1	04-10-2006			
HK 1104078 A1	04-01-2008			
KR 20060092270 A	22-08-2006			
WO 2005052463 A1	09-06-2005			
CN 110617552	A	27-12-2019	NONE	