



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**29.07.2015 Bulletin 2015/31**

(51) Int Cl.:  
**D06F 58/22 (2006.01)**

(43) Date of publication A2:  
**18.03.2015 Bulletin 2015/12**

(21) Application number: **14193979.3**

(22) Date of filing: **22.12.2010**

(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 RS SE SI SK SM TR**

(30) Priority: **28.12.2009 JP 2009298667**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:  
**10196598.6 / 2 351 883**

(71) Applicant: **Panasonic Corporation**  
**Kadoma-shi**  
**Osaka 571-8501 (JP)**

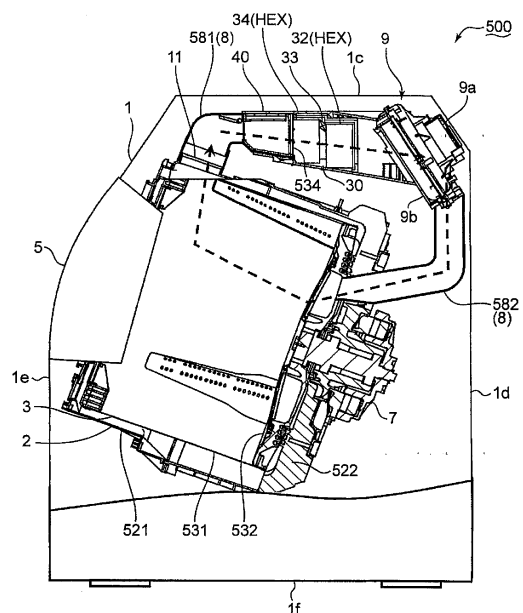
(72) Inventors:  
• **Kurakake, Toshiyuki**  
**Osaka, 540-6207 (JP)**  
• **Nakai, Kouji**  
**Osaka, 540-6207 (JP)**  
• **Terai, Kenji**  
**Osaka, 540-6207 (JP)**  
• **Nakamoto, Shigeharu**  
**Osaka, 540-6207 (JP)**

(74) Representative: **Schwabe - Sandmair - Marx**  
**Patentanwälte**  
**Stuntzstraße 16**  
**81677 München (DE)**

(54) **Drying machine and washing machine comprising a drying machine**

(57) A drying machine (500) including housing (1), outer vessel (2) supported in housing (1), rotating drum (3) mounted in outer vessel (2) to accommodate and dry clothing, heat pump device (30) including heat exchanger (HEX) for drying clothing in rotating drum (3), blower (9) for blowing dry air, circulatory ventilation flue (8) for connecting outer vessel (2) to heat pump device (30) to define circulation path through which dry air from blower (9) circulates, and filter (40) disposed in circulatory ventilation flue (8) to prevent infiltration of dust components into heat exchanger (HEX), wherein filter (40) and heat exchanger (HEX) are disposed in upper space above outer vessel (2) formed in housing (1), and filter (40), heat exchanger (HEX) and blower (9) are disposed in sequence along flow direction of dry air.

FIG.1





## EUROPEAN SEARCH REPORT

Application Number  
EP 14 19 3979

5

10

15

20

25

30

35

40

45

50

55

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	JP 2009 077771 A (HITACHI APPLIANCES INC) 16 April 2009 (2009-04-16) * paragraphs [0001], [0023] - [0025]; figures 2, 5 *	1-5,8,9	INV. D06F58/22
A	JP 2004 135715 A (MITSUBISHI ELECTRIC CORP; NIPPON KENTETSU CO LTD) 13 May 2004 (2004-05-13) * abstract; figure 1 *	1-9	
A	DE 10 2005 062940 A1 (BSH BOSCH SIEMENS HAUSGERAETE [DE]) 5 July 2007 (2007-07-05) * paragraphs [0021] - [0023]; figure 1 *	1-9	
A	JP 2008 194439 A (MITSUBISHI ELECTRIC CORP; NIPPON KENTETSU CO LTD) 28 August 2008 (2008-08-28) * abstract; figure 1 *	1-9	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			D06F
Place of search <b>Munich</b>		Date of completion of the search <b>16 June 2015</b>	Examiner <b>Westermayer, Wilhelm</b>
<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 &amp; : member of the same patent family, corresponding document</p>			

 1  
EPO FORM 1503 03.82 (P04C01)

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

EP 14 19 3979

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.

16-06-2015

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2009077771 A	16-04-2009	JP 4764861 B2	07-09-2011
		JP 2009077771 A	16-04-2009
JP 2004135715 A	13-05-2004	NONE	
DE 102005062940 A1	05-07-2007	DE 102005062940 A1	05-07-2007
		EP 1974088 A1	01-10-2008
		KR 20080081936 A	10-09-2008
		US 2009223077 A1	10-09-2009
		WO 2007077084 A1	12-07-2007
JP 2008194439 A	28-08-2008	JP 4975150 B2	11-07-2012
		JP 2008194439 A	28-08-2008
		JP 2010246994 A	04-11-2010

EPO FORM P0459

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