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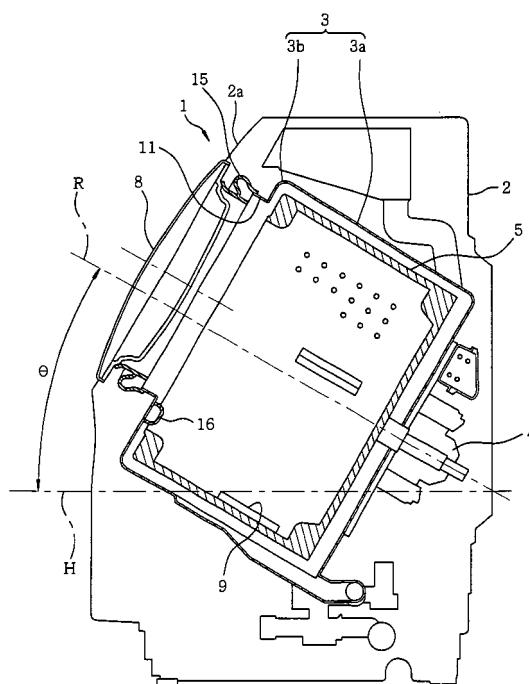
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(54) **Drum type washing machine**

(57) A drum type washing machine includes a housing (2), a water tub (3) disposed in a housing (2) and having a body (3a) with a base on one end and a lid (3b) for providing a laundry loading/unloading opening (11) on the other end, a rotary drum (5) disposed in the body (3a) of the water tub (3) and having a closed bottom and at its top a rotary drum opening, the rotary drum (5) opening being disposed on the same side as the lid (3b) of the water tub (3), and a door (8) installed in the housing. The central axis of the laundry loading/unloading opening (11) is positioned above a rotational axis of the rotary drum (5) and the diameter of the laundry loading/unloading opening (11) is smaller than that of the rotary drum opening. Further, the door (8) is disposed to be substantially concentric with the laundry loading/unloading opening (11).

**FIG. 1**





## EUROPEAN SEARCH REPORT

Application Number  
EP 04 02 6161

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	EP 1 067 231 A (CHARDON RUBBER CO [US]) 10 January 2001 (2001-01-10) * the whole document *	1-3	INV. D06F37/26 D06F37/06 D06F23/06
X	WO 99/54539 A (ELECTROLUX ZANUSSI ELETTRODOME [IT]; DURAZZANI PIERO [IT]) 28 October 1999 (1999-10-28) * the whole document *	1	
Y	----- * the whole document *	2,3	
X	DE 200 16 977 U1 (ELECTROLUX ZANUSSI ELETTRODOME [IT]) 21 December 2000 (2000-12-21) * the whole document *	1	
Y	----- * the whole document *	2,3	
X	EP 1 285 986 A (CANDY SPA [IT]) 26 February 2003 (2003-02-26) * the whole document *	1	
Y	----- * the whole document *	2,3	
X	FR 2 736 942 A (CIAPEM [FR]) 24 January 1997 (1997-01-24) * the whole document *	1	
Y	----- * the whole document *	2,3	TECHNICAL FIELDS SEARCHED (IPC)
Y	EP 0 655 523 A (MERLONI ELETTRODOMESTICI SPA [IT]) 31 May 1995 (1995-05-31) * the whole document *	2,3	D06F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 2 December 2008	Examiner Spitzer, Bettina
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			

 1  
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 02 6161

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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02-12-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1067231	A	10-01-2001	DE 60006616 D1	24-12-2003
			DE 60006616 T2	30-09-2004
			US 6256823 B1	10-07-2001
-----				
WO 9954539	A	28-10-1999	IT PN980027 U1	20-10-1999
-----				
DE 20016977	U1	21-12-2000	ES 1047499 U	16-04-2001
			FR 2801325 A1	25-05-2001
			GB 2356638 A	30-05-2001
			IT PN990047 U1	23-05-2001
-----				
EP 1285986	A	26-02-2003	DE 60104546 D1	02-09-2004
			DE 60104546 T2	15-09-2005
			ES 2223767 T3	01-03-2005
-----				
FR 2736942	A	24-01-1997	IT T0960439 A1	24-11-1997
-----				
EP 0655523	A	31-05-1995	AT 171487 T	15-10-1998
			DE 69413500 D1	29-10-1998
			DE 69413500 T2	11-02-1999
			ES 2122131 T3	16-12-1998
			IT T0930909 A1	30-05-1995
			US 5548978 A	27-08-1996
-----				