

Title (en)
Washing Machine

Title (de)
Waschmaschine

Title (fr)
Machine à laver

Publication
EP 2031121 A1 20090304 (EN)

Application
EP 08160729 A 20080718

Priority
JP 2007227744 A 20070903

Abstract (en)
A washing machine includes a controller for controlling at least the steps of washing, rinsing, and dehydrating, a speaker (25) for receiving an audio signal supplied from the controller (13) and sounding a voice, an external frame of the washing machine, a front panel placed in the external frame (1) at front and having small openings; and a top plate (5) for covering a top section of the external frame (1). The front panel includes therein: a case (30), whose sectional view shows like a letter "L", having a top opening and a lateral opening on both its ends, and a diaphragm of the speaker (25) mounted at the top opening with its face orienting downward, a speaker mounting case for covering the speaker, and a slit cover held between the lateral opening and the front panel. The lateral opening is placed directing toward the small openings (9).

IPC 8 full level
D06F 39/12 (2006.01); **A47L 15/42** (2006.01); **D06F 34/28** (2020.01)

CPC (source: EP US)
D06F 34/28 (2020.02 - EP US); **D06F 39/12** (2013.01 - EP US); **D06F 2101/00** (2020.02 - EP US); **D06F 2105/58** (2020.02 - EP US); **D06F 2105/60** (2020.02 - EP US)

Citation (applicant)
JP 2002011274 A 20020115 - HITACHI LTD

Citation (search report)
• [A] JP 2001293284 A 20011023 - HITACHI LTD
• [A] JP S5957700 A 19840403 - MATSUSHITA ELECTRIC IND CO LTD
• [A] US 2007101512 A1 20070510 - LEE YOUNG W [KR]
• [A] WO 2007080036 A1 20070719 - BSH BOSCH SIEMENS HAUSGERAETE [DE], et al

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EP2905368A1; US2012019114A1; EP2417731A4; US9428855B2; US11118294B2; WO2010117128A1; US10534332B2; EP2644765A3; CN112639206A; EP3845702A4; US11259103B2; DE202014005929U1; US11118295B2; US11959220B2; US11606634B2

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2031121 A1 20090304; EP 2031121 B1 20091223; AT E453008 T1 20100115; CN 101381950 A 20090311; CN 101381950 B 20110216; CN 201236287 Y 20090513; DE 602008000442 D1 20100204; JP 2009056215 A 20090319; JP 4483913 B2 20100616; TW 200934914 A 20090816; TW I362440 B 20120421

DOCDB simple family (application)
EP 08160729 A 20080718; AT 08160729 T 20080718; CN 200810145118 A 20080731; CN 200820130873 U 20080731; DE 602008000442 T 20080718; JP 2007227744 A 20070903; TW 97123083 A 20080620