

Title (en)
PIEZOELECTRIC PUMP FOR HOUSEHOLD ELECTRIC APPLIANCE

Title (de)
PIEZOELEKTRISCHE PUMPE FÜR EIN ELEKTRISCHES HAUSHALTSGERÄT

Title (fr)
POMPE PIEZOÉLECTRIQUE POUR APPAREIL ÉLECTROMÉNAGER

Publication
EP 2364402 A1 20110914 (FR)

Application
EP 09774720 A 20091130

Priority

- IB 2009007607 W 20091130
- FR 0806930 A 20081210

Abstract (en)
[origin: WO2010067157A1] Piezoelectric pump (101, 200) for a household electric appliance comprising a moving wall (4, 204) interposed between a first casing element (1, 201) defining a pumping chamber (5, 205) with said moving wall (4, 204), and a second casing element (2, 202) applying pressure to the periphery of the moving wall (4, 204) in order to hold the latter in position, said moving wall (4, 204) comprising an exterior face in contact with a piezoelectric actuator (41, 241) designed to cause said moving wall (4, 204) to move so as to bring about a periodic variation in the volume of the pumping chamber (5, 205) under the action of said piezoelectric actuator (41, 241), characterized in that said first casing element (1, 201) and said second casing element (2, 202) are held together under stress by means of an elastic clip (9, 209), said elastic clip (9, 209) applying a pressure that tends to compress said first casing element (1, 201) onto said second casing element (2, 202).

IPC 8 full level
F04B 17/00 (2006.01); **D06F 75/18** (2006.01); **F04B 43/04** (2006.01); **F04B 43/09** (2006.01)

CPC (source: EP US)
D06F 75/14 (2013.01 - EP US); **F04B 17/003** (2013.01 - EP US); **F04B 43/046** (2013.01 - EP US); **F04B 43/095** (2013.01 - EP US)

Citation (search report)
See references of WO 2010067157A1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
FR 2939482 A1 20100611; **FR 2939482 B1 20110114**; CN 102224342 A 20111019; CN 102224342 B 20150422; EP 2364402 A1 20110914; EP 2364402 B1 20171129; ES 2654045 T3 20180212; PT 2364402 T 20180109; US 2011296722 A1 20111208; US 8522462 B2 20130903; WO 2010067157 A1 20100617

DOCDB simple family (application)
FR 0806930 A 20081210; CN 200980146709 A 20091130; EP 09774720 A 20091130; ES 09774720 T 20091130; IB 2009007607 W 20091130; PT 09774720 T 20091130; US 200913139071 A 20091130