

Title (en)

METHOD FOR NATURAL FREQUENCY DETECTION IN A DRUM WASHING MACHINE

Title (de)

VERFAHREN ZUR EIGENFREQUENZERFASSUNG IN EINER TROMMELWASCHMASCHINE

Title (fr)

PROCEDE DE DETECTION DE LA FREQUENCE NATURELLE DANS UNE MACHINE A LAVER A TAMBOUR

Publication

**EP 3819417 B1 20230111 (EN)**

Application

**EP 20206599 A 20201110**

Priority

SI 201900218 A 20191111

Abstract (en)

[origin: EP3819417A1] The proposed invention relates to a method for detecting the natural vibration frequencies in the body (4) of a laundry washing machine while it is in operation with regard to the quality of its placement and the base on which it is placed. The method comprises an active system for detecting the transfer of force to the base, which enables the simultaneous detection of the eccentric and dynamic load in the drum and the identification of the dynamic properties of the washing machine. By controlling the rotational frequency of the washing machine drum, it is possible to actively adjust the washing cycle according to the loads in the drum and the dynamic properties of the washing machine. According to the proposed invention, at least one calibration is anticipated at the user's place of installation of the washing machine, which is used to identify the dynamic properties of the entire washing machine-base system.

IPC 8 full level

**D06F 34/16** (2020.01); **D06F 103/26** (2020.01); **D06F 105/48** (2020.01); **D06F 105/52** (2020.01); **D06F 105/58** (2020.01)

CPC (source: EP)

**D06F 34/16** (2020.02); **D06F 2103/26** (2020.02); **D06F 2105/48** (2020.02); **D06F 2105/52** (2020.02); **D06F 2105/58** (2020.02)

Citation (examination)

- JP 2004344338 A 20041209 - HITACHI HOME & LIFE SOLUTIONS
- WO 2018121596 A1 20180705 - QINGDAO HAIER WASHING MACH CO [CN], et al
- US 5101645 A 19920407 - MALCHOW GREGORY L [US]
- WO 2014004328 A1 20140103 - ILLINOIS TOOL WORKS [US]
- EP 1167609 B1 20040915 - WHIRLPOOL CO [US]

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**EP 3819417 A1 20210512**; **EP 3819417 B1 20230111**; SI 25920 A 20210531

DOCDB simple family (application)

**EP 20206599 A 20201110**; SI 201900218 A 20191111