Title (en)

WASHING MACHINE WITH LINEN MASS DETERMINATION

Title (de)

WASCHMASCHINE MIT WÄSCHEMASSENBESTIMMUNGSMENGE

Title (fr)

MACHINE À LAVER AVEC DÉTERMINATION DE POIDS DU LINGE

Publication

**EP 4063552 A1 20220928 (EN)**

Application

**EP 22161448 A 20220310**

Priority

IT 202100007244 A 20210325

Abstract (en)

A method for determining a linen mass (M) through a washing machine (1) or dryer, with an electric motor (14) connected with a linen drum (5) for containing the linen, comprises:A) performing a first sequence of consecutive inrush steps, each inrush step comprising:- actuating a motor (14) of the washing machine (1) to accelerate the linen drum in rotation from an initial speed (v_init) equal to zero to a maximum predetermined speed (v_max), with a predetermined acceleration (STP_1),- upon reaching the maximum predetermined speed (v_max), slowing down the motor so as to make the linen drum (5) decelerate until reaching the initial speed (v_init) again, which is equal to zero,- in a detection time interval during the acceleration of the linen drum in rotation from the initial speed (v_init) equal to zero up to the predetermined maximum speed (v_max), detecting the inrush current (I_inrush) absorbed by the electric motor (14), the rotation speed (v) of the electric motor (14), and the time (t) (STP_2),B) calculating for each individual inrush step a rotational power parameter (P) generated by the electric motor (14) depending on the inrush current (I_inrush) (STP_3),C) calculating for the entire first sequence of consecutive inrush steps an average value (P_avg) of the rotational power parameters (P) calculated for the individual inrush steps (STP_5),D) determining the mass (M) of the linen in the linen drum (5) depending on the average value (P_avg) of the rotational power parameters (P) and predetermined parameters (P_0, A) characterizing the washing machine (1) (STP_13).

IPC 8 full level

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CPC (source: CN EP)

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Citation (search report)

- [XYI] US 2011202303 A1 20110818 - PETRONILHO ANDRE [BR], et al
- [X] EP 3162943 A1 20170503 - ELECTROLUX APPLIANCES AB [SE]
- [Y] US 2005028299 A1 20050210 - JEON SI MOON [KR], et al
- [Y] US 2020109506 A1 20200409 - IM MYUNGHUN [KR], et al
- [A] EP 1561851 A1 20050810 - SANYO ELECTRIC WORKS [JP]

Designated contracting state (EPC)

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