

Title (en)

METHOD FOR THE IMPROVED CONTROL OF A WATER-CONDUCTING DOMESTIC APPLIANCE, AND DOMESTIC APPLIANCE WHICH IS SUITABLE FOR CARRYING OUT THE METHOD

Title (de)

VERFAHREN ZUR VERBESSERTEN STEUERUNG EINES WASSERFÜHRENDEN HAUSHALTSGERÄTES UND HIERZU GEEIGNETES HAUSHALTSGERÄT

Title (fr)

PROCÉDÉ DE COMMANDE AMÉLIORÉE D'UN APPAREIL ÉLECTROMÉNAGER À CIRCULATION D'EAU ET APPAREIL ÉLECTROMÉNAGER ASSOCIÉ

Publication

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Application

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Abstract (en)

[origin: WO2018086864A1] The invention relates to a method for operating a water-conducting domestic appliance comprising a drum 3 for receiving objects 22, 34 to be treated, said drum having at least one perimeter with at least one radiation passage 30, 35; a controller 18; and a spectrometer 21, which comprises at least one radiation source 5, 27, at least one radiation detector 7, 28, and a microcomputer 6. The microcomputer 6 and the controller 18 are designed to exchange information between each other such that data can be exchanged between the spectrometer 21 and the controller 18. The invention is characterized by the following steps: (a) rotating the drum 3 at a specified rotational speed  $Dz$ , wherein a frequency  $f$ , which is based on the number of rotation cycles of radiation passages 30, 35 per unit of time, is defined as the product of the rotational speed  $Dz$  multiplied by the number of radiation passages 30, 35; (b) continuously ascertaining radiation 31 from the at least one radiation source 5, 27 of the spectrometer 21 in a wavelength range  $\lambda_1$  to  $\lambda_2$  through the at least one radiation passage 30, 35 of the rotating drum 3 such that a radiation 3 which is periodically interrupted at the frequency  $f$  is produced in the drum interior and the objects 22, 34 in the rotating drum 3 are supplied with the radiation 31 periodically interrupted at the frequency  $f$ , wherein the at least one radiation detector 7, 28 is arranged such that the radiation 32 reflected by the objects 22, 34 is registered directly as a measurement signal without passing through the radiation passage 30, 35, and thus without being interrupted by the radiation passage 30, 35 at the frequency  $f$ , and a periodic function, which depends solely on the domestic appliance 1, with the period length  $1/f$ , in particular a sine or rectangular function, is generated as a reference signal by the controller 18; (c) transmitting the measurement signal and the reference signal to the microcomputer 6, analyzing the measurement signal and the comparison thereof with the reference signal using an analysis routine stored in the microcomputer 6, and transmitting the analyzed measurement signal to the controller 18; and (d) selecting and/or adapting an operating program by means of the controller 18 with respect to the analyzed measurement signal, wherein steps (b) to (d) are carried out once or multiple times. The invention further relates to a domestic appliance which is suitable for carrying out the method.

IPC 8 full level

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