

Title (en)

METHOD FOR OPERATING A WASHING MACHINE HAVING AN IMPEDANCE SENSOR AND WASHING MACHINE SUITABLE THEREFOR

Title (de)

VERFAHREN ZUM BETRIEB EINER WASCHMASCHINE MIT EINEM IMPEDANZSENSOR SOWIE HIERZU GEEIGNETE WASCHMASCHINE

Title (fr)

PROCÉDÉ POUR FAIRE FONCTIONNER UN LAVE-LINGE COMPRENANT UN CAPTEUR D'IMPÉDANCE ET LAVE-LINGE POUR LA MISE EN ŒUVRE DE CE PROCÉDÉ

Publication

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Application

**EP 16704247 A 20160215**

Priority

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Abstract (en)

[origin: WO2016146321A1] The invention relates to a method for operating a washing machine (1), comprising a container (2), a drum (3) for accommodating laundry items (4), a drive motor (5) for the drum (3), an impedance sensor (9) in the container (2) for determining an impedance signal in dependence on a composition of an aqueous liquid (7) in the container (2), and a control device (8), wherein the following steps are performed: (a) providing a surfactant-containing aqueous liquid (7) having a surfactant concentration  $c_{\text{Tensid}}$  in the container (2) in such a way that the relation  $\text{CCMC} \leq c_{\text{Tensid}} < C_{\text{grenz}}$  is satisfied, wherein CCMC is a critical micelle concentration; (b) measuring the surfactant concentration  $c_{\text{Tensid}}$  in the surfactant-containing aqueous liquid provided in step (a) by capturing and evaluating impedance signals of the impedance sensor (9) by using a relationship between the impedance signals and the surfactant concentration, which relationship is stored in the control device (8); (c) performing a washing phase in such a way that, (c1) in the case a determined surfactant concentration  $c_{\text{Tensid}} \geq C_{\text{grenz}}$ , the surfactant-containing aqueous liquid is thinned until the relation  $\text{CCMC} \leq c_{\text{Tensid}} < C_{\text{grenz}}$  is satisfied; (c2) in the case of a determined surfactant concentration  $c_{\text{Tensid}} < \text{CCMC}$ , additional detergent is added in a metered manner and/or a motion program of the drum (3) stored in the control device (8) for this surfactant concentration is performed. The invention further relates to a washing machine (1) suitable for performing the method.

IPC 8 full level

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