

Title (en)  
SYSTEM FOR CONTROLLING THE DEGREE OF HARDNESS OF THE WASHING WATER IN A WASHING MACHINE, IN PARTICULAR A DISHWASHER, AND METHOD THEREOF

Title (de)  
SYSTEM ZUR STEUERUNG DES HÄRTEGRADES DES WASCHWASSERS IN EINER WASCHMASCHINE, INSBESONDERE EINER GESCHIRRSPÜLMASCHINE, UND VERFAHREN DAZU

Title (fr)  
SYSTEME DE CONTROLE DU DEGRE DE DURETE DE L'EAU DE LAVAGE DANS UNE MACHINE A LAVER, NOTAMMENT UN LAVE-VAISSELLE, ET SON PROCEDE

Publication  
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Application  
**EP 20181149 A 20200619**

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Abstract (en)  
The present invention relates to a system (1), and a corresponding method, for controlling the degree of hardness of the washing water in a washing machine, in particular a dishwasher, said system (1) comprising:- a first tank (10) for containing a substance having decalcifying properties, in particular said first tank (10) being equipped with a first inlet (11) for letting water to be decalcified flow into the first tank (10) and a first outlet (12) for letting decalcified water flow out of the first tank (10), to be then supplied into a tub (V) of a washing machine;- a second tank (20) for containing a regeneration substance, in particular said second tank (20) being equipped with a second inlet (21) for letting water flow into the second tank (20) and a second outlet (22) for letting a regeneration brine, formed upon dissolution of the regeneration substance into the water, flow out of the second tank (20);- a connection duct (30) that connects the second tank (20) with the first tank (10) for letting the brine formed in the second tank (20) flow towards said first tank (10);- a supply duct (2) with which a supply valve (3) is associated, which is controlled by a control unit of the washing machine, said supply duct (2) having a first bifurcation (40) into a first branch (41), for supplying the first tank (10), and a second branch (42). The peculiar feature of the present invention lies in the fact that said second branch (42) comprises a valve (50) located at a second bifurcation (60) into a third branch (43) ending into the tub (V) and a fourth branch (44) ending into the second tank (20), said valve (50) being controlled by said control unit of the washing machine in such a way as to selectively be:- in a first operating configuration, wherein said valve (50) closes the second branch (42) by interrupting the connection of said second branch (42) with the third branch (43) and with the fourth branch (44), so as to cause the water coming from the supply duct (2) to flow into the first branch (41), into the first tank (10), where the water is decalcified, and then into the tub (V);- in a second operating configuration, wherein said valve (50) connects the second branch (42) with the third branch (43) to allow the water coming from the supply duct (2) to flow into the tub (V) through said third branch (43);- in a third operating configuration, wherein said valve (42) connects the second branch (42) with the fourth branch (44) to allow the water coming from the supply duct (2) to flow into the second tank (20) through said fourth branch (44).

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Citation (search report)  
• [A] EP 1275335 A1 20030115 - T & P SPA [IT]  
• [A] EP 1199973 A1 20020502 - ELTEK SPA [IT]  
• [A] EP 2561790 A1 20130227 - BITRON SPA [IT]  
• [A] DE 3535364 A1 19870416 - BOSCH SIEMENS HAUSGERAETE [DE]

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