

Title (en)

METHOD FOR OPERATING A CIRCULATION SYSTEM AND CIRCULATION SYSTEM

Title (de)

VERFAHREN ZUM BETRIEB EINES ZIRKULATIONSSYSTEMS SOWIE ZIRKULATIONSSYSTEM

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME DE CIRCULATION ET SYSTÈME DE CIRCULATION

Publication

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Application

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Abstract (en)

[origin: WO2019219785A1] The invention relates to a method for operating a circulation system (10) comprising a cooling device (12, 14) with an input port (12a, 14a) and an output port (12b, 14b) for cooling water. Said method comprises the following steps; determining, in particular calculating, a change in the temperature of the water between the initial region and the end region according to a model of the axial change in temperature for the first partial section adjacent to the output port (12b, 14b), starting from a temperature start value  $T_{MA}$   $T_{MA}^* < T_{soll}$ , and a volume flow start value  $V_z^*$ , determining, in particular calculating, a change in the temperature of the water between the initial region and the end region for each further partial section according to the model of the temperature change, under the constraint that the water temperature in the initial region of the partial section is equal to the water temperature in the end region of the partial section, to which the given partial section is adjacent, and selecting the value  $T_a$  of the water temperature and the value  $V_z$  of the volume flow at the output port (12b, 14b) in such a way that in the end region of each partial section the water temperature is  $T_{ME}$   $T_{ME} < T_{soll}$  and at the inlet port (12a, 14b) the water temperature  $T_b < T_{soll}$  with  $T_{soll} - T_b < \Theta$  is set, wherein  $\Theta > 0$  is a predetermined value. The invention also relates to a circulation system for implementing said method.

IPC 8 full level

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