

Title (en)
METHOD FOR OPERATING A TEMPERATURE-CONTROLLED CIRCULATION SYSTEM AND TEMPERATURE-CONTROLLED CIRCULATION SYSTEM

Title (de)
VERFAHREN ZUM BETRIEB EINES TEMPERIERTEN ZIRKULATIONSSYSTEM SOWIE TEMPERIERTES ZIRKULATIONSSYSTEM

Title (fr)
PROCÉDÉ POUR FAIRE FONCTIONNER UN SYSTÈME DE CIRCULATION THERMORÉGULÉ AINSI QUE SYSTÈME DE CIRCULATION THERMORÉGULÉ

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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 TMA $TMA^* < Tsoll$, and a volume flow start value Vz^* , 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 Ta of the water temperature and the value Vz 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 TME $TME < Tsoll$ and at the inlet port (12a, 14b) the water temperature $Tb < Tsoll$ with $Tsoll - Tb < \Theta$ is set, wherein $\Theta > 0$ is a predetermined value. The invention also relates to a circulation system for implementing said method.

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