

Title (en)

METHOD FOR FILTERING SEAWATER ONBOARD A SHIP

Title (de)

VERFAHREN ZUR FILTRATION VON SEEWASSER AN BORD EINES SCHIFFES

Title (fr)

PROCÉDÉ DE FILTRATION D'EAU DE MER À BORD D'UN BATEAU

Publication

EP 3344360 A1 20180711 (DE)

Application

EP 16753380 A 20160817

Priority

- DE 102015114473 A 20150831
- EP 2016069529 W 20160817

Abstract (en)

[origin: WO2017036801A1] A method for filtering seawater onboard a ship, with a filtration device (2) that has an in particular cylindrical filter element (6) arranged in a tank (5), and a cleaning device for separating dirt from the filter element (6) and for carrying away a dirt concentrate phase, consisting of water and the dirt, from the filter element (6) and out of the filtration device (2); having the following steps: a) seawater is pumped into the filtration device (2); b) the seawater is introduced into the filtration device (2) at an inlet pressure P_{ein} , flows in the filtration device (2) through the filter element (6), and after the filter element (6) as filtered seawater – filtrate – has an outlet pressure P_{aus} ; c) a concentrate phase – concentrate – which is removed using the cleaning device (11) at the filter element (6) of the filtration device (2) and is carried away from the filter element (6) has a concentrate pressure P_{konz} ; d) the inlet pressure P_{ein} , the outlet pressure P_{aus} and the concentrate pressure P_{konz} are preferably measured using sensors (22, 23, 24) and are transmitted to a control device (21); e) a change in filter efficiency of the filter element (6) is recognized by determining a change in a contamination pressure difference $\Delta PF = P_{\text{ein}} - P_{\text{aus}}$ between the inlet pressure P_{ein} and the outlet pressure P_{aus} ; and/or f) a suction pressure difference $\Delta PK = P_{\text{aus}} - P_{\text{konz}}$ defined as the difference between the outlet pressure and the concentrate pressure is controlled in dependence on the contamination pressure difference $\Delta PF = P_{\text{ein}} - P_{\text{aus}}$.

IPC 8 full level

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CPC (source: EP KR RU US)

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Citation (search report)

See references of WO 2017036801A1

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