

Title (en)
PLATE HEAT EXCHANGER

Title (de)
PLATTENWÄRMEÜBERTRAGER

Title (fr)
ÉCHANGEUR DE CHALEUR À PLAQUES

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EP 10768382 A 20100823

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Abstract (en)
[origin: WO2011023191A2] The invention relates to a plate heat exchanger for transferring heat between two phase-changing mass flows or between a phase-changing mass flow and a liquid mass flow, usually in conjunction with water or low-boiling liquids, e.g., seawater. The heat exchanger comprises several identical heat exchanger plates (4), which are arranged one behind the other and between which evaporator seals and condenser seals are inserted in alternation. The evaporator seals and condenser seals are compressed by end plates (1, 11) clamped by means of tie rods. The evaporator seals and the condenser seals are designed as frame profiled elements (12, 13) having a trapezoidal cross-section and/or the frame profiled elements (12, 13) are provided with several elongated, parallel openings, which together with the heat exchanger plates (4) form channels connected in series, which channels are used for flow through the evaporator chambers (2) and/or condenser chambers (3) in a multi-flow manner. High heat transfer coefficients can be achieved by means of the heat exchanger; the heat exchanger is corrosion-resistant, can be produced cheaply, and can be removed and cleaned without great effort.

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