Title (en)

A coupling element for a heat exchanger

Title (de)

Koppelelement für Wärmetauscher

Title (fr)

Elément de couplage pour échangeur de chaleur

Publication

EP 1500896 A3 20091216 (EN)

Application

EP 04388051 A 20040721

Priority

DK PA200301101 A 20030723

Abstract (en)

[origin: EP1500896A2] The invention relates to a plate water heater (1) comprising a coupling element (3) and a plurality of heat exchanger plates combined to form a plate stack (2a) and configured in such a manner that, between adjoining heat exchanger plates, separate flow passages are formed for conveyance of a heat-emitting liquid and a heat-absorbing liquid, respectively, said coupling element (3) comprising flow channels (21, 22, 23, 24) for conveyance of liquid between the flow passages and the couplings (7, 8, 9, 10), and regulator means (6) for regulating the liquid flow in the heat-emitting liquid. Thereby it is accomplished that there will always be hot liquid in the flow channel for heat-emitting liquid (the primary circuit) immediately the need arises for liquid to be heated in the secondary circuit. This need for hot water will be particularly pronounced in cases where the plate water heater is used for heating utility water.

IPC 8 full level

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CPC (source: EP)

F28D 9/005 (2013.01); **F28F 9/0253** (2013.01); **F28F 9/26** (2013.01)

Citation (search report)

- [DX] WO 9954665 A1 19991028 - SUNDSVALL EN AB [SE], et al
- [E] EP 1559980 A1 20050803 - MODINE MFG CO [US]

Cited by

EP2251631A1; KR101878247B1; FR2967248A1; CN112771343A; JPWO2020075630A1; KR20180024580A; WO2020075238A1; WO2012062714A1

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