

Title (en)
A shell-and-plate heat exchanger and use of a shell-and-plate heat exchanger

Title (de)
Mantel-Platten-Wärmetauscher und Verwendung eines Mantel-Platten-Wärmetauschers

Title (fr)
Échangeur de chaleur calandre-plaque et utilisation d'un échangeur calandre-plaque

Publication
EP 2843324 B1 20201223 (EN)

Application
EP 13181858 A 20130827

Priority
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Abstract (en)
[origin: EP2843324A1] Disclosed is a shell-and-plate heat exchanger (1) for cooling and condensing a circulating refrigerant. The heat exchanger (1) comprises a desuperheater (2) for lowering the temperature of the gaseous refrigerant to a temperature above the condensation temperature of the refrigerant, wherein the desuperheater (2) is formed by a stack of corrugated desuperheater heat transfer plates (3). The desuperheater (2) is connected to a condenser (4) for condensing a main part of the refrigerant, wherein the condenser (4) is formed by a stack of corrugated condenser heat transfer plates (5). The condenser (4) is connected to a subcooler (6) for further lowering the temperature of the condensed refrigerant, wherein the subcooler (6) is formed by a stack of corrugated subcooler heat transfer plates (7), and wherein the stack of corrugated desuperheater heat transfer plates (3), the stack of corrugated condenser heat transfer plates (5) and the stack of corrugated subcooler heat transfer plates (7) are arranged inside the same common continuous shell (8).

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Citation (examination)
• EP 2476975 A2 20120718 - BEHR GMBH & CO KG [DE]
• FR 2846733 A1 20040507 - VALEO THERMIQUE MOTEUR SA [FR]

Cited by
EP3236190A1; US11014425B2; EP3236188A1; US11236932B2; US10697708B2; US11698228B2

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