

Title (en)

A shell-and-plate condenser, a method for removing oil from a refrigerant and use of a shell-and-plate condenser

Title (de)

Mantel-Platten-Kondensator, Verfahren zur Entfernung von Öl aus einem Kältemittel und zur Verwendung des Mantel-Platten-Kondensators

Title (fr)

Condenseur bloc et plaque, procédé d'extraction d'huile à partir d'un fluide frigorigène et utilisation d'un tel condenseur

Publication

**EP 3034965 B1 20210616 (EN)**

Application

**EP 14199301 A 20141219**

Priority

EP 14199301 A 20141219

Abstract (en)

[origin: EP3034965A1] Disclosed is a shell-and-plate condenser (1) comprising a stack of corrugated heat transfer plates (5) arranged inside a tubular outer shell (8), wherein the outer shell (8) comprises at least one entrance hole (2) for leading oil-containing refrigerant into the condenser (1) and the condenser (1) further comprises an integrated oil separator unit (3) arranged above the plate stack. The oil separator unit (3) includes at least one flow distribution chamber (4) being connected to at least one of the entrance holes (2), wherein the flow distribution chamber (4) substantially extends in a longitudinal direction of the tubular outer shell (8) and wherein the flow distribution chamber (4) comprises at least one sidewall (6) comprising a plurality of exit holes (7) through which the oil-containing refrigerant leaves the flow distribution chamber (4) in a direction substantially transversal to the longitudinal direction of the outer shell (8) and flows out into a flow guide channel (9) of the oil separator unit (3). The oil separator unit (3) further includes at least one outflow demister element (10) arranged in a demister part (11) of the flow guide channel (9). A method for removing oil from a refrigerant by means of an oil separator unit (3) arranged inside a tubular outer shell (8) of a shell-and-plate condenser (1) and use of a shell-and-plate condenser (1) is also disclosed.

IPC 8 full level

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CPC (source: EP)

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Cited by

CN106766398A; CN106150599A; CN106802033A; CN107940836A; CN109323486A; WO2019119840A1

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