

Title (en)
ADJUSTABLE LIQUID DISTRIBUTOR OF A COILED HEAT EXCHANGER FOR IMPLEMENTING DIFFERENT LIQUID LOADS

Title (de)
REGELBARER FLÜSSIGKEITSVERTEILER EINES GEWICKELTEN WÄRMEÜBERTRAGERS ZUR REALISIERUNG UNTERSCHIEDLICHER FLÜSSIGKEITSBELASTUNGEN

Title (fr)
DISTRIBUTEUR DE FLUIDE RÉGLABLE D'UN ÉCHANGEUR DE CHALEUR ENROULÉ PERMETTANT DE RÉALISER DES DIFFÉRENTES CHARGES DE FLUIDE

Publication
EP 3719434 B1 20211215 (DE)

Application
EP 20020143 A 20200331

Priority
EP 19020246 A 20190402

Abstract (en)
[origin: US2020318912A1] The invention relates to a heat exchanger (1), comprising: a shell (2) surrounding a shell space (3) of the heat exchanger (1), wherein the shell space (3) is designed to receive a fluid first medium (M); a core tube (4) extending in the shell space (3); a tube bundle (5) having several tubes (50) wound around the core tube (4), wherein the tube bundle (5) is designed to receive at least one fluid second medium (M') so that heat can be transferred indirectly between the first medium (M) and the at least one second medium (M'); and a liquid distributor (6), arranged above the tube bundle (5) in the shell space (3), for applying a liquid phase (F) of the first medium (M) to the tube bundle (5), wherein the liquid distributor (6) has distributor arms (60) projecting in the radial direction (R) from the core tube (3); an annular channel (61) extending above the distributor arms (60) in a circumferential direction (U) of the shell (2), and a collector tank (62) formed by the core tube (4), wherein the annular channel (61) and the collector tank (62) are each designed to collect the first medium (M). According to the invention, it is provided that the distributor arms (60) for applying the liquid phase (F) of the first medium (M) to the tube bundle (5) form at least one first container (60a) and at least one second container (60b) separated from the first container (60a).

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F25J 5/002 (2013.01 - EP); **F28D 3/02** (2013.01 - US); **F28D 3/04** (2013.01 - EP US); **F28D 7/024** (2013.01 - CN EP); **F28F 9/026** (2013.01 - EP); **F28F 25/02** (2013.01 - EP); **F28F 27/02** (2013.01 - CN EP); **F25J 2280/02** (2013.01 - EP); **F25J 2290/32** (2013.01 - EP); **F28D 2021/0033** (2013.01 - EP); **F28D 2021/0064** (2013.01 - EP)

Cited by
CN116379520A

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EP 3719433 A1 20201007; CN 111795590 A 20201020; CN 111795590 B 20240607; CY 1124903 T1 20230105; EP 3719434 A1 20201007; EP 3719434 B1 20211215; RU 2020111039 A 20210917; US 11236945 B2 20220201; US 2020318912 A1 20201008

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