

Title (en)

HEAT EXCHANGER WITH A LIQUID/GAS MIXING DEVICE WITH IMPROVED CHANNEL GEOMETRY

Title (de)

WÄRMETAUSCHER MIT EINER FLÜSSIGKEITS-/GASMISCHVORRICHTUNG MIT VERBESSERTER KANALGEOMETRIE

Title (fr)

ÉCHANGEUR DE CHALEUR AVEC DISPOSITIF MÉLANGEUR LIQUIDE/GAZ À GÉOMÉTRIE DE CANAL AMÉLIORÉE

Publication

EP 3555544 A1 20191023 (FR)

Application

EP 17822398 A 20171212

Priority

- FR 1662581 A 20161216
- FR 2017053505 W 20171212

Abstract (en)

[origin: WO2018109352A1] Plate heat exchanger (1) having plates (2a, 2b, 2c, ...) defining a first series of passages (10) for channelling at least one refrigerant fluid (F1) and a second series of passages (20) for channelling at least one calorigenic fluid (F2), at least one passage (10) of the first series being defined between a first plate (2a) defining an adjacent passage (20) of the second series and a second plate (2b). A mixing device (3) is arranged in the passage (10) of the first series and comprises a first surface (3a) arranged facing the first plate (2a) and a second surface (3b) arranged facing the second plate (2b), at least a first channel (31) for channelling a gaseous phase (61) of the refrigerant fluid (F1) and at least a second channel (32) for channelling a liquid phase (62) of the refrigerant fluid (F1). According to the invention, the longitudinal section of the second channel (32), measured parallel to the longitudinal direction (z), decreases in the direction of the second surface (3b).

IPC 8 full level

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CPC (source: EP RU US)

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Citation (search report)

See references of WO 2018109352A1

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FR 2017053505 W 20171212; CN 201780084451 A 20171212; EP 17822398 A 20171212; FR 1662581 A 20161216; JP 2019531318 A 20171212; RU 2019120798 A 20171212; US 201716469413 A 20171212