

Title (en)

Trickle heat-exchanger and an air distillation comprising such a heat-exchanger

Title (de)

Rieselwärmetauscher und Lufttrennungseinrichtung mit einem solchen Wärmetauscher

Title (fr)

Echangeur de chaleur à ruissellement et installation de distillation d'air comportant un tel échangeur

Publication

EP 0566435 B1 19960424 (FR)

Application

EP 93400746 A 19930323

Priority

FR 9204804 A 19920417

Abstract (en)

[origin: EP0566435A1] The nitrogen condensation passages (19) are closed at the top by a small bar (22), above which a liquid oxygen distribution compartment (23), closed at its upper end, is defined. This compartment contains a perforated bar (27) halfway up and, underneath this bar, packing (28) with cracks having horizontal generatrices. The liquid oxygen is introduced sideways into these compartments, predistributed by the orifices (33) of the bar, finely distributed by the packing (28), and passes into the adjacent oxygen vaporization passages (18) which are open at the top and bottom, through a horizontal slot (34) situated just above the small bar (22). Application to main vaporizer/condensers of double-column air distillation installations. <IMAGE>

IPC 1-7

F25J 3/00; **F25J 3/04**; **F28D 5/00**

IPC 8 full level

F25J 3/02 (2006.01); **F25J 3/00** (2006.01); **F25J 3/04** (2006.01); **F25J 5/00** (2006.01); **F28D 9/00** (2006.01); **F28G 3/00** (2006.01)

CPC (source: EP US)

F25J 3/04412 (2013.01 - EP US); **F25J 3/04878** (2013.01 - EP US); **F25J 5/002** (2013.01 - US); **F25J 5/005** (2013.01 - EP); **F28D 9/0068** (2013.01 - EP US); **F25J 2250/04** (2013.01 - EP US); **F25J 2290/32** (2013.01 - EP US); **Y10S 62/903** (2013.01 - EP US)

Cited by

EP1008826A1; EP2508830A1; EP0718582A1; FR2728669A1; US5765631A; EP0718583A1; FR2728670A1; US6073685A; US5724834A; US5537840A; US5438836A; EP0695921A1; WO9808039A1

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 0566435 A1 19931020; **EP 0566435 B1 19960424**; CA 2094087 A1 19931018; CN 1078801 A 19931124; DE 69302319 D1 19960530; DE 69302319 T2 19960912; ES 2086896 T3 19960701; FR 2690231 A1 19931022; FR 2690231 B1 19940603; JP H0618166 A 19940125; RU 2077010 C1 19970410; US 5321954 A 19940621

DOCDB simple family (application)

EP 93400746 A 19930323; CA 2094087 A 19930415; CN 93104623 A 19930416; DE 69302319 T 19930323; ES 93400746 T 19930323; FR 9204804 A 19920417; JP 8853893 A 19930415; RU 93004819 A 19930416; US 4379893 A 19930407