

Title (en)

MULTIPASS TUBULAR HEAT EXCHANGER AND ASSOCIATED PASS PARTITION PLATE, CHANNEL COVER, AND METHODS

Title (de)

RÖHRENFÖRMIGER MULTIPASS-WÄRMETAUSCHER SOWIE ZUGEHÖRIGE DURCHGANGSPARTITIONSPLATTE, KANALABDECKUNG UND VERFAHREN DAFÜR

Title (fr)

ECHANGEUR DE CHALEUR TUBULAIRE MULTIPASSE ET PLAQUE DE SEPARATION ENTRE PASSES, COUVERCLE DE CONDUITS ET PROCEDES ASSOCIES

Publication

EP 2577207 A4 20150114 (EN)

Application

EP 11787076 A 20110428

Priority

- US 78977910 A 20100528
- US 2011034294 W 20110428

Abstract (en)

[origin: WO2011149617A2] A multipass tubular heat exchanger utilizing a pass partition plate and a tubesheet is described which is suitable for use with high differential pressure tubeside fluid without deformation or dislocation of the pass partition plate, thereby avoiding the problem of tubeside fluid bypassing. The pass partition plate has an edge fitting into a corresponding groove in the tubesheet. The edge and the corresponding groove each have a radius of curvature about an axis extending generally perpendicular to the tubesheet.

IPC 8 full level

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CPC (source: EP KR US)

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F28F 9/0202 (2013.01 - EP US); **F28F 9/22** (2013.01 - EP US); **F28F 13/06** (2013.01 - KR); **F28F 2225/08** (2013.01 - EP US);
F28F 2230/00 (2013.01 - EP US)

Citation (search report)

- [XJ] JP H08219664 A 19960830 - NIPPON DENSO CO
- [Y] DE 69102556 T2 19941013 - PHILLIPS PETROLEUM CO [US]
- [Y] DE 2261477 A1 19740620 - SIEMENS AG
- [A] US 2900173 A 19590818 - PICKFORD ALLAN E
- [A] US 6899169 B1 20050531 - COX RICHARD D [US]
- [A] JP 2007170271 A 20070705 - USUI KOKUSAI SANGYO KK
- See references of WO 2011149617A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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EP 2577207 A4 20150114; JP 2013524158 A 20130617; JP 5563715 B2 20140730; KR 20130122537 A 20131107; US 2011290460 A1 20111201

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