

Title (en)

SHELL-AND-TUBE HEAT EXCHANGER COMPRISING A WEAR-RESISTANT TUBE PLATE LINING

Title (de)

ROHRBÜNDELWÄRMEÜBERTRAGER MIT VERSCHLEISSBESTÄNDIGER ROHRBODENAUSKLEIDUNG

Title (fr)

ÉCHANGEUR DE CHALEUR À FAISCEAU TUBULAIRE, POURVU D'UNE PLAQUE TUBULAIRE À REVÊTEMENT RÉSISTANT À L'USURE

Publication

EP 1902267 A1 20080326 (DE)

Application

EP 06762346 A 20060703

Priority

- EP 2006006440 W 20060703
- DE 102005032118 A 20050707

Abstract (en)

[origin: US2008202732A1] The invention relates to shell-and-tube heat exchangers, including those used to cool cracking gas in petroleum refining, containing wear resistant tube plate linings. In the heat exchangers, at least a portion of the inlet tube plate is covered by wear-resistant inserts which can be at least partially inserted into the heat exchanger tubes.

IPC 8 full level

F28F 9/16 (2006.01)

CPC (source: EP KR US)

F28F 9/013 (2013.01 - KR); **F28F 9/16** (2013.01 - KR); **F28F 9/167** (2013.01 - EP US); **F28F 19/002** (2013.01 - EP US)

Citation (search report)

See references of WO 2007006446A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2008202732 A1 20080828; US 8210245 B2 20120703; AT E510180 T1 20110615; BR PI0612757 A2 20101130; CA 2614362 A1 20070118; CN 101228410 A 20080723; CN 101228410 B 20130529; DE 102005032118 A1 20070111; EP 1902267 A1 20080326; EP 1902267 B1 20110518; ES 2363248 T3 20110728; JP 2008545114 A 20081211; JP 4918545 B2 20120418; KR 101318593 B1 20131015; KR 20080033943 A 20080417; NO 20080694 L 20080331; SG 163575 A1 20100830; WO 2007006446 A1 20070118

DOCDB simple family (application)

US 99499106 A 20060703; AT 06762346 T 20060703; BR PI0612757 A 20060703; CA 2614362 A 20060703; CN 200680024319 A 20060703; DE 102005032118 A 20050707; EP 06762346 A 20060703; EP 2006006440 W 20060703; ES 06762346 T 20060703; JP 2008518752 A 20060703; KR 20087001120 A 20060703; NO 20080694 A 20080206; SG 2010048759 A 20060703