

Title (en)
HEAT EXCHANGER HAVING ENHANCED PERFORMANCE

Title (de)
WÄRMETAUSCHER MIT ERHÖHTER LEISTUNG

Title (fr)
ÉCHANGEUR DE CHALEUR À PERFORMANCES ACCRUES

Publication
EP 2553376 A2 20130206 (FR)

Application
EP 11711331 A 20110329

Priority
• FR 1052447 A 20100331
• EP 2011054843 W 20110329

Abstract (en)
[origin: WO2011120977A2] The invention relates to a heat exchanger including at least one elongate tube (3) adapted for the flow of a coolant, and at least one collection box (5) for such a coolant and into which one end of said tube leads, wherein the collection box includes a collector (9) having an element for receiving the end of said tube, the receiving element including a portion (19) projecting inwardly and shaped into an area for supporting said tube. According to the invention, the receiving element further includes a connection portion (21) for the inwardly projecting portion opposite the collector, and said connection portion protrudes on the side of the collector opposite the collection box such that said inwardly projecting portion (19) and said connection portion (21) have mutually opposite projecting directions.

IPC 8 full level
F28F 9/02 (2006.01); **F28F 9/18** (2006.01)

CPC (source: EP KR US)
F28F 1/006 (2013.01 - US); **F28F 9/00** (2013.01 - KR); **F28F 9/02** (2013.01 - KR); **F28F 9/0224** (2013.01 - EP US);
F28F 9/0226 (2013.01 - EP US); **F28F 9/0265** (2013.01 - KR); **F28F 9/18** (2013.01 - KR); **F28F 9/182** (2013.01 - EP US);
F28F 9/185 (2013.01 - KR)

Citation (search report)
See references of WO 2011120977A2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2011120977 A2 20111006; WO 2011120977 A3 20120202; CN 102933930 A 20130213; CN 102933930 B 20160824;
EP 2553376 A2 20130206; EP 2553376 B1 20140212; FR 2958385 A1 20111007; FR 2958385 B1 20130118; JP 2013524145 A 20130617;
JP 5952259 B2 20160713; KR 20130022405 A 20130306; PL 2553376 T3 20141031; US 2013160973 A1 20130627; US 9366487 B2 20160614

DOCDB simple family (application)
EP 2011054843 W 20110329; CN 201180027106 A 20110329; EP 11711331 A 20110329; FR 1052447 A 20100331;
JP 2013501809 A 20110329; KR 20127028494 A 20110329; PL 11711331 T 20110329; US 201113637635 A 20110329