

Title (en)  
HEAT EXCHANGER HAVING A REINFORCED COLLECTOR

Title (de)  
WÄRMETAUSCHER MIT VERSTÄRKTEM KOLLEKTOR

Title (fr)  
ECHANGEUR DE CHALEUR A COLLECTEUR RENFORCE

Publication  
**EP 2856058 A1 20150408 (FR)**

Application  
**EP 13724231 A 20130516**

Priority  
• FR 1254741 A 20120524  
• EP 2013060184 W 20130516

Abstract (en)  
[origin: WO2013174720A1] The invention relates to a heat exchanger including a heat exchange body (2), at least one cover (4), and a collector (3) connecting the cover (4) to the heat exchange body (2) by means of a crimping device originating from the collector (3) and folded onto the cover (4), the heat exchange body (2) including a plurality of tubes (6a, 6b) capable of channeling a first fluid, the collector (3) including a bottom plate (24) surrounded by a securing edge (13) of the cover (4), characterized in that the bottom plate (24) and the securing edge (13) define a cavity (26) for receiving a lug (15) of the cover (4), the securing edge (13) being formed by a double wall (16), one end (17) of which is secured to at least one tube (6a, 6b).

IPC 8 full level  
**F28F 9/02** (2006.01); **F28D 21/00** (2006.01)

CPC (source: EP KR US)  
**F28D 21/00** (2013.01 - KR); **F28F 1/10** (2013.01 - US); **F28F 9/02** (2013.01 - US); **F28F 9/0219** (2013.01 - KR); **F28F 9/0226** (2013.01 - EP US); **F28D 1/05366** (2013.01 - EP US); **F28D 2021/0082** (2013.01 - EP US); **F28F 2225/08** (2013.01 - EP US); **F28F 2275/122** (2013.01 - EP US)

Citation (search report)  
See references of WO 2013174720A1

Cited by  
US11306982B2

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2013174720 A1 20131128**; CN 104583707 A 20150429; CN 104583707 B 20170222; EP 2856058 A1 20150408; EP 2856058 B1 20160504; FR 2991037 A1 20131129; FR 2991037 B1 20140620; JP 2015520353 A 20150716; JP 6030228 B2 20161124; KR 101639509 B1 20160713; KR 20150017362 A 20150216; PL 2856058 T3 20161130; US 2015129186 A1 20150514

DOCDB simple family (application)  
**EP 2013060184 W 20130516**; CN 201380030759 A 20130516; EP 13724231 A 20130516; FR 1254741 A 20120524; JP 2015513107 A 20130516; KR 20147036205 A 20130516; PL 13724231 T 20130516; US 201314402789 A 20130516