

Title (en)
HEAT EXCHANGER HAVING A REINFORCED COLLECTOR

Title (de)
WÄRMETAUSCHER MIT VERSTÄRKTEM KOLLEKTOR

Title (fr)
ECHANGEUR DE CHALEUR A COLLECTEUR RENFORCE

Publication
EP 2856059 A1 20150408 (FR)

Application
EP 13725116 A 20130516

Priority
• FR 1254743 A 20120524
• EP 2013060180 W 20130516

Abstract (en)
[origin: WO2013174719A1] 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), the heat exchange body (2) being defined by at least one sealing plate (6), the collector (3) including a bottom plate (20) surrounded by a securing edge (13) of the cover (4), characterized in that the securing edge (21) is formed by a double wall (22), one end (23) of which is at least partially secured to the sealing plate (6).

IPC 8 full level
F28F 9/02 (2006.01)

CPC (source: EP KR US)
B21D 39/02 (2013.01 - KR); **B21D 39/03** (2013.01 - KR); **F28D 1/053** (2013.01 - KR); **F28F 3/025** (2013.01 - US); **F28F 9/02** (2013.01 - KR); **F28F 9/0202** (2013.01 - KR); **F28F 9/0226** (2013.01 - EP US); **F28F 9/027** (2013.01 - US); **F28D 2021/0082** (2013.01 - EP US)

Citation (search report)
See references of WO 2013174719A1

Cited by
DE102019112194A1

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 2013174719 A1 20131128; CN 104641198 A 20150520; CN 104641198 B 20180119; EP 2856059 A1 20150408; EP 2856059 B1 20160615; ES 2588903 T3 20161107; FR 2991038 A1 20131129; JP 2015517644 A 20150622; JP 6068623 B2 20170125; KR 101702297 B1 20170206; KR 20150014516 A 20150206; PL 2856059 T3 20170428; US 2015176922 A1 20150625; US 9772144 B2 20170926

DOCDB simple family (application)
EP 2013060180 W 20130516; CN 201380030767 A 20130516; EP 13725116 A 20130516; ES 13725116 T 20130516; FR 1254743 A 20120524; JP 2015513106 A 20130516; KR 20147036204 A 20130516; PL 13725116 T 20130516; US 201314402995 A 20130516