

Title (en)
HEAT EXCHANGER WITH CENTER MANIFOLD

Title (de)
WÄRMETAUSCHER MIT MITTELVERTEILER

Title (fr)
ÉCHANGEUR DE CHALEUR À COLLECTEUR CENTRAL

Publication
EP 3196585 A1 20170726 (EN)

Application
EP 17150275 A 20170104

Priority
US 201615003452 A 20160121

Abstract (en)
A heat exchange device (100) includes a first section (102) and a second section (104). Each of the first and second sections (102, 104) includes flow passages (110) configured to cool fluid. A center manifold (106) is disposed between the first and second sections (102, 104). Hot fluid enters the manifold at one end (112), passes through the first and second sections (102, 104) and cooled fluid exits the manifold at the opposing end (114). Each of the flow passages (110) can have a bend (130) at an outer edge of the heat exchange device (100) configured to return high pressure fluid to the center manifold (106).

IPC 8 full level
F28F 9/02 (2006.01); **F28D 1/04** (2006.01); **F28D 1/047** (2006.01); **F28D 7/00** (2006.01); **F28D 7/06** (2006.01); **F28F 1/40** (2006.01)

CPC (source: EP US)
F28D 1/0408 (2013.01 - EP US); **F28D 1/0476** (2013.01 - EP US); **F28D 7/0066** (2013.01 - EP US); **F28D 7/06** (2013.01 - EP US); **F28D 9/0068** (2013.01 - US); **F28F 1/40** (2013.01 - EP US); **F28F 3/04** (2013.01 - US); **F28F 9/0075** (2013.01 - US); **F28F 9/02** (2013.01 - EP US); **F28F 9/26** (2013.01 - US); **F28D 2021/0021** (2013.01 - US); **F28D 2021/0026** (2013.01 - US); **F28F 2009/224** (2013.01 - US); **F28F 2210/04** (2013.01 - US); **F28F 2225/04** (2013.01 - US); **F28F 2250/102** (2013.01 - US); **F28F 2255/00** (2013.01 - US)

Citation (search report)
• [X] US 2013201628 A1 20130808 - AOKI MICHIMASA [JP], et al
• [X] US 2006067052 A1 20060330 - LLAPITAN DAVID J [US], et al
• [X] US 2012241137 A1 20120927 - AOKI MICHIMASA [JP], et al
• [X] GB 1412842 A 19751105 - HAGNAUER W W

Cited by
CN111189339A; CN108153982A; US2019264982A1; US10962293B2; EP3492858A1

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

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