

Title (en)

HEAT EXCHANGER WITH ENHANCED HEAT TRANSFER

Title (de)

WÄRMETAUSCHER MIT VERBESSERTER WÄRMEÜBERTRAGUNG

Title (fr)

ÉCHANGEUR DE CHALEUR AVEC TRANSFERT DE CHALEUR AMÉLIORÉ

Publication

**EP 3196582 B1 20191016 (EN)**

Application

**EP 17152472 A 20170120**

Priority

US 201615003475 A 20160121

Abstract (en)

[origin: EP3196582A1] A heat exchange device includes a plurality of flow passages (110). Each flow passage has an inlet (120) and an outlet (122) configured for hot fluid flow in a direction from the inlet to the outlet. Secondary heat transfer elements (132) within and adjacent each flow passage have heat transfer characteristics varying in the direction of the hot fluid flow such that peak metal temperatures limit creep to acceptable values and such that transient thermal stresses are limited to values producing acceptable life of the device.

IPC 8 full level

**F28F 1/42** (2006.01); **F28D 1/04** (2006.01); **F28D 1/047** (2006.01); **F28F 1/12** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)

**F28D 1/0408** (2013.01 - EP US); **F28D 1/0476** (2013.01 - EP US); **F28D 9/0062** (2013.01 - EP US); **F28F 1/126** (2013.01 - EP US); **F28F 3/02** (2013.01 - US); **F28F 3/025** (2013.01 - EP US); **F28F 9/02** (2013.01 - EP US); **F28F 9/0246** (2013.01 - EP US); **F28F 13/14** (2013.01 - EP US); **F28D 2001/0266** (2013.01 - US); **F28F 2009/029** (2013.01 - EP US); **F28F 2215/04** (2013.01 - EP US); **F28F 2265/10** (2013.01 - EP US)

Citation (examination)

- US 2883165 A 19590421 - JENSEN ARNOLD E, et al
- US 2006067052 A1 20060330 - LLAPITAN DAVID J [US], et al
- US 2012241137 A1 20120927 - AOKI MICHIMASA [JP], et al
- US 2015241142 A1 20150827 - VALLEE NICOLAS [FR], et al
- US 6035927 A 20000314 - KRAUSS HANS-JOACHIM [DE], et al

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

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