

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 A1 20170726 (EN)

Application

EP 17152472 A 20170120

Priority

US 201615003475 A 20160121

Abstract (en)

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

F28D 1/04 (2006.01); **F28D 1/047** (2006.01); **F28F 1/12** (2006.01); **F28F 1/42** (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 (search report)

- [XY] DE 2362885 A1 19750619 - GO AUTOMOBILNY
- [Y] US 2013201628 A1 20130808 - AOKI MICHIMASA [JP], et al
- [X] DE 19846346 C1 20000309 - GEA MASCHINENKUEHLTECHNIK GMBH [DE]
- [X] WO 2014087225 A1 20140612 - BLUE BOX GROUP S R L [IT]

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)

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