

Title (en)
HEAT TRANSFER ELEMENT FOR MANIFOLD

Title (de)
WÄRMEÜBERTRAGUNGSELEMENT FÜR EINEN VERTEILER

Title (fr)
ÉLÉMENT DE TRANSFERT THERMIQUE DESTINÉ À UN COLLECTEUR

Publication
EP 2604819 A4 20141210 (EN)

Application
EP 11816391 A 20110808

Priority
• JP 2010179232 A 20100810
• JP 2011068056 W 20110808

Abstract (en)
[origin: EP2604819A1] Provided is a heat transfer element for manifold that enables the prevention of thermal fatigue of a manifold main body and has good high-temperature strength and oxidation resistance. At least one part of the heat transfer element for manifold 11 is formed from ferritic stainless steel. The ferritic stainless steel contains at least one element, in terms of mass%, of: C: 0.03% or less; Si: 2.0% or less; Mn: 2.0% or less; Cr: 10 to 30%; Nb: 0.8% or less; and Ti: 0.8% or less, and N: 0.03% or less, and the remaining part thereof is formed from Fe and inevitable impurities. Further, an alloy content of the ferritic stainless steel is adjusted so that an A value in equation (1), where A value = Nb + Ti - 4(C + N), is 0.10 or more, and a B value in equation (2), where B value = Cr + 15Si, is 18 or more.

IPC 8 full level
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CPC (source: EP KR US)
C21D 6/002 (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/004** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/20** (2013.01 - EP KR US); **C22C 38/22** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US); **F01N 13/10** (2013.01 - EP KR US); **F01N 13/16** (2013.01 - EP KR US); **F01N 13/1888** (2013.01 - EP KR US); **F01N 2530/04** (2013.01 - EP US)

Citation (search report)
• [Y] JP 2007016672 A 20070125 - KAWASAKI HEAVY IND LTD
• [Y] JP H0860306 A 19960305 - SUMITOMO METAL IND
• [Y] JP 2005002994 A 20050106 - KOMOTETSUKU KK
• [Y] EP 1873271 A1 20080102 - JFE STEEL CORP [JP]
• See references of WO 2012020727A1

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FR3036133A1

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

DOCDB simple family (publication)
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