Title (en)

MICRO CHANNEL HEAT EXCHANGER ALLOY SYSTEM

Title (de)

SYSTEM MIT EINER MIKROKANAL-WÄRMETAUSCHERLEGIERUNG

Title (fr)

SYSTÈME D'ALLIAGE POUR ÉCHANGEUR THERMIQUE À MICRO-CANAUX

Publication

EP 2769162 A1 20140827 (EN)

Application

EP 12784390 A 20121016

Priority

- US 201161548553 P 20111018
- US 2012060419 W 20121016

Abstract (en)

[origin: WO2013059193A1] A micro channel heat exchanger alloy system is provided and includes first and second manifolds, including a 3000 series aluminum, each of the first and second manifolds being formed to define a respective interior therein, a tube, including at least one of 31108 and 31104 alloy material, extending from the first to the second manifold and being formed to define multiple channels by which the respective interiors of the first and the second manifolds fluidly communicate, a fin structure, including at least 3003 alloy material, disposed in thermal communication with the tube, the fin structure being cladded with a silicon rich layer, including a 4000 series aluminum and a flux material applied to surfaces of the first and second manifolds, the tube and the fin structure.

IPC 8 full level

C22C 21/00 (2006.01); **F28D 1/053** (2006.01); **F28F 1/02** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP US)

C22C 21/00 (2013.01 - EP US); **C22C 21/02** (2013.01 - EP US); **F28D 1/05383** (2013.01 - EP US); **F28F 1/022** (2013.01 - EP US); **F28F 1/126** (2013.01 - US); **F28F 21/084** (2013.01 - EP US)

Citation (search report)

See references of WO 2013059193A1

Citation (examination)

- US 2011220617 A1 20110915 - BECKER ANDREAS [DE], et al
- US 2011014494 A1 20110120 - MATSUMOTO KATSUSHI [JP], 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

DOCDB simple family (publication)

WO 2013059193 A1 20130425; CN 103857973 A 20140611; CN 108917449 A 20181130; EP 2769162 A1 20140827; US 2014262182 A1 20140918

DOCDB simple family (application)

US 2012060419 W 20121016; CN 201280051090 A 20121016; CN 201810659805 A 20121016; EP 12784390 A 20121016; US 201214352510 A 20121016