

Title (en)

Block-type plate heat exchanger with anti-fouling properties

Title (de)

Blockplatten-Wärmetauscher mit fäulnisverhindernden Eigenschaften

Title (fr)

Échangeur thermique à plaques de type bloc doté de propriétés antisalissures

Publication

**EP 2597412 A1 20130529 (EN)**

Application

**EP 11190887 A 20111128**

Priority

EP 11190887 A 20111128

Abstract (en)

An block-type plate that has a stack of heat transfer plates (30) which includes a first heat transfer plate (51) and a second heat transfer plate (52). At least a part of each of the first heat transfer plate (51) and the second heat transfer plate (52) comprises a coating (701) that i) has a layer thickness of 1-30 µm, ii) is prepared by sol-gel processing, iii) comprises silicon oxide (SiOx) having an atomic ratio of O/Si > 1, and iv) comprises #¥ 10 atomic percent carbon (C).

IPC 8 full level

**F28D 9/00** (2006.01); **F28F 9/00** (2006.01); **F28F 19/02** (2006.01)

CPC (source: EP US)

**F28D 9/0037** (2013.01 - EP US); **F28F 3/08** (2013.01 - US); **F28F 9/001** (2013.01 - EP US); **F28F 19/02** (2013.01 - EP US); **F28F 2245/00** (2013.01 - EP US)

Citation (applicant)

- EP 0165179 A1 19851218 - VICARB SA [FR]
- EP 0639258 A1 19950222 - FERNANDEZ JEAN NOEL [FR]
- US 2009123730 A1 20090514 - BOGER SNJEZANA BOGER [DE], et al
- US 2006196644 A1 20060907 - BOGER SNJEZANA [DE], et al
- WO 2008119751 A1 20081009 - SIEMENS AG [DE], et al
- WO 2009034359 A1 20090319 - TEER COATINGS LTD [GB], et al

Citation (search report)

- [A] EP 0165179 A1 19851218 - VICARB SA [FR]
- [A] EP 0639258 A1 19950222 - FERNANDEZ JEAN NOEL [FR]
- [A] DE 102009024320 A1 20101209 - FOERDERUNG VON MEDIZIN BIO UND [DE], et al

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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)

**EP 2597412 A1 20130529; EP 2597412 B1 20140528**; CN 103958998 A 20140730; CN 103958998 B 20161109; DK 2597412 T3 20140811; JP 2014533820 A 20141215; RU 2568716 C1 20151120; US 2014311718 A1 20141023; WO 2013079332 A1 20130606

DOCDB simple family (application)

**EP 11190887 A 20111128**; CN 201280058235 A 20121115; DK 11190887 T 20111128; EP 2012072722 W 20121115; JP 2014542778 A 20121115; RU 2014126368 A 20121115; US 201214357114 A 20121115