

Title (en)

Surface coating layer and heat exchanger including the surface coating layer

Title (de)

Oberflächenbeschichtung und Wärmetauscher mit der Oberflächenbeschichtung

Title (fr)

Couche de revêtement de surface et échangeur thermique incluant la couche de revêtement de surface

Publication

**EP 2476990 A2 20120718 (EN)**

Application

**EP 11188790 A 20111111**

Priority

KR 20110003676 A 20110113

Abstract (en)

A surface coating layer (120), in contact with a surface of a base material (100) of a heat exchanger, comprises a plurality of composite layers comprising a first layer (120a) contacting a surface of the base material (100), the first layer (120a) comprising a first composite comprising a first matrix (50a) and a first nanobody (50b), and a second layer (120b) contacting a surface of the first layer (120a) and having an interface with the air, the second layer comprising a second composite comprising a second matrix (50a) and a second nanobody (50b), wherein the first layer (120a) and the second layer (120b) each include a different amount by volume of the first nanobody and the second nanobody, respectively.

IPC 8 full level

**F28F 17/00** (2006.01); **F28F 19/00** (2006.01)

CPC (source: EP KR US)

**F28F 17/00** (2013.01 - EP KR US); **F28F 19/006** (2013.01 - EP KR US); **F28F 19/04** (2013.01 - EP KR US); **F28F 2245/04** (2013.01 - EP KR US); **F28F 2255/20** (2013.01 - EP KR US)

Cited by

EP2829835A1; EP3399233A1; JP2018155483A; US10663237B2; WO2016019303A1; WO2015104233A1; US10760858B2

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 2476990 A2 20120718**; **EP 2476990 A3 20141112**; CN 102615866 A 20120801; KR 20120082278 A 20120723; US 2012181004 A1 20120719

DOCDB simple family (application)

**EP 11188790 A 20111111**; CN 201210010323 A 20120113; KR 20110003676 A 20110113; US 201113109559 A 20110517