

Title (en)
Coated heat exchanger

Title (de)
Beschichteter Wärmetauscher

Title (fr)
Echangeur thermique revêtu

Publication
EP 2236974 A3 20140430 (DE)

Application
EP 10155043 A 20100301

Priority
DE 102009013054 A 20090316

Abstract (en)
[origin: EP2236974A2] The heat exchanger has exchanger networks e.g. flat pipes (2) and ribs (3), surrounded by air and comprising a coating made of polymer i.e. polyurethane, with nanoscale silver particles. A barrier layer is formed between the coating and a metal i.e. aluminum alloy. The coating comprises an additive for production of a hydrophilic surface. The additive is selected from nanoscale particulate salt i.e. barium sulfate. The coating is formed as a dried lacquer i.e. dried aqueous dispersion lacquer. The barrier layer is formed as a conversion layer. An independent claim is also included for a method for production of a heat exchanger.

IPC 8 full level
F28D 1/053 (2006.01); **F28D 21/00** (2006.01); **F28F 19/04** (2006.01)

CPC (source: EP)
F28D 1/05366 (2013.01); **F28F 19/04** (2013.01); **F28D 2021/0071** (2013.01); **F28F 2245/02** (2013.01); **F28F 2265/20** (2013.01)

Citation (search report)

- [XY] US 5366004 A 19941122 - GARNER DAVID P [US], et al
- [Y] DE 102008004186 A1 20080724 - BEHR GMBH & CO KG [DE]
- [A] DE 19750122 A1 19990520 - VOLKSWAGEN AG [DE]
- [A] DE 102004049107 A1 20060413 - BEHR GMBH & CO KG [DE]
- [A] DE 102004011545 A1 20041014 - BEHR GMBH & CO KG [DE]

Cited by
EP2298961A1; EP3590838A1; US11453197B2; WO2016019303A1; US9677166B2; US10760858B2; EP1799882A2

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA ME RS

DOCDB simple family (publication)
EP 2236974 A2 20101006; **EP 2236974 A3 20140430**; CN 101839591 A 20100922; CN 101839591 B 20140319;
DE 102009013054 A1 20100923

DOCDB simple family (application)
EP 10155043 A 20100301; CN 201010132263 A 20100316; DE 102009013054 A 20090316