

Title (en)
Coated heat exchanger

Title (de)
Beschichteter Wärmetauscher

Title (fr)
Echangeur thermique revêtu

Publication
EP 2236974 A2 20101006 (DE)

Application
EP 10155043 A 20100301

Priority
DE 102009013054 A 20090316

Abstract (en)
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.

Abstract (de)
Die Erfindung betrifft einen Wärmetauscher, insbesondere Verdampfer für einen Kältekreis, umfassend ein von Luft umströmbares Tauschernetz (2, 3), wobei das Tauschernetz (2, 3) zumindest abschnittsweise eine Beschichtung (6) aus einem Polymer mit darin eingebetteten, nanoskaligen Silberpartikeln aufweist.

IPC 8 full level
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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)

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

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