

Title (en)

AIR COOLING ELEMENT, METHOD FOR OPERATING THE SAME, AND AN AIR COOLING ARRANGEMENT

Title (de)

LUFTKÜHLELEMENT, VERFAHREN ZU SEINEM BETRIEB SOWIE LUFTKÜHLANORDNUNG

Title (fr)

ELEMENT DE REFROIDISSEMENT A AIR, PROCEDE PERMETTANT DE LE FAIRE FONCTIONNER, ET DISPOSITIF DE REFROIDISSEMENT A AIR

Publication

EP 1078205 B1 20031105 (DE)

Application

EP 00904781 A 20000225

Priority

- CH 0000104 W 20000225
- CH 38899 A 19990303

Abstract (en)

[origin: US6602129B1] In order to achieve a high cooling power while avoiding troublesome cold air flows, a chamber (2) is sealed, from the room to be cooled, by a thin cooling wall (1) of powder-coated steel with micro-holes which are arranged in a square 5 mm grid and have a diameter of 0.5 mm and whose free cross-section is consequently less than 1%. An antechamber (4) which is connected to the chamber (2) through a partition (3) by means of a distributor nozzle (17) and has air connections for connection to an air supply or an adjacent air-cooling element is arranged above the chamber (2). The cool air is introduced into the chamber (2) via the distributor nozzle (17) in such a way that it passes with high turbulence along the inside of the cooling wall (1). An air-cooling arrangement consists of rows, arranged side by side, of air-cooling elements whose antechambers (4) are connected by connecting nipples which each project into connecting orifices (10) of adjacent air-cooling elements.

IPC 1-7

F24F 13/068

IPC 8 full level

F24F 13/068 (2006.01)

CPC (source: EP US)

F24F 13/068 (2013.01 - EP US)

Cited by

DE112004002362B4; EP2402674A1; WO2006056095A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0052395 A1 20000908; AT E253714 T1 20031115; AU 2655500 A 20000921; AU 770154 B2 20040212; CA 2330787 A1 20000908; DE 50004305 D1 20031211; DK 1078205 T3 20040223; EP 1078205 A1 20010228; EP 1078205 B1 20031105; ES 2209816 T3 20040701; JP 2002538408 A 20021112; JP 3663132 B2 20050622; PT 1078205 E 20040227; US 6602129 B1 20030805

DOCDB simple family (application)

CH 0000104 W 20000225; AT 00904781 T 20000225; AU 2655500 A 20000225; CA 2330787 A 20000225; DE 50004305 T 20000225; DK 00904781 T 20000225; EP 00904781 A 20000225; ES 00904781 T 20000225; JP 2000602570 A 20000225; PT 00904781 T 20000225; US 67455201 A 20010516