

Title (en)
CROSS-FLOW HEAT EXCHANGER

Publication
EP 0176680 A3 19861217 (DE)

Application
EP 85109109 A 19850720

Priority
DE 3435911 A 19840929

Abstract (en)
[origin: US4681157A] A gas-tight crossflow heat exchanger consisting of a metal casing with two gas inlet nozzles and two gas outlet nozzles, at least one installation cover on the top of the casing, a block consisting of a number of ceramic heat-exchange elements mounted completely accurately in cuboid form with gas ducts arranged in layers one above the other and running at right angles to each other, four side surfaces having gas-duct openings, and the bottom and top surfaces being free of openings, the heat exchanger further consisting of thermal insulation between the metal casing and the block of ceramic heat-exchange elements. Gas-tightness is achieved by each heat-exchange element being provided on all four duct-free edges of each side surface with recesses and elevations, with a sealing strip installed between each opposing elevation and recess, each heat-exchange element being provided on the floor and cover surfaces with at least one recess or elevation and of the same shape, and the thermal insulation between the metal casing and the block of ceramic heat-exchange elements enclosing the block providing non-positive structural locking in the direction of the gas inlet and gas outlet nozzles.

IPC 1-7
F28F 7/02; **F28F 21/04**

IPC 8 full level
F28D 9/00 (2006.01); **F28D 9/02** (2006.01); **F28F 7/02** (2006.01); **F28F 21/04** (2006.01); **F28F 21/06** (2006.01)

CPC (source: EP US)
F28F 7/02 (2013.01 - EP US); **F28F 21/04** (2013.01 - EP US); **Y10S 165/431** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0176680 A2 19860409; **EP 0176680 A3 19861217**; **EP 0176680 B1 19881130**; AT E39022 T1 19881215; DD 236982 A5 19860625; DE 3435911 A1 19860403; DE 3566573 D1 19890105; JP S61105096 A 19860523; NO 853808 L 19860401; SU 1426468 A3 19880923; US 4681157 A 19870721; ZA 857471 B 19860924

DOCDB simple family (application)
EP 85109109 A 19850720; AT 85109109 T 19850720; DD 28105685 A 19850926; DE 3435911 A 19840929; DE 3566573 T 19850720; JP 21273385 A 19850927; NO 853808 A 19850927; SU 3958906 A 19850927; US 78114185 A 19850927; ZA 857471 A 19850927