

Title (en)  
CROSS-FLOW HEAT EXCHANGER

Publication  
**EP 0176680 B1 19881130 (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)

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