

Title (en)

Heat exchanger moulded from refractory material.

Title (de)

Wärmetauscher gegossen aus einem hitzebeständigen Material.

Title (fr)

Echangeurs de chaleur moulés en matière réfractaire.

Publication

EP 0131502 A1 19850116 (FR)

Application

EP 84401324 A 19840625

Priority

FR 8311495 A 19830711

Abstract (en)

[origin: ES8603064A1] Heat exchanger for sepd. fluids with separate channels for the fluid to be heated and the are to be cooled, comprises a body contg. the channels moulded by casting refractory material which sets at ambient temp. with a shrinkage less than 0.5%, at least one of the channels including at least one bend, the body being completely monolithic. - The refractory material contains fused and cast grains of one of the systems: ZrO₂-SiO₂, ZrO₂-SiO₂-Al₂O₃ and ZrO₂-SiO₂-Al₂O₃-Cr₂O₃.

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Abstract (fr)

Echangeur de chaleur; cet échangeur à fluides séparés comporte un corps monolithique, moulé en matière réfractaire, qui comprend en son sein, venus de moulage, au moins un canal (2) pour le fluide à réchauffer et au moins un canal (5) pour le fluide à refroidir en relation mutuelle d'échange de chaleur. Application à toutes industries avec des fluides corrosifs ou abrasifs, pour basses ou hautes températures.

IPC 1-7

F28F 7/02; **F28F 21/04**

IPC 8 full level

C04B 35/48 (2006.01); **F28D 17/02** (2006.01); **F28D 21/00** (2006.01); **F28F 7/02** (2006.01); **F28F 21/04** (2006.01)

CPC (source: EP US)

F28F 7/02 (2013.01 - EP US); **F28F 21/04** (2013.01 - EP US); **Y10S 165/395** (2013.01 - EP US); **Y10S 165/905** (2013.01 - EP US)

Citation (search report)

- [A] US 4156625 A 19790529 - WACHENDORFER PAUL L SR [US]
- [A] EP 0021936 A1 19810107 - PRODUITS REFRACTAIRES [FR]
- [A] GB 766668 A 19570123 - ATOMIC ENERGY AUTHORITY UK
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- [A] DE 2458140 A1 19760610 - RUPP OTTMAR
- [A] FR 2429763 A1 19800125 - PRODUITS REFRACTAIRES [FR]
- [A] FR 2449662 A1 19800919 - ISOLITE INSULATING PROD [JP], et al

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EP 0131502 A1 19850116; **EP 0131502 B1 19880127**; DE 3469058 D1 19880303; ES 534181 A0 19851116; ES 8603064 A1 19851116; FR 2549215 A1 19850118; FR 2549215 B1 19880624; JP H0361118 B2 19910918; JP S6038591 A 19850228; US 4711298 A 19871208; US 4770828 A 19880913

DOCDB simple family (application)

EP 84401324 A 19840625; DE 3469058 T 19840625; ES 534181 A 19840710; FR 8311495 A 19830711; JP 14249684 A 19840711; US 4053687 A 19870417; US 91457186 A 19861003