

Title (en)
LOW-COST HIGH-TEMPERATURE HEAT EXCHANGER

Title (de)
KOSTENGÜNSTIGER HOCHTEMPERATUR-WÄRMETAUSCHER

Title (fr)
ECHANGEUR DE CHALEUR HAUTE TEMPERATURE PEU COUTEUX

Publication
EP 1937401 A4 20130619 (EN)

Application
EP 06802430 A 20060828

Priority

- US 2006033439 W 20060828
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- US 22577105 A 20050913

Abstract (en)
[origin: WO2007032891A2] A low- cost, high -temperature heat exchanger is made from a notched piece of metal, the metal being folded back and forth upon itself to form a monolith. The notches in the metal piece create openings, communicating with distinct sides of the monolith. Ducts are attached to the openings. Cut pieces of corrugated metal, which may have a catalyst coating, are inserted between folds of the monolith. The heat exchanger may be used as part of a fuel cell system, or in other industrial applications, to recover waste heat, or to conduct various catalytic and non- catalytic reactions. The invention also includes an element, or building block, for a high- temperature heat exchanger, including a folded metal monolith with metal combs inserted, the monolith and the combs defining seams which are hermetically sealed.

IPC 8 full level
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Citation (search report)

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Designated contracting state (EPC)
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