

Title (en)

Plate-type cross-flow heat exchanger.

Title (de)

Kreuzstromplattenwärmetauscher.

Title (fr)

Echangeur de chaleur à plaques et à courant croisé.

Publication

EP 0212878 A1 19870304 (EN)

Application

EP 86305842 A 19860730

Priority

- AU 6034786 A 19860718
- AU PH186085 A 19850808

Abstract (en)

A plate-type cross-flow heat exchanger having a core (20) which is constituted by a stack of flat metal plates (23 and 24) which are diffusion bonded in face-to-face contact. Some of the plates (23) are formed with a first group of channels (25) which extend between a first pair of opposed edges (26A and 26B) of the plates, and others of the plates (24) are formed with a second group of orthogonally disposed channels (27) which extend between a second pair of opposed edges (28A and 28B) of the plates. First and second headers (35 and 36) are bonded to opposite edges of the core and are in fluid passage communication with the first group of channels (25), and conduits (37) are provided for directing a first fluid to and from the first group of channels (25) by way of the first and second headers (35 and 36). A vessel (51 or 54 or 55) contains the core (20) and the headers (35, 36), with the interior of the vessel being in fluid passage communication with the second group of channels (27) in the core. A conduit (39 or 52) is provided for admitting a second fluid to the second group of channels in the core and to the interior of the vessel (51 or 54 or 55) whereby, in passing through the vessel, the second fluid contacts the exterior surface of the first and second headers (35 and 36) within the vessel. A further conduit (53 or 57) is provided for conveying the second fluid from the interior of the vessel (51 or 54 or 55) after it has contacted the headers (35 and 36).

IPC 1-7

F28D 9/02; F28F 3/08

IPC 8 full level

F28D 9/00 (2006.01)

CPC (source: EP)

F28D 9/0037 (2013.01)

Citation (search report)

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