

Title (en)

Aluminium header construction

Title (de)

Aluminiumsammeler

Title (fr)

Construction de collecteur en aluminium

Publication

EP 0945696 A1 19990929 (EN)

Application

EP 99302345 A 19990326

Priority

- EP 99302345 A 19990326
- US 4974298 A 19980327
- US 26678399 A 19990312

Abstract (en)

A heat exchanger (10) is provided including a first aluminum extruded header (12) spaced apart and arranged essentially parallel to a second aluminum extruded header (14). The first and second headers (12,14) include a plurality of parallel passageways (42) extending therethrough along a longitudinal axis thereof. The passageways (42) are fluidly interconnected by at least one transverse cross-drilled bore (50) extending essentially perpendicularly to the longitudinal axis. A core assembly (20) is secured between the first and second headers (12,14) and includes a plurality of fluid conduits (22) surrounded by heat radiating fins (24). A by-pass valve assembly (58) fluidly communicates with the headers (12,14) and core assembly (20) while providing an alternate pathway independent thereof. Preferably, the by-pass assembly (58) is responsive to fluid temperature and/or pressure for directing fluid flow either into or exterior of the heat exchanger core assembly (20). In one form the by-pass valve assembly (58) is fixedly secured to one of the headers (12,14) whereas in a second embodiment the by-pass valve assembly (76) is removably secured to a plate member (84) secured to one of the headers (12,14). <IMAGE>

IPC 1-7

F28F 9/02

IPC 8 full level

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F28D 1/05333 (2013.01); **F28F 9/0207** (2013.01); **F28F 9/0246** (2013.01); **F28F 2255/16** (2013.01)

Citation (applicant)

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- US 3601878 A 19710831 - KARMAZIN JOHN

Citation (search report)

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Designated contracting state (EPC)

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