

Title (en)
Heat exchanger.

Title (de)
Wärmetauscher.

Title (fr)
Echangeur.

Publication
EP 0328043 A1 19890816 (DE)

Application
EP 89102074 A 19890207

Priority
DE 3803948 A 19880210

Abstract (en)
The manifolds (2, 3) of a profiled-tube heat exchanger (1) consist of a number of manifold sections (5, 6) which are arranged axially one behind another, and are held together and tensioned by means of internally arranged tension rods (7, 8). <IMAGE>

Abstract (de)
Die Sammelrohre (2, 3) eines Profilrohrwärmetauschers (1) bestehen aus einer Anzahl axial hintereinander angeordneter Sammelrohrabschnitte (5, 6) und sind mittels innen angeordneter Zugstäbe (7, 8) zusammengehalten und verspannt.

IPC 1-7
F28D 7/06; **F28F 9/02**

IPC 8 full level
F28D 1/047 (2006.01); **F28D 7/06** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP US)
F28D 7/06 (2013.01 - EP US); **F28F 9/0243** (2013.01 - EP US); **Y10T 29/49352** (2015.01 - EP US)

Citation (search report)

- [Y] GB 2078361 A 19820106 - DELANAIR LTD
- [Y] FR 2122303 A1 19720901 - GEORGE AUGUSTE
- [A] US 3689972 A 19720912 - MOSIER JAMES A, et al
- [A] DE 3146089 A1 19830707 - MTU MUENCHEN GMBH [DE]
- [A] DE 1928146 A1 19691211 - DELANEY GALLAY LTD
- [A] CH 205111 A 19390615 - SPIELVOGEL ERWIN [DE]

Designated contracting state (EPC)
CH DE FR GB IT LI SE

DOCDB simple family (publication)
EP 0328043 A1 19890816; **EP 0328043 B1 19910828**; DE 3803948 A1 19890824; DE 3803948 C2 19900405; JP 2730587 B2 19980325; JP H01247989 A 19891003; US 4969510 A 19901113

DOCDB simple family (application)
EP 89102074 A 19890207; DE 3803948 A 19880210; JP 2882089 A 19890209; US 30394789 A 19890130