

Title (en)
HEAT EXCHANGER ELEMENT AND METHOD AND DEVICE FOR PRODUCING SAME

Title (de)
WÄRMETAUSCHELEMENT, VERFAHREN UND VORRICHTUNG ZU DESSEN HERSTELLUNG

Title (fr)
ELEMENT ECHANGEUR DE CHALEUR, PROCEDE ET DISPOSITIF POUR LE FABRIQUER

Publication
EP 0678186 B1 19970312 (FR)

Application
EP 94904677 A 19940114

Priority
• FR 9400047 W 19940114
• FR 9300498 A 19930115

Abstract (en)
[origin: WO9416272A1] A heat exchanger element consisting of a helically wound tube (1) for a flow of liquid heat transfer medium. The element has a flattened oval cross-section with its long axis substantially perpendicular to the helical axis (XX') or at an acute angle thereto, each tube turn (10) having plane surfaces (11) spaced apart from the adjacent turn surface by a gap having a constant height (h) which is substantially smaller than the width of the flattened tube cross-section. Braces (12) are provided for setting the spacing between the turns. Said element is useful for exchanging heat between two fluids.

IPC 1-7
F24H 1/43; **B21D 53/06**; **F28D 7/02**; **F28F 1/02**

IPC 8 full level
B21D 53/06 (2006.01); **F24H 1/43** (2006.01); **F28D 7/02** (2006.01); **F28F 1/02** (2006.01); **F28F 3/04** (2006.01)

CPC (source: EP)
B21D 53/06 (2013.01); **F24H 1/43** (2013.01); **F28D 7/024** (2013.01); **F28F 1/02** (2013.01); **F28F 3/042** (2013.01); **F28F 2001/027** (2013.01); **F28F 2240/00** (2013.01)

Cited by
WO2011092332A1; EP1752718A1; DE102016215210A1; EP2187138A3; FR2955929A1; EP2295913A3; AU2010212319B2; DE102021120235A1; US9134037B2; EP3220073A1; EP1703227A2; WO2005028966A1; FR2846075A1; EP1279903A2; US7836942B2; WO2012123301A1; WO2016001852A1; US9476610B2; WO2004036121A1; EP2187138A2; DE102008056994A1; WO2010100004A1; US8978638B2; US9816726B2

Designated contracting state (EPC)
DE ES FR GB IT NL

DOCDB simple family (publication)
WO 9416272 A1 19940721; DE 69402051 D1 19970417; DE 69402051 T2 19971009; DE 69402051 T4 19981203; EP 0678186 A1 19951025; EP 0678186 B1 19970312; ES 2101501 T3 19970701; FR 2700608 A1 19940722; FR 2700608 B1 19950407

DOCDB simple family (application)
FR 9400047 W 19940114; DE 69402051 A 19940114; DE 69402051 T 19940114; EP 94904677 A 19940114; ES 94904677 T 19940114; FR 9300498 A 19930115