

Title (en)

HEAT EXCHANGER PLATE HAVING DISTORTION RESISTANT UNIFORM PLEATS

Publication

**EP 0072797 B1 19840926 (EN)**

Application

**EP 81901731 A 19810218**

Priority

US 8100208 W 19810218

Abstract (en)

[origin: WO8202940A1] A heat exchanger plate (2, 4, 6, 8) having undulatory pleats (12) for forming fluid flow passages (18, 20) on opposite sides of the plate (2, 4, 6, 8). The heat exchanger plate (2, 4, 6, 8) is improved by providing the side walls (38, 42, 44) of each pleat (12) with a uniform slope. By this arrangement, the plate is provided with improved distortion resistance and fluid flow capacity. Method and apparatus for forming the pleated plates are also disclosed for using a pair of non-uniform donative fluid passage forming blades (34' and 36') mounted for relative oscillatory movement with respect to a recipient fluid passage forming blade (40') wherein the clearance between each blade is uniform throughout the entire length of each blade. By making the blade clearance constant the slope of pleat sidewalls may be constant even though each pleat follows a curvilinear path in plan view.

IPC 1-7

**F28F 3/08**; **F28F 3/04**

IPC 8 full level

**B21D 13/02** (2006.01); **F28D 9/00** (2006.01); **F28F 3/04** (2006.01); **F28F 3/08** (2006.01)

CPC (source: EP)

**B21D 13/02** (2013.01); **F28D 9/0062** (2013.01); **F28F 3/046** (2013.01); **F28F 2250/108** (2013.01)

Designated contracting state (EPC)

CH DE GB LI SE

DOCDB simple family (publication)

**WO 8202940 A1 19820902**; CA 1152977 A 19830830; DE 3166239 D1 19841031; EP 0072797 A1 19830302; EP 0072797 A4 19830704; EP 0072797 B1 19840926; JP S58500080 A 19830113

DOCDB simple family (application)

**US 8100208 W 19810218**; CA 387947 A 19811015; DE 3166239 T 19810218; EP 81901731 A 19810218; JP 50213581 A 19810218