

Title (en)

A heat transfer tube and method of manufacturing same

Title (de)

Wärmetauscherrohr und Verfahren zu dessen Herstellung

Title (fr)

Tube pour échangeur de chaleur et méthode pour fabriquer un tel tube

Publication

**EP 0865838 B1 20020508 (EN)**

Application

**EP 98630007 A 19980227**

Priority

- US 82047297 A 19970317
- US 81447197 A 19970317

Abstract (en)

[origin: EP0865838A1] The present invention is a heat transfer tube, and a method of manufacturing a heat transfer tube, having an external surface configured to provide improved heat transfer performance in both refrigerant condensing, flooded evaporation and film evaporation applications. The tube has one or more fin convolutions formed on its external surface. Notches extend at an oblique angle across the fin convolutions at intervals about the circumference of the tube. The portion of a fin convolution between adjacent notches in the fin convolution forms a spike. The distal tip of the spike into two tip portions. Each tip portion extends outward from the proximal base of the fin toward the split fin tips in the adjacent fin convolution. <IMAGE>

IPC 1-7

**B21C 37/20**; **F28F 1/36**

IPC 8 full level

**F28F 1/16** (2006.01); **B21C 37/20** (2006.01); **B21D 53/06** (2006.01); **B21H 3/00** (2006.01); **F28F 1/36** (2006.01); **F28F 1/42** (2006.01); **F28F 13/18** (2006.01); **F28F 17/00** (2006.01)

CPC (source: EP)

**B21C 37/207** (2013.01); **F28F 1/36** (2013.01); **F28F 1/42** (2013.01); **F28F 1/422** (2013.01); **F28F 13/187** (2013.01); **F28F 17/005** (2013.01)

Cited by

CN103084813A; CN100449248C; US7509828B2; US8720199B2; US8573022B2; WO03104736A1; US7284325B2; US7311137B2; US7637012B2; US8302307B2

Designated contracting state (EPC)

ES FR GB IT

DOCDB simple family (publication)

**EP 0865838 A1 19980923**; **EP 0865838 B1 20020508**; AU 5842698 A 19980917; AU 722999 B2 20000817; CA 2230213 A1 19980917; CA 2230213 C 20030506; CN 100347512 C 20071107; CN 1193722 A 19980923; ES 2174408 T3 20021101; JP 2945649 B2 19990906; JP H10263734 A 19981006; KR 100324065 B1 20020808; KR 19980080288 A 19981125

DOCDB simple family (application)

**EP 98630007 A 19980227**; AU 5842698 A 19980316; CA 2230213 A 19980220; CN 98104188 A 19980316; ES 98630007 T 19980227; JP 6639598 A 19980317; KR 19980008712 A 19980316