

Title (en)

HEAT EXCHANGER TUBE FOR HEATING BOILERS

Title (de)

WÄRMETAUSCHERROHR FÜR HEIZKESSEL

Title (fr)

TUBE ECHANGEUR DE CHALEUR POUR CHAUDIERE DE CHAUFFAGE

Publication

**EP 0752088 B1 19971126 (DE)**

Application

**EP 95913118 A 19950315**

Priority

- DE 9405062 U 19940324
- EP 9500957 W 19950315

Abstract (en)

[origin: US6070657A] PCT No. PCT/EP95/00957 Sec. 371 Date Sep. 16, 1996 Sec. 102(e) Date Sep. 16, 1996 PCT Filed Mar. 15, 1995 PCT Pub. No. WO95/25937 PCT Pub. Date Sep. 28, 1995The heat exchanger tube comprises a cylindrical, smooth walled outer tube (1) of steel into which a profiled insert (2) of aluminium is inserted. The profiled insert is constituted by two half shells (3,4) which engage in one another at their longitudinal edges with groove-shaped recesses (7) and rib-like projections (8). Both half shells (3,4) carry longitudinally extending ribs (5) on their internal surface which are so aligned that each half shell with its ribs constitutes a profile which is open on one side.

IPC 1-7

**F28F 1/40; F24H 9/00; F28F 21/08**

IPC 8 full level

**F24H 9/00** (2006.01); **F28F 1/40** (2006.01); **F28F 13/06** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP KR US)

**F24H 9/00** (2013.01 - KR); **F24H 9/0026** (2013.01 - EP US); **F28F 1/40** (2013.01 - EP KR US); **F28F 13/06** (2013.01 - EP US); **F28F 21/082** (2013.01 - EP US); **F28F 21/084** (2013.01 - EP US); **F28F 2255/16** (2013.01 - EP US); **F28F 2275/14** (2013.01 - EP US)

Cited by

EP3301378A1; EP2781873A4; EP3040638A1; EP3040638B1; EP1617139B1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)

**US 6070657 A 20000606**; AT E160628 T1 19971215; AU 2070895 A 19951009; AU 678713 B2 19970605; CA 2186270 A1 19950928; CA 2186270 C 20000613; CN 1120347 C 20030903; CN 1144558 A 19970305; CZ 261396 A3 19961211; CZ 286145 B6 20000112; DE 59501046 D1 19980108; DE 9405062 U1 19940526; DK 0752088 T3 19980810; EE 03318 B1 20001215; EP 0752088 A1 19970108; EP 0752088 B1 19971126; ES 2112055 T3 19980316; FI 107835 B 20011015; FI 963772 A0 19960923; FI 963772 A 19960923; GR 3026039 T3 19980430; HR P950131 A2 19970228; HR P950131 B1 20001031; HU 220435 B 20020128; HU 9602608 D0 19961128; HU P9774653 A2 19970128; JP 3016866 B2 20000306; JP H09507708 A 19970805; KR 100217265 B1 19990901; KR 970701851 A 19970412; LV 12025 A 19980420; LV 12025 B 19980720; NO 303151 B1 19980602; NO 963993 D0 19960923; NO 963993 L 19960923; NZ 282800 A 19970324; PL 178916 B1 20000630; PL 316389 A1 19970106; RU 2125219 C1 19990120; SK 116596 A3 19981007; SK 281996 B6 20011008; TR 28643 A 19961216; UA 26941 C2 19991229; WO 9525937 A1 19950928

DOCDB simple family (application)

**US 70459296 A 19960916**; AT 95913118 T 19950315; AU 2070895 A 19950315; CA 2186270 A 19950315; CN 95192244 A 19950315; CZ 261396 A 19950315; DE 59501046 T 19950315; DE 9405062 U 19940324; DK 95913118 T 19950315; EE 9600209 A 19950315; EP 9500957 W 19950315; EP 95913118 A 19950315; ES 95913118 T 19950315; FI 963772 A 19960923; GR 980400207 T 19980130; HR P950131 A 19950322; HU 9602608 A 19950315; JP 52435795 A 19950315; KR 19960705268 A 19960923; LV 970264 A 19971219; NO 963993 A 19960923; NZ 28280095 A 19950315; PL 31638995 A 19950315; RU 96120765 A 19950315; SK 116596 A 19950315; TR 29595 A 19950320; UA 96103777 A 19950315