

Title (en)

CYLINDRICAL SHELL AND TUBE HEAT EXCHANGER, WHEREIN THE SHELL IS RADIALLY HELD INSIDE AN EXTERNAL SHELL

Publication

EP 0173586 B1 19880622 (FR)

Application

EP 85400686 A 19850405

Priority

FR 8405719 A 19840411

Abstract (en)

[origin: ES8701965A1] A steam generator incorporating a tube bundle (2) arranged in a bundle casing (5), in which the wall of bundle casing (5) incorporates openings each corresponding to a supporting component (20), openings along the edge of which are fixed sleeves (15) projecting radially into the space between the casing (5) and the outer wall (3) of the heat exchanger. Each of the supporting components (20) incorporates two cylindrical parts situated in extension of one another, a large-diameter part (20a) welded by its side surface inside the sleeve (15) and a small-diameter part (20b) abutting against the casing (3). Wedges (23) are inserted between the part (20a) of the supporting component (20) and a spacer plate (8) of the heat exchanger. The invention applies, in particular, to steam generators of pressurized water nuclear reactors.

IPC 1-7

F22B 37/20; F28D 7/00; F28F 9/00

IPC 8 full level

F22B 1/16 (2006.01); **F22B 37/20** (2006.01); **F28D 7/16** (2006.01); **F28F 9/00** (2006.01); **F28F 9/013** (2006.01)

CPC (source: EP KR US)

F22B 37/20 (2013.01 - KR); **F22B 37/205** (2013.01 - EP US); **F28D 7/00** (2013.01 - KR); **Y10S 165/41** (2013.01 - EP US)

Cited by

US11678569B2

Designated contracting state (EPC)

BE CH DE GB IT LI SE

DOCDB simple family (publication)

FR 2562996 A1 19851018; FR 2562996 B1 19860620; CA 1253849 A 19890509; DE 3563475 D1 19880728; EP 0173586 A1 19860305; EP 0173586 B1 19880622; ES 542109 A0 19861201; ES 8701965 A1 19861201; JP H0514193 B2 19930224; JP S60232499 A 19851119; KR 850007693 A 19851207; KR 940001782 B1 19940305; US 4655281 A 19870407; YU 60185 A 19871231

DOCDB simple family (application)

FR 8405719 A 19840411; CA 478574 A 19850409; DE 3563475 T 19850405; EP 85400686 A 19850405; ES 542109 A 19850410; JP 7751585 A 19850411; KR 850002378 A 19850409; US 72134985 A 19850409; YU 60185 A 19850410