

Title (en)
Heat exchanger having thin tube plate with improved structure

Title (de)
Wärmetauscher mit dünner Endplatte

Title (fr)
Echangeur de chaleur à plaque tubulaire fine

Publication
EP 1331465 A3 20060705 (EN)

Application
EP 02028251 A 20021216

Priority
IT MI20020118 A 20020124

Abstract (en)
[origin: EP1331465A2] A tube nest heat exchanger has a shell under pressure (11) and an inlet tube plate (12) separating the inside of the shell from an inlet manifold (13) of the fluid to be cooled. The tube plate (12) has passages (14) in it for communication with the interior of the tubes (15) of the tube nest and has on the manifold side a hardening layer (16) formed of a weld deposit and on the opposite side around each passage a projecting neck (17) on which is welded at a distance from the plate surface a corresponding tube of the nest.

IPC 8 full level
F28F 9/18 (2006.01); **F28F 9/02** (2006.01); **F28F 19/06** (2006.01)

CPC (source: EP)
F28F 9/0229 (2013.01); **F28F 9/182** (2013.01); **F28F 19/06** (2013.01)

Citation (search report)
• [XY] US 4401153 A 19830830 - MARSCH HANS-DIETER [DE], et al
• [Y] WO 0148434 A1 20010705 - OLM SPA [IT], et al
• [Y] US 3114415 A 19631217 - WINTZER HERMAN C
• [A] US 3367414 A 19680206 - BROWN FRANCIS X, et al
• [A] WO 0118475 A1 20010315 - OLM SPA [IT], et al
• [A] US 5101892 A 19920407 - TAKEUCHI HIROYUKI [JP], et al
• [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 02 30 January 1998 (1998-01-30)

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