

Title (en)
Individually making method of heat exchanger tubes

Title (de)
Anzeigeverfahren für Wärmetauscherröhre

Title (fr)
Procédé de repérage individuel des tubes d'un échangeur de chaleur

Publication
EP 0536053 B1 19970305 (FR)

Application
EP 92402692 A 19921001

Priority
FR 9112129 A 19911002

Abstract (en)
[origin: EP0536053A1] To permit individual marking of each of the tubes (10) of a steam generator, it is proposed to mark these tubes with the aid of a binary bar code (12a) formed from circular impressions (24) and absences of impressions. The impressions, formed without removal of material, allow reading of the bar code with the aid of a Foucault-current probe. The impressions (24) can be made on the exterior of the tubes (10), at the time of their production, or on the interior of the tubes after they have been fixed to the tube plate (16). A learning process then makes it possible to assign to each bar code a given position on the tube plate. <IMAGE>

IPC 1-7
F22B 37/00

IPC 8 full level
F28F 1/00 (2006.01); **F22B 37/00** (2006.01); **G21C 17/003** (2006.01); **G21D 1/00** (2006.01)

CPC (source: EP KR US)
F22B 37/003 (2013.01 - EP US); **F28D 7/00** (2013.01 - KR); **Y10T 29/49373** (2015.01 - EP US); **Y10T 29/49391** (2015.01 - EP US); **Y10T 29/49771** (2015.01 - EP US)

Designated contracting state (EPC)
BE CH DE ES GB LI SE

DOCDB simple family (publication)
EP 0536053 A1 19930407; **EP 0536053 B1 19970305**; CA 2079559 A1 19930403; CN 1070261 A 19930324; DE 69217798 D1 19970410; DE 69217798 T2 19970828; ES 2101060 T3 19970701; FR 2682179 A1 19930409; FR 2682179 B1 19931112; JP H05223479 A 19930831; KR 930008425 A 19930521; TW 199932 B 19930211; US 5321887 A 19940621; ZA 927554 B 19930414

DOCDB simple family (application)
EP 92402692 A 19921001; CA 2079559 A 19920930; CN 92111286 A 19920930; DE 69217798 T 19921001; ES 92402692 T 19921001; FR 9112129 A 19911002; JP 26352692 A 19921001; KR 920017791 A 19920929; TW 81107810 A 19921001; US 95628492 A 19921005; ZA 927554 A 19921001