

Title (en)
TEMPERATURE CONTROL DURING ANNEALING

Publication
EP 0136810 B1 19890524 (EN)

Application
EP 84305806 A 19840824

Priority
GB 8323995 A 19830907

Abstract (en)
[origin: EP0136810A2] Temperature control at a weld (52) between a tube (51) and tube plate (53) having heat input from an inductive heating probe (50) to effect annealing of the weld is performed with the aid of a signal generating receptor coil (54) coupled with the probe (50). The signal from the coil (54) experiences a characteristic change when the temperature of the weld reaches the required annealing temperature and this signal is used to control the heat input to the weld. The receptor coil can be inside the tube (51). outside the tube (51), embracing a number of similar tubes (51) or may be inside an adjacent tube (51). At the anneal, the materials of the tube and weld reach their Curie point which brings about a permeability change. The invention also has application to annealing a braze between a ferritic repair tube and a ferritic tube in a tube plate as can arise during the repair of shell and tube heat exchangers used in nuclear systems.

IPC 1-7
C21D 9/50; **C21D 11/00**

IPC 8 full level
C21D 9/50 (2006.01); **C21D 11/00** (2006.01)

CPC (source: EP)
C21D 9/50 (2013.01); **C21D 11/00** (2013.01); **F28F 9/18** (2013.01); **F28F 21/083** (2013.01)

Cited by
FR2769858A1; EP0294628A3

Designated contracting state (EPC)
DE FR IT

DOCDB simple family (publication)
EP 0136810 A2 19850410; **EP 0136810 A3 19861126**; **EP 0136810 B1 19890524**; DE 136810 T1 19850814; DE 3478312 D1 19890629; GB 2146435 A 19850417; GB 2146435 B 19870218; GB 8323995 D0 19831012

DOCDB simple family (application)
EP 84305806 A 19840824; DE 3478312 T 19840824; DE 84305806 T 19840824; GB 8323995 A 19830907