

Title (en)

IMPROVED DIRECT TUBE REPAIR PROCESS

Title (de)

VERBESSERTES VERFAHREN ZUR REPARATUR VON RÖHREN

Title (fr)

PROCEDE AMELIORE DE REPARATION DIRECTE D'UN TUBE

Publication

**EP 0771244 A1 19970507 (EN)**

Application

**EP 95903499 A 19940929**

Priority

- US 9409570 W 19940929
- US 27835194 A 19940721

Abstract (en)

[origin: WO9603250A1] The wall of a pressure vessel tube having stress-corrosion cracks or the like is repaired by localized melting using laser welding, for fusing over defects by melting and re-solidifying the metal. A reactive cover gas is maintained over the area of localized melting in order to eliminate cracking caused by impurities in the tube material. The cover gas may be carbon dioxide or other gasses which act to scavenge the impurities. The wall of the tube may be melted twice in order to further improve the surface finish of the repair area; the first melt being to a depth of at least 80 % of the wall thickness, and the second melt being to a depth of about one-third the wall thickness.

IPC 1-7

**B23P 6/00; B23K 26/12**

IPC 8 full level

**B23K 26/12** (2006.01); **B23K 26/28** (2006.01); **B23P 6/00** (2006.01); **F28F 11/00** (2006.01)

CPC (source: EP KR)

**B23K 26/123** (2013.01 - EP); **B23K 26/125** (2013.01 - EP); **B23K 26/16** (2013.01 - EP); **B23K 26/28** (2013.01 - EP); **B23K 26/32** (2013.01 - EP); **B23K 26/342** (2015.10 - EP); **B23P 6/00** (2013.01 - EP KR); **F28F 11/00** (2013.01 - EP); **B23K 2103/50** (2018.07 - EP); **F28F 2275/067** (2013.01 - EP)

Citation (search report)

See references of WO 9603250A1

Designated contracting state (EPC)

FR

DOCDB simple family (publication)

**WO 9603250 A1 19960208**; EP 0771244 A1 19970507; KR 970704548 A 19970906

DOCDB simple family (application)

**US 9409570 W 19940929**; EP 95903499 A 19940929; KR 19970700375 A 19970120