

Title (en)

METHOD FOR PULSE WELDING A SHEET METAL PART SUCH AS A PIPE TO A CAST METAL PART SUCH AS A HOUSING PORT FOR AN EXHAUST SYSTEM

Title (de)

VERFAHREN ZUM PULS-SCHWEISSEN EINES BLECHBAUTEILS WIE EIN ROHR MIT EINEM GUSSMETALLBAUTEIL WIE EINE ÖFFNUNG EINES GEHÄUSES FÜR ABGASANLAGE

Title (fr)

PROCEDE DE SOUDAGE PAR IMPULSIONS D'UN ELEMENT EN TOLE TEL QU'UN TUBE AVEC UN ELEMENT EN METAL COULE TEL QU'UNE OUVERTURE DE BOITIER POUR UN SYSTEME D'ECHAPPEMENT

Publication

**EP 1737608 B8 20090218 (DE)**

Application

**EP 05715467 A 20050223**

Priority

- EP 2005001873 W 20050223
- DE 102004009109 A 20040225

Abstract (en)

[origin: WO2005080045A1] Disclosed is a method for joining a sheet metal part (3) to a cast metal part (5). According to the inventive method, the sheet metal part (3) and the other part (5) are welded together in a pulsed welding process. Said method particularly allows a sheet metal pipe (3) to be welded to the port (12) of a cast metal housing (13). Said advantage can be used for an exhaust system comprising an exhaust manifold (3) and an exhaust unit such as a turbocharger (5).

IPC 8 full level

**B23K 26/32** (2006.01); **B23K 9/028** (2006.01); **B23K 9/23** (2006.01); **B23K 26/00** (2006.01); **F01N 13/08** (2010.01); **F01N 13/10** (2010.01); **F01N 13/18** (2010.01)

CPC (source: EP US)

**B23K 9/0282** (2013.01 - EP US); **B23K 9/232** (2013.01 - EP US); **B23K 26/32** (2013.01 - EP US); **B23K 26/323** (2015.10 - EP US); **F01N 13/102** (2013.01 - EP US); **F01N 13/1805** (2013.01 - EP US); **F02B 67/10** (2013.01 - EP US); **B23K 2101/006** (2018.07 - EP US); **B23K 2101/04** (2018.07 - EP US); **B23K 2103/06** (2018.07 - EP US); **B23K 2103/18** (2018.07 - EP US); **B23K 2103/50** (2018.07 - EP US); **F01N 2450/22** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

**WO 2005080045 A1 20050901**; DE 102004009109 A1 20050915; DE 502005005890 D1 20081218; EP 1737608 A1 20070103; EP 1737608 B1 20081105; EP 1737608 B8 20090218; JP 2007534495 A 20071129; US 2007289954 A1 20071220; US 8183494 B2 20120522

DOCDB simple family (application)

**EP 2005001873 W 20050223**; DE 102004009109 A 20040225; DE 502005005890 T 20050223; EP 05715467 A 20050223; JP 2007500137 A 20050223; US 59053405 A 20050223