

Title (en)

DIFFUSION WELDING PROCESS AND DEVICE FOR JOINING SHEET METAL PARTS

Title (de)

DURCHSETZFÜGEVERFAHREN UND -VORRICHTUNG ZUM VERBINDEN VON BLECHTEILEN

Title (fr)

PROCEDE ET DISPOSITIF DE SOUDAGE PAR DIFFUSION UTILES POUR JOINDRE DES PIECES EN TOLES METALLIQUES

Publication

EP 0934132 B1 20020626 (DE)

Application

EP 98922642 A 19980403

Priority

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- EP 9801970 W 19980403

Abstract (en)

[origin: WO9845065A1] In a diffusion welding process for joining superimposed sheet metal parts by welding, part of the material of the metal sheets is locally upset by means of a stamp and a die perpendicularly to the plane of the metal sheets, causing the material of the sheet metal parts to yield and diffusion welding the sheet metal parts at a weld. In order to achieve a sufficiently solid weld even when the parts to be joined are made of materials with a particular tendency to hardening at low temperatures or pre-hardened materials, the parts of the metal sheet surrounding the weld are pressed onto the die during welding with a force which is sufficient to prevent the material from yielding against the active direction of the stamp.

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B21D 39/03

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WO 9845065 A1 19981015; AT E219708 T1 20020715; CA 2257251 A1 19981015; CN 1222872 A 19990714; DE 19714129 A1 19981015; DE 59804575 D1 20020801; DK 0934132 T3 20020930; EP 0934132 A1 19990811; EP 0934132 B1 20020626; ES 2179494 T3 20030116; JP 2000511470 A 20000905; PT 934132 E 20021129; RU 99100054 A 20001127

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