

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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IPC 8 full level

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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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