

Title (en)

Method of transforming brittle material.

Title (de)

Verfahren zum lokalen Umformen von sprödem Material.

Title (fr)

Procédé pour la transformation locale de matière fragile.

Publication

EP 0546270 B1 19950329 (DE)

Application

EP 92117080 A 19921007

Priority

DE 9114122 U 19911113

Abstract (en)

[origin: US5519934A] Method for the local forming of material tending towards brittle fracture, such as certain aluminum alloys, in which during the forming tensile loads are exerted on the material, such as for example in joggle joining. Brittle fracture is avoided if the material is subjected to a pressure load in the region which is to be formed.

IPC 1-7

B21D 39/03

IPC 8 full level

B21D 22/20 (2006.01); **B21D 24/00** (2006.01); **B21D 24/04** (2006.01); **B21D 39/03** (2006.01)

CPC (source: EP US)

B21D 39/031 (2013.01 - EP US); **Y10T 29/49936** (2015.01 - EP US)

Cited by

DE19714129A1; DE102010020666A1; DE102010020666B4; EP0753898A1; FR2736471A1; US8978220B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IE IT LI NL PT SE

DOCDB simple family (publication)

US 5519934 A 19960528; AT E120390 T1 19950415; CA 2080998 A1 19930514; CA 2080998 C 19990907; DE 59201778 D1 19950504; DE 9114122 U1 19930401; DK 0546270 T3 19950807; EP 0546270 A1 19930616; EP 0546270 B1 19950329; ES 2072680 T3 19950716; JP H05208221 A 19930820; RU 2103093 C1 19980127

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US 97337892 A 19921109; AT 92117080 T 19921007; CA 2080998 A 19921020; DE 59201778 T 19921007; DE 9114122 U 19911113; DK 92117080 T 19921007; EP 92117080 A 19921007; ES 92117080 T 19921007; JP 29714992 A 19921106; RU 92004468 A 19921102