

Title (en)

Method and device for building up residual stress in a metal workpiece

Title (de)

Verfahren und Vorrichtung zum Aufbau von Eigenspannungen in einem metallischen Werkstück

Title (fr)

Procédé et dispositif destinés au montage de contraintes résiduelles dans une pièce usinée métallique

Publication

EP 2065477 B1 20160127 (DE)

Application

EP 08019597 A 20081110

Priority

DE 102007056502 A 20071122

Abstract (en)

[origin: EP2065477A1] The method involves applying low energy laser pulse to a treatment site of workpiece (40) covered by a surface layer. A high energy laser pulse is applied to the treatment site after applying low energy laser pulse. A covering layer is provided over the treatment site during the application of the laser pulses. An independent claim is included for system for creating internal stress in metallic workpiece.

IPC 8 full level

C21D 10/00 (2006.01)

CPC (source: EP US)

C21D 10/005 (2013.01 - EP US)

Citation (examination)

WO 9525821 A1 19950928 - BATTELLE MEMORIAL INSTITUTE [US]

Cited by

CN110361121A

Designated contracting state (EPC)

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EP 2065477 A1 20090603; EP 2065477 B1 20160127; DE 102007056502 A1 20090604; DE 102007056502 B4 20100729; US 2009134130 A1 20090528; US 9096913 B2 20150804

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