

Title (en)

Tool for a punch press for altering the tension state of a piece of sheet metal

Title (de)

Werkzeug für eine Stanzmaschine zum Verändern des Spannungszustands eines Blechs

Title (fr)

Outil pour une poinçonneuse destiné à modifier l'état de tension d'une tôle

Publication

EP 2165783 B1 20120801 (DE)

Application

EP 08016367 A 20080917

Priority

EP 08016367 A 20080917

Abstract (en)

[origin: EP2165783A1] The tool (16) has a tool upper part (8) and a tool lower part (5). The tool upper part has two rollers (19) and the tool lower part has a roller (20), where axes of the rollers run parallel to each other and distance of the axes of the rollers of the former tool part is adjustable relative to each other. The upper part and the lower part exhibit plane surfaces opposite to each other, where the plane surfaces exhibit surface structures. An interface is provided for retaining in a tool holder of a punching machine. Independent claims are also included for the following: (1) a punching machine comprising a tool (2) a method for changing a stress condition in the sheet metal.

IPC 8 full level

B21D 28/04 (2006.01); **B21D 43/08** (2006.01); **B21D 43/10** (2006.01)

CPC (source: EP)

B21D 1/06 (2013.01); **B21D 28/26** (2013.01)

Citation (examination)

- WO 2006038868 A1 20060413 - GESTAMP HARDTECH AB [SE], et al
- US 3664172 A 19720523 - CVACHO DANIEL S
- EP 0832835 A2 19980401 - TSUKADA NEZI SEISAKUSHO KK [JP]

Cited by

CN111659761A; CN109079022A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2165783 A1 20100324; EP 2165783 B1 20120801

DOCDB simple family (application)

EP 08016367 A 20080917