

Title (en)

METHOD AND DEVICE FOR PRODUCING FINE-BLANKED PARTS FROM A MATERIAL STRIP

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN VON FEINSCHNEIDTEILEN AUS EINEM MATERIALSTREIFEN

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LA PRODUCTION DE PIÈCES DÉCOUPÉES DE PRÉCISION À PARTIR D'UNE BANDE DE MATERIAU

Publication

EP 2303488 B1 20120208 (DE)

Application

EP 09772089 A 20090617

Priority

- EP 2009004364 W 20090617
- EP 08012011 A 20080703
- EP 09772089 A 20090617

Abstract (en)

[origin: EP2140954A1] The method involves cutting an incomplete compound die along the circumference of a fine-blanked part (1) with a specially shaped cutting edge of a cutting punch (11) and/or a cutting plate (5) such that the fine-blanked part initially remains bonded to a partial connecting part on a material strip (2). The fine-blanked part is moved together with the strip in a running direction (R) of the strip to a subsequent removal stage, in which the fine-blanked part and the strip are separated from each other. An independent claim is also included for a device for producing a fine-blanked part from a material strip.

IPC 8 full level

B21D 28/10 (2006.01); **B21D 28/16** (2006.01); **B21D 45/00** (2006.01)

CPC (source: EP US)

B21D 28/10 (2013.01 - EP US); **B21D 28/16** (2013.01 - EP US); **B21D 45/003** (2013.01 - EP US); **Y10T 83/0467** (2015.04 - EP US);
Y10T 83/0529 (2015.04 - EP US); **Y10T 83/06** (2015.04 - EP US); **Y10T 83/2079** (2015.04 - EP US)

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 MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2140954 A1 20100106; EP 2140954 B1 20110914; AT E524251 T1 20110915; AT E544541 T1 20120215; EP 2303488 A1 20110406;
EP 2303488 B1 20120208; JP 2011526212 A 20111006; JP 5698125 B2 20150408; US 2011132162 A1 20110609; US 8910549 B2 20141216;
WO 2010000389 A1 20100107

DOCDB simple family (application)

EP 08012011 A 20080703; AT 08012011 T 20080703; AT 09772089 T 20090617; EP 09772089 A 20090617; EP 2009004364 W 20090617;
JP 2011515166 A 20090617; US 97773310 A 20101223