

Title (en)

Method for cutting thin sheets, in particular metal plates, and elastomeric material used in this method.

Title (de)

Verfahren zum Schneiden dünner Platten, insbesondere von Blech und elastomerischem Material, das für dieses Verfahren verwendet wird.

Title (fr)

Procédé de découpage de feuilles minces, notamment de tôle et matériau élastomère utilisable pour ce procédé.

Publication

EP 0292357 A1 19881123 (FR)

Application

EP 88401119 A 19880506

Priority

FR 8707239 A 19870522

Abstract (en)

[origin: JPS6422426A] PURPOSE: To prevent generation of a burr of a product at a low cost by constructing a punch with a heterogeneous composite elastic material having different hardness regions. CONSTITUTION: A punch 4 is formed with a heterogeneous material consisting of a localized region of a relatively larger hardness and a remaining region of a relatively smaller hardness. A heterogeneous structure constituting the punch 4 is arranged with an elasticity distribution mass body 9 made of an elastomer material at an side opposite to a action face of the punch 4, this elasticity distribution mass body 9 transmits punch force to a whole heterogeneous structure placed on a sheet 1 in contact with a sharp edge 7 of a metal die 6 to demarcate a region to be blanked. Accordingly, by generating a crack at an initial place, blanking action is started to cause breaking, until it meets with advancement of an other line of blanking action started by an other heterogeneous region, blanking action by shearing is propagated.

Abstract (fr)

Le procédé de découpage d'un matériau en feuille (1) entre un poinçon (4) et une matrice (6) à arête tranchante (7) est caractérisé en ce que le poinçon (4) est constitué d'un matériau élastique composite hétérogène comportant des zones localisées (4a) à dureté relativement plus élevée et des zones complémentaires (4b) à dureté relativement plus faible.

IPC 1-7

B21D 28/18; B21D 22/10; B26F 1/44

IPC 8 full level

B21D 28/14 (2006.01); B21D 22/10 (2006.01); B21D 28/18 (2006.01); B21D 37/01 (2006.01); B21D 37/20 (2006.01); B26F 1/44 (2006.01)

CPC (source: EP KR US)

**B21D 22/10 (2013.01 - EP US); B21D 22/20 (2013.01 - KR); B21D 28/18 (2013.01 - EP US); B26F 1/44 (2013.01 - EP US);
B26F 1/40 (2013.01 - EP US); B26F 2001/4436 (2013.01 - EP US); B26F 2001/4445 (2013.01 - EP US); B26F 2001/4472 (2013.01 - EP US);
B26F 2001/449 (2013.01 - EP US); Y10T 83/0438 (2015.04 - EP US); Y10T 83/06 (2015.04 - EP US); Y10T 83/8717 (2015.04 - EP US);
Y10T 83/9425 (2015.04 - EP US); Y10T 83/9428 (2015.04 - EP US); Y10T 428/24612 (2015.01 - EP US); Y10T 428/24678 (2015.01 - EP US);
Y10T 428/31551 (2015.04 - EP US)**

Citation (search report)

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Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0292357 A1 19881123; EP 0292357 B1 19910410; AT E62432 T1 19910415; AU 1507492 A 19920813; AU 1605888 A 19881124;
AU 619466 B2 19920130; AU 655635 B2 19950105; CA 1302171 C 19920602; DE 3862341 D1 19910516; ES 2022654 B3 19911201;
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KR 880013632 A 19881221; KR 960007146 B1 19960529; US 4856399 A 19890815; US 5108816 A 19920428**

DOCDB simple family (application)

**EP 88401119 A 19880506; AT 88401119 T 19880506; AU 1507492 A 19920423; AU 1605888 A 19880511; CA 567456 A 19880520;
DE 3862341 T 19880506; ES 88401119 T 19880506; FR 8707239 A 19870522; GR 910400641 T 19910520; JP 12560788 A 19880523;
KR 880005718 A 19880518; US 19508788 A 19880517; US 32441989 A 19890316**