

Title (en)

"Bending press for pieces of sheet metal with integrated manipulator in a rear positioning device"

Title (de)

Abkantpresse für Blechtafeln mit in einer hintere Anschlagvorrichtung integriertem Manipulator

Title (fr)

Plieuse pour tôles avec manipulateur intégré dans un dispositif de butée arrière

Publication

**EP 1772204 A1 20070411 (EN)**

Application

**EP 06115768 A 20060621**

Priority

IT TO20050705 A 20051007

Abstract (en)

Bending press for pieces of sheet metal, comprising: - a stationary support structure (12, 14, 16) bearing a fixed tool holder table (18) and a movable tool holder table (20) able to move in a vertical plane, and - a positioning device (24) situated on the rear side of the fixed tool holder table (18) and bearing at least one retaining element (28) able to be positioned in such a way as to define a reference surface against which is thrust an edge of a piece to be bent (P). The retaining element is provided with at least one gripping element (40a, 40b, 54, 56) rotatable around a horizontal axis (42) and able to be actuated around said axis of rotation (42) under the command of a numeric control unit, in such a way that during the bending operation the gripping element (40a, 40b, 54, 56) can hold the piece and follow the movement of the lap bent by the piece.

IPC 8 full level

**B21D 5/02** (2006.01); **B21D 43/26** (2006.01)

CPC (source: EP)

**B21D 5/002** (2013.01); **B21D 5/0281** (2013.01); **B21D 43/26** (2013.01)

Citation (search report)

- [X] FR 2850592 A1 20040806 - EURATEC EUROP D ASSISTANCE TEC [FR]
- [X] JP S5548425 A 19800407 - SHIN MEIWA IND CO LTD
- [X] JP S55144330 A 19801111 - SHIN MEIWA IND CO LTD
- [A] US 5642291 A 19970624 - PRUNOTTO GIANPAOLO [IT], et al
- [E] WO 2006122379 A1 20061123 - ROBOSOFT NV [BE], et al
- [A] BE 904504 A 19860929 - LVD CO
- [AD] EP 0619151 A1 19941012 - BEYELER RASKIN SA [CH]

Cited by

CN111421023A; CN102712022A; JP2014151385A; CN102699653A; CN111421024A; AT519644B1; AT519644A4; EP3427853A1; CN107000033A; RU2674794C2; US2018133771A1; US10857581B2; DE112018000026B4; US9339860B2; WO2012119175A1; WO2014123054A1; WO2012126032A1; US10807149B2; WO2016059159A1

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DOCDB simple family (publication)

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