

Title (en)

Die unit for punching operations

Title (de)

Stanzeinrichtung für Lochbearbeitungen

Title (fr)

Unité de poinçonnage pour opérations de poinçonnage

Publication

EP 0734799 A3 19970416 (EN)

Application

EP 96400662 A 19960328

Priority

JP 6947095 A 19950328

Abstract (en)

[origin: EP0734799A2] A die unit for performing punching operations in cooperation with a punch unit is disclosed. The die unit includes a die body (3) formed with a die hole (5) extending in an axial direction for receiving a cutting edge of the punch body (17), and with an upper surface portion (7) extending in a plane normal to the axial direction. The die unit also includes a projecting portion (11) formed along the perimeter of the die hole (5) on the upper surface portion (7) of said die body (3). With this die unit, punching operations can be performed on a workpiece without producing a burr that projects downwardly below the lower surface of the workpiece. Thus burr removing operations are dispensed with after the punching operations. <IMAGE>

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B21D 28/24

IPC 8 full level

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CPC (source: EP)

B21D 28/16 (2013.01); **B21D 28/34** (2013.01)

Citation (search report)

- [X] US 3211034 A 19651012 - RAIMUND ANDRIS
- [A] GB 914793 A 19630102 - KIENZLE APPARATE GMBH
- [XA] PATENT ABSTRACTS OF JAPAN vol. 012, no. 340 (M - 740) 13 September 1988 (1988-09-13)
- [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 094 (M - 1219) 9 March 1992 (1992-03-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 021 (M - 555) 21 January 1987 (1987-01-21)
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 269 (M - 621) 2 September 1987 (1987-09-02)

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EP2610019A1; WO2013098154A1

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