

Title (en)

Apparatus for cold-forming metal workpieces having opposite axial elements.

Title (de)

Vorrichtung zur Kaltverformung metallischer Werkstücke mit entgegengesetzten Axialteilen.

Title (fr)

Outillage de formage à froid de pièces métalliques comportant des éléments axiaux opposés.

Publication

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Application

EP 84420011 A 19840127

Priority

FR 8302885 A 19830215

Abstract (en)

1. Apparatus for forming, preferably cold forming, metal workpieces (11, 12, 14, 14a, 14b) from a billet (10), comprising a fixed die (4, 6), which ensures the drawing of axial or longitudinal elements (11, 14a) and which is held statically in the fixed part (8) of the apparatus by a band so as to resist the forming forces developing in its fixed part (8) and comprising in addition a tubular die (2) which is integral with the mobile part of the apparatus and is guided in the said fixed part (8) so as to create by drawing a second axial element (12) opposed to the first (11, 14a), characterized in that the annular face (2a) of the die (2) is in the shape of a truncated cone or is concave (Fig. 3) in the direction of flow of the metal which passes into the die (2) (Fig. 1 to 3), the introduction of the tubular die (2) into the fixed part (8) of the apparatus causing it to be dynamically banded in the fixed part (8) at the moment at which this die (8) comes into contact with the billet (10).

Abstract (fr)

L'outillage suivant l'invention comprend une filière fixe (4-6) réalisée sous la forme d'un poinçon (4) entouré d'une bague annulaire (6) pour la réalisation d'une jupe (11) d'un organe comportant en outre en bout d'arbre (12) axial opposé à cette jupe. Ce bout d'arbre est réalisé par une filière tubulaire (2) solidaire de la partie mobile de l'outillage. Cette filière (2) s'engage sans jeu dans l'alésage (8a) d'une matrice (8) frettée de manière que ladite filière se frette dynamiquement pendant le travail de filage dans ledit alésage. Extrusion à froid des métaux.

IPC 1-7

B21C 23/03; **B21K 1/76**

IPC 8 full level

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Citation (search report)

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