

Title (en)

Method of making hollow rods and shafts.

Title (de)

Verfahren zur Herstellung hohler Stangen und Wellen.

Title (fr)

Procédé pour la fabrication de barres et d'arbres creux.

Publication

EP 0102427 A1 19840314 (EN)

Application

EP 82304647 A 19820903

Priority

EP 82304647 A 19820903

Abstract (en)

Method of making light metal hollow rods and shafts which comprise a tubular section and substantial solid head on each end of said section. In order to avoid joining together of the tubular section and the heads, and in order to avoid the poor strength properties of light metals resulting from moulding, the rods and shafts are made by pressing of a bolt blank in a first extrusion step, by use of a plunger (2) having a substantial planar end for forming of a first solid head (1 min), pressing the blank in a second step, by use of a plunger (3) having a mandrel (3 min) on its end, for forming the tubular section (1 sec), and pressing the blank in a third step, by use of a plunger (2) having a substantial planar end, for forming of a second solid head (1").

IPC 1-7

B21C 23/14; B21C 25/08

IPC 8 full level

B21C 23/14 (2006.01); **B21K 1/10** (2006.01); **B21K 1/76** (2006.01)

CPC (source: EP)

B21C 23/14 (2013.01); **B21K 1/10** (2013.01); **B21K 1/76** (2013.01)

Citation (search report)

- [X] GB 923725 A 19630418 - LEMELSON JEROME H
- [X] DE 129857 C
- [A] US 4292831 A 19811006 - SIMON JOSEPH A
- [A] CH 308330 A 19550715 - KREIDLER ALFRED [DE]

Cited by

EP0445470A3

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

EP 0102427 A1 19840314

DOCDB simple family (application)

EP 82304647 A 19820903