

Title (en)

Process for producing tubular articles.

Title (de)

Verfahren zur Herstellung von rohrförmigen Hohlkörpern.

Title (fr)

Procédé de fabrication de pièces tubulaires.

Publication

EP 0000438 A1 19790124 (EN)

Application

EP 78300126 A 19780706

Priority

GB 2849577 A 19770707

Abstract (en)

A process for the manufacture of a tubular metal container or vessel, such as a shell or cartridge case, in which an open-ended hollow metal tube (10) is mounted on a mandrel (12), and in which the mandrel (12) and a forming punch (17) are moved relative to one another in a die (21) such that the metal at one end of the tube (10) is displaced inwardly from around the circumference of the tube to form a central hole at the said end of the tube, the displaced metal being formed with an external recess or pocket communicating with the said hole.

IPC 1-7

B21D 51/54; B21K 21/14

IPC 8 full level

B21D 51/54 (2006.01); **B21K 21/04** (2006.01); **B21K 21/14** (2006.01)

CPC (source: EP US)

B21D 51/54 (2013.01 - EP US); **B21K 21/04** (2013.01 - EP US); **B21K 21/14** (2013.01 - EP US)

Citation (search report)

- [X] BE 514800 A
- [X] US 2089912 A 19370810 - ORESTE BIGINELLI
- DE 893936 C 19531019 - MARIANNE LEUSSLER
- CH 178286 A 19350715 - BIGINELLI ORESTE [FR]
- GB 931768 A 19630717 - BARKWAY ENGINEERING COMPANY LT
- GB 779730 A 19570724 - BARKWAY ENGINEERING COMPANY LT
- US 3948073 A 19760406 - LOVELL ROBERT

Cited by

EP0055006A1; US9511456B2; WO2012168076A1; WO2023105381A1

Designated contracting state (EPC)

BE DE FR SE

DOCDB simple family (publication)

EP 0000438 A1 19790124; EP 0000438 B1 19821020; CA 1086112 A 19800923; DE 2862061 D1 19821125; GB 1602973 A 19811118;
JP S5440276 A 19790329; US 4198843 A 19800422

DOCDB simple family (application)

EP 78300126 A 19780706; CA 306834 A 19780705; DE 2862061 T 19780706; GB 2849577 A 19770707; JP 8282278 A 19780707;
US 92232878 A 19780706