

Title (en)

METHOD AND DEVICE FOR THE PRODUCTION OF ACCESSORY FORM ELEMENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON NEBENFORMELEMENTEN

Title (fr)

PROCEDE ET DISPOSITIF POUR PRODUIRE DES ELEMENTS DE FORME ACCESSOIRES

Publication

**EP 1383619 A1 20040128 (DE)**

Application

**EP 02727360 A 20020306**

Priority

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- EP 0202418 W 20020306

Abstract (en)

[origin: DE10121787C1] The invention relates to a method and a device for the production of varying elements in a hollow profile, enclosed around the circumference thereof. The device comprises an internal high pressure moulding tool, into the die recess of which a hollow profile blank may be inserted. A branch leads radially off from the die recess, in which the hollow profile blank may be expanded by means of a fluid internal high pressure to form the varying element. According to the invention, varying elements of almost any shape may be formed in the hollow element in a simple and process-secure manner with regard to the moulding process, whereby the device further comprises a membrane and a pressure generator, by means of which the membrane may be pressurised by a pressure medium in such a way that the membrane lies supported against the expanding direction during the expansion of the varying element as said element is formed. The membrane yields elastically on progressive formation of the varying element until the end form is achieved. The membrane is mounted on the tool outside the longitudinal edge of the die recess and stretching across the branching.

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**B21D 26/02**

IPC 8 full level

**B21D 26/037** (2011.01)

CPC (source: EP US)

**B21D 26/037** (2013.01 - EP US)

Citation (search report)

See references of WO 02090014A1

Citation (third parties)

Third party :

- DE 19951850 C1 20010125 - METALLWARENFABRIK REICHERTSHOF [DE]
- DE 19927064 A1 20001228 - BINDER TECHNOLOGIE AG GAMS [CH]
- ALTAN T. PR.: "Metal forming handbook", 1998, SPRINGER, GERMANY, ISBN: 3-540-61185-1, pages: 407, 431, XP002989210

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DOCDB simple family (publication)

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