

Title (en)

Tool for and method of making hollow articles.

Title (de)

Werkzeug und Verfahren zur Herstellung hohler Gegenstände.

Title (fr)

Outil et procédé pour la fabrication d'articles creux.

Publication

**EP 0153810 A1 19850904 (EN)**

Application

**EP 85300486 A 19850124**

Priority

GB 8404321 A 19840218

Abstract (en)

A tool for use in the manufacture of the outer member of a cross-groove type of constant velocity ratio universal joint by forming a blank in a die with the tool in the interior of the blank to define the internal shape of the joint member. The tool comprises first and second elements (33, 37) with portions (34, 38) which together define the shape required in the joint outer member, having formations (34a, 38a) which form the grooves therein, and have an internal cavity (40) which receives an expander (23) to hold the elements in their operative positions. After withdrawal of the expander, the first elements (33) can be moved radially inwardly to disengage them from the formed joint member and withdrawn, following which the second elements (34) can be moved inwardly and subsequently withdrawn.

IPC 1-7

**B21K 1/76**; **B21D 53/84**

IPC 8 full level

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CPC (source: EP US)

**B21J 5/12** (2013.01 - EP US); **B21K 1/762** (2013.01 - EP US); **B21K 1/765** (2013.01 - EP)

Citation (search report)

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