

Title (en)
Method for hydroforming a hollow workpiece

Title (de)
Verfahren zum Innendruckformen eines hohlen metallischen Werkstücks

Title (fr)
Procédé d'hydroformage d'une pièce creuse

Publication
EP 1063029 B1 20041110 (DE)

Application
EP 00109465 A 20000504

Priority
• DE 19928873 A 19990624
• US 65134900 A 20000829

Abstract (en)
[origin: EP1063029A1] A hollow metallic component (2) e.g. of aluminum, with an open end (17) is placed into a pre-heated open tool (1), parts of closing mandrels (10,11) forming closing cylinders (8,9) are fitted sealed into the component ends, and the tool is closed. A heated pressure fluid (14), e.g. air or nitrogen, is introduced via a mandrel into the component, which is now heated and plastified. The pressure fluid presses the component material into a forming nest (5) in the tool. Forming is carried out at temperatures of between 200oC and 400oC, and a pressure of between 150 and 500 bar.

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B21D 26/02

IPC 8 full level
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CPC (source: EP US)
B21D 26/041 (2013.01 - EP US); **B21D 37/16** (2013.01 - EP US); **Y10T 29/49805** (2015.01 - EP US)

Cited by
CN109689241A; US7464572B2; WO03035299A1; US11389851B2; US10737308B2; WO2018010978A1; EP1321203B1

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