

Title (en)
Method of manufacturing by hydroforming

Title (de)
Fertigungsverfahren mittels Innenhochdruckumformung

Title (fr)
Méthode de fabrication par hydroformage

Publication
EP 1321201 B1 20040811 (DE)

Application
EP 02024793 A 20021107

Priority
DE 10162393 A 20011219

Abstract (en)
[origin: EP1321201A2] The deforming process involves inserting a blank between tool parts, closing the deforming tool, deforming under pressure and stamping out a through aperture in the component wall. This is achieved by the use of an insert element (6) to create the through aperture and leaving it in place for plastic deformation to join it positively to the component.

IPC 1-7
B21D 26/02; **B23P 11/00**

IPC 8 full level
B21D 26/02 (2011.01); **B21D 26/023** (2011.01); **B21D 26/035** (2011.01); **B23P 11/00** (2006.01)

CPC (source: EP)
B21D 26/023 (2013.01); **B21D 26/035** (2013.01); **B21D 39/034** (2013.01)

Citation (examination)
EP 1321205 A2 20030625 - BAYERISCHE MOTOREN WERKE AG [DE]

Cited by
US9067252B2

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1321201 A2 20030625; **EP 1321201 A3 20030813**; **EP 1321201 B1 20040811**; DE 10162393 A1 20030703; DE 50200798 D1 20040916

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