

Title (en)

Part-shaping apparatus by flow forging and sheet-metal rubber forming.

Title (de)

Vorrichtung zum Formen von Metallteilen durch Fließpressen und Formen von Metallblechen durch Gummiprägen.

Title (fr)

Appareil pour façonner des pièces métalliques par fluo-forgeage et former des tôles métalliques à l'aide de matériau élastique.

Publication

EP 0334976 A1 19891004 (EN)

Application

EP 88104924 A 19880326

Priority

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- US 64790084 A 19840906

Abstract (en)

An apparatus for flow-forging and sheet-metal rubber-forming a shaped part from a work includes two members (78, 81) spaced from one another which define a pressure zone therebetween. First and second dies (24, 26) disposed between the members (78, 81) clamp the work therebetween. One die (24) includes a plurality of adjoining pressure-transferring elements (28). In a plurality of self-adjustable matching devices (34), each is interposed between the roller conveyor (110) and a pressure-transfer surface (30) of a corresponding pressure-transferring element (28). Each matching device (34) automatically adjusts its position, as it passes through the converging pressure zone. As a gradually and smoothly increasing pressure is applied to the work by the members (78, 81) during the transport of the dies (24, 26) through the pressure zone, any recess flow-forged in the shaped part is smooth and free of any ridges.

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IPC 8 full level

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CPC (source: EP)

B21J 5/008 (2013.01); **B21J 5/02** (2013.01); **B21J 13/02** (2013.01); **B21K 23/00** (2013.01)

Citation (search report)

- [X] EP 0174001 A2 19860312 - MELE JOSEPH J
- [Y] US 4257251 A 19810324 - JURY HAROLD R
- [AD] US 3847004 A 19741112 - BRINGEWALD A
- [AD] US 3521472 A 19700721 - BRINGEWALD AUGUST R
- [AD] US 3415095 A 19681210 - BRINGEWALD AUGUST R
- [AD] US 3303833 A 19670214 - MELLING AUBREY B
- [A] GB 2051643 A 19810121 - INST PO METALLOZNANIE I TEKNO

Cited by

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