

Title (en)

FORGING MACHINE

Publication

EP 0228658 A3 19880831 (DE)

Application

EP 86117596 A 19861217

Priority

- DE 3600018 A 19860102
- DE 3630172 A 19860904

Abstract (en)

[origin: US4831864A] In a forging machine, each ram is the piston or cylinder of a piston-cylinder hydraulic unit and the other component of the unit is attached to the forging machine frame and can be moved to adjust the ram stroke position. The piston or cylinder which constitutes the ram is guided directly in the machine frame to minimize play in the guidance of the ram component.

IPC 1-7

B21J 7/14

IPC 8 full level

B21J 7/14 (2006.01); **B21J 13/00** (2006.01); **B21J 13/03** (2006.01)

CPC (source: EP US)

B21J 7/14 (2013.01 - EP US); **B21J 13/00** (2013.01 - EP US); **B21J 13/03** (2013.01 - EP US)

Citation (search report)

- [X] GB 1302095 A 19730104
- [X] GB 517015 A 19400118 - JOHN PEACE AND SONS LTD, et al
- [X] GB 1186379 A 19700402 - BTR INDUSTRIES LTD [GB]
- [A] DE 1963979 A1 19710624 - DEMAG HYDRAULIK GMBH
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Cited by

EP0549826A1; DE4342974C1; US5313816A

Designated contracting state (EPC)

AT DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0228658 A2 19870715; **EP 0228658 A3 19880831**; **EP 0228658 B1 19910327**; DE 3678411 D1 19910502; JP H0761520 B2 19950705;
JP S62158543 A 19870714; US 4831864 A 19890523

DOCDB simple family (application)

EP 86117596 A 19861217; DE 3678411 T 19861217; JP 9387 A 19870105; US 94730986 A 19861229