

Title (en)  
HOT FORGING DIE AND HOT FORGING METHOD

Title (de)  
WARMSCHMIEDEGESENK UND WARMSCHMIEDEVERFAHREN

Title (fr)  
MATRICE DE FORGEAGE À CHAUD ET PROCÉDÉ DE FORGEAGE À CHAUD

Publication  
**EP 3281719 A4 20181219 (EN)**

Application  
**EP 16776474 A 20160331**

Priority  
• JP 2015077337 A 20150406  
• JP 2016060732 W 20160331

Abstract (en)  
[origin: EP3281719A1] Provided are a hot forging die and a hot forging method which enables to perform necking easily using a radial forging machine, even with difficult-to-work materials used for turbine blades. The hot forging die for hot-forging a rod-shaped forging material by radial forging includes a pair of halved pressing portions between which the forging material is interposed, each of the halved pressing portions having a convex portion having a substantially semicircular cross-section, the convex portion being continuous so as to surround the forging material, wherein each of the halved pressing portions includes a rough processing portion and a finishing portion having a convex portion having a larger curvature radius than the rough processing portion.

IPC 8 full level  
**B21J 13/02** (2006.01); **B21J 1/04** (2006.01); **B21J 5/00** (2006.01); **B21J 7/14** (2006.01); **B21J 9/06** (2006.01); **B21K 3/04** (2006.01)

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Citation (search report)  
• [XAY] JP 3208818 B2 20010917  
• [Y] US 611574 A 18980927  
• [Y] US 2004139781 A1 20040722 - ROZHDESTVENSKIY VLADIMIR VLADI [RU], et al  
• [Y] JP S60250843 A 19851211 - DAIDO STEEL CO LTD  
• [A] EP 2149411 A1 20100203 - MAGNA POWERTRAIN AG & CO KG [AT]  
• [A] US 3893328 A 19750708 - BLAIMSCHEIN GOTTFRIED  
• See references of WO 2016163307A1

Designated contracting state (EPC)  
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