

Title (en)
METHOD FOR MANUFACTURING A NEAR NET-SHAPE MOLD

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER ENDABMESSUNGSNAHEN FORM

Title (fr)
PROCEDE DE FABRICATION D'UN MOULE DE GRANDE PRECISION DIMENSIONNELLE

Publication
EP 1292425 A4 20051116 (EN)

Application
EP 01922508 A 20010322

Priority
• US 0108971 W 20010322
• US 19156900 P 20000323

Abstract (en)
[origin: WO0170450A1] A method for manufacturing a near net-shape mold from a weldable material, including creating a computer model of a mold portion (30, 32), analytically sectioning the computer model of the mold portion into a plurality of mold zones (22), generating mold zone cutting paths for a cutting machine to follow, cutting the weldable material into plurality of mold zones, generating surface profile cutting paths for a cutting machine to follow, machining surface profiles into the mold zones, assembling the mold zones by placing the mold zones side-by-side, generating welding paths for an electron beam welding a machine to follow, and welding the mold zones together.

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B23P 17/00; **B23P 15/24**; **B29C 67/00**

IPC 8 full level
B21D 37/20 (2006.01); **B22C 9/06** (2006.01); **B23K 15/00** (2006.01); **B23P 15/24** (2006.01); **B29C 67/00** (2006.01)

CPC (source: EP)
B21D 37/20 (2013.01); **B23P 15/246** (2013.01)

Citation (search report)
• [XAY] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 12 25 December 1997 (1997-12-25)
• [Y] WALCZYK D F ET AL: "RAPID TOOLING FOR SHEET METAL FORMING USING PROFILED EDGE LAMINATIONS- DESIGN PRINCIPLES AND DEMONSTRATION", TRANSACTIONS OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, SERIES B: JOURNAL OF ENGINEERING FOR INDUSTRY, ASME. NEW YORK, US, vol. 120, no. 4, November 1998 (1998-11-01), pages 746 - 754, XP000803370, ISSN: 0022-0817
• See references of WO 0170450A1

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