

Title (en)

MACHINING SYSTEM FOR CUTTING CYLINDER HEADS

Title (de)

BEARBEITUNGSSYSTEM ZUR SPANENDEN BEARBEITUNG VON ZYLINDERKÖPFEN

Title (fr)

SYSTEME D'USINAGE PAR ENLEVEMENT DE COPEAUX DE CULASSES

Publication

**EP 1675706 A1 20060705 (DE)**

Application

**EP 04764891 A 20040907**

Priority

- EP 2004009946 W 20040907
- DE 10349697 A 20031024

Abstract (en)

[origin: DE10349697A1] A manufacturing system for automotive engines incorporates a machining work station (1) for cylinder heads (3). The main work station (1) has a number of sequential work stations (2a-2f) in which the cylinder heads are presented for machining in different directions (OP20-OP120). The cylinder heads are fed to the sub-stations (2a-2f) in sequence. Each sub-station (2a-2f) has one or more identical machine tools (9-14), each with a number of spindles (7, 7') of which at least some have permanently-attached tools (8, 8').

IPC 1-7

**B23Q 37/00**; **B23Q 39/00**; **B23Q 41/06**

IPC 8 full level

**B23P 23/06** (2006.01); **B23Q 41/00** (2006.01)

CPC (source: EP KR US)

**B23P 23/06** (2013.01 - EP KR US); **B23Q 37/007** (2013.01 - KR); **B23Q 39/04** (2013.01 - KR); **B23Q 41/00** (2013.01 - EP US); **B23Q 41/04** (2013.01 - KR); **Y10T 29/49996** (2015.01 - EP US)

Citation (search report)

See references of WO 2005049268A1

Citation (third parties)

Third party :

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- DE 10163445 A1 20030703 - GROB WERKE BURKHART GROB EK [DE]
- DE 19744157 A1 19990408 - HELLER GEB GMBH MASCHF [DE]
- DE 10302985 A1 20031023 - GROB WERKE BURKHART GROB EK [DE]
- ELHA-MASCHINENBAU LIEMKE KG: "FM 3+X Fertigungsmodul - extrem kurze Nebenzeiten", BROSchURE, August 2002 (2002-08-01), pages 1 - 10, XP003021483
- HUIJBERS M., MESZAROS I.: "Hartgewindedreher - verkuerzt die Prozesskette", WB, 2002, pages 33 - 35, XP003021484
- FM 3+X, Zylinderkopf fuer Bremszylinder von ELHA-Maschinenbau Liemke KG
- ELHA MASCHINENBAU: "Fertigungsmodule - Vom Entwickler der Fertigungsmodule - die neue Generation der rekonfigurierbaren Werkzeugmaschinen", BROSchURE, pages 1 - 12, XP003021486
- ELHA MASCHINENBAU: "Fertigungssysteme - Hochproduktive Bearbeitungsloesungen fuer komplexe Zerspanungsaufgaben", BROSchURE, pages 1 - 8, XP003021487

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DE FR GB

DOCDB simple family (publication)

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