Title (en)

METHOD AND APPARATUS FOR THE COPY GRINDING OF CYLINDRICAL OR SPHERICAL SURFACES

Publication

EP 0359304 B1 19921202 (DE)

Application

EP 89202156 A 19890824

Priority

DE 3831294 A 19880914

Abstract (en)

[origin: EP0359304A2] Provided before a method consisting of precision grinding with subsequent finish grinding is a grinding phase in which the grinding belt (21) is movably pressed under predetermined pressure against the outer surface (45') of the preheated cylinder (45) to be machined within a certain clearance X or X', adjustable by means of an adjusting device (30), between a copying template (10) and a contact roller (23) in such a way that, in this preliminary grinding phase, stock is uniformly removed from the cylinder surface (45') irrespective of its geometry. After a surface layer of the cylinder (45) formed from various particles has been ground down, the proportional pressures applied to the belt-grinding unit (1) are changed in such a way that, in the now following first grinding phase, the actual precision grinding, a fixed connection is set between the copying template (10) and the contact roller (30). A uniform distribution of temperature and thus also a uniform expansion of the cylinder surface (45'), which is of importance especially in the radial direction, are thereby ensured, as a result of which a more accurate cylinder geometry is achieved. <IMAGE>

IPC 1-7

B24B 17/02; B24B 21/02

IPC 8 full level

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CPC (source: EP)

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Cited by

CN112828696A; CN109277920A; DE4309052A1; US5538458A; US5394653A; CN1066378C; CN111958346A; WO9302834A1; WO2008033108A1

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