

Title (en)

METHOD AND APPARATUS FOR CORRECTING DIAMETRICAL TAPER ON A WORKPIECE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERBESSERUNG DER KEGELFORM EINES ZYLINDRISCHEN WERKSTÜCKES

Title (fr)

PROCEDE ET APPAREIL POUR CORRIGER LA CONICITE D'UNE PIECE USINEE CYLINDRIQUE

Publication

EP 0743891 A4 19971029 (EN)

Application

EP 94910107 A 19940209

Priority

US 9401454 W 19940209

Abstract (en)

[origin: CA2182953C] A microfinishing arm assembly for reducing taper on selected bearing journal surfaces of various workpieces rotated about a longitudinal axis, including a primary finishing arm and a taper correction device for applying a plurality of adjacent independently variable grinding pressures. A primary abrasive device for finishing a journal surface is mountable on the primary finishing arm for use with the taper correction device. A measuring device for gauging the bearing journal surfaces at a plurality of spaced points during rotation is utilized with a processor device for receiving the gauging signals, calculating diameters of the journal surfaces and generating a plurality of output signals corresponding to the diameters of the bearing surfaces at spaced points. A comparator device compares the output signals to determine whether a taper exists and controls the grinding pressure of a taper correction device to correct the taper.

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CPC (source: EP)

B24B 5/42 (2013.01); **B24B 49/00** (2013.01); **B24B 49/04** (2013.01)

Citation (search report)

- [YA] US 5148636 A 19920922 - JUDGE EDWARD E [US], et al
- [Y] US 4637144 A 19870120 - SCHEMEL ROLAND [DE]
- [A] US 4979335 A 19901225 - WEBER GOTTRIED [DE], et al
- [A] EP 0219301 A2 19870422 - IND METAL PROD CORP [US]
- See references of WO 9521728A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

CA 2182953 A1 19950817; **CA 2182953 C 20001212**; DE 69421722 D1 19991223; DE 69421722 T2 20000706; EP 0743891 A1 19961127; EP 0743891 A4 19971029; EP 0743891 B1 19991117

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