

Title (en)

Apparatus for rolling engine crankshaft journals, tool and method for rolling of adjacent and staggered crankshaft journals

Title (de)

Gerät zum Walzen von Motorenkurbelzapfen, Walzwerkzeug und Verfahren zum Walzen von aneinanderliegenden und versetzten Kurbelzapfen

Title (fr)

Dispositif pour la galetage de portées de vilebrequin, outil et procédé de galetage de portées de vilebrequin adjacents et décalés

Publication

EP 0661137 B1 19980429 (DE)

Application

EP 95100047 A 19950103

Priority

US 17679294 A 19940103

Abstract (en)

[origin: EP0661137A1] The grooves of angularly offset pairs of journal seats, arranged side by side, of the crankshaft of an internal combustion engine are rolled under pressure by opposite and inclined rollers for the permanent hardening thereof, the said rollers being held side by side, by a pair of claws of an oscillating clamping structure, in cages at the lower ends of a pair of tool housings which are rotatable relative to one another. The said structure enables the rollers to follow the crankshaft-journal seats when the crankshaft is rotated, so that the angularly offset crankshaft-journal grooves can simultaneously be worked under pressure and hardened. The oppositely directed opposing loads of the rollers are neutralised in load-carrying bearings which are operatively arranged between the pair of tool housings. <IMAGE>

IPC 1-7

B24B 39/04; **B24B 5/42**

IPC 8 full level

B24B 5/42 (2006.01); **B24B 39/04** (2006.01)

CPC (source: EP US)

B21H 7/185 (2013.01 - EP US); **B24B 5/42** (2013.01 - EP US); **B24B 39/04** (2013.01 - EP US)

Cited by

DE202016001445U1; DE10357441B3; EP1211026A3; DE10230526A1; DE10060218A1; DE102005021793B4; DE10318766B4; DE10209301C1; EP1340589A1; DE10141119A1; DE10141119B4; US7493788B2; US6666061B2; US7100413B2; WO2005058546A1; US7168278B2; US7100412B2; DE102017001951A1; WO03090971A1; WO03090972A1

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