

Title (en)

DEEP-ROLLING DEVICE OF A DEEP-ROLLING MACHINE FOR CRANKSHAFTS

Title (de)

FESTWALZGERÄT EINER FESTWALZMASCHINE FÜR KURBELWELLEN

Title (fr)

DISPOSITIF DE CYLINDRAGE D'UNE MACHINE DE CYLINDRAGE POUR VILEBREQUINS

Publication

EP 1469972 B1 20050608 (DE)

Application

EP 02791800 A 20021210

Priority

- DE 20200926 U 20020123
- EP 0213969 W 20021210

Abstract (en)

[origin: WO03061906A1] The roll-hardening device (8) pertaining to a roll-hardening machine (1) for crankshafts (3) is configured like a pair of scissors. Two pivotable scissor arms (9, 10) respectively comprise a roll-hardening head (13) or a support roller head (14). The support roller head (14) is provided with two axially parallel support rollers, whereby the rotating axes thereof lie on a common plane. The support roller head (14) is also provided with an axial guide which is arranged in front of the support rollers in the direction of a pivoting (35) to ensure closure. The longitudinal axis thereof is perpendicular to the axis of rotation of the crankshaft (3), and lies on a plane forming an acute angle with the common plane of the axes of rotation of the support rollers and the axial width thereof is larger than width of the support roller head (14) and slightly smaller than the distance between the adjacent oil films of a main or connecting rod bearing journal.

IPC 1-7

B24B 39/04; **B23P 9/02**

IPC 8 full level

B21H 7/18 (2006.01); **B23P 9/02** (2006.01); **B24B 39/04** (2006.01)

CPC (source: EP US)

B21H 7/185 (2013.01 - EP US); **B24B 39/04** (2013.01 - EP US); **Y10T 29/17** (2015.01 - EP US)

Cited by

WO2008031876A1; WO2005082573A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

DE 20200926 U1 20020418; CN 1615205 A 20050511; DE 50203387 D1 20050714; EP 1469972 A1 20041027; EP 1469972 B1 20050608; US 2005066699 A1 20050331; WO 03061906 A1 20030731

DOCDB simple family (application)

DE 20200926 U 20020123; CN 02827500 A 20021210; DE 50203387 T 20021210; EP 0213969 W 20021210; EP 02791800 A 20021210; US 50179304 A 20041115