

Title (en)

AUTOMATIC ADJUSTING OF A UNIVERSAL MILL STAND AFTER ITS RESETTING FOR NEW STRUCTURAL SHAPES

Publication

EP 0399296 B1 19930811 (DE)

Application

EP 90108783 A 19900510

Priority

- DE 3916925 A 19890524
- DE 3916927 A 19890524

Abstract (en)

[origin: EP0399296A2] For the purpose of the automatic adjustment of horizontal and vertical rolls in a universal mill stand, especially after the resetting of the stand for new structural shapes from the mill train with the aid of adjusting elements and with the aid of position measuring devices, connected to computer units 26, for the roll positions, it is proposed to take the axial installation geometry of the vertical rolls 3, 4 in the stand as a fixed reference quantity and to displace the horizontal rolls 1, 2 radially and axially into roll positions, measured by actual position sensors, from which the geometric centre of the roll gap and the geometric rolling centre of the stand are determined. To take into account the spring characteristic constants of the stand, it is proposed that the radial spring characteristic for both horizontal rolls 1, 2 should be determined in common, that the radial spring characteristic for each vertical roll 3, 4 should be determined separately and that the axial spring characteristic of one of the horizontal rolls 1, 2, in each case in one of the two axis directions, should be determined separately, this being accomplished by moving the rolls towards one another electromechanically until the moment of contact and the roll- barrel pressure then being increased hydraulically to at least two working points and relieved again from these working points. <IMAGE>

IPC 1-7

B21B 31/16; B21B 37/08

IPC 8 full level

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