

Title (en)
ADJUSTMENT DEVICE FOR UNIVERSAL ROLL STAND

Publication
EP 0275875 B1 19911127 (DE)

Application
EP 88100096 A 19880107

Priority
DE 3701889 A 19870123

Abstract (en)
[origin: US4918964A] For running-in a universal roll stand without a trial rolling by means of a trial bar or rapidly to adjust the calibre of a finished stand located directly downstream of a reversing stand group, at least one horizontal roll (1) and the two vertical rolls (3, 4) are provided with hydraulic fine adjustment (16, 17, 20, 21) and an electromechanical coarse adjustment (8-11) to be operated independently. By monitoring all settings by means of travel sensors (12-15; 24-27) and the fine adjustments additionally by pressure sensors and/or rolling-force sensors (28-31), the actual values thereof being reproducible in an electronic control device, it is possible, in conjunction with a travel control of the hydraulic fine adjustments after a coarse electromechanical adjustment, depending on the pass plan, of the vertical rollers (3, 4) and at least one horizontal roller (1), to operate the respective hydraulic fine adjustments under travel control as a function of pressures or rolling forces which are variable as a function of the profile or rolling material. For this purpose, the spring constants of the roll stand, which are used for fixing the set position values, dependent on the pass plan, for the electromechanical coarse adjustments and hydraulic pressures and/or travels, must first be determined by calibration and stored. <IMAGE>

IPC 1-7
B21B 1/10; B21B 31/32

IPC 8 full level
B21B 31/32 (2006.01); **B21B 1/10** (2006.01); **B21B 31/16** (2006.01); **B21B 37/00** (2006.01); **B21B 37/58** (2006.01); **B21B 38/10** (2006.01); **B21B 1/12** (2006.01); **B21B 13/10** (2006.01)

CPC (source: EP KR US)
B21B 1/00 (2013.01 - KR); **B21B 31/16** (2013.01 - EP US); **B21B 38/105** (2013.01 - EP US); **B21B 1/12** (2013.01 - EP US); **B21B 31/32** (2013.01 - EP US); **B21B 2013/106** (2013.01 - EP US)

Cited by
EP0329999A3; EP0433819A3; CN110434491A; EP1112784A3; CN113617855A; WO2013041083A3

Designated contracting state (EPC)
AT BE DE ES FR GB IT LU SE

DOCDB simple family (publication)
EP 0275875 A2 19880727; EP 0275875 A3 19881207; EP 0275875 B1 19911127; EP 0275875 B2 19970319; AT E69743 T1 19911215; CN 1012562 B 19910508; CN 88100672 A 19881109; DE 3866360 D1 19920109; ES 2028137 T3 19920701; ES 2028137 T5 19970516; JP H07100164 B2 19951101; JP S63194806 A 19880812; KR 880008840 A 19880913; KR 940010442 B1 19941022; RU 2018386 C1 19940830; US 4918964 A 19900424

DOCDB simple family (application)
EP 88100096 A 19880107; AT 88100096 T 19880107; CN 88100672 A 19880123; DE 3866360 T 19880107; ES 88100096 T 19880107; JP 1101388 A 19880122; KR 880000399 A 19880120; SU 4355062 A 19880122; US 14695288 A 19880122