

Title (en)

DEVICE FOR CONTROLLING THE LIFTING AND PRESSING MOVEMENTS OF THE PRESSURE ROLLERS OF HOT STRIP COILERS

Publication

EP 0222231 A3 19890315 (DE)

Application

EP 86114743 A 19861023

Priority

DE 3539900 A 19851111

Abstract (en)

[origin: US4736605A] The device serves to control the desired lifting and pressure-containing movements of strip pressure rolls for the reels which serve to store hot rolled strip. These reels have a rotating mandrel. The pressure rolls are actuated by piston and cylinder units for positioning the rolls electro-hydraulically in conformity with signals which indicate the relative position of the leading strip edge which rotates with the mandrel. The positioning of the roll, by the lifting and pressure-contacting movements, is effected by position control with subordinated pressure control in a closed-circuit position control loop and a closed-circuit pressure control loop, by input of a setpoint position value which corresponds to the respectively prevailing pressure-contacting and lifting position of the pressure rolls, and by establishment of limited setpoint pressure values for both functions or directions of movement.

IPC 1-7

B21C 47/06

IPC 8 full level

B65H 19/28 (2006.01); **B21C 47/06** (2006.01)

CPC (source: EP KR US)

B21B 37/00 (2013.01 - KR); **B21C 47/063** (2013.01 - EP US)

Citation (search report)

- [A] FR 2541657 A1 19840831 - ISHIKAWAJIMA HARIMA HEAVY IND [JP]
- [AD] DE 2158721 A1 19730530 - INDRAMAT GMBH
- [A] US 4380164 A 19830419 - KUWANO HIROAKI [JP]
- [X] PATENT ABSTRACTS OF JAPAN, Band 8, Nr. 201 (M-325)[1638], 14. September 1984; & JP-A-59 092 118 (MITSUBISHI JUKOGYO K.K.) 28-05-1984
- [X] PATENT ABSTRACTS OF JAPAN, Band 9, Nr. 38 (M-358)[1761], 19. Februar 1985; & JP-A-59 179 218 (MITSUBISHI JUKOGYO K.K.) 11-10-1984
- [X] PATENT ABSTRACTS OF JAPAN, Band 9, Nr. 142 (M-388)[1865], 18. Juni 1985; & JP-A-60 021 122 (MITSUBISHI JUKOGYO K.K.) 02-02-1985
- [X] PATENT ABSTRACTS OF JAPAN, Band 9, Nr. 22 (M-354)[1745], 30. Januar 1985; & JP-A-59 169 619 (ISHIKAWAJIMA HARIMA JUKOGYO K.K.) 25-09-1984
- [XP] PATENT ABSTRACTS OF JAPAN, Band 10, Nr. 336 (M-535)[2392], 14. November 1986; & JP-A-61 140 322 (MITSUBISHI HEAVY IND., LTD) 27-06-1986
- [A] PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 69 (M-125)[947] 30. April 1982; & JP-A-57 009 531 (HITACHI SEISAKUSHO K.K.) 19-01-1982

Cited by

EP0391135A3

Designated contracting state (EPC)

AT BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 0222231 A2 19870520; EP 0222231 A3 19890315; EP 0222231 B1 19940302; AT E102092 T1 19940315; CN 86107620 A 19870520; DE 3539900 A1 19870514; DE 3689682 D1 19940407; ES 2050099 T3 19940516; JP 2898282 B2 19990531; JP S62114723 A 19870526; KR 870004742 A 19870601; KR 930008913 B1 19930917; SU 1558292 A3 19900415; US 4736605 A 19880412

DOCDB simple family (application)

EP 86114743 A 19861023; AT 86114743 T 19861023; CN 86107620 A 19861108; DE 3539900 A 19851111; DE 3689682 T 19861023; ES 86114743 T 19861023; JP 26288986 A 19861106; KR 860009506 A 19861111; SU 4028453 A 19861110; US 93054686 A 19861112