

Title (en)

METHOD AND DEVICE FOR MEASURING AND ADJUSTING THE EVENNESS AND/OR TENSION OF A STAINLESS STEEL STRIP OR STAINLESS STEEL FILM DURING COLD ROLLING IN A 4-ROLL STAND, PARTICULARLY IN A 20-ROLL SENDZIMIR ROLL STAND

Title (de)

VERFAHREN UND EINRICHTUNG ZUM MESSEN UND REGELN DER PLANHEIT UND/ODER DER BANDSPANNUNGEN EINES EDELSTAHLBANDES ODER EINER EDELSTAHLFOLIE BEIM KALTWALZEN IN EINEM VIELWALZENGERÜST, INSBESONDERE IN EINEM 20-WALZEN-SENDZIMIR-WALZWERK

Title (fr)

PROCEDE ET DISPOSITIF POUR MESURER ET REGLER LA PLANEITE ET/OU LA TENSION D'UNE COURROIE D'ACIER INOXYDABLE OU D'UN FILM D'ACIER INOXYDABLE AU COURS DU LAMINAGE A FROID DANS UN LAMINOIR A CYLINDRES MULTIPLES, EN PARTICULIER DANS UN LAMINOIR SENDZIMIR A 20 CYLINDRES

Publication

EP 1763411 B1 20110330 (DE)

Application

EP 05755571 A 20050617

Priority

- EP 2005006570 W 20050617
- DE 102004032634 A 20040706

Abstract (en)

[origin: WO2006002784A1] A method and device for measuring and adjusting the evenness and/or tension of a stainless steel strip (1) during cold rolling in a 4-roll stand (2) provided with at least one control loop (4) comprising several actuators (3), resulting in more precise measurement and adjustment due to the fact that an evenness defect (10) is determined by comparing a tension vector (8) with a predefined reference curve (9), whereupon the characteristic of the evenness defect (10) along the width of the strip is broken down into proportional tension vectors (8) in an analysis building block (11) in a mathematically approximated manner and the evenness defect proportions (C1...Cx) determined by real numerical values are supplied to respectively associated control modules (12a; 12b) for actuation of the respective actuator (3).

IPC 8 full level

B21B 37/42 (2006.01); **B28C 5/12** (2006.01); **B21B 13/14** (2006.01); **B21B 37/28** (2006.01)

CPC (source: EP KR US)

B21B 37/28 (2013.01 - EP KR US); **B21B 37/42** (2013.01 - KR); **B21B 37/48** (2013.01 - KR); **B21B 38/06** (2013.01 - KR); **B21B 13/147** (2013.01 - EP US); **B21B 38/02** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006002784 A1 20060112; AT E503594 T1 20110415; BR PI0510241 A 20071023; CA 2570339 A1 20060112; CA 2570339 C 20111011; CN 1980752 A 20070613; CN 1980752 B 20130724; DE 102004032634 A1 20060216; DE 502005011193 D1 20110512; EP 1763411 A1 20070321; EP 1763411 B1 20110330; ES 2361278 T3 20110615; JP 2008504970 A 20080221; KR 101138715 B1 20120424; KR 20070027534 A 20070309; RU 2006135845 A 20080420; RU 2333811 C2 20080920; TW 200602135 A 20060116; TW I344872 B 20110711; US 2008271508 A1 20081106; US 7797974 B2 20100921; ZA 200606386 B 20071128

DOCDB simple family (application)

EP 2005006570 W 20050617; AT 05755571 T 20050617; BR PI0510241 A 20050617; CA 2570339 A 20050617; CN 200580022734 A 20050617; DE 102004032634 A 20040706; DE 502005011193 T 20050617; EP 05755571 A 20050617; ES 05755571 T 20050617; JP 2007519653 A 20050617; KR 20067021585 A 20050617; RU 2006135845 A 20050617; TW 94120598 A 20050621; US 62950505 A 20050617; ZA 200606386 A 20060802