Title (en)

METHOD AND COMPUTER PROGRAM FOR CONTROLLING A ROLLING PROCESS

Title (de)

VERFAHREN UND COMPUTERPROGRAMM ZUM STEUERN EINES WALZPROZESSES

Title (fr)

PROCEDE ET PROGRAMME INFORMATIQUE POUR LA COMMANDE D'UNE OPERATION DE LAMINAGE

Publication

EP 1812181 A1 20070801 (DE)

Application

EP 06829190 A 20061130

Priority

- EP 2006011486 W 20061130
- DE 102005059653 A 20051214

Abstract (en)

[origin: US7854154B2] The invention relates to a method for controlling a rolling process, in which a metal strip is rolled flat by use of at least one roller. It is known from the prior art that the relative position of a neutral point represents a measure of the instantaneous stability of a rolling process. However, traditional methods for calculating the position of the neutral point do not accurately represent the actual properties of metal and therefore have only limited usefulness for predicting the stability of a rolling process. In order to allow better control of a rolling process for rolling a metal strip with regard to the actual behavior of the metal strip, the invention proposes a new method for calculating the relative position of the neutral point, in which in particular the flat yield stress ke and the hydrostatic pressure pNH at the neutral point are incorporated.

IPC 8 full level

B21B 37/00 (2006.01)

CPC (source: EP KR US)

B21B 37/00 (2013.01 - EP KR US); B21B 27/10 (2013.01 - EP US); B21B 38/04 (2013.01 - EP US); B21B 38/06 (2013.01 - EP US); B21B 45/0251 (2013.01 - EP US); B21B 2261/04 (2013.01 - EP US); B21B 2265/04 (2013.01 - EP US); B21B 2265/20 (2013.01 - EP US); B21B 2267/10 (2013.01 - EP US); B21B 2275/04 (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 LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

US 2008127696 A1 20080605; **US 7854154 B2 20101221**; AT E446147 T1 20091115; AU 2006326732 A1 20070621; AU 2006326732 B2 20090402; AU 2006326732 C1 20100211; BR PI0605912 A2 20090526; CA 2594794 A1 20070621; CA 2594794 C 20100629; CN 101098763 A 20080102; DE 102005059653 A1 20070621; DE 502006005172 D1 20091203; EP 1812181 A1 20070801; EP 1812181 B1 20091021; ES 2333261 T3 20100218; JP 2008521621 A 20080626; JP 5022232 B2 20120912; KR 101146932 B1 20120523; KR 20080078778 A 20080828; RU 2007118157 A 20081120; RU 2359767 C2 20090627; TW 200732056 A 20070901; TW I358331 B 20120221; WO 2007068359 A1 20070621; ZA 200705235 B 20080528

DOCDB simple family (application)

US 79312506 A 20061130; AT 06829190 T 20061130; AU 2006326732 A 20061130; BR PI0605912 A 20061130; CA 2594794 A 20061130; CN 200680001449 A 20061130; DE 102005059653 A 20051214; DE 502006005172 T 20061130; EP 06829190 A 20061130; EP 2006011486 W 20061130; ES 06829190 T 20061130; JP 2007549885 A 20061130; KR 20077007622 A 20061130; RU 2007118157 A 20061130; TW 95144295 A 20061130; ZA 200705235 A 20070702