

Title (en)

REGULATING FLATNESS OF A METAL STRIP AT THE OUTPUT OF A ROLL HOUSING

Title (de)

REGULIERUNG DER EBENHEIT EINES METALLBANDS AM AUSGANG EINES WALZENSTÄNDERS

Title (fr)

REGULATION DE LA PLANEITE D'UNE BANDE METALLIQUE A LA SORTIE D'UNE CAGE DE LAMINOIR

Publication

EP 1827723 B1 20110302 (FR)

Application

EP 05848239 A 20051209

Priority

- FR 2005003097 W 20051209
- FR 0413753 A 20041222

Abstract (en)

[origin: FR2879486A1] The regulation of the flatness of a metal strip at the outlet of a rolling cage uses a flatness regulation device incorporating at least one dynamic flatness driver which, during rolling, characterises the flatness of the strip by measuring a height (D) at n points distributed over the length of the strip. From the n measurements of this height, using a model of the flatness regulation action and an optimisation method, a global consigned value is determined for the regulation system. The global consigned value comprises at least one elementary value for a dynamic driver, such that a criterion of residual default of the calculated flatness may be minimal and global consigned value is executed by the regulation system. The action model on the flatness utilised to determine the global consigned value is made up for each dynamic driver, providing sub-models for each of the n points of measurement of the height characteristic of the flatness. Each sub-model allows the calculation of the effect on the height at the corresponding point of the dynamic driver when the consigned value is applied. An independent claim is included for a computer program for operating this method of flatness regulation.

IPC 8 full level

B21B 37/28 (2006.01)

CPC (source: EP US)

B21B 37/28 (2013.01 - EP US); **B21B 37/30** (2013.01 - EP US); **B21B 37/38** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

FR 2879486 A1 20060623; **FR 2879486 B1 20070413**; CN 101084075 A 20071205; CN 101084075 B 20110309; DE 602005026696 D1 20110414; EP 1827723 A1 20070905; EP 1827723 B1 20110302; US 2009249849 A1 20091008; US 7748247 B2 20100706; WO 2006070087 A1 20060706

DOCDB simple family (application)

FR 0413753 A 20041222; CN 200580044077 A 20051209; DE 602005026696 T 20051209; EP 05848239 A 20051209; FR 2005003097 W 20051209; US 72220505 A 20051209