

Title (en)

ADAPTION OF A CONTROLLER IN A ROLLING MILL BASED ON THE VARIATION OF AN ACTUAL VALUE OF A ROLL PRODUCT

Title (de)

AUF DER STREUUNG EINER ISTGRÖSSE EINES WALZGUTS BASIERENDE ADAPTIERUNG EINES REGLERS IN EINEM WALZWERK

Title (fr)

ADAPTATION D'UN RÉGULATEUR DANS UN LAMINOIR SUR LA BASE DE LA DISPERSION D'UNE GRANDEUR RÉELLE D'UN PRODUIT LAMINÉ

Publication

**EP 2200763 B1 20121226 (DE)**

Application

**EP 08803763 A 20080905**

Priority

- EP 2008061794 W 20080905
- DE 102007050891 A 20071024

Abstract (en)

[origin: WO2009053144A1] During operation of a rolling mill, a rolling product (2) running through the rolling mill is machined by means of a machining device (6). The machining device (6) is controlled by means of a controller (7), to which a target value ( $x^*$ ) and an actual value ( $x$ ) of the roll product (2) are fed after machining by the machining device (6). The controller (7) determines based on the target value ( $x^*$ ) and the actual value ( $x$ ), in conjunction with controller characteristic ( $R$ ), a controlled variable ( $y$ ) for the machining device (6) and outputs the controlled variable ( $y$ ) to the machining device (6). The machining device (6) machines the roll product (2) according to the output controlled variable ( $y$ ). A detection device (8) receives the actual value ( $x$ ) of the mill product (2) after machining by the machining device (6) and a corresponding actual value ( $x'$ ) of the mill product (2) before machining by the machining device (6). Based on the temporal profiles of the actual values ( $x$ ,  $x'$ ) that are fed, said device dynamically determines the controller characteristic ( $R$ ) such that the variance of the actual value ( $x$ ) of the roll product (2) at least tends to be minimized after machining by the machining device (2). Said device also parameterizes the controller (7) according to the determined control characteristic ( $R$ ) determined by it.

IPC 8 full level

**B21B 37/00** (2006.01)

CPC (source: EP US)

**B21B 37/00** (2013.01 - EP US); **B21B 37/16** (2013.01 - EP US); **B21B 37/165** (2013.01 - EP US); **B21B 37/28** (2013.01 - EP US); **B21B 37/48** (2013.01 - EP US); **B21B 37/58** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**DE 102007050891 A1 20090430**; EP 2200763 A1 20100630; EP 2200763 B1 20121226; US 2010211209 A1 20100819; US 8255074 B2 20120828; WO 2009053144 A1 20090430

DOCDB simple family (application)

**DE 102007050891 A 20071024**; EP 08803763 A 20080905; EP 2008061794 W 20080905; US 73893208 A 20080905