

Title (en)
Ribbon stroke and loop control

Title (de)
Bandzug- und Schlingenregelung

Title (fr)
Réglage du feuillard et des nœuds

Publication
EP 2454033 A1 20120523 (DE)

Application
EP 10732933 A 20100709

Priority

- EP 2010059941 W 20100709
- EP 09165549 A 20090715
- EP 10732933 A 20100709

Abstract (en)
[origin: EP2277639A1] For the regulation of the actual tension of a metal strip, between two roll stands in a rolling mill, a lifter between the roll stands acts on the strip to bring it to a nominal tension value. Actual and nominal values (Z^* , Z') are fed to the control unit (15) to determine a tension equalizing signal (ZA) with a time delayed integral portion (IA) to give a nominal speed value (ω_{nl}^*) for at least one roll stand. The difference between the two signals determines a nominal speed portion for the lifter. The nominal (ψ_{nl}^*) and actual (ψ_l) lifter positions are fed to the loop control (16) to determine a loop equalizing signal (SA). A time delay determines a second loop equalizing signal to give a further nominal speed value for a roll stand. The output signals are passed to the roll stand speed control and the loop lifter setting unit.

IPC 8 full level
B21B 37/50 (2006.01)

CPC (source: EP)
B21B 37/50 (2013.01); **B21B 37/52** (2013.01); **B21B 2265/06** (2013.01); **B21B 2275/02** (2013.01); **B21B 2275/04** (2013.01)

Citation (search report)
See references of WO 2011006851A1

Cited by
DE102017200560A1; WO2018130636A1; US11426778B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2277639 A1 20110126; CN 102470410 A 20120523; CN 102470410 B 20150506; EP 2454033 A1 20120523; EP 2454033 B1 20140430;
PL 2454033 T3 20140930; WO 2011006851 A1 20110120

DOCDB simple family (application)
EP 09165549 A 20090715; CN 201080032005 A 20100709; EP 10732933 A 20100709; EP 2010059941 W 20100709; PL 10732933 T 20100709