Title (en)

ROLLING TAKING INTO ACCOUNT FREQUENCY BEHAVIOUR

Title (de)

WALZEN UNTER BERÜCKSICHTIGUNG VON FREQUENZVERHALTEN

Title (fr)

LAMINAGE EN FONCTION DE LA RÉPONSE DE FRÉQUENCE

Publication

EP 3936248 C0 20231025 (DE)

Application

EP 20184420 A 20200707

Priority

EP 20184420 A 20200707

Abstract (en)

[origin: WO2022008133A1] A roll stand (2) of a rolling mill is supplied with a metal strip (1) by an upstream supply device (3) at an in-feed speed (v), with said metal strip being rolled in the roll stand (2). A measuring device (4) between the supply device (3) and the roll stand (2) detects a respective thickness value (d) of the metal strip (1) for consecutive sections (9) of the metal strip (1) and supplies said value to a control device (6) of the rolling mill. The control device (6) determines a respective preliminary thickness deviation based on the deviation of the respective thickness value (d) from a target thickness for the respective section (9) of the metal strip (1), and final thickness deviations based on the preliminary thickness deviations. The control device (6) determines a respective control value (A2, A3) for the roll stand (2) and/or the supply device (3) for the sections (9) of the metal strip (1) based on the final thickness deviation of the respective section (9) of the metal strip (1) and the final thickness deviations of multiple preceding and/or subsequent sections (9) of the metal strip (1), taking a description of the inverse frequency behaviour of the roll stand (2) and/or the supply device (3) and/or the measuring device (4) into account. It then outputs the respective control value (A2, A3) to the roll stand (2) and/or the supply device (3) at the correct time.

IPC 8 full level

B21B 37/16 (2006.01)

CPC (source: EP KR US)

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Cited by

EP3974073A1

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 RS SE SI SK SM TR

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

EP 3936248 A1 20220112; **EP 3936248 B1 20231025**; **EP 3936248 C0 20231025**; CN 115867396 A 20230328; JP 2023533739 A 20230804; KR 20230035563 A 20230314; US 2023256489 A1 20230817; WO 2022008133 A1 20220113

DOCDB simple family (application)

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