

Title (en)

CONTROL DEVICE FOR ROLLING DEVICE, ROLLING EQUIPMENT, AND METHOD FOR OPERATING ROLLING DEVICE

Title (de)

STEUERVORRICHTUNG FÜR EINE WALZVORRICHTUNG, WALZVORRICHTUNG UND VERFAHREN ZUM BETRIEB EINER WALZVORRICHTUNG

Title (fr)

DISPOSITIF DE COMMANDE DESTINÉ À UN DISPOSITIF DE LAMINAGE, ÉQUIPEMENT DE LAMINAGE ET PROCÉDÉ DE FONCTIONNEMENT D'UN DISPOSITIF DE LAMINAGE

Publication

EP 3974074 A4 20220518 (EN)

Application

EP 19937138 A 20190711

Priority

JP 2019027491 W 20190711

Abstract (en)

[origin: EP3974074A1] A control device for controlling a rolling mill device including a pair of mill rolls disposed on opposite sides of a metal plate includes: a first plate end detection part disposed on an entry side of the pair of mill rolls in a conveying direction of the metal plate and configured to detect a plate end position in a plate width direction of the metal plate at a first position in the conveying direction; a second plate end detection part disposed on an exit side of the pair of mill rolls in the conveying direction and configured to detect a plate end position in the plate width direction of the metal plate at a second position in the conveying direction; and a determination part configured to determine whether tip end tension-free rolling, which is rolling of the metal plate by the pair of mill rolls in a state where an exit-side tension applied to the metal plate is zero, can be started, on the basis of a first plate end position of the metal plate detected by the first plate end detection part and a second plate end position of the metal plate detected by the second plate end detection part.

IPC 8 full level

B21B 39/14 (2006.01); **B21B 37/28** (2006.01); **B21B 38/06** (2006.01)

CPC (source: EP)

B21B 37/00 (2013.01); **B21B 37/48** (2013.01); **B21B 37/68** (2013.01); **B21B 38/00** (2013.01); **B21B 2015/0057** (2013.01);
B21B 2265/08 (2013.01); **B21B 2273/04** (2013.01); **B21B 2273/10** (2013.01); **B21B 2273/14** (2013.01)

Citation (search report)

- [X] KR 20050028230 A 20050322 - POSCO [KR]
- [X] WO 2006063948 A1 20060622 - SIEMENS AG [DE], et al
- See also references of WO 2021005778A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3974074 A1 20220330; EP 3974074 A4 20220518; EP 3974074 B1 20231227; EP 3974074 C0 20231227; CN 114007771 A 20220201;
CN 114007771 B 20230616; JP 7150994 B2 20221011; JP WO2021005778 A1 20210114; WO 2021005778 A1 20210114

DOCDB simple family (application)

EP 19937138 A 20190711; CN 201980097659 A 20190711; JP 2019027491 W 20190711; JP 2021530449 A 20190711