Title (en)

HOT ROLLING METHOD, HOT ROLLING MILL AND COMPUTER PROGRAMM FOR CARRYING OUT SUCH METHOD

Title (de)

HEISSWALZVERFAHREN, HEISSWALZWERK UND COMPUTERPROGRAMM ZUR DURCHFÜHRUNG EINES SOLCHEN VERFAHRENS

Title (fr)

PROCÉDÉ DE LAMINAGE À CHAUD, LAMINOIR À CHAUD ET PRODUIT PROGRAMME D'ORDINATEUR POUR LA MISE EN OEUVRE D'UN TEL PROCÉDÉ

Publication

EP 3086889 A1 20161102 (FR)

Application

EP 13824153 A 20131224

Priority

IB 2013002865 W 20131224

Abstract (en)

[origin: WO2015097488A1] Method for regulating at least one of the parameters (a) of a method for the hot-rolling of a part-finished metallic product through at least one stand of rolls of a rolling mill comprising at least two working rolls, the regulating method comprising the following steps of calculating a forward slippage ratio (FWS) using the following equation: FWS = (a) where vout is the speed of the part-finished product leaving said stand and vstand is the linear speed of the working rolls; calculating an estimate of a coefficient of friction (µactual) as a function of a measured value of the clamping force (F) of said working rolls in the stand and of the forward slippage ratio (FWS) previously calculated; and regulating at least one of the parameters (a) on the basis of the calculated estimate of the co-efficient of friction (µactual). Associated rolling method, associated rolling mill and associated computer program product.

IPC 8 full level

B21B 37/00 (2006.01)

CPC (source: EP KR RU US)

B21B 1/22 (2013.01 - US); **B21B 27/10** (2013.01 - KR); **B21B 37/00** (2013.01 - EP KR RU US); **B21B 45/0251** (2013.01 - KR); B21B 27/10 (2013.01 - EP US); B21B 45/0251 (2013.01 - EP US); B21B 2001/225 (2013.01 - US); B21B 2265/12 (2013.01 - EP KR US); B21B 2265/20 (2013.01 - EP KR US); B21B 2275/04 (2013.01 - EP KR US); B21B 2275/06 (2013.01 - EP KR US)

Citation (search report)

See references of WO 2015097488A1

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)

WO 2015097488 A1 20150702; AU 2013409182 A1 20160714; AU 2013409182 B2 20170831; BR 112016014762 A2 20170808; BR 112016014762 B1 20220315; CA 2935193 A1 20150702; CA 2935193 C 20181204; CN 105916603 A 20160831; CN 105916603 B 20180907; EP 3086889 A1 20161102; EP 3086889 B1 20190206; ES 2724456 T3 20190911; HU E044992 T2 20191128; JP 2017500208 A 20170105; JP 6342003 B2 20180613; KR 102110645 B1 20200514; KR 20160101153 A 20160824; KR 20180004332 A 20180110; MA 39044 B1 20181130; MX 2016008454 A 20161014; PL 3086889 T3 20190830; RU 2016130269 A 20180130; RU 2670630 C2 20181024; RU 2670630 C9 20181126; UA 117508 C2 20180810; US 10870138 B2 20201222; US 2016318080 A1 20161103; ZA 201603733 B 20170726

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IB 2013002865 W 20131224; AU 2013409182 A 20131224; BR 112016014762 A 20131224; CA 2935193 A 20131224; CN 201380081821 A 20131224; EP 13824153 A 20131224; ES 13824153 T 20131224; HU E13824153 A 20131224; JP 2016542726 A 20131224; KR 20167019708 A 20131224; KR 20177037905 A 20131224; MA 39044 A 20131224; MX 2016008454 A 20131224; PL 13824153 T 20131224; RU 2016130269 A 20131224; UA A201608117 A 20131224; US 201315108132 A 20131224; ZA 201603733 A 20160601