

Title (en)

SHAPED STEEL ROLLING METHOD, SHAPED STEEL MANUFACTURING LINE, AND SHAPED STEEL MANUFACTURING METHOD

Title (de)

FORMSTAHLWALZVERFAHREN, FORMSTAHLHERSTELLUNGSLINIE UND FORMSTAHLHERSTELLUNGSVERFAHREN

Title (fr)

PROCÉDÉ DE LAMINAGE D'ACIER PROFILÉ, LIGNE DE FABRICATION D'ACIER PROFILÉ ET PROCÉDÉ DE FABRICATION D'ACIER PROFILÉ

Publication

EP 3702058 A1 20200902 (EN)

Application

EP 18899047 A 20181227

Priority

- JP 2018001784 A 20180110
- JP 2018048177 W 20181227

Abstract (en)

Regarding each rolling mill, a rolling torque G_i before biting into a downstream stand is stored, the peripheral velocity of a most downstream stand R_n is controlled to be $G_{n-1} = G_{n-1}^*$ after biting into R_n , and a rolling torque G_n^{**} of R_n after tension is stabilized is stored. After that, the peripheral velocity of a rolling mill R_i is controlled to be $G_i = G_i^*$ toward an upstream side, and the peripheral velocity of a rolling mill R_k at a downstream side of the rolling mill R_i is controlled to keep $G_k = G_k^{**}$ ($k = i+1$ to n) so that a rolling torque of a most upstream rolling mill R_1 becomes equal to a stored G_1^* . Stabilization of material passage and improvement in accuracy of a product dimension are enabled by controlling tension between stands with high accuracy by using a simple control system without using table values or the like by each rolling condition even under a condition where a distance between stands is short.

IPC 8 full level

B21B 37/00 (2006.01); **B21B 1/12** (2006.01); **B21B 37/52** (2006.01)

CPC (source: EP US)

B21B 1/088 (2013.01 - EP US); **B21B 1/12** (2013.01 - US); **B21B 37/52** (2013.01 - US); **B21B 37/46** (2013.01 - EP); **B21B 2201/10** (2013.01 - US); **B21B 2265/02** (2013.01 - US); **B21B 2265/06** (2013.01 - EP); **B21B 2275/12** (2013.01 - EP)

Citation (search report)

See references of WO 2019138908A1

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)

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DOCDB simple family (application)

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