Title (en)

A HIGH EFFICIENT, ENERGY-SAVING PROCESS OF CONTINUOUS CASTING-ROLLING OF THE STRIP STEELS

Title (de)

HOCHEFFIZIENTES ENERGIESPARENDES VERFAHREN ZUM WALZEN VON STAHLBÄNDERN UNMITTELBAR NACH DEM STRANGGIESSEN

Title (fr)

PROCÉDÉ À ÉCONOMIE D'ÉNERGIE ET TRÈS EFFICACE POUR COULER-LAMINER EN CONTINU DES BANDES D'ACIER

Publication

EP 2174728 A1 20100414 (EN)

Application

EP 07764162 A 20070704

Priority

CN 2007070233 W 20070704

Abstract (en)

A high efficient, energy-saving process of continuous casting-rolling of the strip steels includes the following steps: continuous casting the blanks, cutting the casting blanks, transfering the casting blank to a heating furnaces by a roller track, heating the casting blanks, dephosphorizing the casting blanks, rough rolling, cutting the heads and the ends, finishing, cooling and curling. The continuous casting step is provided with at least two casting liquids, and is provided with at least two furnaces for the casting blanks heating. Said furnaces are interlaced arranged in the both sides of the rolling line. The invention realizes four casting liquids entering into a rolling line, and they are continuous rolled at a same high temperature, thus the throughput of CCM and the rolling mill is highly matching.

IPC 8 full level

B21B 1/46 (2006.01)

CPC (source: EP)

B21B 1/466 (2013.01); B21B 39/004 (2013.01); B21B 45/004 (2013.01); B21B 45/0203 (2013.01); B21B 45/08 (2013.01); B21B 2015/0014 (2013.01); B21B 2015/0057 (2013.01); B21B 2273/12 (2013.01); B21B 2273/16 (2013.01)

Cited by

CN109142144A; CN104438326A; CN110032760A; EP2656946A4; CN108672493A; CN106077091A; CN106132571A; CN111672915A; CN110090861A; CN110355221A; CN108435794A; EP4049768A1; CN102310078A; CN112218730A; WO2015107483A1; WO2022179890A1; EP3094425B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 2174728 A1 20100414; **EP 2174728 A4 20100908**; **EP 2174728 B1 20110831**; AT E522289 T1 20110915; JP 2010531734 A 20100930; WO 2009003342 A1 20090108

DOCDB simple family (application)

EP 07764162 A 20070704; AT 07764162 T 20070704; CN 2007070233 W 20070704; JP 2010513613 A 20070704