Title (en)

PROCESS FOR MULTI-MODE MANUFACTURING OF METAL STRIPS AND PLATES

Title (de)

VERFAHREN ZUR MULTIMODALEN HERSTELLUNG VON METALLBÄNDERN UND -PLATTEN

Title (fr)

PROCÉDÉ DE FABRICATION MULTIMODE DE BANDES ET DE PLAQUES MÉTALLIQUES

Publication

EP 3632582 A1 20200408 (EN)

Application

EP 19208335 A 20180409

Priority

- IT 201700039423 A 20170410
- EP 18718524 A 20180409
- IB 2018052459 W 20180409

Abstract (en)

A process for the endless or batch production of strips and plates of hot-rolled steel, with thickness from 0,6 mm to 50 mm, comprises the continuous casting (1) with liquid core reduction of a thin slab (S) having a minimum thickness of 80 mm, followed by a heating in an induction heater (2), a finishing rolling (4), a controlled cooling (6) and a final shearing (5; 8), and further includes prior to said heating in an induction heater (2) an initial rolling (10) with a thickness reduction of the slab (S) of only about 10% and in any case not more than 20%, starting from a thickness reduction of about 8 mm.

IPC 8 full level

B21B 1/46 (2006.01)

CPC (source: EP KR RU)

B21B 1/46 (2013.01 - EP RU); **B21B 1/463** (2013.01 - KR); **B21B 13/22** (2013.01 - RU); **B21B 45/0218** (2013.01 - KR); B21B 45/0203 (2013.01 - EP); B21B 45/0218 (2013.01 - EP); B21B 2265/14 (2013.01 - EP KR)

Citation (applicant)

- EP 1558408 A1 20050803 - ARVEDI GIOVANNI [IT]
- EP 1868748 A1 20071226 - ARVEDI GIOVANNI [IT]
- WO 2007045988 A2 20070426 - DANIELI OFF MECC [IT], et al
- DE 102011004245 A1 20120412 - SMS SIEMAG AG [DE]

Citation (search report)

- [A] WO 2007045988 A2 20070426 - DANIELI OFF MECC [IT], et al
- [A] DE 102011004245 A1 20120412 - SMS SIEMAG AG [DE]

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 2018189652 A1 20181018; CN 110573269 A 20191213; CN 110573269 B 20220104; EP 3606681 A1 20200212; EP 3606681 B1 20210127; EP 3632582 A1 20200408; EP 3632582 B1 20210609; ES 2866154 T3 20211019; ES 2887184 T3 20211222; IT 201700039423 A1 20181010; JP 2020516466 A 20200611; JP 2022107666 A 20220722; JP 7095071 B2 20220704; KR 102435246 B1 20220822; KR 20190134776 A 20191204; MA 47042 A1 20201231; MA 47042 B1 20220131; MX 2019012216 A 20191121; PH 12019502312 A1 20201012; RU 2019135817 A 20210511; RU 2019135817 A3 20210604; RU 2752592 C2 20210729

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