

Title (en)

STEEL PLATE MANUFACTURING EQUIPMENT AND STEEL PLATE MANUFACTURING METHOD

Title (de)

ANLAGE ZUR HERSTELLUNG VON STAHLPLATTEN UND VERFAHREN ZUR HERSTELLUNG VON STAHLPLATTEN

Title (fr)

ÉQUIPEMENT DE FABRICATION DE PLAQUE D'ACIER ET PROCÉDÉ DE FABRICATION DE PLAQUE D'ACIER

Publication

**EP 3653312 A4 20200729 (EN)**

Application

**EP 18861857 A 20180918**

Priority

- JP 2017187298 A 20170928
- JP 2018034420 W 20180918

Abstract (en)

[origin: EP3653312A1] Provided are a steel-plate manufacturing facility capable of uniformly cooling a hot steel plate through on-line cooling to manufacture a flat steel plate with a uniform quality, and a method for manufacturing a steel plate. A hot rolling mill, a first shape correction device, and an accelerated cooling device are arranged in this order. The accelerated cooling device includes dewatering rollers that restrict a steel plate from above and below, and a control system that controls a pressing load P to restrict the steel plate.

IPC 8 full level

**B21B 45/02** (2006.01); **B21B 1/38** (2006.01)

CPC (source: EP KR RU)

**B21B 1/38** (2013.01 - RU); **B21B 15/00** (2013.01 - KR); **B21B 37/74** (2013.01 - KR); **B21B 45/02** (2013.01 - RU); **B21B 45/0218** (2013.01 - KR); **B21B 45/0281** (2013.01 - EP); **B21B 1/38** (2013.01 - EP); **B21B 39/006** (2013.01 - EP); **B21B 45/0218** (2013.01 - EP); **B21B 2015/0071** (2013.01 - KR)

Citation (search report)

- [XAYI] JP 2007007676 A 20070118 - JFE STEEL KK
- [YD] JP 2002011515 A 20020115 - NIPPON KOKAN KK
- [A] EP 2540407 A1 20130102 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- [A] WO 0164362 A1 20010907 - NIPPON KOKAN KK [JP], et al
- See references of WO 2019065360A1

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 3653312 A1 20200520**; **EP 3653312 A4 20200729**; **EP 3653312 B1 20220817**; BR 112020006034 A2 20201006; CN 111194245 A 20200522; CN 111194245 B 20220301; JP 6521193 B1 20190529; JP WO2019065360 A1 20191114; KR 102325649 B1 20211111; KR 20200045531 A 20200504; RU 2741033 C1 20210122; WO 2019065360 A1 20190404

DOCDB simple family (application)

**EP 18861857 A 20180918**; BR 112020006034 A 20180918; CN 201880062688 A 20180918; JP 2018034420 W 20180918; JP 2018559398 A 20180918; KR 20207008754 A 20180918; RU 2020111274 A 20180918