

Title (en)

PLANT AND METHOD FOR HOT ROLLING STEEL STRIP

Title (de)

ANLAGE UND VERFAHREN ZUM WARMWALZEN VON STAHLBAND

Title (fr)

INSTALLATION ET PROCÉDÉ POUR LAMINER À CHAUD DES FEUILLARDS D'ACIER

Publication

**EP 3016754 B1 20190904 (DE)**

Application

**EP 14736716 A 20140701**

Priority

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- EP 2014063955 W 20140701

Abstract (en)

[origin: WO2015000895A1] The invention relates to a method and a plant for hot rolling steel strip (S), wherein the plant has a hot rolling relay (2) which comprises a plurality of roll stands (F1 - F7) which are successively passed through in the conveying direction (F) of the steel strip (S) to be hot rolled, and a cooling section (5) for intensively cooling the hot-rolled steel strip (S) emerging from the last roll stand (F7) of the rolling relay (2). By way of the invention, it is possible, on the basis of such a conventional hot rolling plant, to produce in an operationally reliable manner hot strips with a final thickness of more than 15 mm that satisfy even the highest requirements placed on their toughness. This is achieved according to the invention in that the start of the cooling section (5), as seen in the conveying direction (F) of the steel strip (S) to be hot rolled, is moved to before the end of the hot rolling relay (2), and in that the cooling section (5) starts following the last roll stand (F5) which is passed through before entering the cooling section (5) and in which hot rolling of the steel strip (S) to be hot rolled in each case takes place.

IPC 8 full level

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Citation (opposition)

Opponent : ArcelorMittal

- JP 2009241113 A 20091022 - NIPPON STEEL CORP
- EP 1279445 A1 20030129 - NAKAYAMA STEEL WORKS LTD [JP], et al
- EP 1038978 B1 20040512 - THYSSENKRUPP STAHL AG [DE]

Opponent : SMS group GmbH

- DE 102007058709 A1 20090205 - SMS DEMAG AG [DE]
- EP 1038978 A1 20000927 - THYSSENKRUPP STAHL AG [DE]
- EP 2692894 A1 20140205 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- WO 2013030945 A1 20130307 - TOSHIBA MITSUBISHI ELEC INC [JP], et al
- VOLKER SCHWINN, ET AL: "Recent Developments and Applications of TMCP Steel Plates", 2011 INT. SYMPOSIUM ON THE RECENT DEVELOPMENTS IN PLATE STEELS, 1 January 2011 (2011-01-01), pages 1 - 11, XP055757371
- E. MUTHMANN, ET AL: "Manufacturing of Large Steel Components for Nord Stream Project", 3R INTERNATIONAL. SPECIAL EDITION. STEEL PIPES, 1 February 2010 (2010-02-01), pages 26 - 31, XP055757377

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JP 2016530099 A 20160929; JP 6450379 B2 20190109; KR 102212807 B1 20210205; KR 20160030218 A 20160316; MX 364428 B 20190425;  
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