Title (en)

METHOD AND INSTALLATION FOR THE PRODUCTION OF HOT-ROLLED STRIP HAVING A DUAL-PHASE STRUCTURE

Title (de)

VERFAHREN UND ANLAGE ZUR HERSTELLUNG VON WARMBAND MIT DUALPHASENGEFÜGE

Title (fr)

PROCEDE ET INSTALLATION POUR PRODUIRE UN FEUILLARD LAMINE A CHAUD A STRUCTURE BIPHASEE

Publication

EP 1633894 B1 20170426 (DE)

Application

EP 04739698 A 20040608

Priority

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Abstract (en)

[origin: WO2004111279A2] The aim of the invention is to be able to produce dual-phase steels under local conditions even in the existing cooling section of a continuous casting and rolling plant by means of controlled cooling of the hot-rolled strip in two cooling stages following the forming process. Said aim is achieved by respecting the chemical composition of the initial steel within precisely defined limits and cooling in two stages from a finished rolled strip temperature Tfinish of A3 -100K < Tfinish < A3 -50K to a coiling strip temperature Tcoiling of < 300 DEG C (< initial martensite temperature), the cooling speed V1,2 in both cooling stages ranging between 30 and 150 K/s, preferably between 50 and 90 K/s. The first cooling stage is carried out until the cooling curve enters the ferrite range, whereupon the heat released by the transformation of the austenite into ferrite is used for isothermally holding the obtained strip temperature Tconst during a holding time of = 5 s until the beginning of the second cooling stage.

IPC 8 full level

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Citation (opposition)

Opponent : Primetals Technologies Austria GmbH

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