

Title (en)

METHOD FOR PRODUCING A LOW-ALLOY STEEL INGOT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER NIEDRIGLEGIERTEN STAHLBARREN

Title (fr)

PROCÉDÉ POUR FABRIQUER UN LINGOT D'ACIER FAIBLEMENT ALLIÉ

Publication

**EP 3155137 B1 20190731 (FR)**

Application

**EP 15727949 A 20150603**

Priority

- FR 1455202 A 20140610
- EP 2015062406 W 20150603

Abstract (en)

[origin: CA2951574A1] The invention relates to a method for producing a low-alloy steel ingot, comprising the following steps: a) melting all or part of an electrode using a vacuum arc remelting process, the electrode comprising, before melting, iron and carbon, the melted portion of the electrode being collected in a crucible and thus forming a melt within the crucible, and b) solidifying the melt by means of a heat exchange between the melt and a coolant, the heat exchange carried out enabling an average solidification speed to be established during step b), which is no higher than 45 µm/s, and enabling a low-alloy steel ingot to be obtained.

IPC 8 full level

**C22B 9/00** (2006.01); **C22B 9/04** (2006.01); **C22B 9/20** (2006.01)

CPC (source: CN EP RU US)

**B22D 27/02** (2013.01 - EP US); **B22D 27/04** (2013.01 - EP US); **C22B 9/04** (2013.01 - CN EP US); **C22B 9/20** (2013.01 - CN EP RU US); **C22C 38/00** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **F27B 3/28** (2013.01 - RU); **F27D 19/00** (2013.01 - RU)

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

DOCDB simple family (publication)

**FR 3021977 A1 20151211**; **FR 3021977 B1 20171006**; BR 112016028856 A2 20170822; CA 2951574 A1 20151217; CA 2951574 C 20220628; CN 106574321 A 20170419; CN 106574321 B 20190118; EP 3155137 A1 20170419; EP 3155137 B1 20190731; EP 3536815 A1 20190911; FR 3055340 A1 20180302; FR 3055340 B1 20210730; JP 2017524828 A 20170831; RU 2017100062 A 20180718; RU 2017100062 A3 20190530; RU 2695682 C2 20190725; US 10364479 B2 20190730; US 11560612 B2 20230124; US 2017130297 A1 20170511; US 2019309390 A1 20191010; WO 2015189083 A1 20151217

DOCDB simple family (application)

**FR 1455202 A 20140610**; BR 112016028856 A 20150603; CA 2951574 A 20150603; CN 201580031242 A 20150603; EP 15727949 A 20150603; EP 19169956 A 20150603; EP 2015062406 W 20150603; FR 1757823 A 20170823; JP 2017517188 A 20150603; RU 2017100062 A 20150603; US 201515317508 A 20150603; US 201916450219 A 20190624