

Title (en)

METHOD FOR ADDING ZINC TO MOLTEN STEEL AND PROCESS FOR PRODUCING ZINC-CONTAINING STEEL

Title (de)

VERFAHREN ZUM HINZUFÜGEN VON ZINK ZU STAHL SCHMELZE UND VERFAHREN ZUR HERSTELLUNG VON ZINKHALTIGEM STAHL

Title (fr)

PROCÉDÉ D'ADDITION DE ZINC À DE L'ACIER LIQUIDE, ET PROCÉDÉ DE PRODUCTION D'ACIER CONTENANT DU ZINC

Publication

EP 2695953 B1 20190814 (EN)

Application

EP 11862742 A 20111219

Priority

- JP 2011078118 A 20110331
- JP 2011079350 W 20111219

Abstract (en)

[origin: EP2695953A1] A method is provided by which it is possible to easily add zinc to a molten steel in high yield. The method for adding zinc to a molten steel comprises supplying a composite oxide of Zn with Al and/or Si to a molten steel. The method for adding zinc to a molten steel may further include supplying the oxide of Ca to the molten steel. The molten steel preferably is a molten steel for a hot work tool steel. A process for producing a zinc-containing steel is also provided in which the molten steel to which zinc has been added by the method for adding zinc to a molten steel is cast. The cast zinc-containing steel preferably has a Zn content of 0.001 mass% or higher.

IPC 8 full level

C22C 38/02 (2006.01); **C21C 7/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01);
C22C 38/52 (2006.01)

CPC (source: EP)

C21C 7/0006 (2013.01); **C22C 38/00** (2013.01); **C22C 38/002** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/44** (2013.01);
C22C 38/46 (2013.01); **C22C 38/52** (2013.01)

Citation (examination)

RU 2396364 C1 20100810 - OOO PROMY KOMPANIJA VTORALJUMI [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)

EP 2695953 A1 20140212; EP 2695953 A4 20141008; EP 2695953 B1 20190814; CN 103443297 A 20131211; CN 103443297 B 20151125;
JP 5761335 B2 20150812; JP WO2012132138 A1 20140724; TW 201239104 A 20121001; TW I447232 B 20140801;
WO 2012132138 A1 20121004

DOCDB simple family (application)

EP 11862742 A 20111219; CN 201180069426 A 20111219; JP 2011079350 W 20111219; JP 2013507067 A 20111219;
TW 101109586 A 20120321