

Title (en)

TUYERE FOR MANUFACTURING MOLTEN IRON AND METHOD FOR INJECTING GAS USING THE SAME

Title (de)

WINDFORM ZUR HERSTELLUNG VON SCHMELZFLÜSSIGEM EISEN UND VERFAHREN ZUM EINLEITEN VON GAS DAMIT

Title (fr)

TUYÈRE POUR LA PRODUCTION DE FER EN FUSION ET PROCÉDÉ D'INJECTION DE GAZ AU MOYEN DE CETTE TUYÈRE

Publication

EP 2193212 A4 20120613 (EN)

Application

EP 08828480 A 20080829

Priority

- KR 2008005097 W 20080829
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- KR 20070136401 A 20071224

Abstract (en)

[origin: WO2009028909A2] A tuyere for manufacturing molten iron is provided. The tuyere includes i) an oxygen injection opening that is configured to inject oxygen therethrough, and ii) a sealing gas injection opening that is located to be spaced apart from the oxygen injection opening and is configured to inject a sealing gas surrounding the oxygen.

IPC 8 full level

C21B 11/00 (2006.01); **C21B 7/16** (2006.01); **C21B 13/00** (2006.01); **C21B 13/14** (2006.01)

CPC (source: EP KR US)

C21B 7/16 (2013.01 - KR); **C21B 7/163** (2013.01 - EP US); **C21B 11/00** (2013.01 - KR); **C21B 13/00** (2013.01 - EP KR US); **C21B 13/002** (2013.01 - EP US); **C21B 13/14** (2013.01 - EP US); **F27B 1/16** (2013.01 - EP US); **F27D 3/16** (2013.01 - EP US); **C21C 5/48** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

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WO 2009028909 A2 20090305; **WO 2009028909 A3 20090507**; AU 2008293166 A1 20090305; AU 2008293166 B2 20110908; BR PI0815742 A2 20150218; BR PI0815742 B1 20191008; CA 2696872 A1 20090305; CA 2696872 C 20140225; CN 101790589 A 20100728; EP 2193212 A2 20100609; EP 2193212 A4 20120613; EP 2193212 B1 20190417; JP 2010537153 A 20101202; JP 5470251 B2 20140416; KR 100948927 B1 20100323; KR 20090023002 A 20090304; RU 2010111234 A 20111010; RU 2478121 C2 20130327; UA 93635 C2 20110225; US 2011101576 A1 20110505; ZA 201001047 B 20110428

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