

Title (en)
APPARATUS FOR MANUFACTURING COMPACTED IRONS OF REDUCED MATERIALS COMPRISING FINE DIRECT REDUCED IRONS AND APPARATUS FOR MANUFACTURING MOLTEN IRONS USING THE SAME

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KOMPAKTIERTEM EISEN AUS REDUZIERTEN MATERIALIEN, DIE FEINES DIREKT REDUZIERTES EISEN UMFASSEN, UND VORRICHTUNG ZUR HERSTELLUNG VON SCHMELZFLÜSSIGEM EISEN

Title (fr)
APPAREIL DE FABRICATION DE FERS COMPACTES EN MATERIAUX REDUITS COMPRENANT DES FERS DIRECTEMENT REDUITS A GRAIN FIN ET APPAREIL DE FABRICATION DE FERS FONDUS AU MOYEN DE CET APPAREIL

Publication
EP 2314723 A1 20110427 (EN)

Application
EP 10194663 A 20050630

Priority

- EP 05756726 A 20050630
- KR 20040050469 A 20040630
- KR 20040055556 A 20040716

Abstract (en)
The present invention relates to an apparatus for manufacturing compacted irons and an apparatus for manufacturing molten irons using the same. The apparatus for manufacturing compacted irons according to the present invention includes a charging hopper into which reduced materials containing fine reduced irons are charged; a couple of rolls separated from each other to form a gap between the rolls; a feeding box for transferring the reduced materials comprising fine reduced irons to the couple of the rolls and a couple of cheek plates installed on the sides of the couple of rolls. The charging hopper includes guide tubes extending downward. The couple of rolls compact the reduced materials containing fine reduced irons discharged from the charging hopper and manufacture compacted irons. The couple of cheek plates prevent leakage of the reduced materials containing fine reduce irons charged into the gap and are overlapped with the guide tubes in the axis direction of the rolls.

IPC 8 full level
C22B 1/16 (2006.01)

CPC (source: EP)
B30B 15/308 (2013.01); **C22B 1/248** (2013.01)

Citation (applicant)

- US 5534046 A 19960709 - KEPPLINGER LEOPOLD WERNER DIPL [AT], et al
- US 5666638 A 19970909 - BERGENDAHL HANS GEORG [DE]
- US 4093455 A 19780606 - PIETSCH WOLFGANG B
- US 4076520 A 19780228 - PIETSCH WOLFGANG B
- US 4033559 A 19770705 - PIETSCH WOLFGANG B

Citation (search report)

- [X] US 3860376 A 19750114 - COHLMAYER STANLEY H, et al
- [X] US 3988095 A 19761026 - MERSCH PETER, et al
- [XP] WO 2004057042 A1 20040708 - POSCO [KR], et al
- [E] WO 2006006820 A1 20060119 - POSCO [KR], et al
- [AD] US 4093455 A 19780606 - PIETSCH WOLFGANG B
- [A] US 2001047698 A1 20011206 - MCCLELLAND JAMES M [US], et al
- [A] US 3883110 A 19750513 - HENDRICKSON LUTHER G, et al

Cited by
WO2022174957A1; DE202021103408U1; DE102021103573A1; DE102021103573B4; DE102020104526A1; WO2021164919A1; DE102020104526B4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR LV MK YU

DOCDB simple family (publication)
WO 2006004350 A1 20060112; AT E549424 T1 20120315; BR PI0506142 A 20061003; BR PI0506142 A8 20171107; BR PI0506142 B1 20131001; BR PI0506142 B8 20171219; EP 1776484 A1 20070425; EP 1776484 A4 20071226; EP 1776484 B1 20120314; EP 2314723 A1 20110427; EP 2314723 B1 20160330; RU 2007101512 A 20080810; RU 2354721 C2 20090510

DOCDB simple family (application)
KR 2005002065 W 20050630; AT 05756726 T 20050630; BR PI0506142 A 20050630; EP 05756726 A 20050630; EP 10194663 A 20050630; RU 2007101512 A 20050630