

Title (en)

Device for decarbonising a steel melt

Title (de)

Vorrichtung zur Entkohlung einer Stahlschmelze

Title (fr)

Dispositif de décarburation d'une fonte d'acier

Publication

EP 1764421 A3 20071226 (DE)

Application

EP 06020935 A 20030715

Priority

- EP 03792199 A 20030715
- AT 12502002 A 20020821

Abstract (en)

[origin: WO2004018714A1] The invention relates to methods and a device for decarbonising a steel melt (3) during the production of stainless steel in a metallurgical vessel (2), especially in a converter, whereby the steel melt (3) is treated with oxygen and optionally an inert gas, especially argon and/or nitrogen. During the decarbonisation of said steel melt (3) such that it has a carbon content of below 0.3 wt. %, oxygen and optionally inert gas, especially argon and/or nitrogen, are brought into contact therewith (3) by means of an opening beneath the surface of the steel melt (3) and a blowing device arranged above the surface of the steel melt (3).

IPC 8 full level

C21C 5/35 (2006.01); **C12N 5/06** (2006.01); **C12N 15/87** (2006.01); **C21C 5/00** (2006.01); **C21C 5/32** (2006.01); **C21C 5/46** (2006.01); **C21C 7/068** (2006.01); **C21C 7/072** (2006.01)

CPC (source: EP)

C21C 5/005 (2013.01); **C21C 5/32** (2013.01); **C21C 5/35** (2013.01); **C21C 5/4606** (2013.01); **C21C 7/068** (2013.01); **C21C 7/0685** (2013.01); **C21C 7/072** (2013.01); **F27D 3/16** (2013.01)

Citation (search report)

- [X] JP H06158142 A 19940607 - SUMITOMO METAL IND
- [A] US 5540753 A 19960730 - TAKANO HIRONORI [JP], et al
- [A] US 4545786 A 19851008 - TANOUE TOYOSUKE [JP], et al

Cited by

EP2216110A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004018714 A1 20040304; AT 411530 B 20040225; AT A12502002 A 20030715; AT E363546 T1 20070615; AU 2003257462 A1 20040311; CN 100532581 C 20090826; CN 1675383 A 20050928; DE 50307383 D1 20070712; EP 1530648 A1 20050518; EP 1530648 B1 20070530; EP 1764421 A2 20070321; EP 1764421 A3 20071226; ES 2287557 T3 20071216; RU 2005107698 A 20050910; RU 2319750 C2 20080320

DOCDB simple family (application)

EP 0307634 W 20030715; AT 03792199 T 20030715; AT 12502002 A 20020821; AU 2003257462 A 20030715; CN 03819762 A 20030715; DE 50307383 T 20030715; EP 03792199 A 20030715; EP 06020935 A 20030715; ES 03792199 T 20030715; RU 2005107698 A 20030715