

Title (en)

METHOD AND DEVICE FOR REDUCING THE OXYGEN CONTENT OF A COPPER MELT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERMINDERUNG DES SAUERSTOFFGEHALTES EINER KUPFERSCHMELZE

Title (fr)

PROCEDE ET DISPOSITIF POUR REDUIRE LA TENEUR EN OXYGENE D'UN BAIN DE CUIVRE

Publication

EP 1301642 B1 20050309 (DE)

Application

EP 01956290 A 20010621

Priority

- DE 0102316 W 20010621
- DE 10035593 A 20000721

Abstract (en)

[origin: WO0208476A1] The invention relates to a method and to a device for reducing the oxygen content of a copper melt. One or a plurality of porous plugs is disposed in the lower zone of the copper melt, when seen in a perpendicular orientation, from which circulation gas emanates. The circulation gas rises in the copper melt and the copper melt itself is electrically stirred. The copper is first molten in a shaft furnace and is then guided to a treatment furnace via a transport channel. Both in the zone of the transport channel and in the zone of the treatment furnace the circulation gas emanates from the porous plugs and rises in the copper melt. From at least one of said porous plugs the circulation gas emanates in a composition comprising 30 % to 70 % of a reducing gas and 70 % to 30 % of an inert gas.

IPC 1-7

C22B 15/14; **C22B 9/05**

IPC 8 full level

C22B 9/05 (2006.01); **C22B 15/00** (2006.01); **C22B 15/14** (2006.01)

CPC (source: EP US)

C22B 9/05 (2013.01 - EP US); **C22B 15/006** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0208476 A1 20020131; AT E290613 T1 20050315; AU 7837001 A 20020205; CN 1271225 C 20060823; CN 1443248 A 20030917; DE 10035593 A1 20020131; DE 50105546 D1 20050414; EP 1301642 A1 20030416; EP 1301642 B1 20050309; US 2004007091 A1 20040115; US 7264767 B2 20070904

DOCDB simple family (application)

DE 0102316 W 20010621; AT 01956290 T 20010621; AU 7837001 A 20010621; CN 01813120 A 20010621; DE 10035593 A 20000721; DE 50105546 T 20010621; EP 01956290 A 20010621; US 33322203 A 20030718