

Title (en)

BLOWING LANCE FOR INJECTING AN OXIDISING GAS, ESPECIALLY OXYGEN, FOR TREATING METAL MELTS

Publication

EP 0055956 B1 19870805 (FR)

Application

EP 81402009 A 19811216

Priority

FR 8027410 A 19801222

Abstract (en)

[origin: ES8302791A1] A lance for blowing an oxydizing gas onto a bath of molten metal, especially for blowing oxygen on a bath of molten pig iron for transforming the same into steel. The lance is provided in an end wall of its nose with at least one central aperture for blowing gas jets at great impulsion onto the bath and a plurality of auxiliary apertures for blowing gas streams of considerably smaller impulsion onto the bath. The auxiliary apertures are constituted by elongated slots through the end wall arranged spaced from each other along a circle at a distance of adjacent edges of the slots and that at least one main aperture of about 2-20 cm. This construction permits to improve the amount of secondary combustion of the reaction gas while prolonging the useful life of the nose of the lance. The lance is advantageously used in conjunction with blowing a stirring gas through the bath of molten metal through refractory gas permeable elements provided in the bottom of a crucible containing the bath.

IPC 1-7

C21C 5/46; **F27D 3/16**

IPC 8 full level

C21C 5/46 (2006.01); **F27D 3/16** (2006.01)

CPC (source: EP US)

C21C 5/4606 (2013.01 - EP US); **F27D 3/16** (2013.01 - EP US)

Cited by

EP0490100A1; EP0207656A1; GB2230848A; GB2230848B; EP0086694A1; FR2521167A1; EP0529667A3; US5295816A; EP0629710A1; EP0490099A1; EP0364721A1

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EP 0055956 A1 19820714; **EP 0055956 B1 19870805**; AT E28759 T1 19870815; AU 541840 B2 19850124; AU 7877681 A 19820701; BR 8108301 A 19820706; CA 1178052 A 19841120; DE 3176342 D1 19870910; DE 55956 T1 19830120; ES 508277 A0 19821201; ES 8302791 A1 19821201; FR 2496699 A1 19820625; FR 2496699 B1 19850621; JP S57131313 A 19820814; PT 74151 A 19820101; PT 74151 B 19830628; US 4396182 A 19830802; ZA 818828 B 19821124

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