

Title (en)

OXYGEN LANCE HEAD FOR TREATING MOLTEN MASSES

Title (de)

LANZENKOPF EINER BLASLANZE ZUR BEHANDLUNG VON SCHMELZEN

Title (fr)

TETE DE LANCE A OXYGENE POUR TRAITER DES MATIERES FONDUES

Publication

EP 0842303 B1 19990324 (DE)

Application

EP 96931738 A 19960729

Priority

- DE 9601444 W 19960729
- DE 19529932 A 19950802

Abstract (en)

[origin: US6033621A] PCT No. PCT/DE96/01444 Sec. 371 Date Jun. 10, 1998 Sec. 102(e) Date Jun. 10, 1998 PCT Filed Jul. 29, 1996 PCT Pub. No. WO97/05290 PCT Pub. Date Feb. 13, 1997Disclosed is a lance head for a water-cooled oxygen lance for treating melts, especially for oxygen top-blowing onto steel melts in a converter, with at least one expansion nozzle which widens conically in the direction of the bath surface proceeding from a pipe portion having the narrowest nozzle cross section. This nozzle has, following the pipe portion that has the critical cross section, a first conical widening which opens into a cylindrical duct. At least one annular chamber is provided in the duct. A nozzle part which widens conically at least partially adjoins the annular chamber before the mouth of the expansion nozzle.

IPC 1-7

C21C 5/46; F27D 3/16

IPC 8 full level

C21C 5/46 (2006.01); C21C 7/072 (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)

Designated contracting state (EPC)

AT DE GB IT

DOCDB simple family (publication)

US 6033621 A 20000307; AT E178100 T1 19990415; AU 7082696 A 19970226; DE 19529932 C1 19970116; DE 59601512 D1 19990429; EP 0842303 A1 19980520; EP 0842303 B1 19990324; JP H11500492 A 19990112; WO 9705290 A1 19970213

DOCDB simple family (application)

US 1100898 A 19980610; AT 96931738 T 19960729; AU 7082696 A 19960729; DE 19529932 A 19950802; DE 59601512 T 19960729; DE 9601444 W 19960729; EP 96931738 A 19960729; JP 50711796 A 19960729