

Title (en)
Lance for introducing reactants into molten metal

Title (de)
Lanze zum Einbringen von Behandlungsmitteln in Metallschmelzen

Title (fr)
Lance pour l'introduction d'agents de traitement dans des masses métalliques en fusion

Publication
EP 0594326 B1 19970917 (EN)

Application
EP 93307955 A 19931006

Priority
GB 9221842 A 19921017

Abstract (en)
[origin: EP0594326A1] The invention relates to a lance used to introduce reactants into molten metal, e.g. steel and aims to provide a lance of improved service life. The lance of the invention comprises an inner tube (21) and a refractory casing (25), the inner tube having an inlet (22) adjacent one end and an outlet (26) adjacent its other end, whereby reactant can be injected through the lance, in which the inner tube (21) is spaced from an outer tube (23) to provide an annular air gap (24) between the two tubes, the refractory casing (25) being provided on the outer tube (23) and a gas pipe (27) extending between the inner and outer tubes (21,23), the gas pipe (27) having its outlet adjacent the region of the outlet (26) of the inner tube (21), whereby gas passing through the pipe (27) can exit to atmosphere through the annular air gap (24).

IPC 1-7
C21C 5/46; C21C 1/02; F27D 3/16; C22B 9/05

IPC 8 full level
C21C 1/02 (2006.01); **C21C 5/46** (2006.01); **F27D 3/16** (2006.01)

CPC (source: EP)
C21C 1/02 (2013.01); **C21C 5/4613** (2013.01); **F27D 3/16** (2013.01)

Cited by
CN109210936A; WO2020077960A1; WO2007021238A1

Designated contracting state (EPC)
BE DE ES FR GB IT LU NL SE

DOCDB simple family (publication)
EP 0594326 A1 19940427; EP 0594326 B1 19970917; DE 69313971 D1 19971023; DE 69313971 T2 19980319; ES 2109444 T3 19980116; FI 100726 B 19980213; FI 934562 A0 19931015; FI 934562 A 19940418; GB 9221842 D0 19921202

DOCDB simple family (application)
EP 93307955 A 19931006; DE 69313971 T 19931006; ES 93307955 T 19931006; FI 934562 A 19931015; GB 9221842 A 19921017