

Title (en)

An arrangement for installing and removing a lance into and from a metallurgical vessel and a method therefor.

Title (de)

Einrichtung zum Ein- und Ausbringen einer Lanze in ein und aus einem metallurgischen Gefäß.

Title (fr)

Dispositif d'installation et de démontage d'une lance dans un récipient métallurgique.

Publication

EP 0444006 B1 19940223 (DE)

Application

EP 91890014 A 19910128

Priority

DE 4003068 A 19900202

Abstract (en)

[origin: EP0444006A1] Lances have hitherto been inserted into the metallurgical vessel by means of a lance carriage which can be moved along rails arranged next to the metallurgical vessel. Such arrangements are complex in construction and not sufficiently operationally reliable. The new arrangement is intended to take up little space and have a high degree of operational reliability. <??>The lance (7) is itself designed as a guide and is guided by means of a drive (26, 27, 30) fixed in the direction of the axis (24) of the lance (7) and can be moved in the direction of its axis (24). <??>The drive (26, 27, 30) is mounted in such a way that it can be swivelled about two intersecting axes (16,22). <IMAGE>

IPC 1-7

C21C 5/46

IPC 8 full level

C21C 5/30 (2006.01); **C21C 5/46** (2006.01); **F27D 3/16** (2006.01)

CPC (source: EP US)

C21C 5/462 (2013.01 - EP US)

Citation (examination)

US 4747582 A 19880531 - BERGSTROEM SVEN E [SE], et al

Cited by

WO9744497A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0444006 A1 19910828; EP 0444006 B1 19940223; AT E101877 T1 19940315; CA 2035127 A1 19910803; CN 1022575 C 19931027; CN 1053816 A 19910814; DE 4003068 C1 19910725; DE 59101037 D1 19940407; JP H04214815 A 19920805; JP H0742493 B2 19950510; RU 1836439 C 19930823; TR 26915 A 19940822; US 5200136 A 19930406

DOCDB simple family (application)

EP 91890014 A 19910128; AT 91890014 T 19910128; CA 2035127 A 19910129; CN 91100664 A 19910202; DE 4003068 A 19900202; DE 59101037 T 19910128; JP 1070791 A 19910131; SU 4894370 A 19910201; TR 11291 A 19910201; US 64865191 A 19910131