

Title (en)

Collector nozzle in a device for controlling the outflow of cast steel from a ladle or from a tundish.

Title (de)

Sammlerausguss in einer Vorrichtung zum Kontrollieren des Ausflusses von flüssigem Stahl aus einer Pfanne oder eines Zwischengefäßes.

Title (fr)

Busette collectrice dans un dispositif pour contrôler l'écoulement de l'acier liquide sortant d'une poche de coulée ou d'un panier intermédiaire.

Publication

EP 0171589 A1 19860219 (EN)

Application

EP 85108394 A 19850706

Priority

IT 2194884 A 19840718

Abstract (en)

A collector nozzle (2) in a device for controlling outflow of cast steel from a ladle or from a tundish, which nozzle incorporates at least one main duct (7) placed ringwise round the outlet passage of the nozzle, a first plurality of secondary ducts (12) connecting each of the above main ducts (17) with a portion of said outlet passage and a second plurality of secondary ducts (13) connecting each of said main ducts (17) with the environment outside the nozzle, at the latter's lower end. The main ducts being filled with a current of inert gas under pressure so that the inert gas reaches the area of said passage where otherwise aluminium oxides would become deposited and immediately outside said nozzle to create overpressure of inert gas, thus preventing air from penetrating through the fissures between the nozzle and the tube protecting the flow of cast steel.

IPC 1-7

B22D 11/10; **B22D 41/08**

IPC 8 full level

B22D 41/08 (2006.01); **B22D 41/42** (2006.01); **B22D 41/58** (2006.01); **B22D 11/10** (2006.01)

CPC (source: EP)

B22D 41/42 (2013.01); **B22D 41/58** (2013.01)

Citation (search report)

- [X] GB 2094454 A 19820915 - FLOGATES LTD
- [Y] EP 0048641 A1 19820331 - AIR LIQUIDE [FR]
- [Y] FR 2252157 A1 19750620 - USS ENG & CONSULT [US]
- [Y] DE 2517834 A1 19761104 - LINDE AG

Cited by

CN108127110A; CN103350222A; DE3624320A1; CN110809499A; GB2179573A; BE1000818A3; GB2313076A; GB2313076B; FR2757431A1; EP0293564A3; US5613545A; EA000604B1; EA000774B1; EP0385617A1; EP0373555A3; EP0370934A1; FR2639267A1; US5060715A; US5174360A; WO0183138A1; WO0029147A1; US6250520B1; US6450376B1; WO9817421A1; WO9817420A1

Designated contracting state (EPC)

AT BE CH DE FR GB LI LU NL SE

DOCDB simple family (publication)

EP 0171589 A1 19860219; **EP 0171589 B1 19880504**; AT E33952 T1 19880515; DE 3562461 D1 19880609; IT 1176428 B 19870818; IT 8421948 A0 19840718; JP S6133745 A 19860217

DOCDB simple family (application)

EP 85108394 A 19850706; AT 85108394 T 19850706; DE 3562461 T 19850706; IT 2194884 A 19840718; JP 27426884 A 19841227