

Title (en)  
Shroud nozzle

Title (de)  
Gußrohr

Title (fr)  
Tube de protection de jet.

Publication  
**EP 2301693 A1 20110330 (FR)**

Application  
**EP 09008451 A 20090629**

Priority  
EP 09008451 A 20090629

Abstract (en)

The handling device (26") comprises a unit (28, 30) for maintaining a jet protection pipe in downstream from a metal casting regulation valve, and a unit for attachment to a valve driving unit. The valve has an open configuration and a closed configuration under the action of the driving unit. Fastening units are arranged so that the handling device follows a movement imposed by the driving unit on the valve. A unit comprising a rotative motor is arranged with driving unit for controlling the pipe. The driving unit comprises a hydraulic cylinder (22) and a rod (24) sliding in the cylinder. The handling device (26") comprises a unit (28, 30) for maintaining a jet protection pipe in downstream from a metal casting regulation valve, and a unit for attachment to a valve driving unit. The valve has an open configuration and a closed configuration under the action of the driving unit. Fastening units are arranged so that the handling device follows a movement imposed by the driving unit on the valve. A unit comprising a rotative motor is arranged with driving unit for controlling the pipe. The driving unit comprises a hydraulic cylinder (22) and a rod (24) sliding in the cylinder. The pipe control unit and driving unit are connected around the cylinder by a piece, which is displaced with the rod. The maintenance unit has a flow position and stop position, where the displacement between the two positions has a U trajectory, and comprises a grip tube in the form of a spoon provided with a receiving slot tube and a release tube and valve e.g. arm 63. Independent claims are included for: (1) a jet protection pipe for a flow of liquid metal from a casting ladle towards a metal distributor; and (2) a device for driving the regulation of valve for the flow of liquid metal.

Abstract (fr)

La présente invention a pour principal objet, un tube de protection de jet pour l'écoulement de métal liquide depuis une poche de coulée vers un répartiteur de métal, le tube possédant un axe longitudinal et comportant une tête de préhension du tube à une extrémité. Selon l'invention, cette tête de préhension est fusiforme.

IPC 8 full level

**B22D 41/56** (2006.01); **B22D 11/106** (2006.01)

CPC (source: EP)

**B22D 11/106** (2013.01); **B22D 41/56** (2013.01)

Citation (search report)

- [A] KR 20040021971 A 20040311 - POSCO
- [A] FR 2694711 A1 19940218 - DAUSSAN & CO [FR]
- [AD] JP S57115968 A 19820719 - NISSHIN STEEL CO LTD
- [A] EP 0577909 A1 19940112 - FLOCON ITALIANA [IT]
- [A] WO 9634713 A1 19961107 - VESUVIUS FRANCE SA [FR], et al

Cited by

EP2524748A1; CN102784910A; WO2012156073A1

Designated contracting state (EPC)

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