

Title (en)

SHUT-OFF AND/OR CONTROL ELEMENT FOR TAPPING MOLTEN METAL MELTS FROM A METALLURGICAL CONTAINER

Publication

**EP 0356618 B1 19921111 (DE)**

Application

**EP 89107511 A 19890426**

Priority

DE 3826245 A 19880802

Abstract (en)

[origin: JPH0270374A] PURPOSE: To ensure the good sealness of a closing mechanism in the molten metal tapping port of a metallurgical vessel by mutually conforming the coefficients of thermal expansion in both refractory parts with each other at the closing parts of the molten metal tapping hole so as to develop an annular gap which prevents the penetration of the molten metal during pouring operation. CONSTITUTION: In the closing and regulating mechanism for tapping port of the molten metal from the metallurgical vessel, a fixed part 2 of fixed refractory portion and a rotary part 3 of rotary refractory portion, are provided. Cylindrical sealing surfaces 17, 18 in both parts 2, 3 are formed and mutually fitted. Then, the coefficients of thermal expansion in the fixed part 2 and the rotary part 3 of both refractory portions are mutually conformed with each other so as to develop the annular gap 19 for executing the clearance fitting which prevents the penetration of the molten metal during pouring operation. The annular gap is desirable to be 0.05-0.7 mm at a low temp. In this way, the good sealness of the closing mechanism in the molten metal tapping port of the metallurgical vessel can be guaranteed.

IPC 1-7

**B22D 41/14**

IPC 8 full level

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CPC (source: EP KR US)

**B22D 37/00** (2013.01 - KR); **B22D 41/14** (2013.01 - EP US)

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Cited by

DE102009033934B3; EP0429860A3; EP0423450A3; WO2011009579A1

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