

Title (en)

A SLIDE GATE FOR A MOLTEN-STEEL VESSEL

Title (de)

SCHIEBEVERSCHLUSS FÜR STAHLSCHELMELZEGERÄß

Title (fr)

PORTE COULISSANTE DESTINÉE À UN CONTENANT EN ACIER FONDU

Publication

**EP 1944106 B1 20160907 (EN)**

Application

**EP 06805069 A 20061026**

Priority

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Abstract (en)

[origin: EP1944106A1] The present invention provides a ladle flow control system, which includes the base plate fixed on the ladle; A housing is fixed on this base plate, with the top of housing being connected with the driving mechanism of sliding nozzle; A carrier frame is set on this housing, and an elastic used for generating pressure is provided on the carrier frame; A slider is set on the carrier frame; notches are set on the corresponding surfaces of the housing and slider, and bottom plate and slide plate are respectively embedded in one notch, a rolling mechanism is set on said carrier frame, a guide mechanism is correspondingly set on the slider; the guide mechanism correspondingly set on the slider makes reciprocating motion relative to the rolling mechanism set on the carrier frame, so as to control the open or close of the ladle sliding nozzle. In the present invention, the rolling mechanism is symmetrically set on the carrier frame, and the guide mechanism is correspondingly set on the slider. In the relative motion between the slider and the carrier frame, the fluctuation of its pressure is obviously decreased, so that the overall stability of the system is improved. The elastic element is isolated with the high-temperature zone, which not only leads to relatively low working temperature but also to lasting pressure and long life or permanence.

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