

Title (en)

Casting apparatus for controlling puddle stability and nozzle degradation.

Title (de)

Gießvorrichtung zum Kontrollieren der Stabilität des Giesstümpels und der Düsenabnutzung.

Title (fr)

Appareil de coulée pour contrôler la stabilité du ménisque de coulée et la dégradation de la tuyère de coulée.

Publication

**EP 0126267 A1 19841128 (EN)**

Application

**EP 84104003 A 19840410**

Priority

US 49376783 A 19830512

Abstract (en)

A casting assembly for controlling melt puddle stability and nozzle degradation in planar flow metal casting operations includes a casting nozzle for receiving and dispensing molten metal from a reservoir. The nozzle dispenses the molten metal through an elongated discharge slot onto a relatively moving chill body. The metal solidifies soon after deposit onto the chill body. The discharge slot is defined by a pair of spaced parallel lips. A manifold is provided in the lips for directing an inert gas through the nozzle to isolate the lips, including the exterior surfaces thereof adjacent to the chill body, from molten metal deposited onto the chill body. A surface glaze impermeable to the inert gas is applied to all external surfaces of the nozzle except the exterior lip surfaces to confine passage of the inert gas to critical areas of the nozzle.

IPC 1-7

**B22D 11/06**

IPC 8 full level

**B22D 11/06** (2006.01)

CPC (source: EP)

**B22D 11/064** (2013.01)

Citation (search report)

- [A] FR 2167284 A1 19730824 - SIDERURGIE FSE INST RECH [FR]
- [A] FR 2268583 A1 19751121 - CENTRIFUGATION STE CIVILE ET [FR]
- [X] PATENTS ABSTRACTS OF JAPAN, vol. 7, no. 163(M-229)(1308), 16th July 1983; & JP-A-58 068 455 (TAKAOKA KOGYO K.K.) 23-04-1983

Cited by

US4719963A; DE3827266A1; US5018570A

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