

Title (en)

Process and device for producing coated metal bars, especially metal strips

Title (de)

Verfahren zur Erzeugung von beschichteten Metallsträngen, insbesondere Metallbändern und Beschichtungsanlage

Title (fr)

Procédé et appareil pour fabriquer des barres métalliques revêtues, en particulier des bandes métalliques

Publication

EP 0832989 B1 20040721 (DE)

Application

EP 97116321 A 19970919

Priority

DE 19638905 A 19960923

Abstract (en)

[origin: US6051278A] A method and apparatus for producing metal slabs in which especially a metal strip of steel is conducted through a bottom entry device of a vessel which is filled with molten metal, particularly steel, and, after the molten metal has crystallized onto the metal slab, the coated metal slab, particularly the coated metal strip, is pulled off above the vessel, wherein the crystallization carrier is conducted through the bottom entry device of the vessel which provides a clear opening width between the core strip and the entry device. Controlled cooling is carried out in the bottom area of the vessel containing the molten metal. The temperature of the molten metal at the nozzle exit of the bottom entry device is adjusted to be greater than the liquidus temperature of the molten metal. A meniscus in the pure melt phase is formed at the nozzle exit at the bottom entry device. A distance exists between the meniscus of the molten metal at the nozzle exit and the begin of the solidification. The heat removal in the area of the bottom entry device is controlled in dependence on the strip speed, bath temperature and gap width in such a way that the meniscus is formed freely and stationary at the nozzle exit.

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CPC (source: EP US)

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