

Title (en)

Apparatus for continuous casting of metal strip.

Title (de)

Metallbandgiessvorrichtung.

Title (fr)

Dispositif pour la coulée continue de métal en bande.

Publication

EP 0363702 A1 19900418 (EN)

Application

EP 89117471 A 19890921

Priority

JP 24399488 A 19880930

Abstract (en)

Proposed herein is a twin roll continuous casting apparatus for continuously casting a metal strip through a gap of a pair of internally cooled rolls (1) rotating in the opposite direction to each other having a pair of side dams (2) disposed on both sides of the rolls (1) and a pair of longitudinal dams (3) disposed with their bottom surfaces (11) held slightly above the roll surfaces (1) so that openings are formed between the bottom surfaces (11) of the longitudinal dams (3) and the roll surfaces (1) and that during stationary running of the apparatus the openings are positioned at a level (5) of the surface of molten metal in the pool. The longitudinal dams (3) are capable of preventing formation of triple point solidified shells and make it possible that the surface of molten metal may come in contact with the surfaces of the rolls (1) while forming the transversely uniform contacting edges, and therefore, the proposed apparatus is productive of metal strips having enhanced surface quality which are substantially free from molten metal wrinkles. The advantages are further promoted by using the herein described pouring device (4) having the slit-shaped nozzle (8).

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] PATENT ABSTRACTS OF JAPAN, vol. 12, no. 222 (M-712)[3069], 24 June 1988; & JP-A-63 20 141 (KAWASAKI STEEL CORP.) 27 January 1988
- [A] PATENT ABSTRACTS OF JAPAN, vol. 9, no. 152 (M-391)[1875], 27 June 1985; & JP-A-60 27 448 (ISHII KAWAJIMA HARIMA JUKOGYO K.K.) 12 February 1985
- [A] PATENT ABSTRACTS OF JAPAN, vol. 9, no. 60 (M-364)[1783], 16 March 1985; & JP-A-59 193 739 (NIPPON KOKAN K.K.) 2 November 1984
- [A] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 263 (M-342)[1700], 4 December 1984; & JP-A-59 137 162 (ISHIKAWAJIMA HANIMA JUKOGYO K.K.) 7 August 1984

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