Title (en)

Continuous casting apparatus and method.

Title (de)

Vorrichtung und Verfahren zum Stranggiessen.

Title (fr)

Dispositif et procédé pour la coulée continue.

Publication

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Application

EP 88309202 A 19881003

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- US 10821787 A 19871013
- US 19233388 A 19880510

Abstract (en)

Apparatus for continuously casting strip material comprising a casting drum (10) rotatable about a first axis (12), a pair of cheek members (22) including portions slidably engageable with sides of the casting drum mounted for rotation about a second axis (26) spaced from said first axis and a casting belt (14) wrapped around a portion of the cheek members together defining a converging casting arc. The cheek members include peripheral surfaces (22a) engageable by marginal edges of the casting belt which maintain a variable casting gap between a casting surface on the belt and a casting surface on the drum. The eccentric mounting of the cheek members with respect to the casting drum cause the spacing between the belt and the drum to decrease as the end of the casting arc is reached. The cheek members each include tapered side surfaces which together with the casting drum define ear receiving recesses (50) that increase in a radial direction as the end of the casting arc is approached. The ear receiving recesses thus defined permit a liquid metal pool to exist which is of considerably greater depth than the height of the ears cast by the machine. The principles of the invention are also disclosed in connection with an in-the-ring (ITR) type machine, a bessemer type machine and a converging belt type machine.

IPC 1-7

B22D 11/06

IPC 8 full level

B22D 11/06 (2006.01)

CPC (source: EP KR)

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Citation (search report)

- [A] FR 2127026 A1 19721013 JONES & LAUGHLIN STEEL CORP
- [A] DE 1939930 A1 19710218 SCHLOEMANN AG
- [AD] US 2450428 A 19481005 HAZELETT CLARENCE W
- [A] GB 2004787 A 19790411 HAZELETT STRIP CASTING CORP
- [A] PATENT ABSTRACTS OF JAPAN, vol. 11, no. 21 (M-555)[2468], 21st January 1987; & JP-A-61 193 750 (NIPPON STEEL CORP.) 28-08-1986

Cited by

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