

Title (en)

Downstream mould portion with thin sidewalls for continuous casting

Title (de)

Stromabwärts liegendes Teil einer Stranggiesskokille mit dünnen Seitenwänden

Title (fr)

Partie en aval d'une lignotière pour coulée continue ayant des faces latérales minces

Publication

EP 0686444 A1 19951213 (EN)

Application

EP 95107943 A 19950524

Priority

IT UD940093 A 19940606

Abstract (en)

Downstream mould portion with thin sidewalls for continuous casting of slabs, billets or blooms (22), which is applied to a mould (11) comprising at least a crystalliser (12) cooperating with a discharge nozzle (13) suitable to discharge the molten metal to be cast, the crystalliser (12) being associated with a closed-circuit primary cooling system with cooling fluid under pressure, the cooling system comprising a first cooling chamber (23) with an inner circulation of cooling fluid, the downstream mould portion (10) consisting of a plurality of independent elements (10a) defining a cross-section substantially the same as that of the slab, billet or bloom (22) passing through, each element (10a) of the downstream mould portion comprising at least one outer sidewall (16) and one inner sidewall (17) which define a second closed chamber (18) for the circulation of a cooling fluid under pressure, the outer sidewall (16) cooperating with means (20) to feed and means (19) to discharge the cooling fluid, the inner sidewall (17) in contact with the slab, billet or bloom (22) having a continuous resilient thickness of the order of 4 to 10 mm., the pressure of the cooling fluid being governed functionally by the thrusts and deformations of the inner sidewall (17) due to overheating. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

- EP 0268143 A2 19880525 - CONCAST STANDARD AG [CH]
- US 2698467 A 19550104 - VALENTINE TARQUINEE, et al
- EP 0367024 A1 19900509 - DANIELI OFF MECC [IT]
- CH 357835 A 19611031 - SCHLOEMANN AG [DE]

Citation (search report)

- [Y] CH 357835 A 19611031 - SCHLOEMANN AG [DE]
- [A] FR 1465163 A 19670106 - CONCAST AG
- [AD] EP 0268143 A2 19880525 - CONCAST STANDARD AG [CH]
- [A] US 3688833 A 19720905 - BYKOV VLADIMIR ALEXANDROVICH, et al
- [AD] US 2698467 A 19550104 - VALENTINE TARQUINEE, et al
- [AD] EP 0367024 A1 19900509 - DANIELI OFF MECC [IT]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 008, no. 270 (M - 344) 11 December 1984 (1984-12-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 270 (M - 344) 11 December 1984 (1984-12-11)

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