Title (en)

METHOD FOR CONTINUOUS THIN SLAB METAL CASTING

Title (de)

VERFAHREN ZUM STRANGGIESSEN VON DÜNNBRAMMEN AUS METALL

Title (fr)

PROCEDE DE COULEE CONTINUE DE BRAMES FINES DE METAL

Publication

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Application

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Abstract (en)

[origin: US6044898A] PCT No. PCT/DE96/02375 Sec. 371 Date Aug. 18, 1998 Sec. 102(e) Date Aug. 18, 1998 PCT Filed Dec. 3, 1996 PCT Pub. No. WO97/24196 PCT Pub. Date Jul. 10, 1997The invention relates to a process and a continuous-casting mold for casting thin slabs. The mold has an oblong inner cross-sectional area and cooled mold walls. The melt is poured in through at least one delivery nozzle which dips into the melt. To ensure that, during casting, markedly lower stresses and, as a consequence thereof, fewer cracks appear in the strand shell, at least at the casting level being established and at least over a part of the depth of immersion of the delivery nozzle, the ratio of the gap widths STI and SII/2 and the ratio of the cooling capacities LTI and LII of the mold wall are related by the equation: [STI/(SII/2)]/[LTI/LII]>1. STI is the width of the gap formed in the zone immediately surrounding the particular immersed delivery nozzle by the outer surface of the delivery nozzle and by the inner surface of the directly opposite mold wall, and SII/2 is half the width of the gap formed by the inner surfaces in the zones in which the inner surfaces of the mold walls are directly opposite each other. LTI and LII are the cooling capacities of the zones of the mold wall which form the respective gap or gap section.

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