

Title (en)

CONTINUOUS STEEL CASTING APPARATUS.

Title (de)

STAHLSTRANGGIESSANLAGE.

Title (fr)

INSTALLATION A COULEE CONTINUE POUR L'ACIER.

Publication

EP 0679459 A1 19951102 (EN)

Application

EP 93924819 A 19931112

Priority

- JP 9301659 W 19931112
- JP 30418492 A 19921113

Abstract (en)

A continuous steel casting apparatus which is usable for manufacturing a cast steel piece having excellent surface condition by hardening molten steel without bringing the same into contact with solid casting mold walls, and which has simple construction. A high-temperature lead chamber holding molten lead the temperature of which is higher than the solidifying point of steel and a low-temperature lead chamber holding molten lead the temperature of which is lower than the solidifying point of steel are connected to each other via a partition wall. The high-temperature molten lead and low-temperature molten lead are held in the respective chambers so that the liquid levels thereof exceed the upper end of the partition wall, and a communicating layer of the molten lead is formed on the upper side of the partition wall. Two parallel side weirs (side walls) are provided so as to extend between an upstream side of the partition wall and a downstream side thereof. When molten steel is fed continuously between the side weirs of the high-temperature molten lead chamber, it floats on the surface of the molten lead and spreads between the side weirs to flow above the partition wall into the low-temperature molten lead chamber, the molten steel then floating on the surface of the molten lead in the low-temperature molten lead chamber to be solidified and turn into a thin cast steel piece. <IMAGE>

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