Title (en)

MATRIX COATING FLEXIBLE CASTING BELTS, METHOD & APPARATUS FOR MAKING MATRIX COATINGS

Publication

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Application

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Priority

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- US 54975283 A 19831107

Abstract (en)

[origin: EP0304607A2] An apparatus for making fusion-bonded matrix coatings on endless, flexible metallic casting belts for continuous casting machines is described. The fusion-bonded matrix coating comprises a nonmetallic refractory material interspersed substantially uniformly throughout a matrix of heat-resistant metal or metal alloy, for example nickel or nickel alloy. The coating is applied to a revolving belt (10,20) being supported and driven by pulleys (34,36) in a machine by thermally spraying a powdered mixture directly onto the roughened casting surface of the belt. The machine holds the revolving belt under tension and applies cooling to the rear surface of the revolving belt (10,12) opposite to the region where the thermal spray gun (66) is applying the coating to the belt (10,20), and causes the thermal spray gun (66) to traverse uniformly traversely across the belt. The result is to insulate and protect the underlying belt from intimate molten metal contact. The life of the coated belts is dramatically increased, and the surface quality and properties of the cast product are significantly improved.

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CPC (source: EP KR)

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