

Title (en)

METHOD FOR FABRICATION OF THIXOTROPE METALLIC PRODUCTS BY CONTINUOUS CASTING

Publication

EP 0351327 B1 19920212 (FR)

Application

EP 89420240 A 19890705

Priority

FR 8809616 A 19880707

Abstract (en)

[origin: JPH0255650A] PURPOSE: To degenerate dendrites by imparting a motion to the liquid in the solid to move the liquid from a cold zone to a hot zone, vice versa within the prescribed time, and remelting the crystals contained in the liquid on the surface. CONSTITUTION: An upstream part 1 consisting of a heat insulation material forms a hot zone with a liquid metal 2 therein. A downstream part 3 consisting of a heat conductive material is provided with a graphite ring 4 inside, and cooled from the outside by a water film 5 generated from a supply container 6 to form a cold zone. The metal is solidified along the surface 7 by the cooling effect with water to form a cast product 8. The cold zone is surrounded by a coil 9 to which the AC current is supplied to generate the magnetic field. The electromagnetic force is induced, and the liquid is moved toward the hot zone parallel to the axis of a die as indicated by an arrow 10, and then, returned to the cold zone along a wall part of the die as indicated by an arrow 11. Particles 12 are also moved.

IPC 1-7

B22D 11/10; B22D 11/14

IPC 8 full level

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