

Title (en)

Apparatus for the continuous casting of metals and of steel in particular.

Title (de)

Vorrichtung zum Stranggiessen von Metallen, insbesondere von Stahl.

Title (fr)

Dispositif pour la coulée continue de métaux, en particulier de l'acier.

Publication

EP 0367024 A1 19900509 (EN)

Application

EP 89119336 A 19891018

Priority

IT 523288 A 19881031

Abstract (en)

Apparatus for the continuous casting of metals and of steel in particular, which is suitable for vertical, curved or almost horizontal casting and comprises in association with a main ingot mould (10) a downstream mould (12) positioned immediately downstream of the main ingot mould (10) and consisting of a plurality of independent elements, the downstream mould (12) being cooled with water, the apparatus providing for the formation of ingots with a round, oval, square or like section, the downstream mould (12) consisting of a plurality of independent, movable shell elements (15) which can align themselves and have sides (17) not parallel to the direction of sliding of the metal, the sides (17) of each shell element (15) delimiting in conjunction with the sides (17) of the neighbouring shell elements (15) clefts (18) which have a development not parallel to, or according to a spiral in relation to, the axis and surface of the ingot being formed.

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Citation (search report)

- [A] US 3882924 A 19750513 - FUJIKAWA YASUO
- [A] EP 0268143 A2 19880525 - CONCAST STANDARD AG [CH]
- [A] GB 761401 A 19561114 - ROSSI IRVING
- [A] US 4669526 A 19870602 - HURY SHLOMO [US]
- [A] FR 2445744 A1 19800801 - CLESID SA
- [A] US 3580327 A 19710525 - KHIMICH GEORGY LUKICH, et al
- [AD] DE 1252371 B

Cited by

EP0686444A1; EP0492176A1; US5355936A

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