

Title (en)

Method and device for casting a hollow ingot using a controllable cooled core.

Title (de)

Verfahren und Vorrichtung zum Giessen eines hohlen Stahlblockes unter Verwendung eines steuerbaren gekühlten Kerns.

Title (fr)

Procédé et dispositif de coulée d'un lingot creux utilisant un noyau refroidi de manière réglable.

Publication

EP 0515271 A1 19921125 (FR)

Application

EP 92401375 A 19920520

Priority

FR 9106223 A 19910523

Abstract (en)

The central recess of the ingot is formed by using a core (16) placed in the ingot mould (1) in which a stream of coolant fluid circulates. The stream of coolant fluid consists of a principal fluid flow circulated in the central channel of the core (16) and of an additional fluid flow injected into the principal flow. The additional flow is injected preferably by means of a shaft (17) which is fastened transversely in the mandrel (8) of the core (16) and which comprises an opening, preferably in the form of a blast pipe (tuyere) emerging into the central channel. <IMAGE>

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B22D 7/04; **B22D 11/00**

IPC 8 full level

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CPC (source: EP)

B22D 7/04 (2013.01)

Citation (search report)

- [A] EP 0246040 A2 19871119 - KAWASAKI STEEL CO [JP]
- [A] GB 908832 A 19621024 - MANNESMANN AG
- [A] PATENT ABSTRACTS OF JAPAN vol. 11, no. 140 (M-586)(2587) 8 Mai 1987 & JP-A-61 276 744 (KAWASAKI STEEL CORP.) 6 Décembre 1986
- [A] PATENT ABSTRACTS OF JAPAN vol. 6, no. 181 (M-156)(1059) 17 Septembre 1982 & JP-A-57 088 947 (KAWASAKI SEITETSU K.K.) 3 Juin 1982

Cited by

CN102935493A; CN111136227A

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