

Title (en)

Mandrel and mandrel bar for skew-rolling mills

Title (de)

Walzdorn und Walzstange für Schrägwalzwerke

Title (fr)

Mandrin et tige porte-mandrin pour laminoirs obliques

Publication

EP 0787542 A3 19981028 (DE)

Application

EP 97250015 A 19970129

Priority

DE 19604969 A 19960202

Abstract (en)

[origin: EP0787542A2] A method for cooling a mandrel (2) and protecting the inner surface of a blank (10) against oxidation comprises: (a) returning the water used for internal cooling of the mandrel and directing it into the space between the bar (1) and the inner surface of the hollow blank to quench the latter from inside; and (b) supplying at the same time the forming zone around the mandrel with an inert gas to prevent oxidation of the blank inner surface within this zone, forming a barrier against water flow into this zone. Also claimed is an inner pipe-forming tool implementing the above method.

IPC 1-7

B21B 25/04

IPC 8 full level

B21B 25/04 (2006.01)

CPC (source: EP)

B21B 25/04 (2013.01)

Citation (search report)

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- [A] US 2237983 A 19410408 - STEVENSON FINDLATER
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- [YA] PATENT ABSTRACTS OF JAPAN vol. 008, no. 132 (M - 303) 20 June 1984 (1984-06-20)
- [DY] PATENT ABSTRACTS OF JAPAN vol. 007, no. 116 (M - 216) 20 May 1983 (1983-05-20)
- [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 290 (M - 430) 16 November 1985 (1985-11-16)

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CN106825051A; CN103433281A; EP3718655A4; US11344935B2

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EP 0787542 A2 19970806; EP 0787542 A3 19981028; EP 0787542 B1 20031126; DE 19604969 A1 19970807; DE 19604969 C2 20000824; DE 59711039 D1 20040108; ES 2206654 T3 20040516

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