

Title (en)

INTERNALLY COOLED SUPPORTING AND/OR CONVEYING ROLL AND PROCESS FOR MANUFACTURING THIS ROLL

Publication

EP 0101661 B1 19870325 (DE)

Application

EP 83730069 A 19830706

Priority

DE 3231433 A 19820820

Abstract (en)

[origin: ES8404942A1] A roll for the support and transport of ingots is disclosed including a core with a helical duct along the periphery covered by a thin sleeve being secured to the groove or duct separating ridges by welding making sure that coolant cannot flow transverse to the duct and that the sleeve cannot slip off the core. A particular welding technique as employed has broader applications including joining plate or sheet stock.

IPC 1-7

B22D 11/128; B65G 39/00; B23K 33/00

IPC 8 full level

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CPC (source: EP US)

B22D 11/1287 (2013.01 - EP US); **B21B 39/008** (2013.01 - EP US); **B21B 2027/083** (2013.01 - EP US)

Cited by

EP0424527A4; US9630247B2; WO9113709A3

Designated contracting state (EPC)

AT BE FR GB SE

DOCDB simple family (publication)

EP 0101661 A1 19840229; **EP 0101661 B1 19870325**; AT E26078 T1 19870415; CA 1232848 A 19880216; DE 3231433 A1 19840223; DE 3231433 C2 19850711; ES 525040 A0 19840516; ES 8404942 A1 19840516; JP S5950963 A 19840324; US 4631792 A 19861230; ZA 835876 B 19840425

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EP 83730069 A 19830706; AT 83730069 T 19830706; CA 434969 A 19830819; DE 3231433 A 19820820; ES 525040 A 19830819; JP 13666483 A 19830726; US 52476883 A 19830819; ZA 835876 A 19830810