

Title (en)

CLAD MATERIAL, METHOD FOR MANUFACTURING SAID CLAD MATERIAL, AND APPARATUS FOR MANUFACTURING SAID CLAD MATERIAL

Title (de)

BESCHICHTUNGSMATERIAL, VERFAHREN ZUR HERSTELLUNG DES BESCHICHTUNGSMATERIALS UND VORRICHTUNG ZUR HERSTELLUNG DES BESCHICHTUNGSMATERIALS

Title (fr)

MATERIAU PLAQUE, METHODE POUR FABRIQUER LEDIT MATERIAU ET APPAREIL POUR FABRIQUER LEDIT MATERIAU PLAQUE

Publication

EP 1713601 A4 20070718 (EN)

Application

EP 05710378 A 20050210

Priority

- JP 2005002532 W 20050210
- JP 2004035186 A 20040212
- US 54553004 P 20040219

Abstract (en)

[origin: WO2005077569A1] A method for manufacturing a clad material in which a core material is cast and skin materials are pressure-bonded thereon aims to prevent deterioration of adhesiveness of the core material and the skin materials while keeping sufficient cooling rate of the core material, prevent thickness variation and/or breakage of the skin materials during the manufacturing process, and keep the surface property of the cooling rolls constant. The method for manufacturing a clad material (11) includes the steps of continuously supplying molten metal (M) into a gap between a pair of cooling rollers (2a) (2b) to cast a core material, and cladding skin materials (10a) (10b) on both surfaces of the core material with hot rolling by continuously supplying the skin materials on peripheral surfaces of the cooling rollers so that the skin materials prevent direct contact between the cooling rollers and the molten metal, wherein the skin materials are supplied so as to come into contact with the peripheral surfaces of the cooling rollers, and wherein a contact distance (L1) from a contact starting point (P1) where the skin material begins to come into contact with the cooling roller to a meeting point (P2) where the skin material begins to come into contact with the molten metal is set to 100 times or more of a thickness (t1) of the skin material.

IPC 8 full level

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CPC (source: EP US)

B21B 3/003 (2013.01 - EP US); **B22D 11/008** (2013.01 - EP US); **B22D 11/0622** (2013.01 - EP US); **B32B 15/016** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **B21B 2001/383** (2013.01 - EP US); **B21B 2003/001** (2013.01 - EP US)

Citation (search report)

- [XY] WO 9526241 A1 19951005 - REYNOLDS METALS CO [US]
- [X] EP 0007282 A1 19800123 - TOURNUS MANUF METALLURG [FR]
- [Y] WO 02090031 A2 20021114 - NORSK HYDRO AS [NO], et al
- [Y] WO 03054242 A1 20030703 - NORSK HYDRO TECHNOLOGY [NL], et al
- See references of WO 2005077569A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2005077569 A1 20050825; CN 1933928 A 20070321; EP 1713601 A1 20061025; EP 1713601 A4 20070718; JP 2005254329 A 20050922; US 2007272681 A1 20071129

DOCDB simple family (application)

JP 2005002532 W 20050210; CN 200580008972 A 20050210; EP 05710378 A 20050210; JP 2005033904 A 20050210; US 58919305 A 20050210