

Title (en)

Treatment of longitudinally extending members passing through a bath of molten metal.

Title (de)

Behandeln von langgestreckten Körpern welche durch einen geschmolzenen Metallbad führen.

Title (fr)

Traitement de corps de forme allongée traversant un bain de métal liquide.

Publication

**EP 0514175 A1 19921119 (EN)**

Application

**EP 92304365 A 19920514**

Priority

GB 9110678 A 19910517

Abstract (en)

Metal wire 6 to be coated is passed through a tank 2 containing a volume 4 of molten zinc. The wire emerges from the bath through a refractory shroud 8 whose lower end 10 is submerged in the molten zinc. The shroud 8 has an elongate arcuate slot 18 formed therein at a level above that of the general level of the surface. In use, gas such as nitrogen is continuously bubbled into the molten zinc within the shroud 8. A gas lift pumping effect is thereby created which causes a continuous flow of molten metal over the lower edge of the slot 18. The surface of the molten zinc in the vicinity of the emerging wire is thus continuously renewed. The lift gas creates a non-oxidising atmosphere above the surface. Build up of oxide around the emerging wire is thus prevented. <IMAGE>

IPC 1-7

**C23C 2/36**

IPC 8 full level

**C23C 2/00** (2006.01); **C23C 2/36** (2006.01); **C23C 2/38** (2006.01); **C23C 2/40** (2006.01)

CPC (source: EP)

**C23C 2/36** (2013.01)

Citation (search report)

- [X] GB 486584 A 19380607 - JOSEPH L HERMAN
- [X] US 2702525 A 19550222 - WHITFIELD MARSHALL G
- [X] PATENT ABSTRACTS OF JAPAN vol. 9, no. 228 (C-303)(1951) 13 September 1985 & JP-A-60 089 556 ( SUMITOMO DENKI KOGYO ) 20 May 1985
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 228 (C-303)(1951) 13 September 1985 & JP-A-60 089 556 ( SUMITOMO DENKI KOGYO ) 20 May 1985
- PATENT ABSTRACTS OF JAPAN vol. 12, no. 37 (C-473)(2884) 4 February 1988 & JP-A-62 185 863 ( NIPPON STEEL CORP ) 14 August 1987

Cited by

US9267219B2; CN114369784A; US2011271897A1; WO2011139406A1

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DOCDB simple family (application)

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NZ 24264692 A 19920507; ZA 923359 A 19920508