

Title (en)

Continuous molten copper cladding of ferrous alloys.

Title (de)

Kontinuierliches Plattieren von Eisenlegierungen mit geschmolzenem Kupfer.

Title (fr)

Placage continu d'alliages de fer avec du cuivre fondu.

Publication

**EP 0149064 A1 19850724 (EN)**

Application

**EP 84114169 A 19841123**

Priority

US 56744183 A 19831230

Abstract (en)

A method of forming a composite conductor characterized by a ferrous core and a copper cladding comprises the steps of preheating the core in a hydrogen atmosphere to a temperature approximately 50 to 100 degrees F below the melting point of copper, drawing the preheated core in an upwardly vertical direction through a dry orifice and through a molten copper bath at a rate that permits wetting of the core and adhesion of a copper layer to the core, and cooling the composite ferrous core and copper cladding so that solidification of the cladding occurs at a point about the surface of the molten copper bath.

IPC 1-7

**C23C 2/04**; C23C 2/38; B22D 11/00; B22D 19/00; B23K 20/00

IPC 8 full level

**C23C 2/04** (2006.01); **C23C 2/38** (2006.01)

CPC (source: EP)

**C23C 2/04** (2013.01); **C23C 2/38** (2013.01)

Citation (search report)

- WO 8103136 A1 19811112 - EKEROT S
- GB 1527746 A 19781011 - GEN ELECTRIC
- AT 239043 B 19650310 - GEN ELECTRIC [US]
- PATENT ABSTRACTS OF JAPAN, unexamined applications, C field, vol. 4, no. 50, April 16, 1980 THE PATENT OFFICE JAPANESE GOVERNMENT page 43 C 7 \* JP - A -55-21 537 ( YAZAKI SOUGIYOU K.K. ) \*

Cited by

EP2360286A1; AU2002217180B2; US7024750B2; WO02055753A1

Designated contracting state (EPC)

AT BE DE FR GB IT

DOCDB simple family (publication)

**EP 0149064 A1 19850724**; DE 149064 T1 19851024

DOCDB simple family (application)

**EP 84114169 A 19841123**; DE 84114169 T 19841123