

Title (en)

PROCESS FOR PRODUCTION OF SMELTING MATERIAL CONTAINING COPPER, CHROMIUM AND AT LEAST ONE VOLATILE COMPONENT AND CONSUMABLE ELECTRODE FOR USE IN SUCH A PROCESS

Publication

EP 0314981 B1 19910918 (DE)

Application

EP 88117417 A 19881019

Priority

DE 3737135 A 19871102

Abstract (en)

[origin: EP0314981A1] To produce smelting materials based on copper and chromium, an electric arc-smelting process is applied, in which the electrode material melting off from a consumable electrode of predetermined empirical composition is collected in a water-cooled mould for cooling without macroscopic segregation of copper and chromium. For smelting the material with a further readily volatile component, a consumable electrode is used according to the invention, which partially consists of a solid alloy of copper with the readily volatile component, the concentration of the readily volatile component in the alloy being higher than in the empirical composition of the smelting material, and the readily volatile component remains bound in the smelting material during the smelting. In the appropriate consumable electrode, which specifically consists of copper and chromium as well as tellurium and/or selenium and/or antimony as the readily volatile component, the latter is at least partially alloyed in the copper as an intermetallic compound, the copper-tellurium alloy or copper-selenium alloy or copper-antimony alloy being present as a compact part in the electrode structure. <IMAGE>

IPC 1-7

C22C 1/02; H01H 1/02

IPC 8 full level

C22B 9/20 (2006.01); **C22C 1/02** (2006.01); **H01H 1/02** (2006.01)

CPC (source: EP KR US)

C22B 4/00 (2013.01 - KR); **C22C 1/02** (2013.01 - EP US); **H01H 1/0206** (2013.01 - EP US)

Cited by

CN111593224A; EP2323148A1; DE3915155A1

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0314981 A1 19890510; EP 0314981 B1 19910918; CN 1018934 B 19921104; CN 1041975 A 19900509; DE 3864979 D1 19911024; IN 171315 B 19920919; JP H01149930 A 19890613; JP H0784628 B2 19950913; KR 890008336 A 19890710; KR 960006449 B1 19960516; US 4906291 A 19900306

DOCDB simple family (application)

EP 88117417 A 19881019; CN 88107634 A 19881101; DE 3864979 T 19881019; IN 874CA1988 A 19881024; JP 27435188 A 19881028; KR 880014408 A 19881102; US 26432788 A 19881028