

Title (en)

PROCESS FOR MANUFACTURING A COMPOSITE ARTICLE FROM CHROMIUM AND COPPER

Publication

EP 0099066 B2 19920722 (DE)

Application

EP 83106620 A 19830706

Priority

- DE 3226604 A 19820716
- DE 3322866 A 19830624

Abstract (en)

[origin: US4503010A] In the method according to the invention, Cr powder is poured into a degased mold, which can be made of graphite. On this Cr powder a piece of low-oxygen copper is placed. Subsequently, the mold is closed with a porous cover, which can also be made of graphite. Then the mold is degased in a high-vacuum furnace at room temperature until a pressure of better than 10⁻⁴ mb is reached. Thereafter, the furnace temperature is increased to as high as possible a temperature below the melting point of copper. This furnace temperature is maintained constant until an internal pressure in the furnace of better than 10⁻⁴ mb is reached. Subsequently, without intermediate cooling, the furnace temperature is further increased slowly to a final value of 100 degrees K. to 200 degrees K. above the melting temperature of the copper. This temperature is then maintained until the porosity contained in the Cr powder is completely filled up by the liquid copper.

IPC 1-7

B22F 3/26; H01H 1/02

IPC 8 full level

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CPC (source: EP US)

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Cited by

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