

Title (en)
METHOD OF PRODUCING CEMENTED CARBIDE OR CERMET ALLOY

Publication
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Application
EP 90913553 A 19900912

Priority
• JP 9001171 W 19900912
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Abstract (en)
[origin: WO9104119A1] A method of producing cemented carbide or cermet alloy comprising mixing and kneading cemented carbide powder or cermet alloy powder with an organic binder, molding this mixed powder into a predetermined shape by injection molding, removing the organic binder from the resulting mold and sintering the mold to obtain a compact alloy. The removal of the organic binder is carried out in a first removing step in an inert gas atmosphere and subsequently in a second removing step in vacuum of 1 Torr or below. In the first removing step, the pressure of the atmosphere is kept at or above the atmospheric pressure so as to prevent the occurrence of defects in the mold. After continuous fine pores are formed inside the mold, the pressure of the atmosphere is kept near vacuum in order to promote the evaporation of the gas from the surface and the release of the gas generated inside the mold.

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IPC 8 full level
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Citation (search report)
• [X] US 4836980 A 19890606 - KASHIWADANI NOBUO [JP], et al
• [A] US 4233256 A 19801111 - OHNSORG ROGER W
• [A] DE 3611271 A1 19871015 - LICENTIA GMBH [DE]
• See references of WO 9104119A1

Cited by
EP2379253A4; EP1510590A3; EP0516165A3; US5403373A; CN104357696A; CN116023143A; US8951463B2; US6641640B1; WO9818973A1; WO9734720A1

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WO 9104119 A1 19910404; CA 2041668 A1 19910315; CA 2041668 C 19990803; DE 69015150 D1 19950126; DE 69015150 T2 19950504; EP 0443048 A1 19910828; EP 0443048 A4 19911030; EP 0443048 B1 19941214; JP H03177506 A 19910801; KR 920700819 A 19920810; KR 940009337 B1 19941007; TW 225493 B 19940621

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