

Title (en)

Method of making a cemented carbide body

Title (de)

Verfahren zur Herstellung eines Hartmetallkörpers

Title (fr)

Procédé de fabrication de corps de carbure cimenté

Publication

EP 2647731 A1 20131009 (EN)

Application

EP 12163181 A 20120404

Priority

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Abstract (en)

The present invention relates to a method of making a cemented carbide comprising the steps of first forming a powder blend comprising WC raw material powder and a metal binder phase powder, where the WC raw material is single crystal and where the WC grains after sintering have a spherical or angular morphology. The powder blend is then subjected to a mixing operation using a non-contact mixer wherein acoustic waves achieving resonance conditions to form a mixed powder blend and then subjecting said mixed powder blend to a pressing and sintering operation. The method makes it possible to maintain the grain size, the grain size distribution and the morphology of the WC grains.

IPC 8 full level

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CPC (source: EP)

C22C 1/1084 (2013.01); **B22F 2998/00** (2013.01); **B22F 2999/00** (2013.01)

Citation (applicant)

- EP 0752921 A1 19970115 - SANDVIK AB [SE]
- WO 2008088321 A1 20080724 - HOWE HAROLD W [US], et al
- US 7188993 B1 20070313 - HOWE HAROLD W [US], et al

Citation (search report)

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- [XDA] EP 0752921 A1 19970115 - SANDVIK AB [SE]
- [XA] US 7017677 B2 20060328 - KESHAVAN MADAPUSI K [US], et al
- [AD] US 7188993 B1 20070313 - HOWE HAROLD W [US], et al

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