

Title (en)

Mixed hard metal materials based on borides, nitrides and iron group matrix metals.

Title (de)

Hartmetall-Mischwerkstoffe auf Basis von Boriden, Nitriden und Eisenbindemetallen.

Title (fr)

Matériaux mixtes à base de métaux durs comprenant des borures, nitrures et une matrice en métal ferreux.

Publication

EP 0433856 B1 19940302 (DE)

Application

EP 90123854 A 19901211

Priority

DE 3941536 A 19891215

Abstract (en)

[origin: CA2031640A1] MIXED SINTERED METAL MATERIALS BASED ON BORIDES, NITRIDES AND IRON BINDER METALS The invention relates to mixed sintered metal materials based on high-melting borides and nitrides and low-melting iron binder metals having the composition: (1) 40 - 97% by volume of borides, such as titanium diboride and zirconium diboride; (2) 1 - 48% by volume of nitrides, such as titanium nitride and zirconium nitride; (3) 0 - 10% by volume of oxides, such as titanium oxide and zirconium oxide, with the proviso that components (2) and (3) may also be present as oxynitrides such as titanium and zirconium oxynitride; and (4) 2 - 59% by volume of low-carbon binder metals, such as iron and iron alloys and to processes for preparing the same.

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IPC 8 full level

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Cited by

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