

Title (en)

RESISTANT CERAMIC MATERIAL AND METHOD FOR MAKING SAME

Title (de)

WIDERSTANDSFÄHIGES KERAMIKMATERIAL UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

CERAMIQUE RESISTANTE ET PROCEDE DE FABRICATION

Publication

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Application

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Abstract (en)

[origin: WO2007020634A2] The present invention relates to a method of preparing a resistant ceramic material by consolidation of SiC-AlN solution powder including synthesis of a SiC-AlN solid solution, followed by processing steps including crushing (if necessary), milling, sinter-aid addition, binder addition, granulation (if cold-pressed), cold forming and consolidation. This invention also provides a novel resistant ceramic material comprising primarily a homogeneous SiC-AlN solid solution or a homogeneous SiC-AlN solid solution that underwent phase separation, used for military and civil armor, and products that can withstand dynamic loading and are also wear resistant.

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