



FEDERAL SERVICE
FOR INTELLECTUAL PROPERTY

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(12) **ABSTRACT OF INVENTION**

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(54) **METHOD OF PRODUCING COMPOSITE CERAMIC MATERIAL**

(57) Abstract:

FIELD: chemistry.

SUBSTANCE: feedstock used to produce oxynitride ceramic is products of burning composite mixtures on air, said mixtures being based on coarse titanium powder with addition of 20-40 wt % fine titanium oxide powder TiO₂ and (over 100%) 10 wt % aluminium

nanopowder. The obtained mixture is treated by hot pressing in a nitrogen atmosphere at 1500°C for 30 minutes.

EFFECT: simple synthesis techniques, using air as a nitrogen-containing reactant at the sintering mixture synthesis step.

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