

- [54] **SINTERED COMPOSITE MATERIAL, A PROCESS OF MAKING SAME, AND A METHOD OF USING SAME**
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[57] ABSTRACT

A valuable composite material is produced by sintering together a first starting material A composed of at least one mineral component, preferably of the apatite group and a second starting material B composed of an inorganic multi-component system, such as a glass or a glass ceramic material which may contain at least one modifier. The modifier may be an agent causing under the sintering conditions foaming of the composite material, such as a carbonate, or it may be a radioactive agent. The first starting material may also contain an inorganic permutite serving as ion exchange agent. The composite material is useful as implant material in the animal and human body for replacing damaged bones or teeth, as a radioactive source, for instance, for exposing the body to radioactive irradiation, as an ion donor, for instance, for supplying the body with calcium, magnesium, and/or potassium ions, as a filter material for removing harmful agents from the body, and for other purposes.

2 Claims, 1 Drawing Figure