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United States Patent [19]

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Giordano

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[54] **METHOD FOR FABRICATING CERAMIC NETWORK MATERIAL**

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[73] Assignee: **Trustees of Boston University**, Boston, Mass.

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[*] Notice: This patent is subject to a terminal disclaimer.

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[21] Appl. No.: **09/201,455**

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[22] Filed: **Nov. 30, 1998**

Related U.S. Application Data

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[63] Continuation-in-part of application No. 08/854,805, May 12, 1997, Pat. No. 5,843,348, which is a continuation of application No. 08/307,455, Sep. 19, 1994, abandoned.

[51] **Int. Cl.**⁷ **A61C 13/00**; A61C 13/08; C04B 33/32; B05D 3/02

[57] **ABSTRACT**

[52] **U.S. Cl.** **264/628**; 264/16; 264/19; 264/643; 427/2.26; 427/2.27; 427/314

A process for producing a ceramic network material including the steps of: introducing a ceramic powder into a mold to form a molded material; firing the molded material to form a ceramic, open pore network; infusing the ceramic network with a silane solution; infusing a monomer to at least a portion of the ceramic network; and forming an interpenetrating network. The ceramic network materials may be used as restorative materials and in various devices such as posts, implant abutments, orthodontic brackets and blocks.

[58] **Field of Search** 264/16, 19, 628, 264/643; 427/2.1, 2.26, 2.27, 314

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7 Claims, 2 Drawing Sheets

