Title: INORGANIC MATRIX COMPOSITIONS, COMPOSITES AND PROCESS OF MAKING THE SAME

Abstract: A modified alkali silicate composition for forming an inorganic network is made by reacting an alkali silicate (or precursors such as an alkali hydroxide, a SiO₂ source and water), an acidic oxoanionic compound such as phosphoric acid, water and optionally one or more multivalent cation(s) selected from Groups 2, 3, 4, 5, 6, 11, 12, 13, 14, 15 or 16 of the periodic table such as an alkaline earth salt, water and optional processing aids. A composite can be prepared by applying the modified aqueous alkali silicate composition to a reinforcing medium and curing the composite at a temperature from 15°C up to 1000°C and a pressure of up to 20,000 psi (137.895 MPa). Composite and neat resin components prepared from the invention can exhibit excellent dimensional stability to 1000°C and higher, and can be prepared at temperatures and pressures typical for organic polymer processing. The composite can be shaped by Compression molding as well as other known fabrication methods.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C04B28/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Relevant to claim No.</th>
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Further documents are listed in the continuation of box C. Patient family members are listed in annex.

"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claims or on which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search
28 March 2002

Date of mailing of the international search report
08/04/2002

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Theodoridou, E

Form PCT/ISA/210 (second sheet) (July 1992)
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