

United States Patent [19]**Fukumoto et al.**[11] **3,867,156**[45] **Feb. 18, 1975**

[54] **PROCESS FOR MANUFACTURING
GRANULAR FOAMED PRODUCTS OF
SILICA**

[75] Inventors: **Kenichi Fukumoto; Ryuji
Nakamura**, both of Osaka, Japan

[73] Assignee: **Shikoku Kaken Kogyo Kabushiki
Kaisha**, Osaka-fu, Japan

[22] Filed: **Feb. 16, 1973**

[21] Appl. No.: **333,365**

[30] **Foreign Application Priority Data**
Feb. 21, 1972 Japan..... 47-18332

[52] U.S. Cl. **106/40 V, 106/98, 106/288 B,**
106/40 R

[51] Int. Cl. **C04b 21/00, C04b 35/14**

[58] Field of Search..... **106/40 V, 40 R**

[56] **References Cited**

UNITED STATES PATENTS

2,328,644 9/1943 Happe..... 106/40 R

2,883,347	4/1959	Fisher et al.	106/40 R
3,717,486	2/1973	Fukumoto et al.	106/40 V
3,719,510	3/1973	Temple et al.	106/40 R
3,744,984	7/1973	Sato	106/40 V

Primary Examiner—Winston A. Douglas

Assistant Examiner—Mark Bell

Attorney, Agent, or Firm—Larson, Taylor and Hinds

[57]

ABSTRACT

A process for manufacturing foamed product of silica which comprises adding a water-insoluble inorganic powder having a particle size of 0.05 to 100 μ to a silica sol to produce a uniform mixture, gelling the resulting mixture at a pH of not higher than 7 to produce hydrosilica gel, drying the gel obtained to remove sorbed water and firing the dried silica gel at 1000° to 1600°C to effect foaming, said water-insoluble inorganic powder being stable under the gelling condition of silica sol and infusible, not decomposable and nonvolatile under the firing condition.

11 Claims, No Drawings