

United States Patent [19]

Caslavsky et al.

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- [54] **SELF-GELLING THERAPEUTIC COMPOSITIONS FOR TOPICAL APPLICATION**
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- [21] Appl. No.: **617,977**
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Related U.S. Application Data

- [60] Continuation of Ser. No. 518,951, Aug. 1, 1983, which is a division of Ser. No. 381,530, May 24, 1982, Pat. No. 4,411,889.
- [51] Int. Cl.⁴ **A61K 33/16**
- [52] U.S. Cl. **424/151; 424/52**
- [58] Field of Search **424/151, 52**

[56] **References Cited**
U.S. PATENT DOCUMENTS

4,411,889 10/1983 Caslavsky et al. 424/151

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[57] **ABSTRACT**

A self-gelling aqueous therapeutic composition for topical application and for the sustained release of a medicant compound, which compositions comprise an aqueous ethyl orthosilicate emulsion, a therapeutic compound which is to be released in a sustained manner on topical application, a gelling facilitating agent to aid the in situ gelation of the ethyl orthosilicate composition comprising a surface-active agent and/or a low concentration of an ammonium or fluoride compound and a gelling accelerating compound to accelerate the conversion of the solution to a gel state, which accelerator compound comprises an imidazole compound to effect the self gelling of the composition.

21 Claims, No Drawings