

# United States Patent [19]

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**Kroupa**

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[54] **LIQUID CURABLE  
POLYORGANOSILOXANE COMPOSITIONS**

3,436,366	4/1969	Modic .....	528/32
3,697,473	10/1972	Polmanteer et al. ....	528/15
4,128,299	12/1978	Maher .....	350/96.13
4,340,709	7/1982	Jeram et al. ....	528/32

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[57] **ABSTRACT**

**Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 592,481, Mar. 23, 1984, abandoned.

Curable polyorganosiloxane compositions that can be cured to yield readily deformable, tough, elastomeric gels comprise a liquid triorganosiloxy endblocked polydimethylsiloxane containing terminal vinyl radicals, a resinous organosiloxane polymer containing dimethylvinylsiloxy, trimethylsiloxy and SiO<sub>4/2</sub> groups, a polyorganosiloxane containing at least 3 silicon-bonded hydrogen atoms per molecule, a substantially linear polydimethylsiloxane containing dimethylhydrogen-siloxy terminal groups and a catalyst to promote curing of said composition. Gels prepared using preferred embodiments of these curable compositions are transparent and useful as pressure sensitive optical waveguides.

[51] Int. Cl.<sup>3</sup> ..... **C08G 77/06**

[52] U.S. Cl. .... **528/15; 528/31; 528/32; 525/478; 350/96.1; 350/96.12; 350/96.13**

[58] Field of Search ..... **528/15, 31, 32; 525/478; 350/96.1, 96.12, 96.13**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

3,284,406 11/1966 Nelson ..... 528/32

**12 Claims, No Drawings**