

[54] **OPTICALLY CLEAR FILLED SILICONE ELASTOMERS**

Primary Examiner—Lewis T. Jacobs
Attorney, Agent, or Firm—Albert H. Graddis; Frank S. Chow

[75] **Inventor:** Edward A. Travnicek, Southbridge, Mass.

[73] **Assignee:** American Optical Corporation, Southbridge, Mass.

[22] **Filed:** Mar. 17, 1976

[21] **Appl. No.:** 666,591

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 572,788, April 29, 1975.

[52] **U.S. Cl.** 260/37 SB; 260/46.5 UA; 260/825

[51] **Int. Cl.²** C08L 83/04

[58] **Field of Search** 260/37 SB, 46.5 UA, 260/825

References Cited

UNITED STATES PATENTS

3,197,433	7/1965	Lamoreaux	260/46.5 P
3,491,165	1/1970	Seyfried et al.	260/825
3,808,178	4/1974	Gaylord	260/46.5 UA X

[57] **ABSTRACT**

Reinforced silicone elastomers, having improved tensile strength and particularly tear strength, include at least copolymers of aryl siloxanes and alkyl siloxanes, in a ratio of aryl to alkyl substituents providing 6 to 16 mole percent phenyl chosen to provide a refractive index matched to the index of refraction of a silica filler, form optically clear material useful for soft contact lenses. Preferably two copolymers are used and each has methyl groups with 6 to 16 mole percent phenyl groups. One of the two copolymers contains terminal vinyl groups and the other copolymer contains terminal (R)₂HSi—O— groups. Platinum materials are used to catalyze the vulcanization of the copolymer mix. These elastomers are useful for a variety of optical products, e.g., contact lenses, intraocular implants and the like.

6 Claims, No Drawings