

[54] COPOLYMER FOR SOFT CONTACT LENS, ITS PREPARATION AND SOFT CONTACT LENS MADE THEREOF

[75] Inventors: Kyoichi Tanaka; Kouzou Takahashi, both of Nagoya; Mitsuhiro Kanada, Aichi; Shinji Kanome; Tatsutoshi Nakajima, both of Nagoya, all of Japan

[73] Assignee: Toyo Contact Lens Co., Ltd., Nagoya, Japan

[21] Appl. No.: 888,323

[22] Filed: Mar. 20, 1978

[30] Foreign Application Priority Data

Nov. 8, 1977 [JP] Japan 52-134248

[51] Int. Cl.² C08F 220/28; C08F 230/08; G02C 7/04

[52] U.S. Cl. 260/29.6 TA; 204/159.22; 351/160 R; 526/218; 526/232; 526/264; 526/279

[58] Field of Search 526/264, 279, 218, 232; 204/159.22; 351/160; 260/29.6 TA

[56]

References Cited

U.S. PATENT DOCUMENTS

3,787,380	1/1974	Stamberger	526/264
3,937,680	2/1976	de Carle	526/264
3,951,893	4/1976	Gander	526/279
4,022,754	5/1977	Howes et al.	526/264

FOREIGN PATENT DOCUMENTS

52-33502 8/1977 Japan.

Primary Examiner—Harry Wong, Jr.

Attorney, Agent, or Firm—Armstrong, Nikaido, Marmelstein & Kubovcik

[57]

ABSTRACT

A copolymer suitable for use as soft contact lenses, comprising a polymerization product of (a) at least one monomer selected from methyl-di(trimethylsiloxy)silyl-propylglycerol methacrylate and methyl-di(trimethylsiloxy)silyl-propylglycerolethyl methacrylate, (b) a hydrophilic monomer and (c) a cross-linking agent having at least two copolymerizable functional groups. Soft contact lens made of the above copolymer has excellent oxygen permeability in spite of low water content and can be comfortably worn continuously for a long term without a foreign body sensation and pain.

12 Claims, No Drawings