



US005217490A

# United States Patent [19]

[11] Patent Number: 5,217,490

Sayano et al.

[45] Date of Patent: Jun. 8, 1993

- [54] **ULTRAVIOLET LIGHT ABSORBING INTRAOCULAR IMPLANTS**
- [75] Inventors: Reizo Sayano, Montebello, Calif.; Eugene P. Goldberg, Tampa, Fla.
- [73] Assignee: Kabi Pharmacia AB, Upsala, Sweden
- [21] Appl. No.: 830,476
- [22] Filed: Feb. 3, 1992

### Related U.S. Application Data

- [63] Continuation of Ser. No. 735,161, Jul. 23, 1991, abandoned, which is a continuation of Ser. No. 617,959, Nov. 26, 1990, abandoned, which is a continuation of Ser. No. 443,875, Nov. 30, 1989, abandoned, which is a continuation of Ser. No. 599,005, Apr. 11, 1984, abandoned.

- [51] Int. Cl.<sup>5</sup> ..... A61F 2/16
- [52] U.S. Cl. .... 623/6
- [58] Field of Search ..... 623/6

### References Cited

#### U.S. PATENT DOCUMENTS

3,925,825	12/1975	Richards et al.	3/13
4,316,291	2/1982	Severin	3/13
4,390,676	6/1983	Loshaek	526/313
4,402,579	9/1983	Poler	3/13

#### FOREIGN PATENT DOCUMENTS

32835	7/1981	European Pat. Off.	3/13
1480492	7/1977	United Kingdom	3/13

#### OTHER PUBLICATIONS

Undated brochure. Pure Perspex CQ With UV Absorber—The American Revolution in Intraocular Lenses—Date unavailable.

Undated brochure. Pure Perspec CQ With UV Absorber— . . . exclusively from American Medical Optics—Date unavailable.

Undated brochure. Technical Report Series #14—Scientific Basis for the Selection of a UV Absorbing Intraocular Lens Material—Data unavailable.

Optical Radiation Corp. Literature; "New ORC UV400®: The First IOL Designed for UV Protection".

Surgidev Literature; "The Leiske Physioflex Style 10 Anterior Chamber Lens".

*The Merck Index*; "Tinuvin® P." p. 1053, 8th edition 1968.

*The Condensed Chemical Dictionary*; "1,2,3-benzotriazole" p. 99, 9th Edition 1977.

*Primary Examiner*—Mark L. Bell

*Assistant Examiner*—Helene Klemanski

*Attorney, Agent, or Firm*—Poms, Smith, Lande & Rose

### [57] ABSTRACT

Intraocular implants having optical lenses that are light, non-toxic, biocompatible, nonleachable in the presence of eye fluids and absorb at least 90% of the ultraviolet light in the 300–380 nm wavelength range but are transparent to most of the visible radiation. The intraocular implants will have a haptic for fixation in the posterior or anterior chamber of the eye. The optical lens has uniformly dispersed therein an ultraviolet light absorbing amount of 2-(hydroxy-lower alkylphenyl) benzotriazole which may be halogen substituted in the 4, 5, 6 or 7 positions.

6 Claims, 1 Drawing Sheet

