

[54] PROCESS FOR MAKING SOFT CONTACT AND INTRAOCULAR LENSES WITH AN ESTERIFIABLE CARBOXYL-CONTAINING POLYMER

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[57] ABSTRACT

A process of making soft lenses from an esterifiable, partially cross-linked carboxyl-containing polymer, and a method of attaching a haptic to a swellable intraocular lens. The soft contact lenses are made by first forming a lens button from a hard polymer containing α,β -ethylenically unsaturated carboxylic acid such as acrylic or methacrylic acid and 0.1-10 mols per 100 mols of monomer of a divinyl cross-linking agent such as 1,4-butanediol dimethacrylate. The hard lens button is then esterified by contact with an alcohol having up to 15 carbon atoms such as n-butanol under esterifying conditions in the substantial absence of water while simultaneously removing water of reaction. Unreacted alcohol may be removed by solvent exchange with a lower molecular weight alcohol and/or drying. In the haptic attachment method, a lens is formed from a polymer and a peripheral bore is formed in the lens; the lens is swollen with an organic fluid such as ethanol and an enlarged end of a haptic is inserted in the peripheral bore; and the organic fluid is then removed from the lens so that the haptic is secured to the lens by contraction of the peripheral bore about the enlarged section of the haptic.

37 Claims, 2 Drawing Figures

