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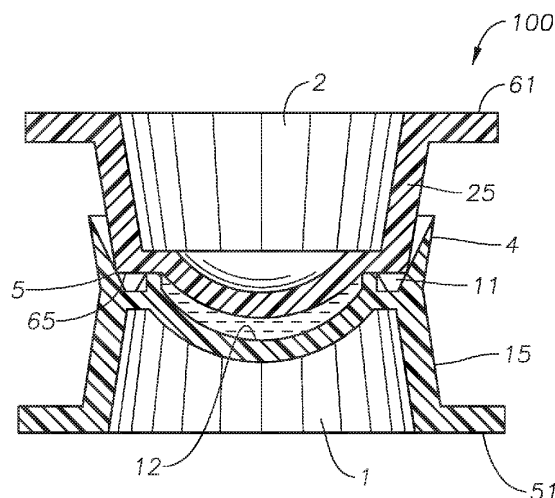


FIG. 1

(57) Abstract: The invention provides a method for producing photochromic silicone hydrogel (SiHy) contact lenses based on thermal cast-molding technology in a relatively efficient and consistent manner. The method is characterized by selecting a high radical-reactive hydrophilic acrylic monomer while eliminating any low radical-reactive hydrophilic N-vinyl amide monomer in a lens formulation (polymerizable composition), by selecting a weight ratio of low-radical-reactive hydrophilic N-vinyl amide monomer to a high radical-reactive hydrophilic acrylic monomer in a lens formulation if the low radical-reactive hydrophilic N-vinyl amide monomer is needed, and/or by using a relatively high temperature thermal initiator in a lens formulation, to control the lens properties (e.g., water content, elastic modulus, etc.) and lens processability (capability of dry-delensing from molds) of thermally cast-molded SiHy contact lenses while minimizing loss in photochromic ability of resultant SiHy contact lenses.

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