

[54] VARIABLE POWER LENS AND METHOD

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[58] Field of Search 351/41, 158, 159, 168; 350/418, 419, 607, 608

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[57] ABSTRACT

A variable power lens includes a pair of optical membranes, each of which has a periphery and at least one of which is flexible. A frame is provided for holding the membranes with their peripheries in juxtaposition such that the surface of the membranes and their peripheries define a predetermined volume which is filled with refractive fluid. A control operatively associated with the frame selectively imposes forces on the periphery of the membranes which vary the fluid pressure in the volume. The membrane and the frame are constructed and arranged so that the surfaces of the membranes vary in a substantially spherical manner in response to changes in pressure of the fluid.

25 Claims, 4 Drawing Sheets

