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Portney

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[54] **METHOD OF MAKING AN OPHTHALMIC LENS**

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Related U.S. Application Data

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[51] **Int. Cl.**[6] **G02C 7/04**

[52] **U.S. Cl.** **351/177**; 351/161

[58] **Field of Search** ..... 351/160 R, 160 H, 351/161, 162, 177

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[57] **ABSTRACT**

An improved opthalmic lens is disclosed which has a plurality of alternating power zones with a continuously varying power within each zone, as well as in transition from one zone to another. In other words, a plurality of concentric zones (at least two) are provided in which the variation from far to near vision correction is continuous, i.e., from near correction focal power to far correction focal power, then back to near, and again back to far, or vice versa. This change is continuous (progressive), without any abrupt correction changes, or "edges".

Two versions of the invention are disclosed. In the first version continuous, alternating power variation is accomplished by a continuously changing curvature of the lens posterior surface, thereby altering the angle of impact of light rays on the eye.

In the second version continuous, alternating power variation is accomplished by creating non-homogeneous surface characteristics having refractive material indexes which continuously vary in the lens radial direction (out from the optical axis).

9 Claims, 7 Drawing Sheets