

[54] PROGRESSIVE MULTIFOCAL OPTHALMIC LENS

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[56] References Cited

U.S. PATENT DOCUMENTS

4,315,673 2/1982 Guilino et al. 351/169

FOREIGN PATENT DOCUMENTS

57-76521 5/1982 Japan 351/169

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[57] ABSTRACT

Progressive multifocal ophthalmic lenses are provided having a far vision viewing zone, a near vision viewing zone and an intermediate vision viewing zone therebetween. A principal meridian curve extends vertically through the far, intermediate and near vision viewing zones. The surface power along the principal meridian curve in the intermediate vision viewing zone varies progressively. The sizes of the zones and configuration of the zones are set by predetermined conditions and equations. The construction provides improved lenses for use in activities such as sports, driving, shopping and the like.

12 Claims, 39 Drawing Figures

