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[54] MULTIFOCAL INTRAOCULAR LENS

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[58] Field of Search **623/4-6; 351/161, 168**

[56] References Cited

U.S. PATENT DOCUMENTS

4,170,043	10/1979	Knight et al.	623/6
4,402,579	9/1983	Poler	623/6 X
4,636,211	1/1987	Nielsen et al.	623/6
4,704,016	11/1987	DeCarle	351/161
4,813,955	3/1989	Achatz et al.	623/6

FOREIGN PATENT DOCUMENTS

0140063 5/1985 European Pat. Off. .
WO86/03961 7/1986 PCT Int'l Appl. 623/6

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[57] ABSTRACT

Multifocal lenses are formed having a substantially circular central region having a first optical power, surrounded by a plurality of concentric ring regions which alternate between at least two optical powers, one of which may be the first optical power. Preferably, the central region is powered for near vision. For example, one embodiment of the invention is a bifocal lens having a central near-vision portion, a first concentric ring region powered for distance vision, and a second concentric ring region having the same power as the central region.

18 Claims, 2 Drawing Sheets

