

19. A corneal contact lens for providing clear central vision at distance, intermediate and near distance ranges comprising;

a lens body having concave posterior and convex anterior surfaces, each of said posterior and interior surfaces including an apical umbilical point at which the derivative of curvature of said surface vanishes,

at least one of said surfaces being defined by a plurality of predetermined semi-meridian sections extending centrifugally from and tangent to one another at said apical umbilical point, said semi-meridian sections forming a continuous surface modeled as having at least four angular zones,

said at least four angular zones including at least two angular zones having varying refractive properties defined by the predetermined changing curvature of said semi-meridian sections defining said at least two angular zones, such that clear central vision is achieved over a full range of distances regardless of the size of the pupillary aperture.

20. A corneal contact lens as in claim 19, wherein each of said semi-meridian sections defining said at least

one lens surface is chosen to provide a constant edge thickness with respect to the other surface of said lens.

21. A corneal contact lens as in claim 19, wherein each of said semi-meridian sections defining said at least one lens surface is chosen to maintain a constant semi-diameter at a specified sagittal depth.

22. An intraocular lens for implantation in the eye providing clear central vision over distance, intermediate and near distance ranges comprising;

a lens body having at least one surface comprising an apical umbilical point at which the derivative of curvature of said surface vanishes, wherein said surface is defined by a plurality of semi-meridian sections extending centrifugally from said apical umbilical point to form a continuous surface modeled as at least one defined angular zone, wherein said at least one angular zone will provide varying refractive properties defined by the curvatures of each of said semi-meridian sections, with said curvatures being varied in a predetermined manner such that the refractive power of said surface varies rotationally to provide clear central vision over a full range of distances regardless of the size of the pupillary aperture.

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