Claims

1. An ophthalmic lens for use in preventing or slowing the development or progression of myopia, the ophthalmic lens comprising an optic zone for focusing light from distant point objects to a focal surface, wherein:

the optic zone comprises a diffractive lens for manipulating the longitudinal chromatic aberration properties of the light proximate the focal surface;

the optic zone comprises an annular region and a central region;

the central region comprises said diffractive lens;

the annular region has a greater optical power than the base power of the central region;

the annular region does not comprise a diffractive lens for manipulating the longitudinal chromatic aberration properties of the light; and

the diffractive lens is configured to reverse the longitudinal chromatic aberration caused by the natural eye.

2. The ophthalmic lens according to claim 1, wherein the diffractive lens has a positive optical power.

3. The ophthalmic lens according to any preceding claim, wherein the diffractive lens has an optical power of between +6.8 dioptre and +7.2 dioptre.

4. The ophthalmic lens according to any preceding claim, wherein the optical power of the diffractive lens varies by at least 3.0 dioptre over a wavelength range of 400 nm to 700 nm.

5. The ophthalmic lens according to any preceding claim, wherein the diffractive lens comprises a central zone surrounded by a plurality of concentric ring-shaped zones.

6. The ophthalmic lens according to any preceding claim, wherein the ophthalmic lens is a contact lens.

7. The contact lens according to claim 6, wherein the central zone has a diameter of between 1.0 mm and 1.4 mm.

8. The contact lens according to claim 6 or 7, wherein the optical phase across each zone of the diffractive lens varies over an interval of 2π radians.

9. The contact lens according to any one of claims 6 to 8, wherein the width of each successive ring-shaped zone is less than the immediately preceding ring-shaped zone.

10. The ophthalmic lens according to any preceding claim, wherein the ophthalmic lens is a contact lens and wherein the contact lens comprises an elastomer material, a silicone elastomer material, a hydrogel material, or a silicone hydrogel material, or mixtures thereof.

11. The ophthalmic lens according to any preceding claim, wherein the ophthalmic lens is a moulded contact lens.

12. The ophthalmic lens according to any preceding claim, wherein optic zone has a base optical power of between 0.5 dioptre and -15.0 dioptres.

13. The ophthalmic lens according to any preceding claim, wherein the focus of the annular region and the focus of the central region share a common optical axis.

14. The ophthalmic lens according to any preceding claim, wherein the ophthalmic lens is a contact lens and wherein the refractive index of the contact lens material is between 1.40 and 1.44.