CLAIMS

What is claimed is:

1. A lens element, comprising:

a base region, wherein the base region comprises a prescription region for correcting a refractive error of an eye; and

a plurality of insular regions, wherein the insular regions comprise regions for inhibiting development of the refractive error of the eye,

wherein at least some of the insular regions are adjacent to each other and have a shared edge; and

for edges of all the insular regions on the lens element, a length of a shared edge portion is L_1, a length of a non-shared edge portion is L_2, and a ratio of L_1 to L_2 is 0.3 or more.

2. The lens element according to claim 1, wherein the insular region comprises one or more of the following:

the first insular region, wherein the first insular region is configured to scatter incident light to inhibit development of a refractive error of an eye; and

the second insular region, wherein the second insular region is configured to focus an image at a position other than a retina of the eye to inhibit the development of the refractive error of the eye.

3. The lens element according to claim 1, wherein the lens element comprises an insular region array, the insular region array comprises a plurality of insular regions arranged successively, and adjacent insular regions have a shared edge, wherein the lens element comprises a plurality of insular region arrays, and the plurality of insular region arrays are spaced apart from each other.

4. The lens element according to claim 3, wherein the insular region array is completely overlaid by a plurality of insular regions.

5. The lens element according to claim 3, wherein the lens element comprises a plurality of strip-shaped insular region arrays, and the plurality of strip-shaped insular region arrays are spaced parallel to each other.

6. The lens element according to claim 3, wherein the lens element comprises a plurality of straight-strip-shaped insular region arrays, and the plurality of straight-strip-shaped insular region arrays are spaced parallel to each other.

7. The lens element according to claim 1, wherein the ratio of $\mathbf{L_1}$ to $\mathbf{L_2}$ is 1 or more.

8. The lens element according to claim 1, wherein the lens element is a spectacle lens; optionally, the lens element is a non-contact spectacle lens; and optionally, the lens element is a contact spectacle lens.

9. A pair of spectacles, comprising a spectacle frame and a lens element mounted on the spectacle frame, wherein the lens element is the lens element according to any one of claims 1 to 8, and comprises: a first lens element and a second lens element mounted on the spectacles frame, wherein the spectacles have one or more of the following features (1) to (2):

(1) a plurality of straight-strip-shaped insular region arrays spaced apart from each other are arranged on the first lens element, the plurality of straight-strip-shaped insular region arrays are arranged parallel to each other, and the plurality of straight-strip-shaped insular region arrays are parallel to a connection line between a center of the first lens element and a center of the second lens element; and

(2) a plurality of straight-strip-shaped insular region arrays spaced apart from each other are arranged on the second lens element, the plurality of straight-strip-shaped insular region arrays are arranged parallel to each other, and the plurality of straight-strip-shaped insular region arrays are parallel to the connection line between the center of the first lens element and the center of the second lens element.

10. A mold, wherein the mold has a mold cavity, and a shape of the mold cavity is configured to correspond to a shape of the lens element according to any one of claims 1 to 8.

11. An optical lens group, comprising a first lens element and a second lens element, wherein

the first lens element comprises:

a base region, wherein the base region has a base refractive power; and

insular regions, wherein the insular region has a refractive power different from the base refractive power and has a function of focusing an image at a position other than a retina of the eye to inhibit development of the refractive error of the eye;

a $1Y^{th}$ optical region is arranged near an optical center of the first lens element, the $1Y^{th}$ optical region comprises a first region A and a first region B, a plurality of self-contained insular regions are arranged in the first region A, the first region B is substantially formed by the base region or a plurality of self-contained insular regions are distributed in the first region B, and the first region B has a lower distribution density of insular regions than the first region A; and

the second lens element comprises:

a base region, wherein the base region has a base refractive power; and

an insular region, wherein the insular region has a refractive power different from the base refractive power and has a function of focusing an image at a position other than a retina of the eye to inhibit development of the refractive error of the eye;

a $2Y^{th}$ optical region is arranged near an optical center of the second lens element, the $2Y^{th}$ optical region comprises a second region A and a second region B, a plurality of self-contained insular regions are arranged in the second region A, the second region B is substantially formed by the base region or a plurality of self-contained insular regions are distributed in the second region B, and the second region B has a lower distribution density of insular regions than the second region A; and

the first lens element and the second lens element are configured in such a way that when the first lens element and the second lens element are placed parallel to each other and coaxially, at least one relative position exists for the first lens element and the second lens element, to make the two lens elements meet a specific relationship, and the specific relationship comprises:

(1) a projection of the first region A of the first lens element on the second lens element at least partially overlaps with the second region B of the second lens element; and

(2) a projection of the second region A of the second lens element on the first lens element at least partially overlaps with the first region B of the first lens element.

12. The optical lens group according to claim 11, wherein the specific relationship has one or more of the following features:

(1) a plurality of first regions A spaced apart from each other are arranged in the 1Yth optical area;

(2) a plurality of first regions B spaced apart from each other are arranged in the 1Yth optical area;

(3) a plurality of second regions A spaced apart from each other are arranged in the 2Yth optical area; and

(4) a plurality of second regions B spaced apart from each other are arranged in the 2Yth optical area.

13. The optical lens group according to claim 11, wherein the specific relationship has one or more of the following features:

(1) a plurality of first regions A spaced apart from each other and a plurality of first regions B spaced apart from each other in the 1Yth optical region are alternately arranged in a circumferential direction;

(2) a plurality of second regions A spaced apart from each other and a plurality of second

regions B spaced apart from each other in the 2Yth optical region are alternately arranged in a circumferential direction;

(3) a plurality of first regions A spaced apart from each other and a plurality of first regions B spaced apart from each other in the 1Yth optical region are alternately arranged in a radial direction;

(4) a plurality of second regions A spaced apart from each other and a plurality of second regions B spaced apart from each other in the 2Yth optical region are alternately arranged in a radial direction;

(5) a plurality of first regions A spaced apart from each other and a plurality of first regions B spaced apart from each other in the 1Yth optical region are alternately arranged in a straight-line direction; and

(6) a plurality of second regions A spaced apart from each other and a plurality of second regions B spaced apart from each other in the 2Yth optical region are alternately arranged in a straight-line direction.

14. The optical lens group according to claim 11, wherein the specific relationship has one or more of the following features:

(1) an overlapping part of the projection of the first region A on the second lens element and the second region B accounts for at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% or 90% of each of an area of the first region A and an area of the first region B; and

(2) an overlapping part of the projection of the second region A on the first lens element and the first region B accounts for at least 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% or 90% of each of an area of the first region B and an area of the second region A.

15. The optical lens group according to claim 11, having one or more of the following features:

(1) all first regions A on the first lens element form a rotationally symmetric pattern, and a rotational symmetry center of the rotationally symmetric pattern is the optical center of the first lens element;

(2) all first regions B on the first lens element form a rotationally symmetric pattern, and a rotational symmetry center of the rotationally symmetric pattern is the optical center of the first lens element;

(3) all second regions A on the second lens element form a rotationally symmetric pattern, and a rotational symmetry center of the rotationally symmetric pattern is the optical center of the second lens element; and

(4) all second regions B on the second lens element form a rotationally symmetric pattern,

and a rotational symmetry center of the rotationally symmetric pattern is an optical center of the second lens element.

16. The optical lens group according to claim 11, having one or more of the following features:

(1) the 1Yth optical region is formed by one or more first regions A and one or more first regions B;

(2) the 2Yth optical region is formed by one or more second regions A and one or more second regions B;

(3) in the 1Yth optical region, a total area of the insular regions ranges from 10% to 60% relative to a total area of the 1Yth optical region; and

(4) in the 2Yth optical region, a total area of the insular regions ranges from 10% to 60% relative to a total area of the 2Yth optical region.

17. The optical lens group according to claim 11, wherein the first lens element and the second lens element are spectacle lenses; optionally, the first lens element and the second lens element are non-contact spectacle lenses; and optionally, the first lens element and the second lens element are contact spectacle lenses.

18. The optical lens group according to claim 11, wherein each of the first lens element and/or the second lens element is independently the lens element according to any one of claims 1 to 8.

19. The optical lens group according to claim 11, having one or more of the following features:

(1) at least some of the insular regions on the first lens element are adjacent to each other and have a shared edge; and

(2) at least some of the insular regions on the second lens element are adjacent to each other and have a shared edge.

20. A method for assembling a pair of spectacles, comprising:

providing a spectacle frame and an optical lens group mounted on the spectacle frame, wherein the optical lens group is the optical lens group according to any one of claims 11 to 19; and

respectively mounting the first lens element and the second lens element on the spectacles frame at positions corresponding to a first eye and a second eye of a wearer, wherein

relative positions of the first lens element and the second lens element are configured to satisfy the following specific relationship, wherein the specific relationship comprises:

(1) the first region A of the first lens element forms a $1A^{th}$ projection on the first eye, the

second region B of the second lens element forms a $2B^{th}$ projection on the second eye, and the $1A^{th}$ projection after being translated by an interpupillary distance toward the second eye can at least partially overlap or completely overlap with the $2B^{th}$ projection; and

(2) the second region A of the second lens element forms a $2A^{th}$ projection on the second eye, the first region B of the first lens element forms a $1B^{th}$ projection on the first eye, and the $2A^{th}$ projection after being translated by the interpupillary distance toward the first eye can at least partially overlap or completely overlap with the $1B^{th}$ projection.