

CLAIMS

1. A lens element intended to be worn in front of an eye of a person comprising:
- a refraction area having a refractive power based on a prescription for said eye of
5 the person; and
- a plurality of at least three optical elements
wherein the optical elements are configured so that along at least one section of the
lens the mean sphere of optical elements increases from a point of said section
towards the peripheral part of said section.
- 10 2. The lens according to claim 1, wherein the optical elements are configured so that
along at least one section of the lens the mean cylinder of optical elements increases
from a point of said section towards the peripheral part of said section.
- 15 3. The lens element according to claim 1 or 2, wherein the optical elements are
configured so that along the at least one section of the lens the mean sphere and/or
the mean cylinder of optical elements increases from the center of said section
towards the peripheral part of said section.
- 20 4. The lens element according to any of the preceding claims, wherein the refraction
area comprises an optical center and optical elements are configured so that along
any section passing through the optical center of the lens the mean sphere and/or the
mean cylinder of the optical elements increases from the optical center towards the
peripheral part of the lens.
- 25 5. The lens element according to any of claims 1 to 3, wherein the refraction area
comprises a far vision reference point, a near vision reference, and a meridian line
joining the far and near vision reference points, the optical elements are configured
so that in standard wearing conditions along any horizontal section of the lens the
30 mean sphere and/or the mean cylinder of the optical elements increases from the
intersection of said horizontal section with the meridian line towards the peripheral
part of the lens.

6. The lens element according to claim 5, wherein the mean sphere and/or the mean cylinder increase function along the sections are different depending on the position of said section along the meridian line.
- 5 7. The lens element according to claims 5 or 6, wherein the mean sphere and/or the mean cylinder increase function along the sections are unsymmetrical.
8. The lens element according to any of the preceding claims, wherein the optical elements are configured so that in standard wearing condition the at least one section
- 10 is a horizontal section.
9. The lens element according to any of the preceding claims, wherein the mean sphere and/or the mean cylinder of optical elements increases from a first point of said section towards the peripheral part of said section and decreases from a second
- 15 point of said section towards the peripheral part of said section, the second point being closer to the peripheral part of said section than the first point.
10. The lens element according to any of claims 1 to 8, wherein the mean sphere and/or the mean cylinder increase function along the at least one horizontal section is
- 20 a Gaussian function.
11. The lens element according to any of claims 1 to 8, wherein the mean sphere and/or the mean cylinder increase function along the at least one horizontal section is
- 25 a Quadratic function.
12. The lens according to any of the preceding claims, wherein the optical elements are configured have an optical function of focusing an image on a position other than the retina so as to slow down the progression of the abnormal refraction of the eye.
- 30 13. The lens element according to any of the preceding claims, the optical elements are spherical micro-lenses.

14. The lens element according to any of the preceding claims, wherein for every circular zone having a radius comprised between 4 and 8 mm comprising a geometrical center located at a distance of the optical center of the lens element greater or equal to said radius + 5mm, the ratio between the sum of areas of the parts
5 of optical elements located inside said circular zone and the area of said circular zone is comprised between 20% and 70%.

15. The lens element according to any of the preceding claims, wherein the least three optical elements are non-contiguous.