CLAIMS

1. An optical lens for vision correction comprising:

an inner side surface configured to contact the eye (E);

an outer side surface opposite to said inner side surface;

a first image fusion area centered on a visual axis (L) of the eye (E) of a user and including a plurality of first dioptric portions randomly arranged around said first image fusion area and fused to have a first diopter (N);

a second image fusion area connected to and surrounding said first image fusion area, said second image fusion area including a plurality of second dioptric portions randomly arranged around said second image fusion area and fused to have a second diopter (M); and

a third image fusion area connected to and surrounding said second image fusion area, said third image fusion area including a plurality of third dioptric portions randomly arranged around said third image fusion area and fused to have a third diopter (O);

wherein the absolute value of said first diopter |N| is smaller than the absolute value of said second diopter |M|, and the longest width of each of said first and second dioptric portions

relative to the visual axis (L) is smaller than 200 nanometers;

wherein said first image fusion area, said second image fusion area and said third image fusion area are disposed between said inner side surface and said outer side surface of said optical lens;

wherein each of said third dioptric portions has a diopter of $O \pm \delta_3$, where δ_3 is a variable value ranging from 0.25D to 12.0D, and said third diopter |O| ranges between said first diopter |N| and said second diopter |M|;

wherein said optical lens is a contact lens, said first image fusion area has a radius (r_1) with respect to the visual axis (L) ranging from 1 mm to 2.5 mm, said second image fusion area has a radius (r_2) with respect to the visual axis (L) ranging from 1.5 mm to 4 mm, and said third image fusion area has a radius (r_3) with respect to the visual axis (L) ranging from 2 mm to 8 mm.

2. The optical lens as claimed in Claim 1, wherein each of said first dioptric portions has a diopter of $N \pm \delta_1$, where δ_1 is a variable value ranging from 0.25D to 9.0D, and each of said second dioptric portions has a diopter of $M \pm \delta_2$, where δ_2 is a variable value ranging from 0.25D to 12.0D.

3. The optical lens as claimed in Claim 1, wherein said first, second and third dioptric portions are distributed around one of said outer and inner side surfaces.

4. The optical lens as claimed in Claim 1, wherein said optical lens is configured to be worn by a user in need of a vision correction in diopter (P), and wherein the absolute value of said first diopter |N| is smaller than the absolute value of the corrected diopter |P|, and the absolute value of said second diopter |M| is larger than the absolute value of the corrected diopter |P|.