Claims

We claim:

1. A translating presbyopic contact lens having a vertical meridian comprising:
    a) an optical zone;
    b) a curved lenticular portion within the optical zone; and
    c) a pseudotruncation which is asymmetric about the vertical meridian, wherein the pseudotruncation comprises an elongated, arcuate thickened portion in the lens, peripheral to the optical zone but inside of the edge;

wherein said thickened portion is asymmetrical with the vertical meridian of the lens and wherein the curve of the lenticular portion contains a point of inflection.

2. The contact lens of claim 1, wherein the pseudotruncation is peripheral to an optical lenticular junction the latter defining the boundary which separates the optical zone into distance vision and near vision zones.

3. The contact lens of claim 2, wherein the pseudotruncation is rotated nasally up.

4. The contact lens of claim 3, wherein the pseudotruncation is rotated nasally up by between 1 to 15 degrees.

5. The contact lens of claim 3, wherein the pseudotruncation is rotated nasally up by between about 7 to 8 degrees.

6. The contact lens of claim 2, wherein the pseudotruncation is rotated nasally down.

7. The contact lens of claim 6, wherein the pseudotruncation is rotated nasally down by between about 1 to 10 degrees.

8. The contact lens of claim 2, wherein the pseudotruncation and optical zone are rotationally aligned substantially the same amount.

9. The contact lens of claim 2, wherein the pseudotruncation and optical zone are not rotationally aligned substantially at the same amount.

10. The contact lens of claim 2, wherein the optical zone is inset horizontally nasalward.

11. The contact lens of claim 2, wherein the optical zone is rotated nasally up.

12. The contact lens of claim 2, wherein the optical zone is inset horizontally nasalward and rotated nasally up.

13. The contact lens of claim 2 and 4, wherein the optical zone is inset horizontally nasalward and rotated nasally up and further moved up.

14. The contact lens of claim 2, wherein the pseudotruncation is comprised of a single elevated zone.

15. The contact lens of claim 2, wherein the pseudotruncation is comprised of more than one elevated zone.

16. The contact lens of claim 2, wherein the angular subtense of the pseudotruncation when it is 80% of its maximum thickness, is between 40 and 100 degrees circumferentially around the lens.

17. The contact lens of claim 2, wherein the radial position of the peak thickness value of the pseudotruncation at any meridian around the lens is substantially constant, the arc being a portion of a concentric circle about the lens center.

18. The contact lens of claim 2, wherein the radial position of the peak thickness value of the pseudotruncation at any meridian around the lens is variable, the arc not being a portion of a concentric circle about the lens center.

19. The contact lens of claim 2, wherein the outer circumference of the lens is substantially circular, or concentric with a constant radius about the lens center.

20. The contact lens of claim 2, wherein the outer circumference of the lens is not circular, and not concentric about the lens center.

21. The contact lens of claim 2, wherein the pseudotruncation further comprises a lenticular bevel junction, a bevel flange junction, and a flange portion wherein the bevel portion is a portion of the lens surface which extends radially out from center, beginning at the junction at the lenticular bevel junction and ending at the bevel flange junction and wherein the width of the bevel portion is between about 50μ to about 500μ.

22. The contact lens of claim 2, wherein the pseudotruncation further comprises a lenticular bevel junction, a bevel flange junction, and a flange portion wherein the bevel portion is a portion of the lens surface which extends radially out from center, beginning at the junction at the lenticular bevel junction and ending at the bevel flange junction and wherein the position of the bevel flange junction is between about 5 to about 7 mm.

23. The contact lens of claim 2, wherein the pseudotruncation further comprises a lenticular bevel junction, a bevel flange junction, and a flange portion wherein the bevel portion is a portion of the lens surface which extends radially out from center, beginning at the junction at the lenticular bevel junction and ending at the bevel flange junction and wherein the maximum radial thickness of the lenticular bevel junction is between about 300μ to about 600μ.

24. The contact lens of claim 2, wherein the pseudotruncation further comprises a lenticular bevel junction, a bevel flange junction, and a flange portion wherein the bevel portion is a portion of the lens surface which extends radially out from center, beginning at the junction at the lenticular bevel junction and ending at the bevel flange junction and wherein the thickness of the bevel flange junction is between about 75μ to about 250μ.

Claims

1. A translating presbyopic contact lens having a vertical meridian comprising:
    a) an optical zone;
    b) a curved lenticular portion within the optical zone; and
    c) a pseudotruncation which is asymmetric about the vertical meridian, wherein the pseudotruncation comprises an elongated, arcuate thickened portion in the lens, peripheral to the optical zone but inside of the edge;

wherein said thickened portion is asymmetrical with the vertical meridian of the lens and wherein the curve of the lenticular portion contains a point of inflection within a plane parallel with the plane defined by the peripheral edge of the lens.

2. The contact lens of claim 1, wherein more than one point of inflection exists.

3. The contact lens of claim 2, wherein the pseudotruncation is rotated nasally up by between 1 to 15 degrees or by between 7 to 8 degrees.

4. The contact lens of claim 2, wherein the pseudotruncation is rotated nasally down by between 1 to 10 degrees.

5. The contact lens of claim 2, wherein the optical zone is inset horizontally nasalward and/or rotated nasally up.

6. The contact lens of claim 2 and 3, wherein the optical zone is inset horizontally nasalward and rotated nasally up and further moved up.

7. The contact lens of claim 2, wherein the angular subtense of the pseudotruncation when it is 80% of its maximum thickness, is between 40 and 100 degrees circumferentially around the lens.

8. The contact lens of claim 2, wherein the radial position of the peak thickness value

of the pseudotruncation at any meridian around the lens is substantially constant, the arc being a portion of a concentric circle about the lens center.

9. The contact lens of claim 2, wherein the radial position of the peak thickness value of the pseudotruncation at any meridian around the lens is variable, the arc not being a portion of a concentric circle about the lens center.

10. The contact lens of claim 2, wherein the outer circumference of the lens is substantially circular, or concentric with a constant radius about the lens center.

11. The contact lens of claim 2, wherein the outer circumference of the lens is not circular, and not concentric about the lens center.

12. The contact lens of claim 2, wherein the pseudotruncation further comprises a lenticular bevel junction, a bevel flange junction, and a flange portion wherein the bevel portion is a portion of the lens surface which extends radially out from center, beginning at the junction at the lenticular bevel junction and ending at the bevel flange junction and wherein:

a) the width of the bevel portion is between 50μ to 500μ; or
b) the position of the bevel flange junction is between 5 to 7 mm; or
c) the maximum radial thickness of the lenticular bevel junction is between 300μ to 600μ; or
d) the thickness of the bevel flange junction is between 75μ to 250μ.