WHAT IS CLAIMED IS:

1. Spectacles for reducing progression of myopia in a human child, the spectacles comprising at least one myopia control spectacle lens comprising a single vision region and a myopia control region, wherein the myopia control spectacle lens comprises:

(i) a clear aperture,

(ii) an annular region surrounding the clear aperture, the annular region comprising one or more features that reduce the visual acuity for a corresponding eye, wherein the features include a lenslet or a light scattering feature, and

(iii) a transition zone between the clear aperture and the annular region,

wherein both (i) and (ii) are substantially centered on a lens axis, the clear aperture corresponding to the single vision region and the annular region corresponding to the myopia control region.

2. The spectacles of claim 1, wherein the transition zone provides a graded transition from the clear aperture to the one or more features that reduce the visual acuity for the corresponding eye.

3. The spectacles as in claim 1 or claim 2, wherein the one or more features that reduce the visual acuity for the corresponding eye comprise a plurality of spaced apart scattering centers sized and shaped to scatter incident light.

4. The spectacles of claim 3, wherein the scattering centers are formed on a surface of the myopia control spectacle lens.

5. The spectacles of claim 4, wherein the scattering centers are formed in a bulk of the myopia control spectacle lens.

6. The spectacles of claim 4, wherein the scattering centers have a diameter of 0.2 mm or less.

7. The spectacles as in any one of claims 3-6, wherein, in the annular region, the scattering centers have a density in a range from 2 to 5 per mm^2.

8. The spectacles as in any one of claims 3-7, wherein the scattering centers are arranged in a pattern that includes a random variation in spacing between adjacent dots and/or a random variation in dot size.

9. The spectacles of claim 8, wherein the scattering centers are positioned relative to a regular array of lattice sites, wherein each scattering center is displaced in at least one dimension from a corresponding one of the lattice sites by an amount equal to or less than a jitter amplitude, the jitter amplitude being a fraction of a distance between adjacent lattice sites.

10. The spectacles of claim 9, wherein the jitter amplitude is 0.5 or less.

11. The spectacles of claim 9 or 10, wherein the scattering centers have a dimension that varies randomly from a nominal value, the random variation being equal to or less than the jitter amplitude.

12. The spectacles of claim 11, wherein the jitter amplitude is 0.5 times the nominal value or less.

13. The spectacles as in any of claims 3-12, wherein the scattering centers have a volume that varies randomly from a nominal volume, the random variation being equal to or less than the jitter amplitude.

14. The spectacles as in any one of claims 2-13, wherein the annular region corresponds to an area of 50% or more of the lens surface.

15. The spectacles of claim 1, wherein the myopia control spectacle lens comprises regions having an optical power different from an optical power of the clear aperture.

16. The spectacles of claim 1, wherein the regions comprise island-shaped lenses.

17. The spectacles as in any one of claims 1-16, wherein the clear aperture has a diameter in a range from 2 mm to 8 mm.

18. The spectacles as in any one of claims 1-17, wherein the clear aperture is aligned to be in front of the human's pupil when in distance gaze.

19. The spectacles as in any one of claims 1-18, wherein the myopia control spectacle lens reduces an image contrast of an object viewed through the annular region by at least 20% compared to an image contrast of the object viewed through the clear aperture.

20. The spectacles as in any one of claims 1-19, wherein the myopia control spectacle lens has optical power to correct the human's on-axis vision to 20/20 or better through the clear aperture, and, corrects the human's vision to 20/25 or better through the annular region.