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 ~~reduces myopia progression in the human child by 0.4 D or more after three years of treatment compared to a control group~~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 ~~myopia control spectacle lens comprises (i) a clear center, and (ii) a surrounding annular portion, both (i) and (ii) 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 and comprising~~ 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~~s~~ 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 ~~2-6~~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 ~~2-7~~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 ~~the~~ 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 ~~a~~ 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 ~~a~~ 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 ~~central region~~ 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 ~~central region~~ 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 ~~central region~~ 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 ~~peripheral~~ annular region by at least 20% compared to an image contrast of the object viewed through the ~~central region~~ 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 ~~central region~~ clear aperture, and, corrects the human's vision to 20/25 or better through the ~~peripheral~~ annular region.