1. A bifocal contact lens dividing light passing through a common portion thereof and providing two foci for said light, a first portion of said light being focused by refraction and a second portion of said light being focused by asymmetric zone plate surfaces.

2. A bifocal contact lens which determines one focus of the bifocal action by refraction and the other focus of the bifocal action by diffraction, the lens substantially having a basic curvature which conforms to the said one focus but comprising concentric zones formed on said basic curvature, said zones having surfaces spaced from said basic curvature by distances differing across each zone width.

3. A bifocal contact lens having one focus provided by diffraction and the other focus provided by refraction comprising a lens surface having steps defining a plurality of concentric zones of the same size as in a phase zone plate, said lens surface being made up of discrete parts having a curvature of the same one radius but with steps between said parts of a size such that a series of parts together provide a discontinuous surface approximating to a curvature of a radius different from said one radius, one of said curvatures providing a retardation of light across each zone width which determines said focus provided by diffraction and the other of said curvatures determining said focus provided by refraction.

4. A bifocal contact lens having a basic curvature which determines one focus of the bifocal action and having diffractive power which determines the other focus of the bifocal action, the lens comprising a plurality of concentric zones which together conform to the basic curvature providing the said on focus but which are arranged so as to cause diffraction of light transmitted through the lens with each zone providing an asymmetric retardation of light across the zone width in a manner which directs light of a design wavelength predominantly into one required order and sign of diffraction at the expense of transmission at zero order and at the expense of transmission at the opposite sign of said required order of diffraction, while light of another wavelength displaced from said design wavelength is predominantly transmitted at zero order in preference to the said required order and sign of diffraction, whereby light of said design wavelength is directed to the other focus by way of said required order and sign of diffraction and light of said other wavelength is directed to the said one focus by way of zero order transmission and refraction.

5. A lens according to claim **4** in which said required order of diffraction is first order diffraction.

6. A lens according to claim **4** in which the zones are defined, and the asymmetric retardation is provided, by the surface contour of the lens.

7. A lens according to claim **6** in which the zones are defined, and the asymmetric retardation is provided, by the rear surface contour of the lens.

8. A lens according to claim **4** in which the zones are defined by steps in the lens surface.

9. A lens according to claim **4** in which the asymmetric retardation is provided by a stepped surface contour having stepped areas across each zone.

10. A lens according to claim **8** in which the asymmetric retardation is provided by a stepped surface contour having stepped areas across each zone.

11. A lens according to claim **4** in which the asymmetric retardation is provided by a smooth curve across each zone.

12. A lens according to claim **8** in which the asymmetric retardation is provided by a smooth curve across each zone.

13. A lens according to claim **4** whose diffractive power is additional to refractive power provided by the material of the lens and the basic curvature of its front and rear surfaces.

14. A lens according to claim **13** having a surface contour superimposed on the base curve in a manner which effectively retains the basic curvature.

15. A lens according to claim **14** in which the asymmetric retardation is provided by a stepped surface contour having stepped areas across each zone.

16. A lens according to claim **15** in which the stepped areas across each zone each have a radius of curvature the same as that of the base curve.

17. A lens according to claim **14** in which the zones are defined by steps in the lens surface and the asymmetric retardation is provided by a smooth curve across each zone.

18. A lens according to claim **17** in which the smooth curve across each zone has a radius of curvature which differs from that of the base curve but the step size at the zone edge is such as to give general conformation of the surface to the basic curvature.

19. A lens according to claim **4** having a surface contour produced by cutting.

20. A lens according to claim **19** having a surface contour cut by a computer-controlled lathe.

21. A lens according to claim **6** having a surface contour produced by cutting.

22. A lens according to claim **21** having a surface contour cut by a computer-controlled lathe.

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