and the parameters are selected to provide substantially the same focal length for all diameters of the lens.

3. An intraocular lens in accordance with claim 2 wherein the apical radius of curvature is between 6.2 and 15.51 mm.

4. An intraocular lens in accordance with claim 2 wherein the refractive power at the apex is between 10 and 25 diopters in the eye.

5. An intraocular lens in accordance with claim 2 wherein the lens is plano convex.

6. An intraocular lens for implantation in the human eye comprising a lens having at least one curved surface wherein the curvature of the surface varies from the apex to the edge according to the equation for the SAG value Z of

$$Z = \frac{Ca\ Y^2}{1 + [1 - (i + k)(Ca)^2\ Y_2]^{\frac{1}{2}}} + AY^4 + BY^6 + CY^8 + DY^{10}$$

where: Ca is the apical curvature, k is a conic constant; A, B, C, and D are coefficients and Y is the distance normal to the optical axis of the lens through the apex and wherein the apical curvature, a conic constant and coefficients for each diopter of lens are selected from the following:

Diopter (Eye)	Ca × 10^{-2}	K × 10^{-3}	A × 10^{-3}	B × 10^{-5}	C × 10^{-9}	D × 10^{-10}
10	6.447	.265	−.192807	−.10861	−.203377	.507039
10.5	6.77	.299	−.194550	−.115792	−.869791	.522880
11	7.092	.314	−.196336	−.123124	−1.58687	.520648
11.5	7.415	.318	−.198817	−.131235	−2.36760	.509791
12	7.737	.320	−.201688	−.139867	−3.21878	.489171
12.5	8.059	.307	−.205027	−.149196	−4.16882	.462950
13	8.382	.298	−.208396	−.158830	−5.22122	.424082
13.5	8.705	.299	−.212971	−.170045	−6.41432	.381238
14	9.027	.307	−.217322	−.181376	−7.72415	.316264
14.5	9.349	.304	−.222617	−.194216	−9.19654	.226656
15	9.671	.288	−.228381	−.208100	−10.8498	.113574
15.5	1.000	.131	−.234722	−.223455	−12.7517	−.0361902
16	1.031	.116	−.241366	−.239526	−14.8455	−.0194536
16.5	10.627	.118	−.249590	−.258260	−17.2455	−.380321
17	10.965	.120	−.257318	−.277884	−20.0191	−.676902
17.5	11.287	.138	−.265935	−.299238	−23.1081	−.997463
18	11.628	.119	−.276075	−.324511	−26.8191	−1.45071
18.5	11.933	.115	−.286278	−.349943	−30.6623	−1.92666
19	12.255	.093	−.297730	−.379195	−35.2485	−2.54846
19.5	12.579	−209.862	−.257701	−.337117	−30.9202	−1.58611
20	12.903	−209.861	−.266800	−.362553	−34.8611	−2.19214
20.5	13.288	−216.035	−.274240	−.386696	−39.2435	−2.62190
21	13.55	−23.2098	−.280288	−.410766	−43.3719	−3.28125
21.5	13.87	−23.2093	−.290679	−.441681	−48.8705	−4.06198
22	14.184	−23.2094	−.302648	−.476935	−55.1714	−4.98135
22.5	14.514	−23.2095	−.315256	−.515630	−62.4471	−6.11013
23	14.837	−23.2145	−.332809	−.566820	−71.6961	−7.46951
23.5	15.155	−24.2738	−.338602	−.595568	−78.2638	−8.73609
24	15.48	−24.2737	−.355016	−.648247	−88.88159	−10.5606
24.5	15.798	−24.2745	−.371194	−.702356	−100.112	−12.6698
25	16.129	−25.7839	−.381465	−.749158	−110.796	−14.5862

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