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(71) Applicant *(for all designated States except US)*: **ALCON, INC.** [CH/CH]; Bosch 69, CH-6331 Hunenberg (CH).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **HONG, Xin** [CN/US]; 5009 Arbor Mill Drive, Fort Worth, TX 76135 (US). **KARAKELLE, Mutlu** [TR/US]; 6713 Glen Meadow Drive, Fort Worth, TX 76132 (US). **ZHANG, Xiaoxiao** [US/US]; 5100 Alaire Drive, Fort Worth, TX 76132 (US). **CHOI, Myoung** [KR/US]; 5900 Moss Drive, Arlington, TX 76016 (US). **ZHANG, Yan** [CN/US]; 4320 Bellaire Drive South, Unit 211, Fort Worth, TX 76109 (US). **SIMPSON, Michael** [US/US]; 3004 Waterway Court, Arlington, TX 76102 (US).

(74) Agents: **PASTRANA, Armando, Jr.** et al.; Mail Code Tb4-8, 6201 South Freeway, Fort Worth, TX 76134 (US).

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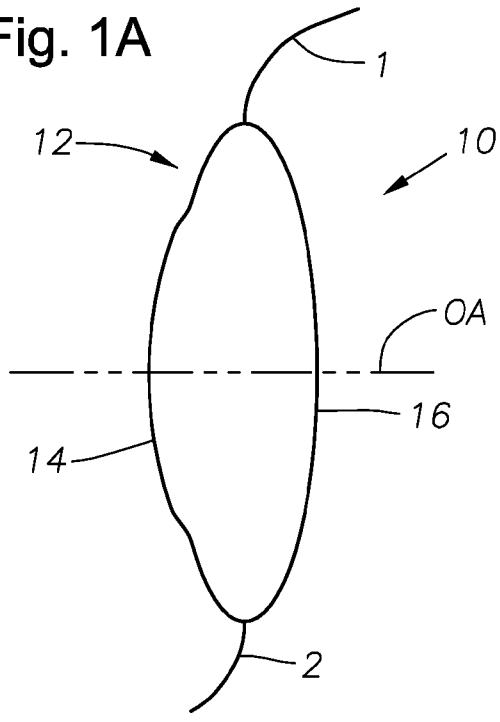
[Continued on next page]

(54) Title: EXTENDED DEPTH OF FOCUS (EDOF) LENS TO INCREASE PSEUDO-ACCOMMODATION BY UTILIZING PUPIL DYNAMICS

Fig. 1A



(57) Abstract: In one aspect, the present invention provides an ophthalmic lens (e.g., an IOL) that includes an optic having an anterior surface and a posterior surface disposed about an optical axis. At least one of the surfaces (e.g., the anterior surface) has a profile characterized by superposition of a base profile and an auxiliary profile. The auxiliary profile can include an inner region, an outer region and a transition region between the inner and the outer regions, where an optical path difference across the transtion region (i.e., the optical path difference between the inner and the outer radial boundaries of the transition region) corresponds to a non-integer fraction (e.g., 1/2) of a design wavelength (e.g., a wavelength of about 550 nm).

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