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(71) Applicant *(for all designated States except US)*: **ELENZA, INC.** [US/US]; 5238 Valleypointe Parkway, Suite 6, Roanoke, Virginia 24019 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **FEHR, Jean-Noel** [CH/CH]; c/o ELENZA, INC., 5238 Valleypointe Parkway, Suite 6, Roanoke, Virginia 24019 (US). **DOLL, Walter** [CH/CH]; c/o ELENZA, INC., 5238 Valleypointe Parkway, Suite 6, Roanoke, Virginia 24019 (US). **SCHNELL, Urban** [CH/CH]; c/o ELENZA, INC., 5238 Valleypointe Parkway, Suite 6, Roanoke, Virginia 24019 (US).

(74) Agents: **RAWLINS, Andrew E.** et al.; Foley & Lardner LLP, Washington Harbour, 3000 K Street, N.W., Suite 600, Washington, District of Columbia 20007-5143 (US).

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Declarations under Rule 4.17:

[Continued on next page]

(54) **Title**: OPHTHALMIC DEVICES AND METHODS WITH APPLICATION SPECIFIC INTEGRATED CIRCUITS

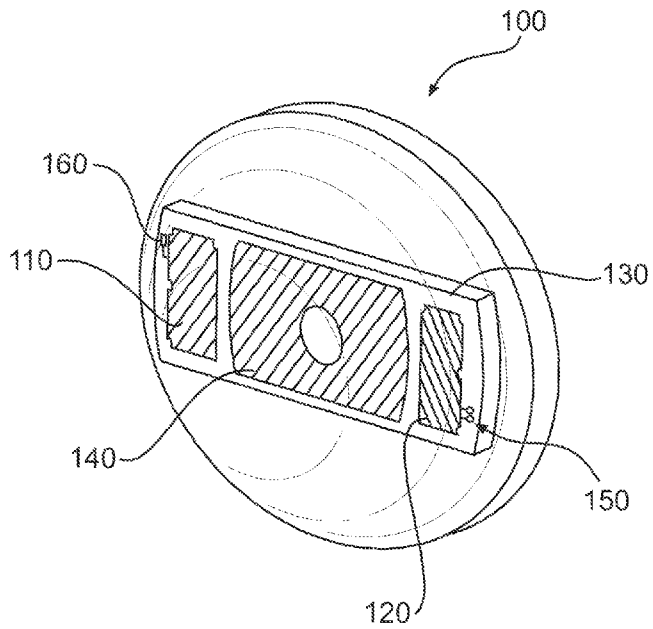


FIG. 1

(57) **Abstract**: Ophthalmic devices with dynamic electro-active elements offer variable optical power and/or depth of field that restore lost accommodation in individuals suffering from presbyopia or aphakia. An illustrative device senses physiological processes indicative of the accommodative response and actuates a dynamic electro-active element to provide the desired change in optical power and/or depth of field. The illustrative device includes two application-specific integrated circuits (ASICs) for processing the accommodative response and actuating the electro-active element: a high-voltage ASIC that steps up a low voltage from a power supply to a higher voltage suitable for actuating the electro-active element, and another ASIC that operates at low voltage (and therefore consumes little power) and controls the operating state of the high-voltage ASIC. Because each ASIC operates at the lowest possible voltage, the illustrative ophthalmic device dissipates less power than other ophthalmic devices.

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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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