



(51) International Patent Classification:
G02B 1/06 (2006.01)

(21) International Application Number:
PCT/US2010/052367

(22) International Filing Date:
12 October 2010 (12.10.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/579,203 14 October 2009 (14.10.2009) US

(71) Applicant (for all designated States except US):
ADLENS BEACON, INC. [US/US]; 33 Wood Avenue South, Suite 600, Iselin, New Jersey 08830 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GUPTA, Amitava** [US/US]; 5322 Fox Den Road, Roanoke, Virginia 24018 (US). **SCHNELL, Urban** [CH/CH]; Eichgutweg 16, CH-3053 Munchenbuchsee (CH). **HAROUD, Karim** [CH/CH]; Bourg du village 6, CH-1512 Chavannes sur Moudon (CH). **JAEGER, Hans** [CH/CH]; Eschenstrasse 11, CH-4922 Thunstetten (CH).

(74) Agents: **RAY, Michael B.** et al.; 1100 New York Avenue N.W., Washington, District of Columbia 20005 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: ASPHERIC FLUID FILLED LENS OPTIC

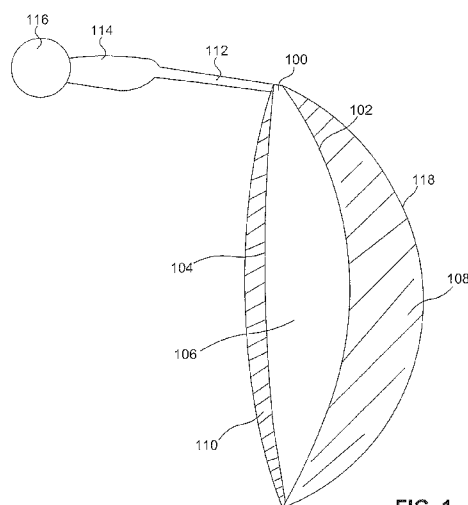


FIG. 1

(57) Abstract: A non-round fluid lens assembly includes a non-round rigid lens and a flexible membrane attached to the non-round rigid lens, such that a cavity is formed between the non-round rigid lens and the flexible membrane. A reservoir in fluid communication with the cavity allows a fluid to be transferred into and out of the cavity so as to change the optical power of the fluid lens assembly. In an embodiment, a front surface of the non-round rigid lens is aspheric. Additionally or alternatively, a thickness of the flexible membrane may be contoured so that it changes shape in a spheric manner when fluid is transferred between the cavity and the reservoir.

