

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : G02F 1/03, 1/155, 1/153	A1	(11) International Publication Number: WO 00/57238 (43) International Publication Date: 28 September 2000 (28.09.00)
(21) International Application Number: PCT/US00/07088 (22) International Filing Date: 20 March 2000 (20.03.00) (30) Priority Data: 09/273,266 22 March 1999 (22.03.99) US (71) Applicant (for all designated States except US): VISSON IP, INC. [US/US]; 15 East Dover North St., Dover, DE 19901 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): KIRYUSCHEV, Irina [IL/IL]; 9/9 Pilichovski Street, Ramat Aviv, 69341 Tel Aviv (IL). ZAIDENBERG, Lev [IL/IL]; 49 Hanesher Street, 43100 Raanana (IL). (74) Agent: FRIEDMAN, Mark, M.; c/o Castorina, Anthony, Suite 207, 2001 Jefferson Davis Highway, Arlington, VA 22202 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: ELECTRO-OPTICAL LIGHT MODULATING DEVICE (57) Abstract A light modulating device (20) is provided, which includes a first set of fibers (22) and a second set of fibers (24) being arranged to form a two-dimensional array of junctions between fibers of the first set of fibers (22) and fibers of the second set of fibers (24). Each of the fibers of the first and second sets of fibers includes a longitudinal conductive element (26), whereas fibers of at least one of the first and second sets of fibers, at least at the junctions, further include a coat (28) of an electro-optically active substance being capable of reversibly changing its optical behavior when subjected to an electric or magnetic flux or field. The light modulating device has advantages over prior art light modulating devices because it is (i) readily fabricated in any desired dimensions; (ii) flexible; (iii) foldable/collapsible; (iv) simple to manufacture; and therefore (v) cost-effective.		