



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G02F 1/1337	A1	(11) International Publication Number: WO 00/36463 (43) International Publication Date: 22 June 2000 (22.06.00)
(21) International Application Number: PCT/IB99/01938 (22) International Filing Date: 6 December 1999 (06.12.99) (30) Priority Data: 9827540.7 15 December 1998 (15.12.98) GB 9828283.3 22 December 1998 (22.12.98) GB (71) Applicant (for all designated States except US): ROLIC AG [CH/CH]; Innerre Güterstrasse, CH-6301 Zug (CH). (72) Inventors; and (75) Inventors/Applicants (for US only): FÜNFSCILLING, Jurg [CH/CH]; Weiherhofstrasse 138, CH-4054 Basel (CH). STALDER, Martin [CH/CH]; 63 Bienenstrasse, CH-4104 Oberwil (CH). SCHADT, Martin [CH/CH]; Liestalerstrasse 77, CH-4411 Seltisberg (CH). (74) Agent: NEVILLE, Peter, Warwick; BTG International Limited, 10 Fleet Place, Limeburner Lane, London EC4M 7SB (GB).		(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: ORIENTATION LAYER FOR A LIQUID CRYSTAL MATERIAL		
(57) Abstract A liquid crystal device comprising ferroelectric liquid crystal material aligned by a liquid crystal polymer (LCP) network layer (18) under 20 nm thick, which itself was aligned by a photo-oriented linearly photopolymerised (LPP) layer (16) under 20 nm thick, exhibits low voltage drop over the aligning layer and has a remarkable contrast ratio. 11 → 13 15 17 19 19 18 16 14 12 20		