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(21) International Application Number: PCT/NL98/00341 (22) International Filing Date: 12 June 1998 (12.06.98) (30) Priority Data: 1006302 12 June 1997 (12.06.97) NL (71) Applicant (for all designated States except US): ZETFOLIE B.V. [NL/NL]; Vlietweg 16, NL-2266 KA Leidschendam (NL). (72) Inventors; and (75) Inventors/Applicants (for US only): RUITER, Jacobus, Christiaan, Gerardus, Maria [NL/NL]; Shakespearezijde 22, NL-2725 NN Zoetermeer (NL). TERLOUW, Erik, Maarten [NL/NL]; Bloemgracht 109, NL-1016 KJ Amsterdam (NL). HADZIIOANNOU, Georges [GR/NL]; Boerakkerweg 3, NL-9321 EL Peize (NL). BROUWER, Hendrik-Jan [NL/NL]; Radijsstraat 2, NL-9741 BN Groningen (NL). (74) Agent: DE BRUIJN, Leendert, C.; Nederlandsch Octrooibureau, Scheveningseweg 82, P.O. Box 29720, NL-2502 LS The Hague (NL).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SUBSTRATE HAVING A UNIDIRECTIONAL CONDUCTIVITY PERPENDICULAR TO ITS SURFACE, DEVICES COMPRISING SUCH A SUBSTRATE AND METHODS FOR MANUFACTURING SUCH A SUBSTRATE (57) Abstract Substrate (7; 7'; 10) and devices including such a substrate, the substrate having a first surface and a second surface extending substantially in parallel to the first surface, the substrate being of a material of a first conductivity and provided with a plurality of electrically conducting channels (21) which are extending exclusively in a direction perpendicular to the first and second surfaces, said channels having a second conductivity substantially larger than the first conductivity, the substrate being provided with at least one electrode (42) on either one of the first and second surfaces, contacting at least one of said channels, the at least one electrode (42) having a predetermined minimum dimension (D) in a contact area (A) with the substrate, and mutual distances between adjacent ones of the plurality of channels (21) being smaller than said minimum dimension of said at least one electrode (42).		

