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(21) International Application Number: PCT/NO00/00127 (22) International Filing Date: 14 April 2000 (14.04.00) (30) Priority Data: 19991916 22 April 1999 (22.04.99) NO (71) Applicant (for all designated States except US): THIN FILM ELECTRONICS ASA [NO/NO]; P.O. Box 1872 Vik, N-0124 Oslo (NO). (72) Inventors; and (75) Inventors/Applicants (for US only): ROMAN, Lucimara, Stolz [BR/SE]; Mårdtorpsgatan 29, S-584 32 Linköping (SE). INGANÄS, Oile [SE/SE]; Wernersgatan 13, S-582 35 Linköping (SE). HAGEL, Oile [SE/SE]; Lektorsgatan 3, S-582 35 Linköping (SE). BERGGREN, Magnus [SE/SE]; Bergsbadvägen 14, S-590 77 Vreta Kloster (SE). GUSTAFSSON, Göran [SE/SE]; Trumslagaregatan 33, S-582 16 Linköping (SE). CARLSSON, Johan [SE/SE]; Ekholmsvägen 219, S-589 29 Linköping (SE). (74) Agent: LEISTAD, Geirr, I.; Thin Film Electronics ASA, P.O. Box 1872 Vik, N-0124 Oslo (NO).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, 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 With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: A METHOD IN THE FABRICATION OF ORGANIC THIN-FILM SEMICONDUCTING DEVICES (57) Abstract In a method in the fabrication of an organic thin-film semiconducting device comprising an electrode arrangement with electrodes contacting a semiconducting organic material, an anode in the electrode arrangement is made as a two-layer structure, where the first layer is a conducting or semiconducting material or a combination thereof deposited on a substrate and a second layer is a conducting polymer with a work function higher than that of the material in the first layer. A third layer consisting of semiconducting organic material and forming the active material of the device is deposited on the top of the anode, and the cathode made of a fourth layer of a metal deposited on a third layer. In a preferred embodiment a low work function metal is used in the first layer, a doped conjugated polymer such as PEDOT-PSS in the second layer, while the cathode may be formed of the same metal as used in the first layer. Use in the manufacturing of the electrode arrangement in an organic thin-film diode or in a transistor structure.		