



- (51) **International Patent Classification:**
Not classified
- (21) **International Application Number:**
PCT/US2019/051159
- (22) **International Filing Date:**
13 September 2019 (13.09.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/731,600 14 September 2018 (14.09.2018) US
- (71) **Applicant: UBIQUITOUS ENERGY, INC.** [US/US];
3696 Haven Ave, Suite B, Redwood City, California 94063 (US).
- (72) **Inventors: BARR, Miles C.;** 3696 Haven Ave, Suite B, Redwood City, California 94063 (US). **PANDEY, Richa;** 3696 Haven Ave, Suite B, Redwood City, California 94063 (US). **SYKES, Matthew E.;** 3696 Haven Ave, Suite B, Redwood City, California 94063 (US). **LOVE, John A.;** 3696 Haven Ave, Suite B, Redwood City, California 94063 (US). **FLORES, Gabriel A.;** 3696 Haven Ave, Suite B, Redwood City, California 94063 (US).
- (74) **Agent: LARGENT, Craig C. et al.;** KILPATRICK TOWNSEND & STOCKTON LLP, Mailstop: IP Docketing - 22, 1100 Peachtree Street, Suite 2800, Atlanta, Georgia 30309 (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, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

(54) **Title:** METHOD AND SYSTEM FOR MULTILAYER TRANSPARENT ELECTRODE FOR TRANSPARENT PHOTO-VOLTAIC DEVICES

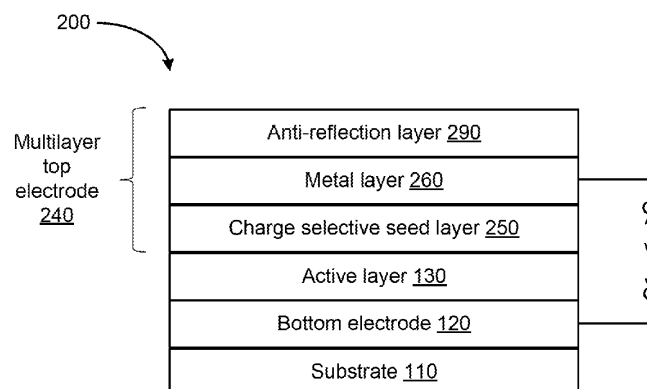


FIG. 2A

(57) **Abstract:** A transparent photovoltaic device includes a transparent substrate and a transparent bottom electrode coupled to the transparent substrate. The transparent photovoltaic device also includes an active layer coupled to the transparent bottom electrode and a transparent multilayer top electrode that includes a seed layer coupled to the active layer and a metal layer coupled to the seed layer. The transparent photovoltaic device is characterized by an average visible transmission (AVT) greater than 25% and a top electrode sheet resistance that is less than 100 Ohm/sq.

[Continued on next page]

Published:

- *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*