

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 June 2022 (09.06.2022)



(10) International Publication Number
WO 2022/117894 A3

(51) International Patent Classification:

H01L 31/0224 (2006.01) H01L 31/0747 (2012.01)
H01L 31/0745 (2012.01) H01L 31/0216 (2014.01)

(21) International Application Number:

PCT/EP2022/000024

(22) International Filing Date:

08 February 2022 (08.02.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

202110828468.X 22 July 2021 (22.07.2021) CN

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(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, IT, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

— with international search report (Art. 21(3))
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
— upon request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a)

(88) Date of publication of the international search report:

07 July 2022 (07.07.2022)

(54) Title: DOPED REGION STRUCTURE AND SOLAR CELL COMPRISING THE SAME, CELL ASSEMBLY, AND PHOTO-VOLTAIC SYSTEM

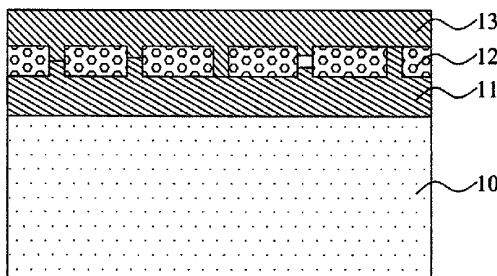


FIG. 1

(57) Abstract: The disclosure relates to the technical field of solar cells, and provides a solar cell and a doped region structure thereof, a cell assembly, and a photovoltaic system. The doped region structure includes a first doped layer, a passivation layer, and a second doped layer that are disposed on a silicon substrate in sequence. The passivation layer is a porous structure having the first doped layer and/or the second doped layer inlaid in a hole region. The first doped layer and the second doped layer have a same doping polarity. By means of the doped region structure of the solar cell provided in the disclosure, the difficulty in production and the limitation on conversion efficiency as a result of precise requirements for the accuracy of a thickness of a conventional tunneling layer are resolved.

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