

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
27 May 2021 (27.05.2021)



(10) International Publication Number
WO 2021/099356 A1

(51) International Patent Classification:

C09D 183/16 (2006.01) C07F 7/10 (2006.01)

(21) International Application Number:

PCT/EP2020/082484

(22) International Filing Date:

18 November 2020 (18.11.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2019-210377 21 November 2019 (21.11.2019) JP

(71) Applicant: **MERCK PATENT GMBH** [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).

(72) Inventors: **NAKAMOTO, Naoko**; c/o Merck Performance Materials Ltd., 3330, Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP). **TAKAGISHI, Hideyuki**; c/o Merck Performance Materials Ltd., 3330, Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP). **FUJIWARA, Takashi**; c/o Merck Performance Materials Ltd., 3330, Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP). **SATO, Atsuhiko**; c/o Merck Performance Materials Ltd., 3330, Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP).

(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).

Published:

— with international search report (Art. 21(3))

(54) Title: AMORPHOUS SILICON FORMING COMPOSITION AND METHOD FOR PRODUCING AMORPHOUS SILICON FILM USING SAME

(57) Abstract: To provide an amorphous silicon forming composition, which has high affinity with a substrate. An amorphous silicon forming composition comprising a polysilane having an amino group; and a solvent.



WO 2021/099356 A1