

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
26 September 2024 (26.09.2024)



(10) International Publication Number
WO 2024/194227 A1

- (51) **International Patent Classification:**
G03F 7/26 (2006.01) *G03F 7/38* (2006.01)
- (21) **International Application Number:**
PCT/EP2024/057099
- (22) **International Filing Date:**
18 March 2024 (18.03.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
2023-044684 20 March 2023 (20.03.2023) JP
- (71) **Applicant:** MERCK PATENT GMBH [DE/DE]; Frankfurt
Strasse 250, 64293 Darmstadt (DE).
- (72) **Inventors:** YANAGITA, Hiroshi; c/o Merck Elec-
tronics Ltd. [JP], 3330 Chihama, Kakegawa-shi, Shizuoka
437-1412 (JP). YAMAMOTO, Kazuma; c/o Merck Elec-
tronics Ltd. [JP], 3330 Chihama, Kakegawa-shi, Shizuoka
437-1412 (JP).
- (74) **Agent:** MERCK PATENT ASSOCIATION; c/o Merck
Patent GmbH, 64271 Darmstadt (DE).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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:** THICKENING COMPOSITION, METHOD FOR MANUFACTURING THICKENED RESIST PATTERN, AND
METHOD FOR MANUFACTURING PROCESSED SUBSTRATE

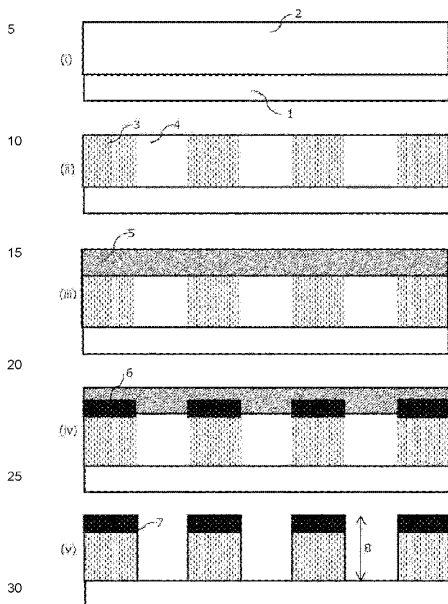


Fig. 1

(57) **Abstract:** [Problem] To provide a thickening composition.
[Means for Solution] To provide a thickening composition comprising
a polymer (A) comprising a repeating unit (A1) represented by the for-
mula (a1) and a solvent (B).

WO 2024/194227 A1

[Continued on next page]

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))*