

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 December 2022 (01.12.2022)



(10) International Publication Number
WO 2022/248524 A1

(51) International Patent Classification:
G03F 7/039 (2006.01)

(21) International Application Number:
PCT/EP2022/064144

(22) International Filing Date:
25 May 2022 (25.05.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2021-090002 28 May 2021 (28.05.2021) JP

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

(72) Inventors: **SUZUKI, Masato**; c/o Merck Electronics Ltd.,
3330 Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP).
YANAGITA, Hiroshi; c/o Merck Electronics Ltd., 3330
Chihama, Kakegawa-shi, Shizuoka, 437-1412 (JP). **SAO,**
Takayuki; c/o Merck Electronics 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, IQ, IR, IS, IT, JM, 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))
- 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))

(54) Title: THICK FILM RESIST COMPOSITION AND METHOD FOR MANUFACTURING RESIST FILM USING THE SAME

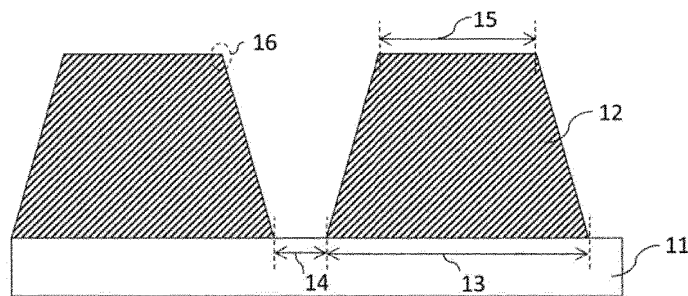


Figure 1

(57) Abstract: [Problem] To provide a thick film resist composition capable of forming a resist pattern with high rectangularity. [Means for Solution] A thick film resist composition comprising a polymer (A), a deprotecting agent (B), a particular carboxylic acid compound (C) and a solvent (D).

WO 2022/248524 A1