

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
11 March 2021 (11.03.2021)



(10) International Publication Number
WO 2021/045843 A1

- (51) International Patent Classification:
C09D 11/30 (2014.01) *C09D 11/101* (2014.01)
- (21) International Application Number:
PCT/US2020/041803
- (22) International Filing Date:
13 July 2020 (13.07.2020)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
16/562,716 06 September 2019 (06.09.2019) US
- (71) Applicant: **CANON KABUSHIKI KAISHA** [JP/JP];
30-2, Shimomanuko 3-chome, Ohta-ku, Tokyo 146-8501 (JP).
- (71) Applicant (for AE only): **CANON NANOTECHNOLOGIES, INC.** [US/US]; 1807 West Braker Lane C-300, Austin, Texas 78758 (US).
- (72) Inventors: **LI, Fei**; 1807 West Braker Ln. C-300, Austin, Texas 78758 (US). **LIU, Weijun**; 1807 West Braker Lane C-300, Austin, Texas 78758 (US).
- (74) Agent: **KING, Cameron A.**; P.O. Box 81536, Austin, Texas 78708 (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, 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,

(54) Title: CURABLE COMPOSITION

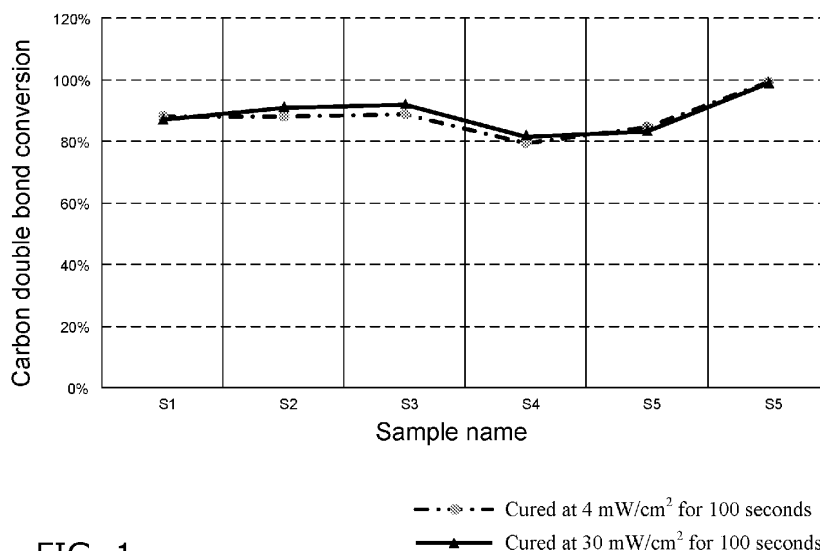


FIG. 1

(57) Abstract: A curable composition can comprise a polymerizable material and an initiator. The polymerizable material can comprise a first monomer and a second monomer, wherein the second monomer is soluble in the first monomer, and the second monomer includes a ring structure selected from a maleimide ring, a pyrone ring, or a 2-furanone rings. The curable composition can have a viscosity of not greater than 10 mPa·s, a fast curing kinetic, low shrinkage during curing, and is suitable for use in inkjet adaptive planarization.

[Continued on next page]

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))