

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
30 May 2025 (30.05.2025)



(10) International Publication Number
WO 2025/111136 A1

- (51) **International Patent Classification:**
C09G 1/02 (2006.01) *C09K 3/14* (2006.01)
- (21) **International Application Number:**
PCT/US2024/054661
- (22) **International Filing Date:**
06 November 2024 (06.11.2024)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/601,467 21 November 2023 (21.11.2023) US
- (71) **Applicant: VERSUM MATERIALS US, LLC** [US/US];
8555 South River Parkway, Tempe, Arizona 85284 (US).
- (72) **Inventors: HENRY, James Matthew;** c/o Versum Materials US, LLC, 8555 South River Parkway, Tempe, Arizona 85284 (US). **DODD, Andrew J.;** c/o Versum Materials US, LLC, 8555 South River Parkway, Tempe, Arizona 85284 (US). **SHI, Xiaobo;** c/o Versum Materials US, LLC, 8555 South River Parkway, Tempe, Arizona 85284 (US).
- (74) **Agent: YANG, Lina;** Versum Materials US, LLC, 8555 South River Parkway, Tempe, Arizona 85284 (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, 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).

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

(54) **Title:** ECO-FRIENDLY BIOCIDES FOR CHEMICAL MECHANICAL PLANARIZATION (CMP) POLISHING COMPOSITIONS

(57) **Abstract:** Present invention provides eco-friendly biocides for inhibiting microbiological growth (bacteria and/or fungi) growth in Chemical Mechanical Planarization (CMP) polishing compositions.



WO 2025/111136 A1