

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
15 June 2023 (15.06.2023)



(10) International Publication Number
WO 2023/107345 A1

(51) International Patent Classification:

B08B 17/02 (2006.01) **C07C 67/00** (2006.01)
B01F 21/00 (2022.01) **C07C 67/62** (2006.01)
C07B 63/04 (2006.01) **C07C 253/32** (2006.01)
C07C 57/00 (2006.01)

(21) International Application Number:

PCT/US2022/051667

(22) International Filing Date:

02 December 2022 (02.12.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

202111489084.6 08 December 2021 (08.12.2021) CN

(71) Applicant: **ECOLAB USA INC.** [US/US]; 1 Ecolab Place,
St. Paul, MN 55102 (US).

(72) Inventor: **KONG, Meng**; 1-3 F of Building C, Jinqiao
Science Park, 255 Guizhao Road, Pudong New Area, Shang-
hai, SH 201206 (CN).

(74) Agent: **BABYCH, Eric, D.**; Barnes & Thornburg LLP, 299
South Main Street, Suite 1825, Salt Lake City, UT 84111
(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, 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, 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,

(54) Title: METHOD AND COMPOSITION TO REMOVE POLYMER FOULANT

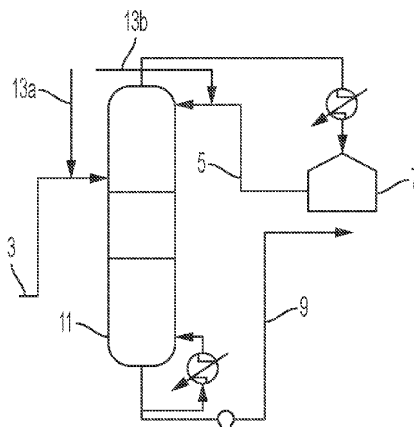


FIG. 1

(57) Abstract: A composition and method for dissolving foulant formed in a monomer manufacturing process. The composition may include an amide-containing compound and a solvent. Other components may optionally be included in the composition, such as a polymerization inhibitor or dispersant. The amide-containing compound may be, for example, dimethylacetamide. The solvent may be, for example, methanol or toluene. The foulant includes a polymer.

[Continued on next page]

WO 2023/107345 A1

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))*