

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 July 2009 (30.07.2009)

(10) International Publication Number
WO 2009/094098 A3

(51) International Patent Classification:
A62D 3/30 (2007.01) *A62D 3/33* (2007.01)

(21) International Application Number:
PCT/US2008/088547

(22) International Filing Date:
30 December 2008 (30.12.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/017,749 22 January 2008 (22.01.2008) US

(71) Applicant (for all designated States except US): **E-Z-EM, INC.** [US/US]; 1111 Marcus Avenue, Lake Success, NY 11042 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HENRY, Timothy, G.** [US/US]; 95 Mason Drive, Princeton, NJ 08540 (US). **PRICE, Barbara, B.** [US/US]; 44-995 Waialele Road, #29, Kane'ohe, HI 96744 (US).

(74) Agent: **BALTS, Timothy J.**; Alston & Bird LLP, Bank Of America Plaza, 101 South Tryon Street, Suite 4000, Charlotte, NC 28280-4000 (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, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ,

EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

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))

(88) Date of publication of the international search report:
8 April 2010

(54) Title: METHOD AND FORMULATION FOR NEUTRALIZING TOXIC CHEMICALS AND MATERIALS

(57) Abstract: The present invention is directed to a formulation and associated method for neutralizing one or more toxic chemical and/or materials including toxic industrial chemicals and toxic industrial materials, such as irritants, heavy metals, radioactive metals, acids and acid irritants, pesticides, and various agricultural chemicals, (collectively referred to as toxic chemical, materials, or simply toxins) as well as decontaminating surfaces that have come into contact with these agents. As a result, the formulation of the present invention can be used for neutralizing a broad spectrum of toxic chemicals and materials. In one embodiment, the active ingredient comprises 2, 3, butanedione monoxime (also known as diacetyl monoxime (DAM)), and alkali salts thereof such as potassium 2,3-butanedione monoxime (KBDO). The formulation also typically includes a carrier in which the active ingredient is dispersed. In one embodiment, the carrier comprises polyethylene glycol (PEG); monomethoxypolyethylene glycol(mPEG); and combinations and derivatives thereof.



WO 2009/094098 A3