

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
21 July 2011 (21.07.2011)

(10) International Publication Number
WO 2011/088286 A3

PCT

(51) International Patent Classification:

C04B 35/447 (2006.01) **C04B 35/626** (2006.01)
C04B 38/10 (2006.01) **E01C 9/00** (2006.01)
C04B 28/34 (2006.01)

(21) International Application Number:

PCT/US2011/021240

(22) International Filing Date:

14 January 2011 (14.01.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/294,986 14 January 2010 (14.01.2010) US

(71) Applicant (for all designated States except US): **ENGINEERED ARRESTING SYSTEMS CORPORATION** [US/US]; 2550 Market Street, Aston, PA 19014 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VALENTINI, Silvia C.** [US/US]; 301 Lea Drive, West Chester, PA 19382 (US). **LI, Youhong** [CN/US]; 806 The Woods, Cherry Hill, NJ 08003 (US). **CORATOLO, Anthony Mario** [US/US]; 39 Jerome Avenue, Erial, NJ 08081 (US).

(74) Agents: **PRATT, John S.** et al.; Kilpatrick Townsend & Stockton LLP, 1100 Peachtree Street, Suite 2800, Atlanta, GA 30309 (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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, 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))

(88) Date of publication of the international search report:

13 October 2011

(54) Title: CELLULAR PHOSPHATE CERAMICS AND METHODS OF MANUFACTURE AND USE

(57) Abstract: Embodiments of the present invention provide cellular phosphate bodies formed using specialized steps to ensure a specific strength range, and specifically a compressive strength less than 100 pounds per square inch. Further embodiments relate to uses for various phosphate ceramics as vehicle arresting systems.



WO 2011/088286 A3