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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 August 2012 (30.08.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/116228 A3

(51) International Patent Classification:
B05C 1/14 (2006.01)

(21) International Application Number:
PCT/US2012/026391

(22) International Filing Date:
23 February 2012 (23.02.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/445,977 23 February 2011 (23.02.2011) US

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(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, QA, RO, RS, RU, RW, 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.

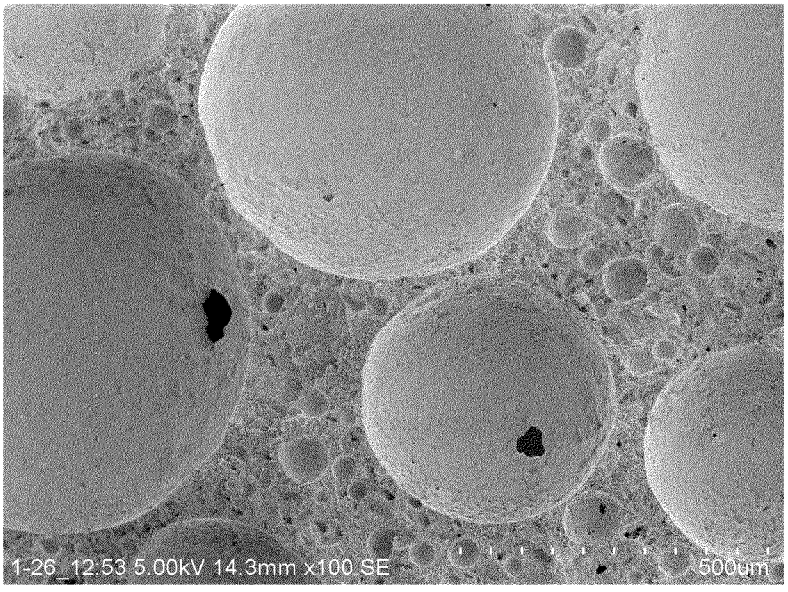
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, 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))*

(88) Date of publication of the international search report:
17 April 2014

(54) Title: IMPROVED GYPSUM WALLBOARD SLURRY AND METHOD FOR MAKING THE SAME



(57) Abstract: A slurry for manufacturing gypsum board is disclosed. The slurry comprises calcined gypsum, water, a foaming agent, and a thickening agent. The thickening agent of the present disclosure acts to improve the cohesiveness of the slurry without adversely affecting the setting time of the slurry, the paper-to-core bond (wet and dry), or the head of the slurry by acting as a de-foaming agent or coalescing agent. Examples of suitable thickening agents include cellulose ether and co-polymers containing varying degrees of polyacrylamide and acrylic acid. A gypsum board and method of forming the slurry and the gypsum board are also disclosed. The gypsum board comprises a gypsum layer formed from the slurry.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/26391

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - B05C 1/14 (2012.01)
USPC - 118/708
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - B05C 1/14 (2012.01)
USPC - 118/708

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8) - B05C 1/14 (2012.01)
USPC - 118/708 (keyword delimited)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (PGPB,USPT,USOC,EPAB,JPAB) Terms - foam foaming calcined gypsum cellulose cellulosic ether acrylic acrylate wallboard coalescing surfactant
Google - foam gypsum wallboard slurry copolymers (polyacrylamide and acrylic acid) surfactant

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2008/0202415 A1 (MILLER, ET AL.) 28 August 2008 (28.08.2008), para [0022], [0028]-[0029], [0032], [0039]-[0045]	1-3, 5, 6, 16-20, 28-30 --- 4, 7-15, 21-27, 31-35
Y	US 6,902,797 B2 (POLLOCK, ET AL.) 07 June 2005 (07.06.2005), col 2, ln 15-24	4, 31
Y	WO 2008/157479 A2 (MARTIN, ET AL.) 24 December 2008 (24.12.2008), paras [0020], [0023], [0026]	7-15, 21-27, 32-35
Y	Application, applicant's admitted prior art, (APPA), para [0044]	8-10, 13-15, 22-24, 32-35

☐ Further documents are listed in the continuation of Box C. ☐

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"A" document defining the general state of the art which is not considered to be of particular relevance
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
28 May 2012 (28.05.2012)	20 JUN 2012

Name and mailing address of the ISA/US	Authorized officer:
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774