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

### (19) World Intellectual Property Organization

8 April 2010 (08.04.2010)







# (10) International Publication Number WO 2010/039160 A3

(51) International Patent Classification:

(21) International Application Number:

PCT/US2008/087458

(22) International Filing Date:

E04F 15/022 (2006.01)

18 December 2008 (18.12.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 11/962,031 20 December 2007 (20.12.2007)

US

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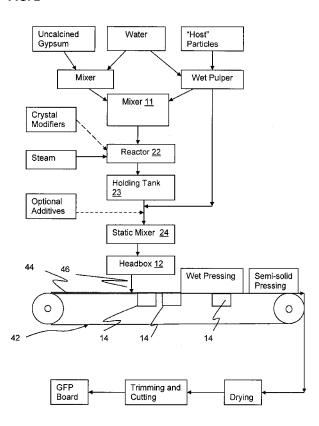
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, 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,

[Continued on next page]

#### (54) Title: LOW FIBER CALCINATION PROCESS FOR MAKING GYPSUM FIBERBOARD

FIG. 2



(57) Abstract: An energy efficient method for making a gypsum cellulose fiberboard comprising adding a first portion of cellulose fiber to gypsum before the gypsum and cellulose fiber are co-calcined in a reactor, adding a second portion of cellulose fiber to the slurry after it leaves the reactor to form a second slurry, depositing the slurry to form a mat dewatering the mat, rehydrating the mat and then finishing the mat to form a final gypsum cellulose fiberboard. A reduction of up to about 40% to 50% of steam energy used can be achieved when the second portion of added cellulose fiber is 50% or more of the total cellulose fiber used in the final board compared to gypsum cellulose board made with the same ingredients but when all of the fiber is added to the gypsum prior to the reactor.

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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).

- 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))
- MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (88) Date of publication of the international search report: (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

#### Published:

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

International application No.

#### PCT/US2008/087458

#### A. CLASSIFICATION OF SUBJECT MATTER

#### E04F 15/022(2006.01)i

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)

E04F 15/022; B28B 11/24; B32B 13/08; B32B 31/06; C04B 11/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

(Chinese Patents and application for patent)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: gypsum, fiber, board, slurry

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
A	US 7273579 B2 (MILLER; DAVID PAUL) 25 September 2007 See the whold document.	1-19	
A	US 4252568 A1 (BOUNINI; LARBI) 24 February 1981 See the abstract.	1-19	
A	US 4544424 A1 (TAKE; TAKAO et al.) O1 October 1985 See the abstract.	1-19	
A	US 4392896 A1 (SAKAKIBARA; SYOJI) 12 July 1983 See the abstract.	1-19	

		Further documents are	listed in the	continuation	of Box C.
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See patent family annex.

- \* Special categories of cited documents:
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Date of the actual completion of the international search

26 APRIL 2010 (26.04.2010)

Date of mailing of the international search report

27 APRIL 2010 (27.04.2010)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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#### INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/087458

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