

Search history

Search 1: TAC=(foam* W5 gypsum) and PD<20140519 and IC=(B01F3* OR B28C5*) (Results 35)

Search 2: 1 AND (FT = can* OR gate) (Results 29)

Search 3: 2 AND (FT = mix* OR (divert* OR taper#)) (Results 27)

Search 4: 3 AND (FT= inject*) (Results 11)

Title: PROCESS FOR THE PRODUCTION OF FORMED GYPSUM CASTINGS

Abstract: Source: US3454688A ABSTRACT OF THE DISCLOSURE

This invention provides a method of forming lightweight gypsum building blocks or panels 'which, require little or no drying and which set so quickly that it is possible to cast them in a continuous mold. The invention provides a continuous process for casting gypsum building blocks or panels directly from product gypsum.

Classifications:

International (ipc 8-9): B28B1/16 B28B1/50 B28B19/00 B28B23/00 B28B5/00 B28B5/02 B28B7/00 B28B7/36 B28C5/00 B29C44/28 C04B28/14 (Advanced/Invention);

B28B1/16 B28B1/50 B28B19/00 B28B23/00 B28B5/00 B28B7/00 B28B7/36 B28C5/00 B29C44/00 C04B28/00 (Core/Invention)

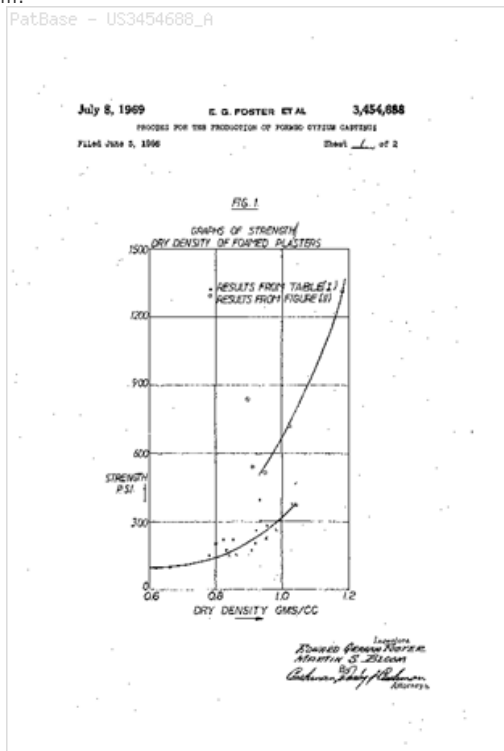
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CPC: B28B1/16 B28B1/50 B28B5/00 B28B5/027 B28B7/0067 B28B7/36 B28B19/0092 B28B23/0006 B28C5/003 B29C44/28 C04B28/14 C04B28/146

European: B28B1/16 B28B1/50 B28B19/00K B28B23/00A B28B5/00 B28B5/02C2 B28B7/00F1 B28B7/36 B28C5/00B B29C44/28 C04B28/14 C04B28/14H2

US: 106/122 106/680 264/213 264/338 264/41 264/42 425/110 425/115 425/200 425/4C 425/4R

PatBase - US3454688_A



Family:

Publication number	Publication date	Application number	Application date
DE1571575 A1	19750828	DE1966J031080	19660615
DE1571575 C3	19750828	DE1966J031080	19660615
DE1646617 A1	19710826	DE19671646617	19671011
FR1483464 A	19670602	FR19660065663	19660615
FR93129 E	19690214	FR19670125338	19671020
GB1104419 A	19680228	GB19650025246	19650615
GB1127296 A	19680918	GB19660046921	19661020
US3454688 A	19690708	US19660555095	19660603
US3526685 A	19700901	US19670669835	19670922

Priority:

GB19650025246 19650615 FR19660065663 19660615 GB19660046921 19661020

Probable Assignee: ICI LTD

Assignee(s): (std): ICI LTD ; IMPERIAL CHEMICAL INDUSTRIES LTD LONDON

Assignee(s): IMP CHEMICAL IND LTD ; IMPERIAL CHEM IND LTD ; IMPERIAL CHEMICAL INDUSTRIES LIMITED ; IMPERIAL CHEMICAL INDUSTRIES LTD

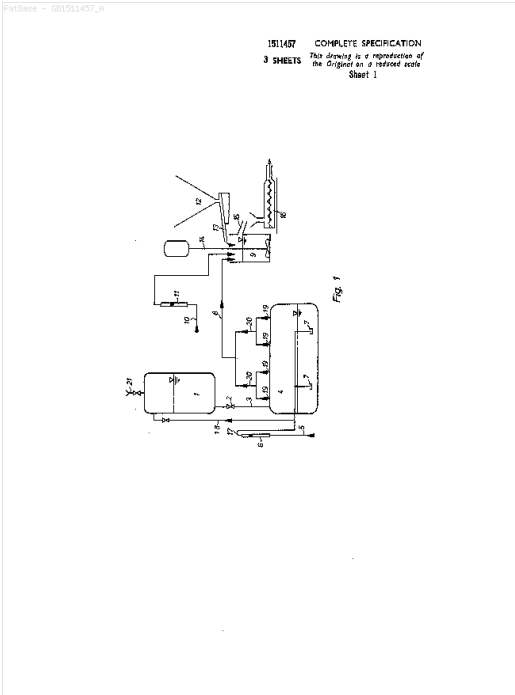
Inventor(s): (std): BLOOM MARTIN S ; FOSTER EDWARD GRAHAM ; GRAHAM FOSTER EDWARD ; NORTON ON TEES ; S BLOOM MARTIN

Inventor(s): MARTIN S BLOOM ; EDWARD GRAHAM FOSTER

Title: PROCESS AND APPARATUS FOR MAKING CELLULAR PLASTER BUILDING MATERIAL

Abstract: Source: GB1511457A 1511457 Cellular plaster HOECHST AG 30 July 1976 [1 Aug 1975] 31866/76 Heading C1H [Also in Division B1] In a continuous method of making a cellular plaster (see also Division B1) a foam is made by introducing air into an aqueous surfactant solution which is then continuously **mixed** with water and gypsum. The surfactant solution comprises a **mixture** of substantially equal parts of two components. Component I consists of 27A5 percent C 10 -C 12 aliphatic alcohol ether sulphate; 6A0 percent C 12 -C 14 aliphatic alcohol ether sulphate; 5A0 percent sodium salt of oleic acid-N methyl tauride; 7A5 percent C 16 -C 18 olefin sulphonate; 3A5 percent of a 5 percent blend of an alcohol having up to 12 carbon atoms in a 1:1 by weight **mixture** of butyl diglycol and ethanol; 12A5 percent butyl diglycol; all percentages being by weight, and the balance being water. Component II consists of: 11A5 percent C 10 -C 12 aliphatic alcohol ether sulphate; 10A0 percent sodium salt of oleic acid-N-methyl tauride; 6A0 percent C 16 -C 18 olefin sulphonate; 25A0 percent butyl diglycol; the balance being water.

Classifications:
International (IPC 8-9): B28C5/38 C04B28/14 (Advanced/Invention); B28C5/00 C04B28/00 (Core/Invention)
International (IPC 1-7): B01F13/02 B01F3/04 B28C5/00 C04B11/00 C04B11/14 C04B13/20 C04B15/02 C04B21/00 C04B21/10 C04B43/00
CPC: B28C5/386 C04B28/14 C04B2103/40
European: B28C5/38B4 C04B28/14 M04B103/40



Family:

Publication number	Publication date	Application number	Application date
AT363370 B	19810727	AT19760005662	19760730
AT566276 A	19801215	AT19760005662	19760730
BE844645 A	19770131	BE19760169344	19760729
BE844645 A1	19770131	BE19760169344	19760729
CH605456 A	19780929	CH19760009052	19760714
DE2534427 A1	19770210	DE19752534427	19750801
FR2332961 A1	19770624	FR19760023434	19760730
GB1511457 A	19780517	GB19760031866	19760730
LU75509 A	19770415	LU19760075509	19760730
NL7608439 A	19770203	NL19760008439	19760729

Priority:

DE19752534427 19750801

Probable Assignee: HOECHST AG

Assignee(s): (std): HOECHST AG

Assignee(s): HOECHST AKTIENGESELLSCHAFT ; HOECHST AKTIENGESELLSCHAFT TE FRANKFORT A D MAIN BONDSREPUBLIEK DUITSLAND ; HOECHST TE FRANKFORT A D MAIN BONDSREPUBLIEK DUITSLAND AG

Inventor(s): (std): GRADL REINHARD DR ; SCHROEDTER HERMANN DR ; SCHWARTZ GUENTHER ; SCHROEDTER HERMANN DIPL CHEM D ; HARNISCH HEINZ DIPL CHEM DR ; GRADL REINHARD DIPL CHEM DR ; HARNISCH HEINZ DR

Inventor(s): SCHROEDTER HERMANN DIPL CHEM DR ; SCHROEDTER HERMANN DIPL CHEMDR ; DR REINHARD GRADL ; DR HERMANN SCHROEDTER ; DR HEINZ HARNISCH ; GUENTHER SCHWARTZ ; HARNISCH HEINZ DIPL CHEMDR ; DRHEINZ HARNISCH ; GRADL REINHARD DIPL CHEMDR

Title: Mixer

Abstract: Source: US5484200A The invention provides apparatus for use in the preparation of gypsum products such as plasterboard from foamed gypsum plaster slurry. The apparatus comprises a first mixing chamber 10 containing a high speed rotor 14 and inlets 18, 19 for gypsum plaster and water. The initial dispersion of gypsum plaster and water foamed in the first chamber passes directly and continuously into a second chamber 25 containing a low speed rotor 29. Preformed foam is introduced into the second chamber through an inlet 33, and the foamed slurry product leaves the second chamber through an outlet 34, to be formed into plasterboard.

Classifications:

International (IPC 8-9): B01F13/00 B01F3/12 B28C5/00 B28C5/16 B28C5/38 C04B11/00 C04B38/00 C04B38/10 (Advanced/Invention); B28C5/00 C04B38/00 C04B38/10 (Advanced/Non-invention)

International (IPC 1-7): B01F13/00 B01F13/10 B01F3/12 B28C5/00 B28C5/16 B28C5/38 B28C7/04 C04B11/00 C04B28/14 C04B38/00 C04B38/10

CPC: B28C5/383 B28C5/388

European: B28C5/38B3 B28C5/38B4B

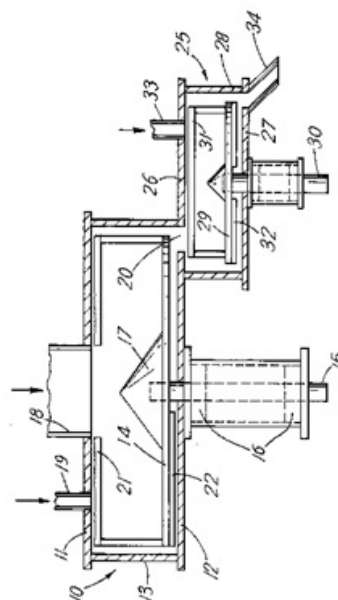
US: 106/674 106/680 106/772 106/778 106/779 106/783 106/785 366/15 366/65

PatBase - US5484200_A

U.S. Patent

Jan. 16, 1996

5,484,200

**Family:**

Publication number	Publication date	Application number	Application date
AT206995 E	20011115	AT19940301391T	19940228
AU199456458 A1	19940908	AU19940056458	19940301
AU669598 B2	19960613	AU19940056458	19940301
CA2116630 AA	19940902	CA19942116630	19940228
CA2116630 C	20050628	CA19942116630	19940228
DE69428619 D1	20011122	DE19946028619	19940228
DE69428619 T2	20020801	DE19946028619T	19940228
DK0613764 T3	20020114	DK19940301391T	19940228
EP0613764 A1	19940907	EP19940301391	19940228
EP0613764 B1	20011017	EP19940301391	19940228
ES2165374 T3	20020316	ES19940301391T	19940228
GB2275875 A1	19940914	GB19930004120	19930301
GB2275875 B2	19970205	GB19930004120	19930301
GB9304120 A0	19930414	GB19930004120	19930301
JP3592358 B2	20041124	JP19940054966	19940228
JP7001437 A2	19950106	JP19940054966	19940228
PT613764 T	20020429	PT19940301391T	19940228
US5484200 A	19960116	US19940203404	19940301
US5575844 A	19961119	US19950467805	19950606

Priority:

CA19942116630 19940228 GB19930004120 19930301 US19950467805 19950606
US19940203404 19940301

Probable Assignee: BPB PLC**Assignee(s):** (std): BPB IND PLC ; BPB INDUSTRIES PLC ; BPB PLC ; BPB PLC SLOUGH**Assignee(s):** BRADSHAW JOHN JAMES ; BPB INDUSTRIES PUBLIC LIMITED COMPANY ; BPB IND PUBLIC CO LTD ; BPB IND**Inventor(s):** (std): BRADSHAW JOHN JAMES ; JIYON JIEEMUZU BURATSUDOSHIYOU ; BRADSHAW JOHN J**Inventor(s):** JOHN JAMES BRADSHAW**Agent(s):** CALLINANS; FETHERSTONHAUGH AND CO**Designated states:** AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

Title: GYPSUM BOARD, AND METHOD OF MANUFACTURING THE GYPSUM BOARD

Abstract: Source: US2005106375A There is provided a lightweight plaster board having a cellular porous plaster core, excellent in adhesion to a covering base paper for a plaster board, free from dry-out in side edge parts of the plaster board, and with no disadvantage in workability for driving a nail into the plaster board. The plaster board includes a plaster core having a front surface, a back surface, and four side surfaces, and at least one covering base paper that covers the front surface, the back surface, and the at least two opposite side surfaces of the plaster core. The plaster core includes one or more hard edge parts each including one of the side surfaces covered with the covering base paper, one or more high-density parts including the front surface or the back surface, not including the side surface covered with the covering base paper, and having a density substantially equal to the density of the hard edge part, and a low-density part having a density less than the densities of the hard edge part and the high-density part and contacting with the hard edge part and the high-density part. The hard edge part does not include a position in which a nail is driven.

Classifications:

International (ipc 8-9): C04B38/10 E04C2/04 B28B1/16 B28B1/30 B28B19/00 B28C5/08 B32B13/08 B32B3/00 B32B3/04 B32B37/24 B32B5/14 B32B7/02 C04B28/14 E04C2/16

E04C2/26 (Advanced/Invention);

B32B13/08 (Advanced/Non-invention);

B28B1/16 B28B1/30 B28B19/00 B28C5/00 B28C5/08 B32B13/00

B32B13/08 B32B3/00 B32B7/02 C04B28/00 C04B28/14 C04B38/10

E04C2/04 E04C2/10 (Core/Invention)

International (ipc 1-7): B05C 17/005 B05C17/005 B28B1/16

B28B19/00 B28C5/08 B32B13/02 B32B13/08 B32B7/02 C04B28/14

C04B38/10 E04C2/04

CPC: B28B19/0092 B28C5/0881 B32B7/02 C04B28/14

C04B2111/00474 C04B2111/0062 C04B2111/30 E04C2/043

B32B13/08

European: B28B19/00K B28C5/08G B32B13/08 B32B7/02

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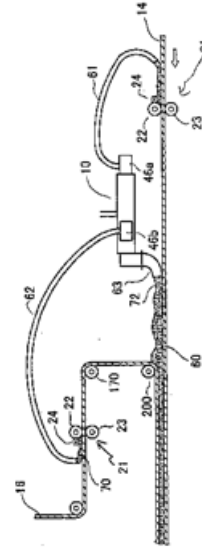
US: 156/346 156/348 156/40 156/43 156/44 428/192 428/212

428/220 428/294.7 428/294.700P 428/312.4 428/312.400P

PatBase - US2005106375_AA

Patent Application Publication May 19, 2005 Sheet 1 of 11 US 2005/0106375 A1

FIG.1

**Family:**

Publication number	Publication date	Application number	Application date
AU2003221132 AA	20031008	AU20030221132	20030325
AU2003221132 BB	20060810	AU20030221132	20030325
CA2479147 AA	20040913	CA20032479147	20030325
CA2479147 C	20081014	CA20032479147	20030325
CN100400280 C	20080709	CN20038007073	20030325
CN1642733 A	20050720	CN20038007073	20030325
EP1488920 A1	20041222	EP20030712937	20030325
EP1488920 A4	20080827	EP20030712937	20030325
IN01360KN2004 A	20060505	IN2004KN01360	20040914
IN244045 B	20101119	IN2004KN01360	20040914
JP2003080329 A1	20050721	JP20030578134T	20030325
JP2007247393 A2	20070927	JP20070099684	20070405
JP4503628 B2	20100714	JP20070099684	20070405
KR100621307 B1	20060913	KR20047015440	20030325
KR20040094890 A	20041110	KR20047015440	20030325
MXPA04009272 A1	20050125	MX2004PA09272	20030325
NO20044609 A	20041227	NO20040004609	20041026
NO338625 B1	20160919	NO20040004609	20041026
RU2004131642 A	20050610	RU20040131642	20030325
RU2281860 C2	20060820	RU20040131642	20030325
TH53641 B	20170206	TH20031001079	20030324
TH62010 A	20040510	TH20031001079	20030324
TW200402361 A	20040216	TW20030106491	20030324
TWI265087 B	20061101	TW20030106491	20030324
US2005106375 AA	20050519	US20040508885	20040923
US2006280932 AA	20061214	US20060508002	20060822
US7686902 BB	20100330	US20040508885	20040923
US7691467 BB	20100406	US20060508002	20060822
WO03080329 A1	20031002	WO2003JP03652	20030325

Priority:

JP20020089356 20020327 JP20030578134 20030325 US20030508885 20030325
 US20060508002 20060822 US20040508885 20040923 JP20070099684 20070405
 WO2003JP03652 20030325

Probable Assignee: YOSHINO GYPSUM CO

Assignee(s): (std): JOSINO DZHIPSUM KO LTD ; KIMURA TATSUKAZU ; OSAWA KENICHIRO ; TANI HIROKUNI ; TSUNO NORIO ; YOSHINO GYPSUM CO ; YOSHINO GYPSUM CO LTD ; ISHIBASHI SEIGO

Assignee(s): JOSINO DZHIPSUM KO

Inventor(s): (std): HIROKUNI TANI ; ISHIBASHI SEIGO ; KENICHIRO OSAWA ; KIMURA TATSUKAZU ; NORIO TSUNO ;
OSAWA KENICHIRO ; SEIGO ISHIBASHI ; TANI HIROKUNI ; TATSUKAZU KIMURA ; TSUNO NORIO ;
TANI KOICHI ; KIMURA RYUICHI ; ISHIBASHI MASATAKA ; TANI KHIROKUNI ; OSAWA KENITIRO ;
ISIBASI SEJGO

Agent(s): SPRUSON AND FERGUSON; MARKS AND CLERK; ITOH TADAHIKO; LADAS AND PARRY LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK
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SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: APPARATUS AND METHOD FOR FRACTIONATING SLURRY AND METHOD OF PRODUCING PLASTER-BOARD

Abstract: Source: US2006045975A The present invention provides an apparatus and a method for fractionating gypsum slurry which **can** surely control the density of the gypsum slurry fractionated from the **mixer** (fractionated slurry), which **can** restrict change of the flow rate of the fractionated slurry, and which **can** reduce the consumption of foam or foaming agent. The fractionation apparatus (30) fractionates the gypsum slurry from a **mixer** (4) for **mixing** calcined gypsum and water. The **mixer** has a hollow connector section (50), which allows the gypsum slurry to flow from a **mixing** area inside of the **mixer** into a chute section (5), and the chute section (5) discharging the inflow of gypsum slurry through its slurry discharge port onto a gypsum board liner paper. The fractionation apparatus has a slurry fractionation port (33) opening to the chute section or the hollow connector section, and causes a part of the gypsum slurry in the chute or hollow connector section to be delivered to a slurry delivery conduit (11,13,19).

Classifications:

International (IPC 8-9): B05C11/00 B05D3/12 B28B1/30 B28B13/02 B28B19/00 B28B5/02 B28C5/08 B28C5/16 B28C7/16 B32B37/00 (Advanced/Invention);

B28B13/02 B32B37/00 (Advanced/Non-invention);

B05C11/00 B05D3/12 B28B13/00 B28B19/00

B28C5/00 (Core/Invention);

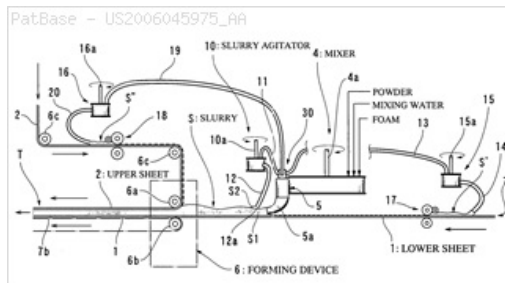
B32B37/00 (Core/Non-invention)

International (IPC 1-7): B28B13/02 B28C7/16

CPC: B28C5/0881 B28B19/0015 B28B19/0092

European: B28B19/00B B28B19/00K B28C5/08G

US: 118/665 156/346 156/39 156/390 156/43 156/44 156/45 427/355



Family:

Publication number	Publication date	Application number	Application date
AU2003264413 AA	20040408	AU20030264413	20030912
CA2497974 AA	20050307	CA20032497974	20030912
CA2497974 C	20120313	CA20032497974	20030912
CN100478152 C	20090415	CN20038018696	20030912
CN1675040 A	20050928	CN20038018696	20030912
DE60342918 D1	20130221	DE20036042918	20030912
EP1555099 A1	20050720	EP20030797582	20030912
EP1555099 A4	20090114	EP20030797582	20030912
EP1555099 B1	20121219	EP20030797582	20030912
ES2403343 T3	20130517	ES20030797582T	20030912
IN00567KN2005 A	20060623	IN2005KN00567	20050404
IN222230 B	20080801	IN2005KN00567	20050404
JP2004026550 A1	20060112	JP20040537555T	20030912
JP4338089 B1	20090930	JP20040537555T	20030912
JP4338089 B2	20090930	JP20040537555T	20030912
KR20050047086 A	20050519	KR20057001621	20030912
MXPA05002990 A1	20050622	MX2005PA02990	20030912
NO20051894 A	20050620	NO20050001894	20050419
RU2005111755 A	20060120	RU20050111755	20030912
RU2313451 C2	20071227	RU20050111755	20030912
TH66473 A	20050117	TH20031003496	20030918
TW200413145 A	20040801	TW20030125430	20030916
US2006045975 AA	20060302	US20050528228	20050318
US8685188 BB	20140401	US20030528228	20030912
WO04026550 A1	20040401	WO2003JP11677	20030912

Priority:

EP20030797582 20030912 JP20020274610 20020920 WO2003JP11677 20030912

Probable Assignee: YOSHINO GYPSUM CO

Assignee(s): (std): JOSINO DZHIPSUM KO LTD ; KANEKO SHINOBU ; YAMAJI YUKIO ; YOSHINO GYPSUM CO ; YOSHINO GYPSUM CO LTD

Assignee(s): JOSINO DZHIPSUM KO

Inventor(s): (std): YUKIO YAMAJI ; YAMAJI YUKIO ; KANEKO SHINOBU ; KANEKO SINOBU ; JAMADZI JUKIO ; SHINOBU KANEKO

Inventor(s): YAMAJI YUKIO C O YOSHINO GYPSUM CO LTD CHIYODA KU ; KANEKO SHINOBU C O YOSHINO GYPSUM CO LTD CHIYODA KU

Agent(s): SPRUSON AND FERGUSON; SIM AND MCBURNEY; ZIMMERMANN AND PARTNER PATENTANWAELE MBB; Zimmermann &, Partner; GARCIA-CABRERIZO GARCIA-CABRERIZO PEDRO; JACOBSON HOLMAN LLC; WESTERMAN HATTORI DANIELS AND ADRIAN LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: **MIXER** FOR **FOAMED GYPSUM** PRODUCTS

Abstract: Source: US2004062141A Apparatus for **mixing** aqueous **foam** with a slurry of **gypsum** and water. A cylindrical housing includes, in its upper end, an inlet for a slurry and a helical **diverter** for directing the slurry in a downward spiral flow path. An inlet for aqueous foam is located in said **diverter** and directs the foam into the incoming slurry. An annular flow restrictor is located in the lower end of the housing. Turbulence resulting from diversion of the incoming slurry from linear flow to a downward spiral flow path and from changes in spin diameter and speed through the flow restrictor uniformly **mix** foam with the slurry.

Classifications:

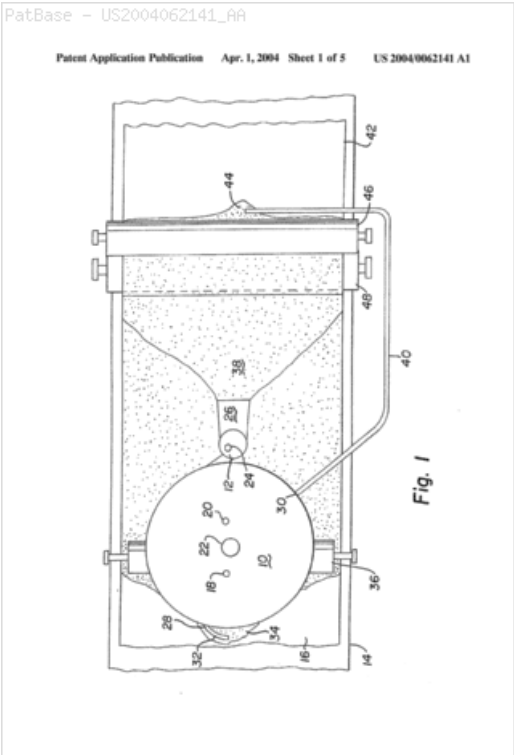
International (IPC 8-9): B01F13/10 B01F5/06 B01F7/16 B01F7/26 B28C5/02 B28C5/08 B28C7/04 C04B38/10 (Advanced/Invention); B28B19/00 (Advanced/Non-invention); B01F13/00 B01F5/06 B01F7/16 B01F7/26 B28C5/00 B28C7/00 C04B38/10 (Core/Invention); B28B19/00 (Core/Non-invention)

International (IPC 1-7): B01F13/00 B01F5/00 B28C5/00

CPC: B01F5/0646 B01F5/0647 B01F7/1675 B01F7/26 B01F13/103 B28B19/0092 B28C5/02 B28C5/0881 B28C7/0418 C04B38/10

European: B01F13/10C2B B01F5/06B3F B01F5/06B3F2 B01F7/16P B01F7/26 B28C5/02 B28C5/08G B28C7/04B4 C04B38/10 L28B19/00K

US: 366/155.1 366/155.100P 366/165.2 366/165.200S 366/175.2 366/175.200S 366/181.5 366/181.500S 366/2 366/29 366/290 366/290S 386/165.2 386/30 386/313



Family:

Publication number	Publication date	Application number	Application date
US2004062141 AA	20040401	US20020263320	20021001
US6742922 BB	20040601	US20020263320	20021001

Priority:

US20020263320 20021001

Probable Assignee: TIN INC D B A TEMPLE INLAND

Assignee(s): (std): TEMPLE INLAND FOREST PRODUCTS

Assignee(s): TEMPLE INLAND FOREST PRODUCTS CORP ; TIN INC D B A TEMPLE INLAND ; WILLIAMS CRAIG L ; MCNEER JAMES W ; SHRADER GAYLON BRUCE

Inventor(s): (std): MCNEER JAMES W ; MCNEER JR JAMES W ; SHRADER GAYLON BRUCE ; WILLIAMS CRAIG L

Title: GYPSUM WALLBOARD PROCESS

Abstract: Source: US2004201120A A method of manufacturing gypsum board includes applying compressed air to an input end of a tube, wherein the tube includes the input end, an output end, and a venturi located between the input end and the output end; admitting a foaming agent to the input end of the tube so as to form a **mixture** of the compressed air and the diluted foaming agent; passing the **mixture** through the venturi and out the output end; combining the **mixture** with gypsum and water to form a gypsum slurry; and casting the gypsum slurry onto a continuous web for forming a gypsum board.

Classifications:

International (IPC 8-9): B01F15/00 B01F3/04 B01F5/04 B05D1/02 B28B19/00 B28C5/02 B29C44/20 B29C44/58

C04B38/10 (Advanced/Invention);

B29C44/34 (Advanced/Non-invention);

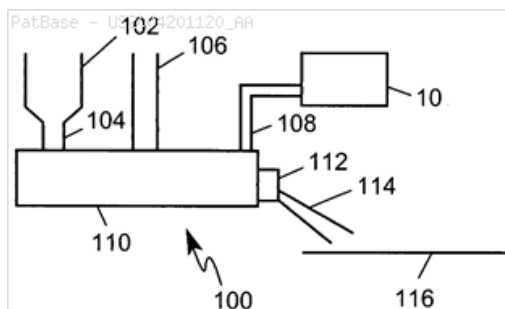
C04B (Subclass/Invention)

International (IPC 1-7): B01F15/00 B05D1/02 B28B1/24 B29C44/20 B29C44/58 C04B E04C2/10

CPC: B01F5/043 C04B38/10 B01F3/04446 B28B19/0092 B28C5/026 B29C44/3446

European: B01F3/04C3 B01F5/04C12 B28B19/00K B28C5/02B C04B38/10 L29C44/34F2

US: 264/45.8 264/5 264/50 366/101 427/18 427/180



Family:

Publication number	Publication date	Application number	Application date
TW200507996 A	20050301	TW20040102177	20040130
US2004201120 AA	20041014	US20040768096	20040202
WO04069764 A2	20040819	WO2004US02794	20040202
WO04069764 A3	20050203	WO2004US02794	20040202

Priority:

US20030443852P 20030131 US20040768096 20040202

Probable Assignee: LAFARGE NORTH AMERICA INC

Assignee(s): (std): COLBERT ELIZABETH ; LAFARGE NORTH AMERICA INC

Inventor(s): (std): COLBERT ELIZABETH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: METHOD AND SYSTEM FOR GENERATING **FOAM** FOR THE MANUFACTURE OF **GYPSUM** PRODUCTS

Abstract: Source: US2005248049A A method for generating **foam** for **gypsum** product manufacturing includes **injecting** water through a conduit and **injecting** a foaming agent through the conduit to form a first solution comprising the water and the foaming agent. The method includes straining the first solution in the conduit and **injecting** air through the conduit to form a second solution comprising the water, the foaming agent and the air. The method also includes straining the second solution in the conduit to form foam and communicating the **foam** to a **gypsum** product manufacturing device.

Classifications:

International (IPC 8-9): B01F3/04 B01F5/04 B01F5/06 B01F9/10 B28C5/38 B29C44/02 B29C44/36 C04B11/00

C04B38/10 (Advanced/Invention);

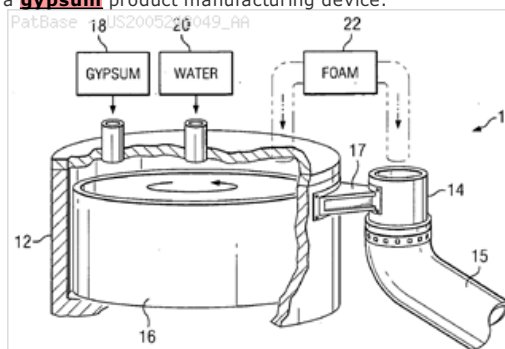
B01F3/04 B01F5/04 B01F5/06 B01F9/00 B28C5/00 B29C44/02 C04B38/10 (Core/Invention)

International (IPC 1-7): B29C44/02 C04B38/10

CPC: B01F5/0693 B01F3/04446 B01F5/0475 B01F5/0478 B01F5/0682 B01F9/10 B28C5/381

European: B01F3/04C3 B01F5/04C14C B01F5/04C14C4 B01F5/06F B01F5/06F4F B01F9/10 B28C5/38B

US: 156/346 156/39 264/333 264/42 264/50 264/51 264/51P 366/101 425/4.00C 425/4.00CP 425/4.00CS 425/4C



Family:

Publication number	Publication date	Application number	Application date
CA2504104 AA	20051104	CA20052504104	20050414
MXPA05004685 A1	20051109	MX2005PA04685	20050429
US2005248049 AA	20051110	US20040838901	20040504
US2008274226 AA	20081106	US20080173887	20080716
US7404917 BB	20080729	US20040838901	20040504
US7654807 BB	20100202	US20080173887	20080716

Priority:

CA20052504104 20050414 US20040838901 20040504 US20080173887 20080716

Probable Assignee: EAGLE MATERIALS INC

Assignee(s): (std): EAGLE MATERIALS INC

Assignee(s): GANNAWAY KERRY G ; SIMS FLOYD E ; BARNES RAYMOND J

Inventor(s): (std): FLOYD E SIMS ; SIMS FLOYD E ; GANNAWAY KERRY G ; BARNES RAYMOND J

Inventor(s): BARNES RAYMOND ; GANNAWAY KERRY ; SIMS FLOYD

Agent(s): KIRBY EADES GALE BAKER; BAKER BOTTS LLP

Title: SLURRY DISTRIBUTION SYSTEM AND METHOD

Abstract: Source: US2012168527A A slurry distributor for use in a continuous manufacturing process includes an inlet opening and a shaped duct adapted to receive a flow of slurry provided at the inlet opening. The shaped duct has a parabolic guide surface adapted to redirect the flow of slurry. An outlet opening in fluid communication with the shaped duct is adapted to discharge the flow of slurry from the slurry distributor.

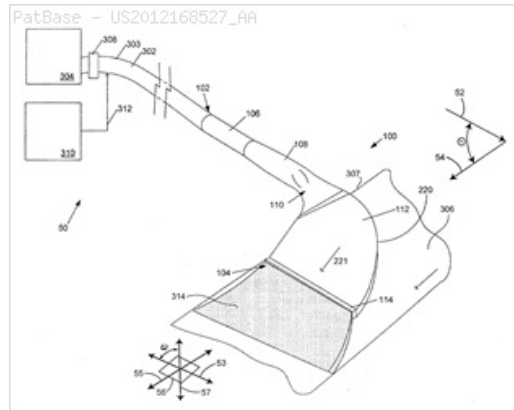
Classifications:

International (IPC 8-9): A61K39/395 A61K45/06 B01F15/02 B01F5/00 B01J4/00 B05B1/00 B05B1/04 B05B1/26 B05B15/02 B05B17/00 B05C11/10 B05C3/02 B05C5/00 B05C5/02 B05D1/26 B05D1/28 B05D5/00 B05D7/24 B26B19/00 B28B1/30 B28B1/50 B28B13/02 B28B17/00 B28B19/00 B28B5/00 B28B7/16 B28C5/00 B28C5/08 B28C5/46 B28C7/04 B28C7/12 B28C7/14 B28C7/16 B29B7/74 B29B7/76 B29C33/30 B29C33/48 B29C37/00 B29C39/02 B29C39/26 B29C41/14 B29C41/38 B29C41/42 B29C47/00 B29C47/08 B29C47/16 B29C47/70 B5C5/02 C04B12/00 C07K16/32 E03B1/00 E04C2/02 F16K7/06 F16L41/00 F16L41/02 F16L43/00 F16L47/32 F16L55/24 F17D1/08 (Advanced/Invention); B28B19/00 (Advanced/Non-invention); B05C5/02 B28B19/00 F16L43/00 (Core/Invention)

CPC: F17D1/08 B28C5/00 B28C5/003 Y10T137/85938 F16L43/00 B05C11/10 B29C33/30 B29C33/44 B29C33/448 B29C33/48 B29C33/50 B29C33/505 B29C37/0017 B29C41/14 B29C33/0033 B29C33/485 B29C37/0014 B29C41/386 B29C41/42 B29L2031/757 B28C5/0881 Y10T137/87652 B05C5/0262 B29B7/74 B29B7/76 F16L41/023 Y10T137/0318 Y10T137/87571 B05D1/28 B05C5/0254 B28B19/0092 B05C5/0245 B05C5/0225

European: B28B19/00K

US: 1/1 106/638 118/412 137/1 137/1S 137/561A 137/602 137/602S 137/896 222/1 222/145.6 239/1 239/1P 239/303 239/303S 239/601 239/601S 264/301 366/1 366/10 366/177.1 366/177.100P 366/2 366/3 366/30 366/6 425/275 427/286 427/427

**Family:**

Publication number	Publication date	Application number	Application date
AR084755 AA	20130605	AR2011P105036	20111230
AR085780 AA	20131030	AR2012P100001	20120103
AR088520 AA	20140618	AR2012P103987	20121024
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WO14066207 A1	20140501	WO2013US65836	20131021
WO14066211 A1	20140501	WO2013US65843	20131021
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Priority:

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WO2013US65836	20131021	WO2013US65843	20131021	WO2013US66008	20131022

Probable Assignee: UNITED STATES GYPSUM CO

Assignee(s): (std): SONG DAVID ; NELSON CHRIS ; RAGO WILLIAM ; LORING CURT ; SCHENCK RONALD E ; NELSON CHRISTOPHER ROBERT ; RAGO WILLIAM J ; SONG WAIXIN DAVID ; LORING CURTIS B ; CHAN CESAR ; LEE CHRIS C ; LI ALFRED ; UNITED STATES GYPSUM CO ; WITTBOLD JAMES ; SONG WEIXIN DAVID ; WITTBOLD JAMES R ; UNITED STYATES GYPSUM CO ; SONG WEIXIN D

Assignee(s): CARRAZCO LUIS ; UNITED STATES GYPSUM CO CHICAGO ; LI ALFRED C ; PUNATI NAVEEN ; UNITED STATES GYPSUM COMPANY

Inventor(s): (std): JAMES WITTBOLD ; LEE CHRIS C ; LI ALFRED ; LI ALFRED C ; LI IFRED ; LI KRIS K ; LORING CURT ; LORING CURTIS B ; LORING KURT ; LUIS CARRAZCO ; NAVEEN PUNATI ; NELSON CHRISTOPHER ROBERT ; PUNATI NAVEEN ; RAGO BILL ; RAGO UILYAM ; RAGO WILLIAM ; RAGO WILLIAM J ; RONALD E SCHENCK ; SCHENCK RONALD E ; SHENK RONALD E ; SONG VEJSIN DEJVID ; SONG WAIXIN DAVID ; SONG WEIXIN D ; SONG WEIXIN DAVID ; UITTBOLD DZHEJMS ; WEIXIN DAVID SONG ; WILLIAM J RAGO ; WILLIAM RAGO ; WITTBOLD JAMES R ; ALFRED C LI ; ALFRED LI ; C CHEN ; CARRAZCO LUIS ; CEN CESAR ; CESAR CHAN ; CHAN CESAR ; CHAN SEZAR ; CHRIS C LEE ; CURT LORING ; WITTBOLD JAMES ; SONG DAVID ; NELSON CHRISTOPHER ; NELSON CHRIS ; LEE CHRISTOPHER C

Inventor(s): LEE CHRIS C DEERFIELD ; CHAN CESAR LIBERTYVILLE ; LI ALFRED NAPERVILLE ; RAGO WILLIAM GURNEE ; SONG WEIXIN DAVID VERNON HILLS ; DAVID SONG ; CHRIS NELSON ; WITTBOLD JAMES DES PLAINES

Agent(s): JAMES AND WELLS INTELLECTUAL PROPERTY; MADDERNS PATENT AND TRADE MARK ATTORNEYS; MOFFAT AND CO; JOHANSSON AND LANGLOIS LTDA; MARKS AND CLERK LUXEMBOURG LLP; SCHUETTE HARTMUT; BSB INTELLECTUAL PROPERTY LAW; RIZZO SERGIO; BUDI RAHMAT SH; BUDI RAHMAT; RYBINOJ NA; NA RYBINOJ; LEYDIG VOIT AND MAYER LTD; PHILIP T; PRADIP K; FILBIN PAUL ET AL; HASAN SALIM ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHOD OF IMPROVING GYPSUM BOARD STRENGTH

Abstract: Source: US2012167805A One or more of these or other problems are improved using a method of making a strong gypsum panel which includes a method for forming a hardened shell structure at the interface of a **foamed** bubble and a **gypsum** slurry. A strengthening component is selected from the group consisting of set accelerators, water soluble polyphosphate salts, blends of water soluble polyphosphate salts with starch, boric acid, fibers, glycerin or combinations thereof. The strengthening component is combined with a foaming agent and with water to form an aqueous soap **mixture**. Foam is generated from the aqueous soap **mixture**, and added to a gypsum slurry. Allowing the strengthening component to contact the soap bubbles prior to addition of the **foam** to the **gypsum** slurry allows the strengthening component to preferentially contact the soap film rather than be dispersed through the entire slurry.

Classifications:

International (IPC 8-9): B01F17/00 B01F3/12 B28C7/12 C04B11/00 C04B14/32 C04B14/36 C04B16/06 C04B22/08

C04B22/16 C04B24/02 C04B24/08 C04B24/38 C04B28/14 C04B38/10 C04B38/10 (Advanced/Invention);

B01F17/00 C04B28/14 C04B38/10 (Core/Invention)

CPC: C04B38/106 Y02W30/97 C04B28/14

European: C04B28/14 C04B38/10P

US: 106/677

Family:

Publication number	Publication date	Application number	Application date
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW