

Search query (3): SFT=((ceramic* or clay*) and (grind* or mill* or grist* or pound*) and (crush* or shatter*) and (sift* or sieve*) and (laminat* or roll*) and (machine* or device*))) and PD<20171201 and CPC=B28B

Results: 96

Search history

Search SFT=((ceramic* or clay*) and (grind* or mill* or grist* or pound*) and (crush* or shatter*) and (sift* or sieve*) and (laminat* or roll*) and (machine* or device*))) and PD<20171201 (Results 4215)

Search SFT=((ceramic* or clay*) and grind* and sift* and laminat* and (machine* or device*))) and PD<20171201 (Results 228)

Search SFT=((ceramic* or clay*) and (grind* or mill* or grist* or pound*) and (crush* or shatter*) and (sift* or sieve*) and (laminat* or roll*) and (machine* or device*))) and PD<20171201 and CPC=B28B (Results 96)

1) Family number: 63866014 (US2017107764A)

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Title: MESOSCALE REINFORCEMENT OF METAL MATRIX COMPOSITES

Priority: US20150905072 20150424 WO2015US27458 20150424

Family:	Publication number	Publication date	Application number	Application date
	CA2980122 AA	20170918	CA20152980122	20150424
	CN107427919 A	20171201	CN201580078127	20150424
	GB201714600 A0	20171025	GB20170014600	20150424
	GB2552907 A1	20180214	GB20170014600	20150424
	US2017107764 AA	20170420	US20150905072	20150424
	WO16171711 A1	20161027	WO2015US27458	20150424

Probable Assignee: HALLIBURTON CO

Assignee(s):(std): HALLIBURTON CO ; HALLIBURTON ENERGY SERVICES INC

Assignee(s): THOMAS JEFFREY G ; COOK GRANT O III

Inventor(s):(std): COOK GRANT O III ; THOMAS JEFFREY G ; COOK III GRANT O ; GRANT O COOK III ; JEFFREY G THOMAS

Agent(s): PARLEE MCLAWS LLP; KAISER IONA 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 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

International class (IPC 8-9): B22F1/00 B22F3/105 B22F5/00 B22F5/04 B22F5/10 B22F7/06 B23K15/00 B23K26/342 B28B1/00 B29C64/106 B29C67/00 B33Y10/00 B33Y70/00 B33Y80/00 E21B10/42 E21B10/46 E21B10/60 (Advanced/Invention)

CPC: B22F2005/001 B22F2007/066 Y02P10/295 B33Y10/00 B33Y80/00 B23K15/0086 B23K26/342 B22F1/0011 B28B1/001 E21B10/602 B22F3/1055 E21B10/42 B22F7/062 B29C64/153 B22F5/00 B22F5/007 B22F5/04 B22F5/10 B22F2005/002 B33Y70/00 B23K2101/002

US class: 175/425

[Classification Explorer](#)

Cited documents: US4884477 A, US2013312927 AA, US2013247475 AA, US2006231293 AA, EP2607511 A2,

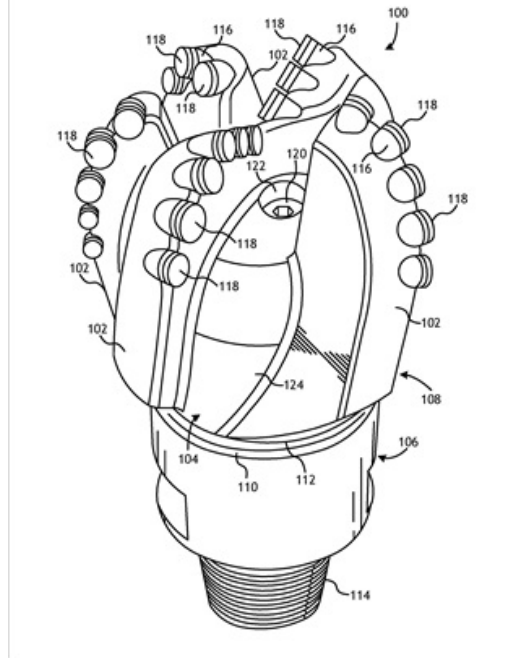
DE102007015389 B4

CN1312450 A, CN1177312 A,

Forward Citations: CN108145828, AT16111,

Abstract:

A metal matrix composite (MMC) tool includes a mesoscale-reinforced hard composite portion that comprises reinforcing particles and mesoscale reinforcing structures dispersed in a binder material. The mesoscale reinforcing structures are printed using at least one additive manufacturing technique and are larger than an average powder-size distribution of the reinforcing particles.

**2) Family number: 15439035** (US6905644B)

© PatBase

Title: PROCESS AND DEVICE FOR PRODUCING COMPONENTS AND SEMIFINISHED PRODUCTS FROM SYNTHETIC GRAPHITE OR CERAMIC GRANULES, IN PARTICULAR FOR PRODUCING GRAPHITE TUBES

Priority: DE20001000165 20000105 DE20005010176 20001124 WO2000EP11751 20001124
KR20017011303 20010905 WO2000EP11751 20010905

Family:	Publication number	Publication date	Application number	Application date
	AT294149 E	20050515	AT20000979623T	20001124
	CA2362391 AA	20010904	CA20002362391	20001124
	CA2362391 C	20081118	CA20002362391	20001124
	CZ20013206 A3	20021016	CZ20010003206	20001124
	CZ301481 B6	20100317	CZ20010003206	20001124
	DE10000165 A1	20010712	DE20001000165	20000105
	DE50010176 D1	20050602	DE20005010176	20001124
	DK1198437 T3	20050815	DK20000979623T	20001124
	EP1198437 A1	20020424	EP20000979623	20001124
	EP1198437 B1	20050427	EP20000979623	20001124
	ES2241674 T3	20051101	ES20000979623T	20001124
	JP2003519037 T2	20030617	JP20010550174T	20001124
	KR100713192 B1	20070502	KR20017011303	20001124
	KR20020004958 A	20020116	KR20017011303	20001124
	PL192369 B1	20061031	PL20000349643	20001124
	PT1198437 T	20050831	PT20000979623T	20001124
	US6905644 BA	20050614	US20020936067	20020123
	WO0149633 A1	20010712	WO2000EP11751	20001124

Probable Assignee: SGL CARBON AG

Assignee(s):(std): KUENZEL JUERGEN ; MUELLER HOLGER ; SCHMID MANFRED ; SGL ACOTEC GMBH ; SGL TECHNIK GMBH ; SGL CARBON AG

Assignee(s): ES EL CARBON EVIL TIEN IS BEST SHAFT

Inventor(s):(std): HOLGER MUELLER ; JUERGEN KUENZEL ; KUENZEL JUERGEN ; MANFRED SCHMID ; MUELLER HOLGER ; SCHMID MANFRED

Agent(s): FETHERSTONHAUGH AND CO; YAMAGUCHI IWAO; GREENBERG LAURENCE A; STEMER WERNER H; LOCHER RALPH E; WERNER H; RALPH E; LAURENCE A

Designated states: AT BE BF BJ CA CF CG CH CI CM CY CZ DE DK ES FI FR GA GB GR IE IT JP KR LI LU MC MR NE NL PL PT SE SN TG TR US

International class (IPC 8-9): B28B21/52 B28B3/20 B28B3/24 B28B3/26 C04B35/52 C04B35/532 C04B35/83 (Advanced/Invention); C04B35/532 (Advanced/Non-invention); B28B21/00 B28B3/20 B28B3/26 C04B35/52 C04B35/528 C04B35/83 (Core/Invention)

International class (IPC 1-7): B21C23/08 B22F3/20 B28B21/52 B28B3/20 B28B3/24 B28B3/26 B29C47/00 C04B35/52 C04B35/532 C04B35/83

CPC: B28B3/20 B28B3/24 B28B3/26 B28B21/52 C04B35/532 C04B35/83 B28B21/5 C04B35/5 C04B35/8

European class: B28B21/52 B28B3/20 B28B3/24 B28B3/26 C04B35/532 C04B35/83

US class: 264/108 264/177.2 264/211.11 264/40.7

JP class F-Term: 4G032 4G054 4G054/AA05 4G054/AA14 4G054/AB07 4G054/BD00 4G054/BD02 4G054/BD08 4G054/BD11 4G132 4G132/AA02 4G132/AA07 4G132/AA09 4G132/AA18 4G132/AA72 4G132/AA74 4G132/AB01 4G132/AB30 4G132/AB35 4G132/BA04 4G132/CA06 4G132/CA15 4G132/GA02 4G132/GA04 4G132/GA07 4G132/GA16 4G132/GA24 4G132/GA25 4G132/GA31

JP class F-Index: B28B3/20/E B28B3/20/K C04B35/52 C04B35/54/D

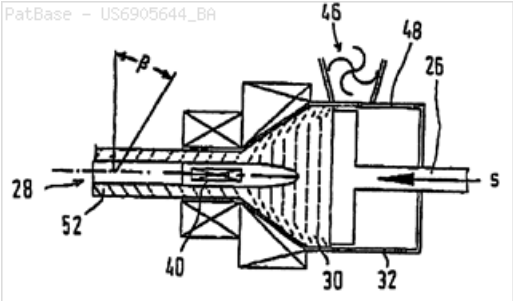
[Classification Explorer](#)

Cited documents: US6261495 BA, US4521360 A, US3888958 A, US3874837 A, US3689614 A, US3676535 A, US3666847 A, US3267518 A, US2269436 A, JP3267518 U1, EP1198437 A1, EP0216978 A1, DE961729 A, DE3116309 C2, DE19747757 A1, DE1945981 A1, DE1945971 A1, DE1132896 B,

Forward Citations: US8901023, US8460515, US8454801, US8216955, US7704907, US2017097292, US2010162618, US2010133086, EP3006185, DE102012203046, CZ301481, CN106269956,

Abstract:
This invention relates to a process and a device for producing components and semi-finished products from synthetic graphite or from ceramic granules, in particular for producing graphite tubes, involving shaping of a material to be mixed preferably containing petroleum coke or graphite granules, by means of an extrusion press (22) or an extruder, wherein the process provides the following steps:

- a) Pre-pressing the material (20) to be mixed in static or quasi-static manner, flow movements of the material (20) to be mixed being stopped or impeded in such a way that particles previously irregularly arranged in the material to be mixed are initially aligned transversely to the direction of pressing,
- b) Pressing out of the pre-pressed material (20) to be mixed through an outlet opening (28) of the extrusion press (22) or the extruder in such a way that owing to adjusted flow properties of the material (20) to be mixed, the particles within the pre-compressed material (20) to be mixed realign, starting from their transverse alignment, by an angle (beta) of a maximum of 75 degrees in the direction of pressing.



3) Family number: 63365042 (US2016250780A) © PatBase

Title: DYNAMIC BLOCK PRESS, AND ASSOCIATED METHODS AND SYSTEMS

Priority: US20150634672 20150227

Family:

Publication number	Publication date	Application number	Application date
US2016250780 AA	20160901	US20150634672	20150227
WO16138462 A1	20160901	WO2016US19908	20160226

Probable Assignee: WATERSHED MATERIALS LLC

Assignee(s):(std): WATERSHED MAT LLC

Assignee(s): WATERSHED MATERIALS LLC

Inventor(s):(std): EASTON DAVID CARR ; EASTON KHYBER ; EASTON KHYBER J

Agent(s): GLENN MICHAEL A 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 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

International class (IPC) B28B21/18 B29C43/02 (Advanced/Invention)

8-9):

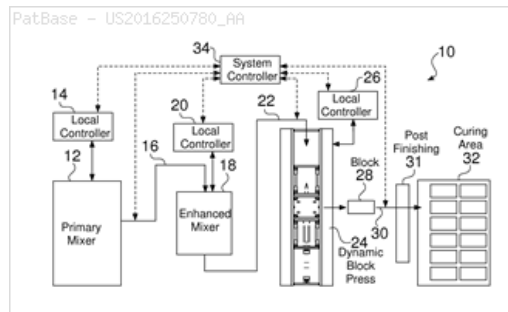
CPC: B29C43/021 B29L2031/102 B28B1/0935 B28B3/086 B28B7/007 B28B7/183 B28B7/28 B28C5/143 B28C5/16 B01F3/1221 B01F3/1228 B01F7/00558 B01F7/086 B01F7/16 B01F13/1027

US class: 264/334

[Classification Explorer](#)

Cited documents: US3279021 A, US2012139163 AA, US2010213640 AA, US2009077920 AA, US2003214069 AA, US2003113397 AA, US1327721 A,

Abstract:
Disclosed is a block press and associated process, for dynamically forming a block mold, to produce a masonry block. In some embodiments, the block mold includes a plurality of mold elements, such as a lower impact plate, an upper impact plate, and a plurality of side plates, and can further include one or more block cores. In operation, one or more of the mold elements are moved to dynamically forming a block mold, which is then filled with product formula. The product formula is then compressed, to form a masonry block. One or more of the mold elements are then released, such as to release pressure on the formed masonry block, and to allow removal of the formed masonry block from the block press, wherein the formed masonry block can be moved to a curing area, and the block press can reform the block mold for subsequent production.



4) Family number: 21713045 (US2676892A)

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Title: METHOD FOR MAKING UNICELLULAR SPHERULIZED CLAY PARTICLES AND ARTICLES AND COMPOSITION THEREOF

Priority: US19530391889 19531113

Family:	Publication number	Publication date	Application number	Application date
	US2676892 A	19540427	US19530391889	19531113

Probable Assignee: KANIUM CORP

Assignee(s):(std): KANIUM CORP

Inventor(s):(std): MCLAUGHLIN JEROME D

International class (IPC 8-9): B28B1/00 (Advanced/Invention); B28B1/00 (Core/Invention)

CPC: Y10S264/63 Y10S425/101 Y10S521/921 B28B1/004

European class: B28B1/00C

US class: 106/409 106/681 106/718 106/793 252/378R 252/62 264/43 264/DIG.63 423/133 423/328.2 425/DIG.101 432/13 432/18 501/85 521/921 65/142 65/21.4

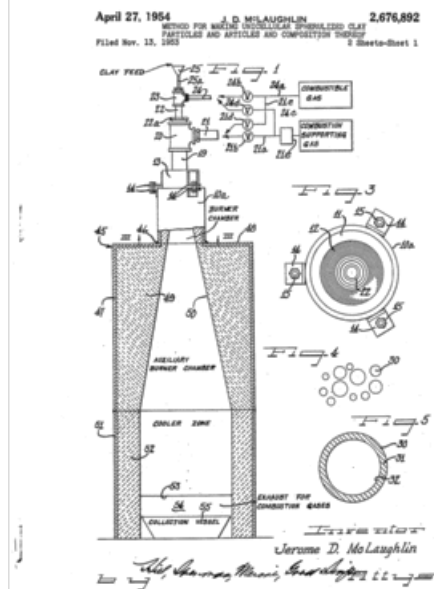
[Classification Explorer](#)

Cited documents: US868762 A, US2542992 A, US2517993 A, US2340194 A, US2136096 A, US1682675 A, GB117504 A,

Forward Citations: WO12033412, USRE35709, US9279255, US9006302, US8993462, US8609244, US8603239, US8291727, US8209927, US8182606, US7998571, US7993570, US7897534, US7878026, US7744689, US7727329, US7666807, US7666505, US7658794, US7651563, US7455798, US6254981, US6045913, US6027799, US5883029, US5665785, US5611833, US5518512, US5496387, US5470368, US5342419, US5253991, US5108461, US5100451, US4602962, US4512736, US4448599, US4311541, US4179264, US4025689, US4017290, US3854267, US3673290, US3516959, US3436790, US3433859, US3409450, US3340567, US3290723, US3231030, US3230184, US3197810, US3183107, US3174561, US3161468, US3151965, US3100715, US3085022, US3056184, US3046607, US3042535, US3041159, US3030215, US3021195, US3015852, US3015604, US3010177, US2978340, US2978339, US2946112, US2929106, US2899715, US2855191, US2850687, US2806509, US2766800, US2014260078, US2011138859, US2010144562, US2009200512, US2009156385, US2009146108, US2008096018, US2007275335, US2006240967, US2006122049, US2006060820, US2006059953, US2004262801, US2004081827, US2004080063, US2004079260, US10213293, EP1549427, DE3540068,

Abstract:

(Claim 1) ing and expanding clay particles by the method deflyied in claim 18.

**5) Family number: 13178046** (US6228134B)

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Title: EXTRUDED ALUMINA-BASED ABRASIVE GRIT, ABRASIVE PRODUCTS, AND METHODS**Priority:** US19980064493 19980422 WO1999US06013 19990319**Family:**

Publication number	Publication date	Application number	Application date
DE69919350 D1	20040916	DE19996019350	19990319
DE69919350 D1	20040916	DE19996019350T	19990319
DE69919350 T2	20050901	DE19996019350T	19990319
EP1080160 A1	20010307	EP19990912699	19990319
EP1080160 B1	20040811	EP19990912699	19990319
JP2002512298 T2	20020423	JP20000544759T	19990319
US6228134 BA	20010508	US19980064493	19980422
WO9954425 A1	19991028	WO1999US06013	19990319

Probable Assignee: 3M CO**Assignee(s):(std):** 3M CO ; 3M INNOVATIVE PROPERTIES CO ; MINNESOTA MINING AND MFG**Assignee(s):** MINNESOTA MINING AND MFG CO ST PAUL ; MINNESOTA MINING AND MFG CO ; 3M INNOVATIVE PROPERTIES COMPANY ; MINNESOTA MINING AND MANUFACTURING COMPANY**Inventor(s):(std):** ERICKSON D ; ERICKSON DWIGHT D**Designated states:** AT BE BR CA CH CY DE DK ES FI FR GB GR IE IT JP LU MC NL PT SE**International class (IPC 8-9):** B24D18/00 B24D3/14 B28B3/26 C09C1/68 C09K3/14 (Advanced/Invention); B24D18/00 B24D3/04 B28B3/26 C09C1/68 C09K3/14 (Core/Invention)**International class (IPC 1-7):** B24D3/00 C09C1/68 C09K3/14**CPC:** Y10T428/2929 Y10T428/2938 B24D3/14 B24D18/0054 B28B3/2636 C09K3/1436**European class:** B24D18/00G B24D3/14 B28B3/26D C09K3/14C**US class:** 264/172.15 264/173.12 264/173.16 264/623 428/373 428/378 501/12 501/127 501/95.1 501/951 51/307 51/309**JP class F-Term:** 4H018**JP class F-Index:** C09K3/14/550/C[Classification Explorer](#)

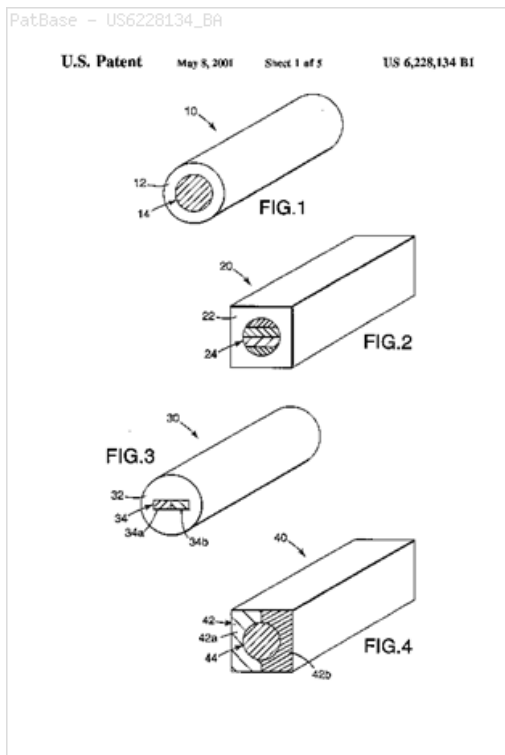
Cited documents: WO9707937 A2, WO9633638 A1, WO9422559 A1, US5690707 A, US5679067 A, US5641330 A, US5628806 A, US5611828 A, US5573619 A, US5551963 A, US5505747 A, US5489204 A, US5474583 A, US5443906 A, US5435816 A, US5429647 A, US5372620 A, US5316812 A, US5312789 A, US5244477 A, US5227104 A, US5224970 A, US5219806 A, US5215552 A, US5213591 A, US5201916 A, US5194072 A, US5185012 A, US5164348 A, US5152917 A, US5129919 A, US5103598 A, US5090968 A, US5035723 A, US5017316 A, US5011508 A, US5009676 A, US4997461 A, US4964883 A, US4929578 A, US4881951 A, US4848041 A, US4824623 A, US4814029 A, US4799939 A, US4798814 A, US4797378 A, US4770671 A, US4744802 A, US4737163 A, US4734104 A, US4707399 A, US4652275 A, US4623364 A, US4574003 A, US4314827 A, US4311489 A, US4278449 A, US4252544 A, US4249913 A, US3957598 A, US3340205 A, US2958593 A, US2127504 A, GB1139258 A, EP0620082 A1, EP0426138 A2, EP0360590 A1, EP0272197 A2,

Forward Citations: WO12092605, WO12092605, US9938440, US9938439, US9914864, US9902045, US9890309, US9803119,

US9783718, US9771507, US9771506, US9771504, US9765249, US9707529, US9688893, US9676982, US9676981, US9676980, US9657207, US9643236, US9604346, US9598620, US9567505, US9566689, US9517546, US9457453, US9440332, US9428681, US9303196, US9242346, US9238768, US9200187, US9150765, US9074119, US9073179, US9017439, US9016406, US8986409, US8961632, US8841005, US8840696, US8840695, US8840694, US8820133, US8808591, US8800848, US8790439, US8789625, US8764865, US8764863, US8758461, US8753742, US8753558, US8697258, US8637127, US8628597, US8480772, US8142891, US8142532, US8142531, US8123828, US8034137, US7887608, US6802878, US2015367462, US2015174734, US2013043615, US2010326894, US2010319269, US2010151201, US2010151196, US2010151195, US2010146867, US2009197059, US2009169816, US2009165394, US2008236051, US2006096179, US10196551, US10179391, US10160071, US10137556, US10106715, US10106714, US10000676, EP3342839, EP2760639, CN103347975,

Abstract:

Alumina-based abrasive material having at least an internal core structure is provided. Preferably, the abrasive material results from co-extrusion of at least two different sols. In some preferred processing, steps to provide multiple internal core structures are conducted.



6) Family number: 56883075 (US2014194328A)

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Title: THERMOSET CERAMIC COMPOSITIONS AND A METHOD OF PREPARATION THEREFOR
Priority: US20130749417P 20130107 US20130832328 20130315 JP20160501813T 20140313
WO2014US25293 20140313 US20140039599P 20140820 US20140040125P 20140821
US20140040655P 20140822 US20150831154 20150820 US20150238736P 20151008
US20160288127 20161007 JP20180070280 20180330 US20180190635 20181114

Family:	Publication number	Publication date	Application number	Application date
	EP2970012 A1	20160120	EP20140770628	20140313
	EP2970012 A4	20161221	EP20140770628	20140313
	JP2016514662 T2	20160523	JP20160501813T	20140313
	JP2018138512 A2	20180906	JP20180070280	20180330
	KR20150131319 A	20151124	KR20157029689	20140313
	US2014194328 AA	20140710	US20130832328	20130315
	US2016023951 AA	20160128	US20150831154	20150820
	US2017050887 AA	20170223	US20160288127	20161007
	US2019077715 AA	20190314	US20180190635	20181114
	WO14151252 A1	20140925	WO2014US25293	20140313

Probable Assignee: COVARON INC
Assignee(s):(std): MADKOUR AHMAD ; SHICK REED A ; MARCHAL JULIEN ; SHICK REED ; VINCENT ALESSI ; ALESSI VINCE ; ALESSI VINCENT
Assignee(s): COVARON INC
Inventor(s):(std): ALESSI VINCE ; ALESSI VINCENT ; SHICK REED A ; MARCHAL JULIEN ; MADKOUR AHMAD ; SHICK REED ; VINCENT ALESSI
Agent(s): BUSHER SAMANTHA JANE; MCKELLAR ROBERT L
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

International class (IPC 8-9): A61C13/083 B05D1/00 B05D1/04 B05D1/40 B05D3/00 B05D7/24 B28B1/14 B29C33/02 B29C33/04 B29C33/38 B29C33/40 B29C39/02 B29C39/22 B29C45/37 B29C45/73 C01B33/00 C04B12/04 C04B14/02 C04B14/04 C04B14/06 C04B14/10 C04B14/22 C04B14/30 C04B14/34 C04B14/36 C04B14/38 C04B14/42 C04B14/48 C04B16/06 C04B18/06 C04B18/08 C04B18/14 C04B22/00 C04B22/02 C04B22/06 C04B24/20 C04B24/32 C04B28/00 C04B28/10 C04B28/24 C04B28/26 C04B35/04 C04B35/057 C04B35/10 C04B35/14 C04B35/52 C04B38/00 C04B40/06 C08K3/04 C08K3/22 C08K3/36 C08K7/02 C08L101/06 C09D183/00 C09J5/06 C09K8/32 C09K8/80 C23C18/12 C23C24/08 C23C4/04 C23C4/12 C23C4/129 C23C4/134 E21B43/26 (Advanced/Invention); B29K101/00 B29L31/00 C04B111/00 C04B111/28 (Advanced/Non-invention)

CPC: C04B38/009 C04B35/10 A61C13/083 C04B35/14 C01B33/00 C09K8/805 B29C39/22 B29K2101/00 B29K2995/0092 B29L2031/757 E21B43/26 C04B35/04 C04B35/057 C09J5/06 B05D7/24 B05D3/007 B29C45/37 B28B1/14 B29C33/04 B29C33/02 B29C33/40 B29C33/3842 B29C45/73 C04B2235/3203 C04B2235/3206 C04B2235/3208 C04B2235/3217 C04B2235/3418 C04B2235/422 B29K2909/02 B29C39/02 C09K8/80 C04B40/065 C04B14/303 C04B14/06 C04B14/022 C04B18/08 C04B14/38 C04B14/106 C04B16/06 C04B24/32 C04B22/0013 C04B14/043 C04B14/041 C04B24/20 C04B22/066 C04B22/062 C04B14/42 C04B14/22 C04B12/04 C04B28/005 C04B28/008 C04B28/26 C04B2111/00112 C04B2111/00482 C04B2111/00836 C04B2111/0087 C04B2111/28 C09D183/00 C09K2208/08 C23C4/04 C23C4/129 C23C4/134 C23C18/1216 C23C18/1254 C23C18/127 C23C24/082 Y02P40/165 Y02W30/92 C04B35/52

US class: 106/287.17 264/299 423/327.1 425/352 427/240 427/358 427/385.5 427/447 427/485 427/58 428/304.4 428/332 428/34.6 428/446 428/689 507/269

JP class F-Term: 4G112 4G112/PA02 4G112/PA11 4G112/PA13 4G112/PA14 4G112/PA15 4G112/PA17 4G112/PA19 4G112/PB02 4G112/PB03 4J002 4J002/AA05 4J002/BD08 4J002/BF03 4J002/BG01 4J002/DA01 4J002/DE05 4J002/DE07 4J002/DE14 4J002/DJ01 4J002/DL00 4J002/FA04 4G112/MA00 4G112/PA06 4G112/PA09 4G112/PA26 4G112/PA27 4G112/PA28 4G112/PA29 4H022

JP class F-Index: C04B12/04 C04B14/02/Z C04B14/30 C04B14/34 C04B14/36 C04B14/38/A C04B14/42/Z C04B14/48/Z C04B22/02 C04B22/06/Z C04B28/26 C08K3/04 C08K3/22 C08K3/36 C08K7/02 C08L101/06 C04B14/10/B C04B14/22 C04B18/06 C04B18/08/Z C04B18/14/A C04B18/14/Z C09K8/32

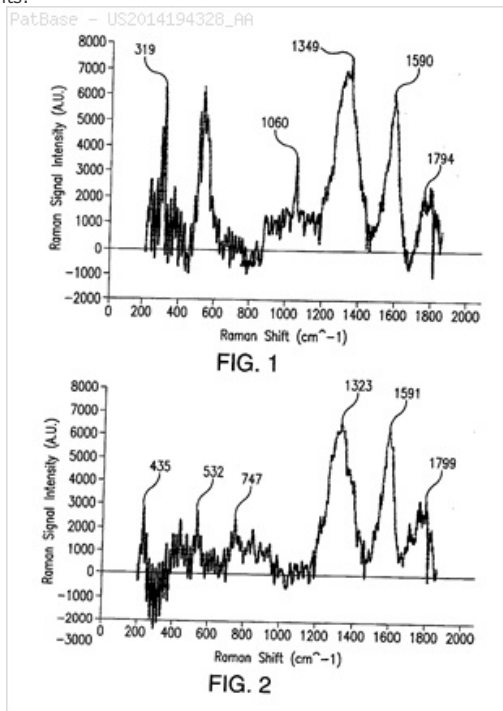
[Classification Explorer](#)

Cited documents: WO12055028 A1, US8257486 BB, US7846250 BB, US7794537 BB, US7655202 BB, US5866754 A, US5601643 A, US5284513 A, US5096858 A, US4977113 A, US4897232 A, US4888311 A, US3413242 A, US2016023951 AA, US2014194328 AA, US2012252845 AA, US2011230339 AA, US2010058957 AA, US2004029707 AA, JP2013502367 T2, JP2012528066 T2, JP2009185224 A2, JP2006088408 A2, JP2000178065 A2, JP1252563 A2, JP11071164, JP10139523, EP2438027 A2, EP0311289 B1, CN101830654 A,

Forward Citations: WO17079500, US9944526, US2017050887, US2016106543, US2016023951, US10253833, US10213312, US10131113, US10035305, US10022890, IT201600100917,

Abstract:

Thermoset ceramic compositions and a method of preparation of such compositions. The compositions are advanced organic/inorganic hybrid composite polymer ceramic alloys. The material combine strength, hardness and high temperature performance of technical ceramics with the strength, ductility, thermal shock resistance, density, and easy processing of the polymer. Consisting of a branched backbone of silicon, alumina, and carbon, the material undergoes sintering at 7 to 300 centigrade for 2 to 94 hours from water at a pH between 0 to 14, humidity of 0 to 100 percent, with or without vaporous solvents.



7) Family number: 13380098 (GB2309499A)

Title: Manufacturing flanged ceramic pipe sections

Priority: IE19960000045 19960119 GB19960001339 19960123

Family:	Publication number	Publication date	Application number	Application date
	GB2309499 A1	19970730	GB19960001339	19960123
	GB2309499 B2	19990707	GB19960001339	19960123
	GB9601339 A0	19960327	GB19960001339	19960123
	IE67370 B3	19960320	IE19960000045	19960119
	IE960045 A2	19960320	IE19960000045	19960119

Probable Assignee: STONEWARE TECH LTD

Assignee(s):(std): STONEWARE TECH LTD

Assignee(s): STONEWARE TECHNOLOGY LIMITED

Inventor(s):(std): WARD PETER

Inventor(s): PETER WARD

International class (IPC 8-9): B28B11/24 B28B17/02 B28B21/52 B28B21/54 B28B21/92 (Advanced/Invention); B28B11/00 B28B17/00 B28B21/00 (Core/Invention)

International class (IPC 1-7): B28B15/00 B28B21/00 B28B21/52 B28C1/02 F16L9/10

CPC: B28B11/243 B28B17/026 B28B21/52 B28B21/54 B28B21/92 F16L9/10

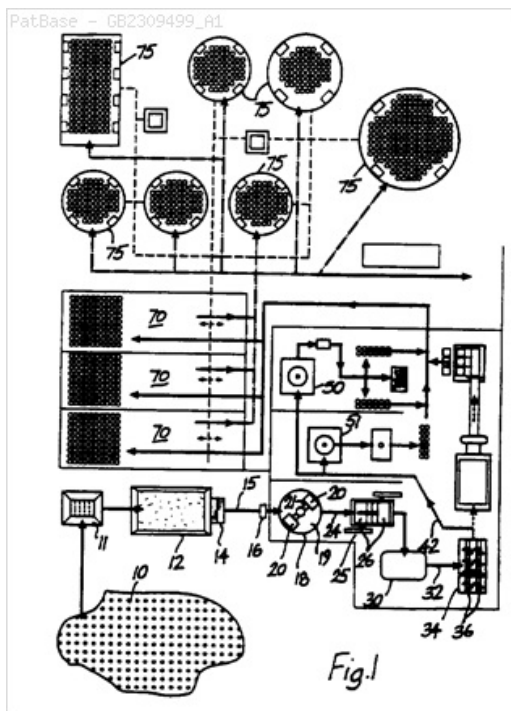
European class: B28B11/24C B28B17/02C B28B21/52 B28B21/54 B28B21/92 F16L9/10

[Classification Explorer](#)

Forward Citations: EP0936041, EP0936041, CN107984606,

Abstract:

Shale is broken in a crusher (11) and delivered to a box feeder (12) then discharged to a pan mill (18) in which the size of shale pieces is reduced prior to delivery between high-speed rollers (26) for final size reduction. Downstream of the rollers (26) a feeder (30) delivers the shale pieces to a mixer (34) in which water is added to form a shale paste which is passed through an extruder (50,51) at which tubular pipe sections are extruded, stacked on pallets and delivered to a drying room (70). Heated air extracted from a kiln (75) after firing is passed through the drying room (70) to reduce the moisture content of the pipe sections. Then the dried pipe sections are delivered to a kiln (75) and fired. The extruder (50) produces straight sections with lower flanges by means of an associated flange former below the die.; Alternatively, the extruder (51) produces bend sections along with the flange former. The sections are trimmed by a cutter wire.



8) Family number: 63844105 (WO16200286A1)

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Title: METHOD FOR PRODUCING LARGE-SIZED FOAMED GLASS-CRYSTALLINE BLOCKS

Priority: RU20150116118 20150610 WO2015RU00399 20150626

Family:	Publication number	Publication date	Application number	Application date
	EA201792385 A1	20180928	EA20170092385	20150626
	EP3309135 A1	20180418	EP20150895072	20150626
	EP3309135 A4	20190306	EP20150895072	20150626
	RU2600252 C1	20161020	RU20150116118	20150610
	WO16200286 A1	20161215	WO2015RU00399	20150626

Probable Assignee: OBSHSHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU KERAPEN

Assignee(s):(std): CERAPEN LTD ; OBSHSHESTVO S OGRANICHENNOJ OTVETSTVENNOST JU KERAPEN ; OBSHSHESTVO S OGRANICHENNOJ OTVETSTVENNOSTYU KERAPEN

Assignee(s): KERAPEN LIABILITY CO LTD

Inventor(s):(std): CHEREPANOV ANDREJ BORISOVICH ; CHEREPANOV BORIS STEPANOVICH ; DOLMANOV IGOR NIKOLAEVICH

Agent(s): CHIMINI FRANCESCO; KOTLOV DMITRY VLADIMIROVICH

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

International class (IPC 8-9): C03B19/08 C04B38/02 (Advanced/Invention)

CPC: C04B38/02 B28B3/00 B28B5/00 B28B11/12 B28B11/145 C04B38/0051 C04B38/0067 C04B38/0087 C03B19/08

[Classification Explorer](#)

Cited documents: US5788608 A, US4822541, SU936953 A1, SU1715777 A1, RU2540741 C1, RU2451000 C1, EP2752395, EA017891 B1, EA007884 B1,

Abstract:

The invention relates to a method for producing blocks of foamed glass-crystalline ceramics. The technical result of the invention is the production of foamed ceramic materials having a thickness of up to 200 mm and a uniformly cellular fine-pore structure throughout the volume of the material and enhanced physical and chemical characteristics. The method comprises preparing a finely ground glass-crystalline phase with a particle size in a range of 1-50 micrometres comprising an industrial by-product containing at least 10 wt percent of silicon carbide. A finely ground charge is then prepared for making foamed blocks, said charge having a particle size in a range of 1-50 micrometres and comprising the finely ground glass-crystalline phase in an amount of 5-95 wt percent and a binding component. The charge is pressed to produce blanks in the shape of large-size tiles which are then dried until a residual moisture content of 0.5 percent is achieved, a double layer of engobe is applied to the bottom and side surfaces of the tile, which are aligned with the movement of a roller conveyor. The dried tiles, carried by the roller conveyor, enter a kiln where the speed of the conveyor is 10-25 percent slower at the end of a sintering zone than upstream of said zone. Once foaming is complete, the bar is quenched, an incision is made thereon, and, upon exit, the bar is divided into blocks along the incision lines, the blocks then being annealed and machined.

9) Family number: 776105 (FR1506413A)

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Title: PROCEDE POUR LA PREPARATION D'UN PRODUIT ISOLANT A FAIBLE DENSITE PROCESS FOR THE PREPARATION OF INSULATION PRODUCT LOW DENSITY (Machine translation)

Priority: US19650557857 19650526 FR19660078784 19661005 NL19660014464 19661014

Family:	Publication number	Publication date	Application number	Application date
	BE688302 A	19670414		19661014
	FR1506413 A	19671222	FR19660078784	19661005
	NL6614464 A	19680416	NL19660014464	19661014

Probable Assignee: GREFCO

Assignee(s):(std): GREFCO

Assignee(s): GREFCO INC

International class (IPC 8-9): B28B1/52 B28B5/02 C04B28/00 C04B30/02 D21J1/00 (Advanced/Invention); B28B1/52 B28B5/00 C04B28/00 C04B30/00 (Core/Invention)

International class (IPC 1-7): H01B3/52

CPC: B28B1/52 B28B5/027 C04B28/001 C04B30/02 D21J1/00

European class: B28B1/52 B28B5/02C2 C04B28/00B C04B30/02 D21J1/00

[Classification Explorer](#)

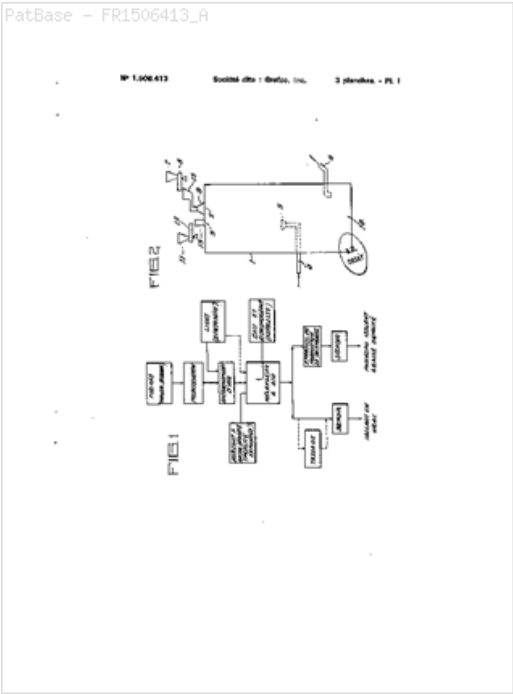
Forward Citations: FR2646628, FR2175187, EP0192208, EP0192208, EP0067456, EP0067456,

Abstract:

Source: FR1506413A [FR] (Claim 1) aksUxfi L'invention concerne un procede de preparation d'un produit isolant contenant des fibres et un agre gat mineral. a base densite, caracterisee par les points suivants. consideres isolement ou en com binaisons 1 Le procede a pour objet l'obtention d'un pro duit isolant contenant des fibres et un agregat mi neral a basse densite et il consiste a incorporer un composant constitue par un agregat mineral a basse densite dans un agent gazeux, a disperser un composant fibreux dans un agent gazeux, a se parer notablement le composant fibreux en fibres individuelles et a-entourer les fibres avec un agent gazeux, a melanger ensemble les fibres et (agregat dans l'agent gazeux avant toute agglomeration des fibres de facon a empecher cette agglomeration a maintenir un espace vide suffisant pour aider a un melangeage uniforme des composants et pour main tenir les fibres sous forme individuelle, a introduire un systeme aqueux dans les composants disperses dans l'agent gazeux, a maintenir les composants dans l'agent gazeux sous turbulence controlee jus qu'a ce qu'ils soient uniformement melanges, a sepa rer les melanges de l'agent gazeux et, a elimi ner pratiquement toute l'eau du melange; 2 On maintient au moins 90 percent d'espace vide dans l'agent gazeux pour aider a maintenir les fibres sous forme individuelle et a melanger les compo sants du produit de facon pratiquement uniforme; 3 La turbulence est insuffisante pour provoquer une rupture appreciable du composant a basse den site; 4 Un agent hydrofugeant est incorpore dans le melange avant l'elimination de l'eau; 5 Le procede implique la mise en suspension d'un liant non fibreux dans un agent gazeux et le melangeage de la totalite des composants en sus pension ensemble dans l'agent gazeux sous tur bulence controlee avec le maintien d'un espace vide d'au moins 90 /o jusqu'a ce que les composants soient melanges de facon pratiquement uniforme; 6 Le melange a basse densite est tasse en une forme coherente apres separation de l'air; 7 Au moins une partie.

Machine translation: (Claim 1) aksUxfi The invention relates to a method of preparing an insulation product containing fibers and mineral aggre gat. a base density, characterized by the following points. considered in isolation or in combination combinations 1 The method is to obtain a pro duct insulation contain fiber and an aggregate mi neral a low density and it is to incorporate a component is a mineral aggregate at low density in an agent gas, has a fiber component dispersed in a gaseous agent, a deal is a significant component fiber into individual fibers and fiber-surround with a gaseous agent, mixed together and the fibers (aggregates in the gaseous agent prior to agglomeration of fibers to prevent the agglomeration has maintained a blank space sufficient to support a uniform mixing of components and hand hold the fibers in individual form, to introduce a system in aqueous components dispersed in the gaseous agent, to keep components agent in the controlled gaseous turbulence has juice that they are uniformly mixed, a sepa rer mixtures of gaseous agent and elimi NER has almost all the water in the mixture 2 is maintained at least 90 percent empty space in the gaseous agent to help keep the fibers as individual components and mix the components of the product substantially uniformly;

3 Turbulence is insufficient to cause rupture of the component has appreciable low den site 4 A water repellent is incorporated into the mixture before the removal of water, 5 The method involves the suspension of a binder in a fibrous non-gaseous agent and the mixing of all of the components together in extra pension agent lence in gas tur controlled with maintaining a gap of at least 90 / o until the components are mixed substantially uniformly; 6 The mixture has low density cup is a coherent form after separation of air; 7 At least part.



10) Family number: 30773133 (FR2160899A) © PatBase

Title: ANTISKID ROAD SURFACE - USING HARD TETRA HEDRALL PYRAMIDAL OR CONICAL PARTICLES AS AGGREGATE

Priority: GB19710054289 19711123

Family:

Publication number	Publication date	Application number	Application date
AU197248933 A1	19740516	AU19720048933	19721116
BE791763 A	19730316		00000000
BE791763 A1	19730316	BE19720124486	19721122
DE2257535 A1	19730530	DE19722257535	19721123
FR2160899 A1	19730706	FR19720041286	19721121
IT975812 A	19740810	IT19720070664	19721122
JP48059639 A2	19730821	JP19720117905	19721124
LU66501 A	19730201	LU19720066501	19721120
NL7215808 A	19730525	NL19720015808	19721122

Probable Assignee: REDLAND RESEARCH AND DEV LTD

Assignee(s):(std): REDLAND RESEARCH AND DEV LTD ; REDLAND RESEARCH DEVELOP

Assignee(s): REDLAND RESEARCH AND DEVELOPMENT LTD ; REDLAND RESEARCH AND DEVELOPMENT LTD REDLAND HOU ; REDLAND RESEARCH AND DEVELOPMENT LTD REDLAND HOUSE REIGATE SURREY GR BR ; REDLAND RESEARCH AND DEVELOPMENT LTD REIGATE SURREY GROSSBRITANNIEN

Inventor(s):(std): BEECHING LORD ; AINSWORTH LESLIE

Inventor(s): LORD BEECHING ; LESLIE AINSWORTH ; BEECHING LORD EAST GRINSTEAD ; AINSWORTH LESLIE HOVE

International class (IPC 8-9): B28B1/00 B28B3/14 C03C10/00 C03C3/083 C04B35/01 C04B35/14 E01C7/00 E01C7/08 (Advanced/Invention); B28B1/00 B28B3/00 C03C10/00 C03C3/076 C04B35/01 C04B35/14 E01C7/00 (Core/Invention)

International class (IPC 1-7): B28B3/14 C04B31/20 C04B35/00 C04B35/14 C04B35/60 E01C7/00 E01C7/08

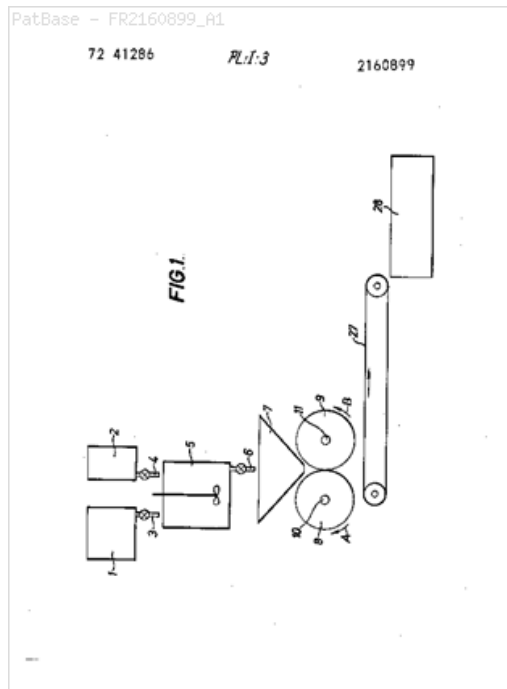
CPC: B28B1/004 B28B3/14 C04B35/01 C04B35/14 E01C7/085

European class: B28B1/00C B28B3/14 C04B35/01 C04B35/14 E01C7/08B

[Classification Explorer](#)

Forward Citations: WO16012101, EP3172380, CN107075817,

Abstract: Road making material comprises granules of a hard solid which, when the granules repose in stable equilibrium on a horizontal surface always present a point or an edge directed upwards. The particles are pref tetrahedral in form, or conical or pyramidal. The road making mixt. contains is not 50 percent of these particles. suspended in a bitumastic mix. The particles are of a hard solid, mainly alumina, mixed with a vitreous phase obtd. by heat treating granite or red mud and improve the antiskid properties of the road surface.



11) Family number: 49151139 (WO11078708A1)

© PatBase

Title: CARBON PLASTER BOARD
Priority: NZ20090582398 20091224
Family:

Publication number	Publication date	Application number	Application date
WO11078708 A1	20110630	WO2010NZ00265	20101223

Probable Assignee: CARBON CREDIT CORP NEW ZEALAND LTD
Assignee(s):(std): CARBON CREDIT CORP NEW ZEALAND LTD ; LIDGARD GORDON JOHN PALMER
Assignee(s): CARBON CREDIT NEW ZEALAND CORP LTD
Inventor(s):(std): LIDGARD GORDON JOHN PALMER
Agent(s): ADAMS MATTHEW D ET AL
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 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 RO RS RU 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

International class (IPC 8-9): B32B13/00 B32B13/08 C04B28/14 E04C2/26 E04F13/08 (Advanced/Invention)

CPC: B28B19/0092 B28C5/003 B28C5/381 C04B28/14 C04B2111/00129 C04B2111/0062 E04C2/043

European class: B28C5/00B B28C5/38B C04B28/14 E04C2/04C L28B19/00K M04B111/00M14 M04B111/00T6B

[Classification Explorer](#)

Cited documents: WO06016200 A1, US6054088 A, US5683635 A, US2006280898 AA, KR20090097060 A, JP2000109358 A2, JP11058594 A2, CN101139199 A,

Forward Citations: WO17158270, WO14154597, FR3048696, FR3003880, EP3089950, CN106493967, CN106313670, CN102344275,

Abstract:

The invention is concerned with gypsum-based plaster board or gypsum cardboards or other gypsum plaster mouldings that incorporate carbon, and preferably charcoal in the form of either powder or granules or both, as a component or filler of the gypsum core, for use as building components in any buildings for walls, ceilings or other enclosed space liners such as cupboards, duct ways, and any other suitable construction applications. The present invention is concerned with methods of producing such gypsum-based plaster, and also the resulting plaster boards themselves. Using charcoal in plaster boards or mouldings provides building components with some or all of the properties of charcoal such as: improved thermal insulation, air purification, removal of odours, shielding attenuation, sound proofing, emission of far-infrared rays and anions, and/or adsorption of volatile organic compounds used in paints and adhesives.



12) Family number: 31985171 (WO9515849A1)

© PatBase

Title: HINGES FOR HYDRAULICALLY SETTABLE MATERIALS

Priority: US19930163681 19931206 WO1994US14171 19941206

Family:	Publication number	Publication date	Application number	Application date
	AU199514329 A1	19950627	AU19950014329	19941206
	WO9515849 A1	19950615	WO1994US14171	19941206

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER J

Inventor(s): SIMON K HODSON ; PER J ANDERSEN

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UZ VN

International class (IPC 8-9): B05C5/02 B28B1/52 B28B11/00 B28B11/08 B29C43/02 B29C43/22 B29C43/24 B29C67/24 B32B13/02 B65D43/16 C04B26/28 C04B28/00 E05D1/02 (Advanced/Invention); B05C5/02 B29C43/02 B29C43/22 (Advanced/Non-invention); B28B1/52 B28B11/00 B28B11/08 B29C43/02 B29C43/22 B29C43/24 B29C67/24 B32B13/00 B65D43/16 C04B26/00 C04B28/00 E05D1/00 (Core/Invention); B05C5/02 (Core/Non-invention)

International class (IPC 1-7): B32B13/00 C04B14/00 E05D5/00

CPC: B29C43/02 B05C5/0245 B28B1/52 B28B11/003 B28B11/0863 B29C43/00 B29C43/222 B29C67/242 B29C2043/022 B29C2043/023 B29C2043/142 B29C2043/464 B29K2003/00 B29K2105/04 B29L2031/712 B32B13/02 B65D43/162 B65D2565/385 C04B26/28 C04B28/00 C04B2111/00129 C04B2111/00612 C04B2111/00948 E05D1/02 E05Y2900/602 B29C48/001 B29C48/0011 B29C48/0012 B29C48/0017 B29C48/0019 B29C48/0022 B29C48/07 B29C48/08 B29C48/13

European class: B28B1/52 B28B11/00E B28B11/08E B29C43/02 B29C43/22B B29C43/24 B29C67/24C B32B13/02 B65D43/16B C04B26/28 C04B28/00 E05D1/02 L05C5/02E L29C43/00 L29C43/02B1 L29C43/02B2 L29C43/14A1 L29C43/46A3 L29C47/00J4 L29C47/00J5 L29C47/00L L29C47/00L12 L29C47/00L4 L29C47/00L5 L29C47/00L7 L29C47/00L9 L29K105/04 L29K3/00 L29L31/712 L65D565/38Y7 M04B111/00M14 M04B111/00T6 M04B111/00T6 P05D1/02 P05Y900/602

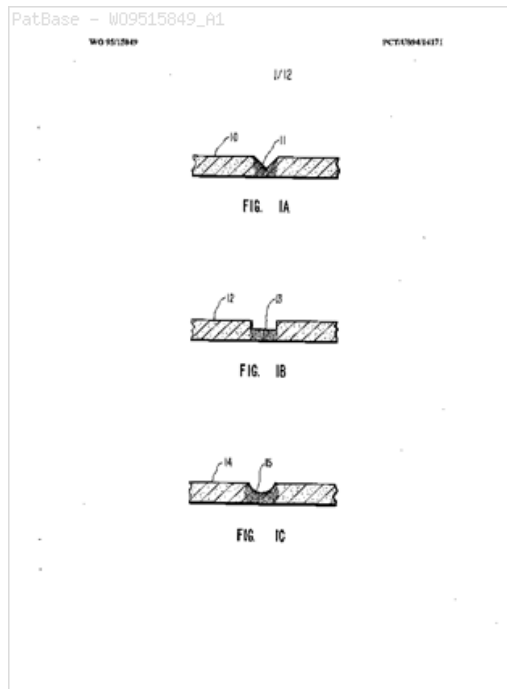
[Classification Explorer](#)

Cited documents: GB2220934 A1,

Forward Citations: US9676141, US8828170, US8622208, US8087147, US7918016, US7918005, US7818866, US7814647, US7704347, US7694843, US7552841, US7536767, EP3470345, EP0816299, EP0816299, EP0743899, EP0743899, EP0713481, EP0713481, EP0686082, EP0686082,

Abstract:

A hinge (11) for use in hydraulically settable materials is provided. The hinge (11) has a hydraulically settable matrix (10) formed from a reaction product of a hydraulically settable binder and water, with fibrous material dispersed in the matrix. Additional components may be utilized in the matrix (10), such as rheology-modifying agents, aggregate materials and substances to produce air voids. The hinge (11) of the invention allows hydraulically settable materials to be bent along a line without breakage of the material. The hinge (11) is particularly useful in cementitious containers that require bending of various container parts, such as in food containers and boxes made from cementitious materials.



13) Family number: 32172191 (WO05075167A1)

© PatBase

Title: ROOF TILE, PROCESS AND EQUIPMENT FOR THE MANUFACTURE THEREOF

Priority: WO2004BR00008 20040209

Family:	Publication number	Publication date	Application number	Application date
	WO05075167 A1	20050818	WO2004BR00008	20040209

Probable Assignee: NASPOLINI OCTAVIO

Assignee(s):(std): NASPOLINI OCTAVIO

Inventor(s):(std): NASPOLINI OCTAVIO

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

International class (IPC 8-9): B28B15/00 B28B3/20 B28C1/00 B28C1/22 (Advanced/Invention); B28B11/04 B28B3/20 (Advanced/Non-invention); B28B15/00 B28B3/20 B28C1/00 (Core/Invention); B28B11/04 B28B3/20 (Core/Non-invention)

International class (IPC 1-7): B28B15/00 B28B3/20

CPC: B28B3/20 B28B11/044 B28B15/00 B28C1/006 B28C1/227

European class: B28B15/00 B28C1/00B2 B28C1/22D L28B11/04C L28B3/20

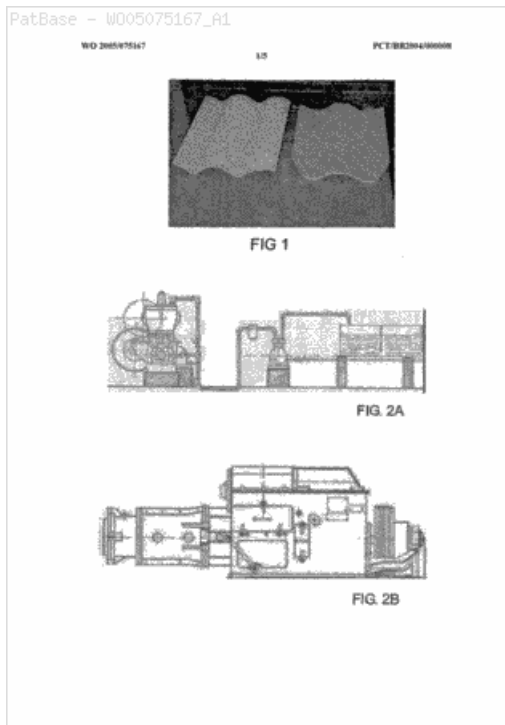
[Classification Explorer](#)

Cited documents: US5686037 A, US2431629 A, EP0307508 A1,

Forward Citations: FR2988715,

Abstract:

Tegula-type roof tile, process and improvement in equipment for the manufacture thereof, comprising the shaping of a tegula-type roof tile made of ceramic material, using appropriate proportions of plastic clays, argillites and ivory palm, so that a substantially plastic dough can be processed in different equipment and shaped in a vacuum extruder, after which the product goes through the final, finish stages.



14) Family number: 31985202 (US5720913A)

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Title: METHODS FOR MANUFACTURING SHEETS FROM HYDRAULICALLY SETTABLE COMPOSITIONS

Priority: US19920929898 19920811 US19930019151 19930217 US19930095662 19930721
US19930101500 19930803 US19950475366 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5720913 A	19980224	US19950475366	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C49/04 B29C49/06 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention); B01F3/12 B28B1/00 B28B1/52 B28B11/00 B28B13/00 B28B23/00 B28B3/00 B28B3/02 B28B3/20 B28B3/26 B28B7/40 B28C7/00 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/44 B29C45/00 B29C49/00 B29C51/00 B29C51/10 B29C53/00 B29C55/18 B29C67/24 B29C70/04 B32B13/00 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/02 C04B14/38 C04B16/00 C04B20/00 C04B22/00 C04B24/00 C04B26/00 C04B28/00 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/60 C08L1/00 C08L3/00 C08L5/00 C08L89/00 C08L97/00 E05D1/00 (Core/Invention); B05B11/00 B05C1/08 B05C3/00 B05C5/02 B29C49/04 B29C49/06 B29C51/08 B32B37/12 (Core/Non-invention)

International class (IPC 1-7): B28B11/16 B29C59/00 B29C67/20 B29D31/00

CPC: Y02W30/97 C04B41/61 B01F3/1214 B01F2003/125 B05B11/0037 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B13/021 B28B13/06 B28B23/0081 B28B23/0087 B28C7/02 B29C43/00 B29C43/003 B29C43/222 B29C43/34 B29C43/46 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/242 B29C67/243 B29C70/50 B29C2043/3433 B29C2043/3689 B29C2043/463 B29C2043/464 B29C2043/466 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2089/00 B29K2105/04 B29K2105/12 B29K2105/16 B29K2405/00 B29L2024/00 B29L2031/608 B29L2031/712 B32B5/02 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/466 B65D2301/20 B65D2565/385 C04B14/064 C04B16/02 C04B20/002 C04B20/0048 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B38/0006 C04B38/02 C04B40/00 C04B40/0028 C04B40/006 C04B41/009 C04B41/45 C04B2111/00129 C04B2111/00612 C04B2111/00948 C04B2111/00965 C04B2111/27 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 B29C44/3402 B29C48/0011 B29C48/0012 B29C48/0019 B29C48/07 B29C48/08 B29C48/12

European class:

B01F3/12B2 B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B11/00E3 B28B13/02C B28B13/06 B28B23/00Z B28B23/00Z1 B28B3/00 B28B3/02 B28B3/12C B28B3/20 B28B3/26E B28B7/42 B28C7/02 B29C43/00B B29C43/02 B29C43/22 B29C43/22B B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00E B29C49/00B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/22D1 B29C67/24C B29C67/24C2 B29C70/50 B32B13/02 B32B27/04 B32B27/20 B32B31/00J B32B37/14B B32B5/02 B65D11/02 B65D43/16B B65D5/00 B65D65/38 B65D65/46C C04B14/06G C04B16/02 C04B20/00D2 C04B20/00F C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/02B C04B26/28 C04B26/28B C04B28/00 C04B28/02 C04B38/00B C04B38/02 C04B40/00 C04B40/00D C04B40/00D7 C04B41/00V C04B41/45 C04B41/61 C08L1/28 C08L3/00 C08L3/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 L01F3/12G L05B11/00B5 L05C1/08P L05C1/08P2 L05C3/18 L05C5/02E L29C43/00 L29C43/34B L29C43/36H2 L29C43/46 L29C43/46A2 L29C43/46A3 L29C43/46B L29C47/00J4 L29C47/00J5 L29C47/00J9 L29C47/00L4 L29C47/00L5 L29C47/00L9 L29C49/00F L29C49/04 L29C49/06 L29C49/46B1A L29C51/04 L29C51/08 L29C51/08B L29C51/10 L29C53/58 L29C791/00E4 L29C795/00D L29K1/00 L29K105/04 L29K105/12 L29K105/16 L29K3/00 L29K405/00 L29K5/00 L29K89/00 L29L24/00 L29L31/60C L29L31/712 L32B31/00A8B L32B37/12 L65D301/20 L65D565/38Y7 M04B111/00M14 M04B111/00T6 M04B111/00T66 M04B111/00T70 M04B111/27 P05D1/02 P05Y900/602

US class:

264/108 264/129 264/145 264/152 264/175

[Classification Explorer](#)

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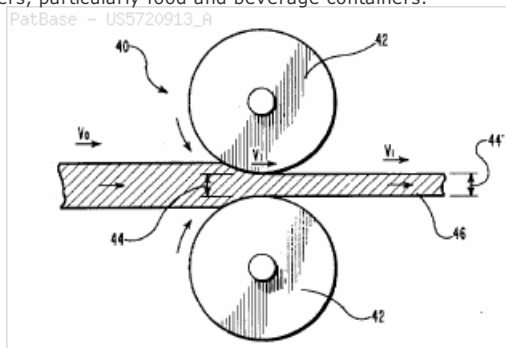
US882538 A, US591168 A, US5380180, US5366549, US5338349, US5316624, US5290355, US5269845, US5232496, US5184995, US5167894, US5154771, US5108679, US5108677, US5106880, US5106423, US5102596, US5085366, US5076986, US5051217, US5047086, US5039560, US5030282, US5021093, US4990566, US4985119, US4979992, US4948429, US4944595, US4939192, US4927573, US4923665, US4912069, US4895598, US4892589, US4889428, US4888059, US4872913, US4842649, US4840672, US4836940, US4799961, US4797161, US4789244, US4786670, US4784816, US4784693, US4780180, US4772439, US4755494, US4754589, US4746481, US4707187, US4655981, US4650523, US4642137, US4640715, US4637860, US4636345, US4623150, US4613627, US4588443, US4585486, US4562218, US4552463, US4533393, US4529663, US4524828, US4508595, US4504315, US4497662, US4481037, US4462835, US4447479, US4444593, US4428775, US4427610, US4415366, US4410366, US4406703, US4383862, US4377440, US4373957, US4370166, US4362679, US4353748, US4326891, US4313997, US4310996, US4305758, US4299790, US4279695, US4272198, US4264368, US4264367, US4261754, US4257814, US4257710, US4244781, US4239716, US4234344, US4233368, US4233080, US4230502 A, US4229225 A, US4225357 A, US4225247 A, US4220576 A, US4209336 A, US4202857 A, US4190454 A, US4188231 A, US4185923 A, US4159302 A, US4157998 A, US4135940 A, US4133619 A, US4132555 A, US4117060 A, US4117059 A, US4115135 A, US4093690 A, US4086045 A, US4084980 A, US4077809 A, US4073658 A, US4070199 A, US4046584 A, US4040851 A, US4028454 A, US4017324 A, US4017321 A, US4014636 A, US4002482 A, US3998651 A, US3989534 A, US3979217 A, US3954490 A, US3917781 A, US3914359 A, US3904341 A, US3902912 A, US3872204 A, US3857715 A, US3841885 A, US3827895 A, US3824107 A, US3819389 A, US3806571 A, US3773700 A, US3770859 A, US3759729 A, US3754954 A, US3753749 A, US3697366 A, US3689294 A, US3683760 A, US3579366 A, US3558070 A, US3526172 A, US3520707 A, US3492385 A, US3470005 A, US3468993 A, US3432317 A, US3406614 A, US3393261 A, US3356779 A, US3306961 A, US3305613 A, US3215549 A, US3205116 A, US3169877 A, US3149986 A, US3042578 A, US3030258 A, US3027266 A, US3006615 A, US2959489 A, US2917778 A, US2837435 A, US2820713 A, US2793957 A, US2700615 A, US2671939 A, US2629667 A, US2549507 A, US2496895 A, US2432971 A, US2307629 A, US2205735 A, US2170102 A, US2045099 A, US1965538 A, US1954117 A, US1932150 A, US1874974 A, US128980 A, US1234692 A, US1223834 A, US109669 A,

Forward Citations:

WO12095569, US9999989, US9909718, US9890083, US9701583, US9616591, US9579822, US9475732, US9410361, US9375899, US9296124, US9243444, US9080372, US9027296, US8927622, US8915033, US8881494, US8658714, US8604123, US8597766, US8501260, US8382888, US8268417, US8152510, US8087921, US7553363, US7481645, US7476351, US7217382, US7155866, US6416606, US6340388, US6319312, US6251979, US6182375, US201824448, US2015184414, US2010280149, US2010192351, US2010136269, US2009238912, US2009218347, US2009208705, US2008159870, US2008099122, US2007202228, US2006110498, US2006033237, US2006016501, US2005089606, US2004265453, US2004177580, US2004177579, US2004083677, US2004081816, US2002038924, US10246236, US10245611, US10240089, US10239230, US10196309, US10077597, US10076853, US10059033, US10052793, US0999989, FR2970477, FR2777495, EP0951987, CN101766653,

Abstract:

Compositions and methods for manufacturing sheets having a hydraulically settable matrix are disclosed. Suitable compositions are prepared by mixing together a hydraulic binder, water, and appropriate additives (such as aggregates, fibers, and rheology-modifying agents) which impart predetermined properties so that a sheet formed therefrom has the desired performance criteria. The compositions are formed into sheets by first extruding them into a sheet and then calendering the sheet using a set of rollers. The calendered sheets are dried in an accelerated manner to form a substantially hardened sheet. The drying is performed by heated rollers and/or a drying chamber. The hydraulically settable sheets so formed may have properties substantially similar to sheets made from presently used materials like paper, cardboard, polystyrene, or plastic. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19950484673 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5665442 A	19970909	US19950484673	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/61 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B5/16 B32B9/04

CPC: Y10S229/93 Y10S428/906 C04B41/61 B01F3/1214 B01F2003/125 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B13/021 B28B13/06 B28B23/00 B28B23/0081 B28B23/0087 B28C7/02 B29C43/00 B29C43/003 B29C43/02 B29C43/08 B29C43/222 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C67/243 B29C70/50 B29C71/0009 B29C2043/022 B29C2043/023 B29C2043/3433 B29C2043/3689 B29C2043/463 B29C2043/464 B29C2043/466 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/04 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/46 B65D65/466 B65D2301/20 B65D2565/385 C04B14/064 C04B16/02 C04B20/002 C04B20/0048 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B38/0006 C04B38/02 C04B40/00 C04B40/0028 C04B40/006 C04B41/009 C04B41/45 C04B2111/00129 C04B2111/00379 C04B2111/00413 C04B2111/00612 C04B2111/00948 C04B2111/00965 C04B2111/80 C08J5/18 C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 Y10T428/1314 Y10T428/1348 Y10T428/1352 Y10T428/1372 Y10T428/1376 Y10T428/15 Y10T428/2438 Y10T428/2446 Y10T428/24471 Y10T428/24612 Y10T428/24694 Y10T428/269 Y10T428/249924 Y10T428/249928 Y10T428/249968 Y10T428/249969 Y10T428/249974 Y10T428/249986 Y10T428/31971 B29C44/3402 B31B50/32 B31B2105/0022 B29C48/0011 B29C48/0012 B29C48/0019 B29C48/0022 B29C48/07 B29C48/08 B29C48/12 B29C48/13

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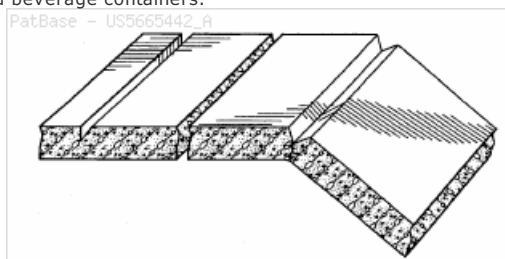
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WO06102101, WO06102101, WO04037533, WO04037533, USRE39339, USD437527, USD434605, USD434604, US9999989, US9909718, US9890083, US9701583, US9616591, US9579822, US9475732, US9410361, US9375899, US9334380, US9296124, US9243444, US9080372, US9027296, US8927622, US8915033, US8881494, US8741443, US8658714, US8636011, US8627828, US8604123, US8501260, US8469036, US8414464, US8382888, US8268417, US8152510, US8129042, US8087921, US7867927, US7645490, US7553363, US7482053, US7481645, US7296387, US7138346, US7138346, US6990779, US6962745, US6872440, US6743490, US6719943, US6708456, US6700106, US6673432, US6670592, US6586353, US6571980, US6500560, US6474497, US6459075, US6440509, US6420689, US6403936, US6401962, US6357347, US6255636, US6241096, US6211501, US6211500, US6176915, US6168857, US6083586, US5965257, US2012045602, US2010280149, US2009238912, US2009218347, US2009104314, US2008256821, US2007202228, US2007042657, US2006270762, US2006110498, US2006088707, US2005089606, US2004265453, US2004232098, US2004177580, US2004177579, US20040455239, US2003134079, US10245611, US10240089, US10239230, US10196309, US10098376, US10077597, US10076853, US10059033, US10052793, US09999989, EP2813338, EP1063102, EP1063102, AU2003299511,

Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



16) Family number: 31985224 (US5660903A)

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Title: SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX
Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19950474495 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5660903 A	19970826	US19950474495	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

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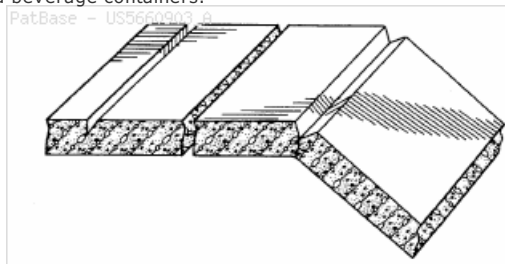
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Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



17) Family number: 33376227 (US5506046A)

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Title: ARTICLES OF MANUFACTURE FASHIONED FROM SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19930158824 19931124

Family:	Publication number	Publication date	Application number	Application date
	US5506046 A	19960409	US19930158824	19931124

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Inventor(s): ANDERSEN PER J

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B19/00 B32B27/20 B32B9/00 C08K3/00

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US class: 229/164.1 229/406 229/5.81 229/931 428/152 428/182 428/220 428/292.1 428/294 428/339 428/34.5 428/35.6 428/35.7 428/36.4 428/53 428/532 524/4 524/425 524/446 524/447 524/451 524/498 524/650

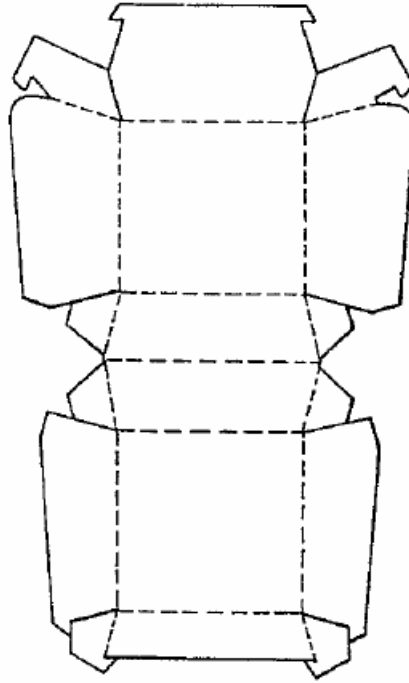
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Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and then passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets. They have especial utility in the mass production of containers, particularly food and beverage containers.

**18) Family number: 33376228** (US5508072A)

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Title: SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119

Family:	Publication number	Publication date	Application number	Application date
	US5508072 A	19960416	US19930152354	19931119

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Inventor(s): ANDERSEN PER J

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B3/26 B32B3/28 B32B5/16 C08L89/00

CPC: Y10S229/93 Y10S428/906 C04B41/61 B01F3/1214 B01F2003/125 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B13/021 B28B13/06 B28B23/00 B28B23/0081 B28B23/0087 B28C7/02 B29C43/00 B29C43/003 B29C43/02 B29C43/08 B29C43/222 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C67/243 B29C70/50 B29C71/0009 B29C2043/022 B29C2043/023 B29C2043/3433 B29C2043/3689 B29C2043/463 B29C2043/464 B29C2043/466 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/04 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/46 B65D65/466 B65D2301/20 B65D2565/385 C04B14/064 C04B16/02 C04B20/002 C04B20/0048 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B38/0006 C04B38/02 C04B40/00 C04B40/0028 C04B40/006 C04B41/009 C04B41/45 C04B2111/00129 C04B2111/00379 C04B2111/00413 C04B2111/00612 C04B2111/00948 C04B2111/00965 C04B2111/80 C08J5/18 C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 Y10T428/1314 Y10T428/1348 Y10T428/1352 Y10T428/1372 Y10T428/1376 Y10T428/15 Y10T428/2438 Y10T428/24446 Y10T428/24471 Y10T428/24612 Y10T428/24694 Y10T428/269 Y10T428/249924 Y10T428/249928 Y10T428/249968 Y10T428/249969 Y10T428/249974 Y10T428/249986 Y10T428/31971 B29C44/3402

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US class:

229/5.81 229/930 428/152 428/182 428/220 428/292.1 428/293.4 428/294 428/312.4 428/312.6 428/313.9
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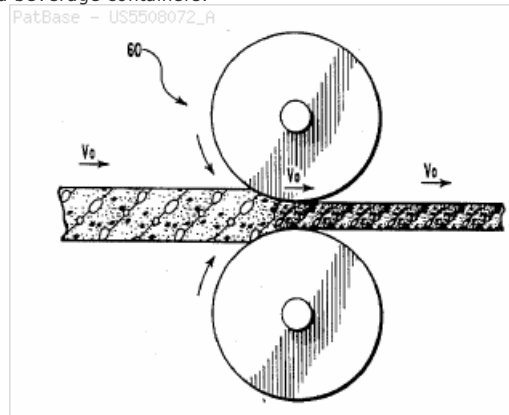
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Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They

have especial utility in the mass production of containers, particularly food and beverage containers.



19) Family number: 33376232 (US5582670A)

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Title: METHODS FOR THE MANUFACTURE OF SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930154436 19931119

Publication number	Publication date	Application number	Application date
US5582670 A	19961210	US19930154436	19931119

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Inventor(s): ANDERSEN PER J

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C47/14 B29C48/305 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B29D7/01 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B9/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C49/06 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B05D3/02 B29C67/20

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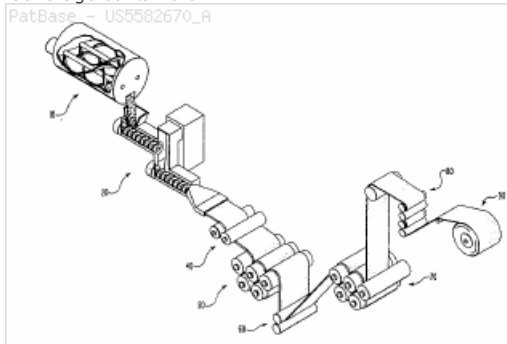
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Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, cardboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



Title:	SHEETS MADE FROM MOLDABLE HYDRAULICALLY SETTABLE MATERIALS											
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Inventor(s):(std):	ANDERSEN PER JUST ; HODSON SIMON K											
Inventor(s):	ANDERSEN PER J											
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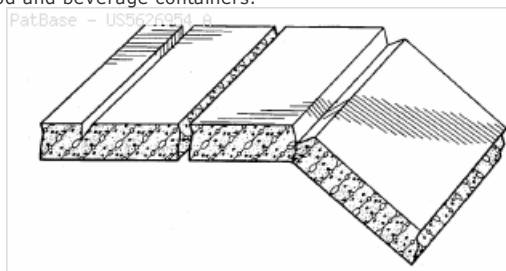
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Abstract:

Compositions and methods for manufacturing sheets having a hydraulically settable matrix. Suitable compositions are prepared by mixing together a hydraulic binder, water, and appropriate additives (such as aggregates, fibers, and rheology-modifying agents) which impart predetermined properties so that a sheet formed therefrom has the desired performance criteria. The compositions are formed into sheets by first extruding them into a sheet and then calendering the sheet using a set of rollers. The calendered sheets are dried in an accelerated manner to form a substantially hardened sheet. The drying is performed by heated rollers and/or a drying chamber. The hydraulically settable sheets so formed may have properties substantially similar to sheets made from presently used materials like paper, cardboard, polystyrene, or plastic. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



21) Family number: 33376234 (US5631053A)

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Title: HINGED ARTICLES HAVING AN INORGANICALLY FILLED MATRIX
Priority: US19920929898 19920811 US19920982383 19921125 US19930019151 19930217
US19930095662 19930721 US19930101500 19930803 US19930152354 19931119
US19930163681 19931206 US19940192965 19940207 US19950472554 19950607

Publication number	Publication date	Application number	Application date
US5631053 A	19970520	US19950472554	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Inventor(s): ANDERSEN PER J

International class (IPC 8-9): B01F3/12 B05D3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/08 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L9/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B19/02 B32B25/02 B32B5/16 E05F1/08

CPC: B01F3/1214 B01F2003/125 B05B11/0037 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B11/0863 B28B13/021 B28B13/06 B28B23/00 B28B23/0081 B28B23/0087 B28C7/02 B29C43/00 B29C43/003 B29C43/08 B29C43/222 B29C43/34 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C51/002 B29C51/04 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C67/243 B29C70/50 B29C71/0009 B29C2043/142 B29C2043/3433 B29C2043/463 B29C2043/464 B29C2049/4608 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/04 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/18 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/466 B65D2301/20 B65D2565/385 C04B14/064 C04B16/02 C04B20/002 C04B20/0048 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B38/0006 C04B38/02 C04B40/00 C04B40/0028 C04B40/006 C04B41/009 C04B41/45 C04B41/61 C04B2111/00379 C04B2111/00948 C04B2111/00965 C04B2111/50 C08J5/18 C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L9/06 C08L97/02 E05D1/02 E05Y2900/602 Y10T16/52 Y10T16/538 Y10T16/555 Y10T156/1064 Y10T428/1352 Y10T428/1355 Y10T428/1372 Y10T428/24504 Y10T428/24579 Y10T428/24612 Y10T428/24694 Y10T428/269

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European class:

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428/532

[Classification Explorer](#)

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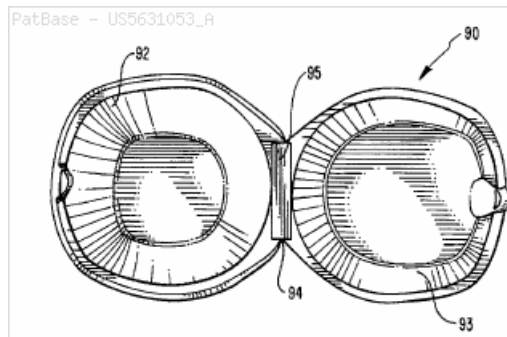
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US2005127073, US2005089606, US2005008810, US2004265453, US2004038015, US10240089,
US10196309, US10077597, US10061359, EP0997618, EP0997618, DE102014221387,

Abstract:

A hinge for use in inorganically filled composite materials is provided. The hinge has an inorganically filled structural matrix comprising a water-dispersable organic polymer binder, an aggregate material, and a fibrous material. The hinge allows inorganically filled materials to be bent along a line without breakage of the material. The hinge is preferably formed by scoring a formed sheet of inorganically filled material. The hinge is particularly useful in containers that require bending of various container parts, such as in food containers and boxes made from inorganically filled materials.



22) Family number: 31985236 (US5614307A) © PatBase

Title: SHEETS MADE FROM MOLDABLE HYDRAULICALLY SETTABLE COMPOSITIONS
Priority: US19920929898 19920811 US19930019151 19930217 US19930095662 19930721
US19930101630 19930803 US19950477205 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5614307 A	19970325	US19950477205	19950607

Probable Assignee: E KHASHOGGI IND LLC
Assignee(s):(std): KHASHOGGI E IND
Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES
Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K
Inventor(s): ANDERSEN PER J

International class (IPC 8-9): A47G19/00 B01F3/12 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B21/70 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B65D1/00 B65D1/10 B65D1/12 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/02 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B40/00 C04B41/45 C04B41/61 C04B41/62 C04B41/65 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B13/02 B32B13/04

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US class: 106/400 106/638 428/152 428/167 428/182 428/220 428/294 428/294.7 428/312.4 428/318.4 428/319.3 428/703 428/906

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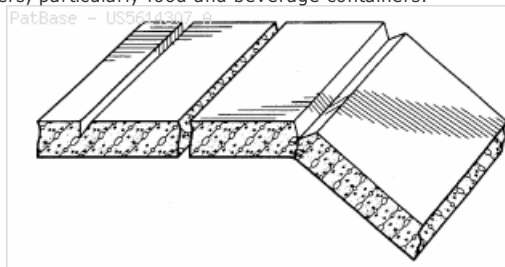
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Forward Citations:

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Abstract:

Compositions and methods for manufacturing sheets having a hydraulically settable matrix are disclosed. Suitable compositions are prepared by mixing together a hydraulic binder, water, and appropriate additives (such as aggregates, fibers, and rheology-modifying agents) which impart predetermined properties so that a sheet formed therefrom has the desired performance criteria. The compositions are formed into sheets by first extruding them into a sheet and then calendaring the sheet using a set of rollers. The calendared sheets are dried in an accelerated manner to form a substantially hardened sheet. The drying is performed by heated rollers and/or a drying chamber. The hydraulically settable sheets so formed may have properties substantially similar to sheets made from presently used materials like paper, cardboard, polystyrene, or plastic. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



23) Family number: 33376236 (US5660900A)

© PatBase

Title: INORGANICALLY FILLED, STARCH-BOUND COMPOSITIONS FOR MANUFACTURING CONTAINERS AND OTHER ARTICLES HAVING A THERMODYNAMICALLY CONTROLLED CELLULAR MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930109100 19930818 US19940218971 19940325 US19940288664 19940809
US19940288667 19940809

Family:	Publication number	Publication date	Application number	Application date
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	US5783126 A	19980721	US19940288667	19940809

Probable Assignee: EARTHSHELL SPE LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; EARTHSHELL SPE LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): A61K47/36 B01F3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/42 B28C7/02 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/36 B29C33/58 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/40 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00

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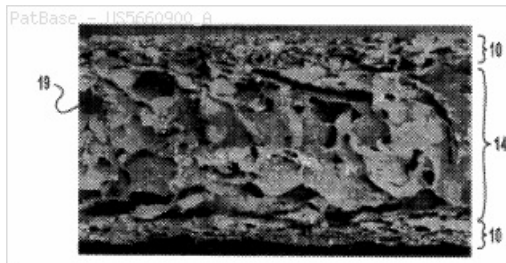
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Forward Citations: WO9944806, WO03078267, WO0246058, USRE39339, US9890083, US9840066, US9802866, US9701583,
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EP2559541, EP2559541, EP1265957, DE102016113423, CN102971128,

Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a particle packed, highly inorganically filled, cellular matrix are disclosed. Suitable inorganically filled mixtures are prepared by mixing together a starch-based binder, a solvent, inorganic aggregates, and optimal admixtures, e.g., fibers, mold-releasing agents, rheology-modifying agents, plasticizers, coating materials, and dispersants, in the correct proportions to form an article which has the desired performance criteria. The inorganically filled mixtures have a predetermined viscosity and are heated between molds at an elevated temperature and pressure to produce form-stable articles having a desired shape and a selectively controlled cellular, structure matrix. The molded articles may be placed in a high humidity chamber to obtain the necessary flexibility for their intended use. The articles may be manufactured to have properties substantially similar to articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic materials. They have especial utility in the mass-production of containers, particularly food and beverage containers.

**24) Family number: 33376237 (US5660904A)**

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Title: SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX
Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930154436 19931119 US19950486317 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5660904 A	19970826	US19950486317	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C47/14 B29C48/305 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B29D7/01 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B9/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C49/06 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B23/18 B32B5/16

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US class: 206/524.3 206/524.6 206/524.7 428/152 428/182 428/295.1 428/295.4 428/339 428/36.4 428/43 428/532 428/906

[Classification Explorer](#)

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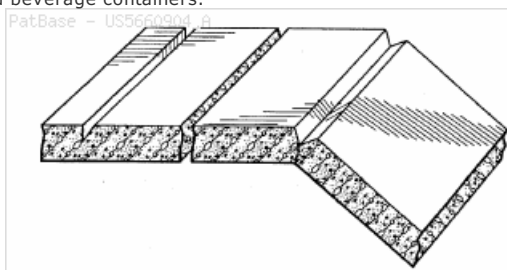
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Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, cardboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



Title: COMPOSITIONS FOR MANUFACTURING FIBER-REINFORCED, STARCH-BOUND ARTICLES HAVING A FOAMED CELLULAR MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930109100 19930818 US19940218971 19940325 US19940288664 19940809
US19940288667 19940809 US19940327524 19941021

Publication number	Publication date	Application number	Application date
US5662731 A	19970902	US19940327524	19941021

Probable Assignee: EARTHSHELL SPE LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; EARTHSHELL SPE LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C33/36 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/34 B29C43/36 B29C43/38 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B32/00 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/52 C08J9/00 C08J9/12 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C53/58 B32B37/12 E05D1/02 (Advanced/Non-invention)

International class (IPC 1-7): C04B14/38 C08L3/02

CPC: B01F3/1214 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B11/24 B28B11/245 B28B13/021 B28B13/06 B28B23/00 B28B23/0081 B28B23/0087 B28C7/02 B29C33/10 B29C33/20 B29C33/36 B29C39/003 B29C39/42 B29C43/00 B29C43/003 B29C43/02 B29C43/06 B29C43/08 B29C43/34 B29C43/36 B29C43/38 B29C44/0407 B29C45/0013 B29C49/0005 B29C51/002 B29C51/04 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/202 B29C67/24 B29C67/242 B29C70/025 B29C70/12 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/3615 B29C2043/3621 B29C2043/3623 B29C2043/3689 B29C2049/4608 B29C2795/007 B29K2003/00 B29K2005/00 B29K2089/00 B29K2093/00 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/14 B32B5/18 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/466 B65D2301/20 B65D2565/385 C04B7/527 C04B16/02 C04B20/0048 C04B22/002 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B40/00 C04B40/006 C04B40/0616 C04B41/45 C04B41/61 C08J9/0085 C08J9/12 C08J2303/00 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 Y02W30/97 Y02W90/11 B29C44/3402 B31B50/32 B31B2105/0022

European class: B01F3/12B2 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B11/00E3 B28B11/24 B28B11/24D B28B13/02C B28B13/06 B28B23/00 B28B23/00Z B28B3/00 B28B3/02 B28B3/12C B28B3/20 B28B3/26E B28B7/42 B28C7/02 B29C33/36 B29C39/00B B29C39/42 B29C43/00B B29C43/02 B29C43/06 B29C43/08 B29C43/34 B29C43/36 B29C43/38 B29C44/04A B29C45/00E B29C49/00B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/20C B29C67/22D1 B29C67/24 B29C67/24C B29C70/02A4 B29C70/12 B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/14B B32B5/02 B32B5/14 B32B5/18 B65D11/02 B65D43/16B B65D5/00 B65D65/38 B65D65/46C C04B16/02 C04B20/00F C04B22/00H C04B26/00 C04B26/02 C04B26/02B C04B26/28 C04B26/28B C04B28/00 C04B40/00 C04B40/00D7 C04B40/06A2 C04B41/45 C04B41/61 C04B7/52H C08J9/00N C08J9/12 C08L1/28 C08L1/28F C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 L05B11/00B5 L05B11/30 L05C1/08P L05C1/08P2 L05C3/18 L05C5/02E L29C33/10 L29C33/20 L29C43/00 L29C43/06 L29C43/08 L29C43/34B L29C43/36C2 L29C43/36C2B L29C43/36C2B1 L29C43/36H2 L29C49/46B1A L29C53/58 L29C795/00D L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29K93/00 L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D301/20 L65D565/38Y7 M08J303/00 P05D1/02 P05Y900/602

US class: 106/206.1 106/217.01 106/400 521/68 521/84.1 523/128 536/102 536/107

[Classification Explorer](#)

Cited documents: US5569514, US5525281, US5523293, US5512378, US5512135, US5512090, US5501774, US5501771, US5496440, US5494509, US5487813, US5480923, US5476621, US5474856, US5470382, US5462980, US5456933, US5454863, US5447604, US5436078, US5432000, US5428150, US5427614, US5419962, US5415827, US5405564, US5405437, US5397834, US5395438, US5393804, US5393333, US5389322, US5382611, US5382285, US5378418, US5376320, US5372877, US5367067, US5362777, US5362776, US5360844, US5360828, US5360586, US5360473, US5356467, US5352709, US5346541, US5324351, US5320669, US5317119, US5317037, US5314754, US5308879, US5300333, US5298273, US5296526, US5296180, US5290350, US5288765, US5288318, US5284672, US5280055, US5279658, US5278194, US5277764, US5275774, US5273821, US5272181, US5269845, US5268187, US5266368, US5264030, US5262458, US5258430, US5256711, US5252271, US5248702, US5240561, US5234978, US5224595, US5221435, US5209776, US5208267, US5206087, US5194206, US5186990, US5185382, US5178730, US5162126, US5160676, US5160368, US5156718, US5153037, US5141797, US5134179, US5132155, US5126014, US5126013, US5124161, US5122231, US5110413, US5108807 A, US5108677 A, US5106880 A, US5104669 A, US5104487 A, US5095054 A, US5082500 A, US5076985 A, US5071512 A, US5061346 A, US5059642 A, US5043196 A, US5039378 A, US5039003 A, US5035930 A, US4979992 A, US4963603 A, US4957754 A, US4957558 A, US4952278 A, US4950490 A, US4944595 A, US4941922 A, US4927656 A, US4927655 A, US4925530 A, US4923665 A, US4921250 A, US4919758 A, US4912069 A, US4889428 A, US4872913 A, US4863655 A, US4833191 A, US4814012 A, US4789244 A, US4781932 A, US4755494 A, US4753710 A, US4749583 A, US4735811 A, US4711669 A, US4710422 A, US4673438 A, US4655840 A, US4648314 A, US4623150 A, US4613627 A, US4595623 A, US4588443 A, US4552463 A, US4545854 A, US4543370 A, US4529663 A, US4529662 A, US4529653 A, US4511585 A, US4508595 A, US4482386 A, US4462835 A, US4456625 A, US4454268 A, US4445970 A, US4438685 A, US4410571 A, US4394930 A, US4378271 A, US4377440 A, US4329177 A, US4328136 A, US4306059 A, US4303690 A, US4249991 A, US4230502 A, US4229225 A, US4225383 A, US4225247 A, US4210490 A, US4172154 A, US4149550 A,

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International class (IPC) C04B14/38 C08L3/02

1-7):

CPC:

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European class:

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US class:

106/162.5 106/162.51 106/162.9 106/164.01 106/205.01 106/206.1 106/217.01 106/287.35 106/400 536/102

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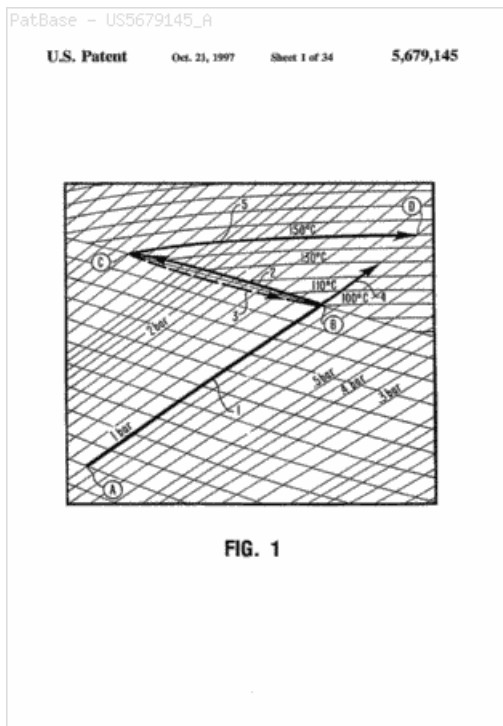
Forward Citations:

WO9963015, WO9950346, WO15198178, WO12002914, WO11084955, WO04074367, WO0202705, WO0039213, USD725946, USD710631, USD699447, USD697723, USD677936, USD677935, US9931305, US9901888, US9890083, US9855221, US9845564, US9834482, US9718258, US9714480, US9701583, US9506181, US9475732, US9458556, US9410361, US9375899, US9327438, US9265366, US9243444, US9139473, US9108340, US9080372, US9076428, US9056967, US9027296, US9017586, US8997924, US8927622, US8925228, US8915033, US8907155, US8906277, US8900498, US8900497, US8881494, US8863420, US8808442, US8795470, US8765167, US8764904, US8741443, US8685437, US8658714, US8652378, US8623246, US8604123, US8598404, US8592641, US8591677, US8555536, US8501260, US8454795, US8445101, US8440296, US8382888, US8360008, US8349444, US8329977, US8268417, US8168003, US8152510, US8127720, US8087921, US7989524, US7967904, US7938908, US7909003, US7754119, US7744791, US7731880, US7704328, US7666261, US7635731, US7553363, US7524379, US7481645, US7276201, US7083673, US7041369, US7029620, US7025821, US6977116, US6955850, US6902783, US6878199, US6869990, US6811740, US6808560, US6802895, US6790275, US6709526, US6589327, US6569233, US6547867, US6533854, US6524639, US6478861, US6440204, US6419988, US6372819, US6176915, US6136377, US6090195, US2016143860, US2014099874, US2013171393, US2011233086, US2011186473, US2011126776, US2011113983, US2010280149, US2009258172, US2009165976, US2009104314, US2008134986, US2008029045, US2007202228, US2007148384, US2007027234, US2007021534, US2006255507, US2006110498, US2005244635, US2005120915,

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Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a starch-bound cellular matrix reinforced with substantially uniformly dispersed fibers. High strength articles that have adequate flexibility and toughness immediately or very shortly after being demolded without the need for subsequent conditioning are molded from compositions having a starch-based binder and fibers that are uniformly dispersed by means of a high yield stress fluid fraction within the starch-based composition. In a two-step mixing process, a preblended mixture is formed by gelating a portion of the starch-based binder or other thickening agent in water to form a liquid phase having high yield stress into which the fibers are substantially uniformly dispersed. The fibers preferably have an average length of at least about 2 mm and an aspect ratio of at least about 25:1. The remaining starch-based binder, water, and other desired admixtures, such as mold-release agents, inorganic fillers, rheology-modifying agents, plasticizers, integral coating or sealing materials, and dispersants, are added to the preblended mixture to form a moldable starch-based composition, which is molded between heated molds to produce form-stable articles having a desired shape and a selectively controlled foamed structural matrix. Such articles can replace articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic-based materials and have especial utility in the mass-production of containers, particularly food and beverage containers.



27) Family number: 33376241 (US5683772A)

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Title: ARTICLES HAVING A STARCH-BOUND CELLULAR MATRIX REINFORCED WITH UNIFORMLY DISPERSED FIBERS

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930109100 19930818 US19940218971 19940325 US19940288667 19940809
US19940327524 19941021 US19940353543 19941209

Family:	Publication number	Publication date	Application number	Application date
	US5683772 A	19971104	US19940353543	19941209

Probable Assignee: EARTHSHELL SPE LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; EARTHSHELL SPE LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C33/36 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/06 C04B14/42 C04B14/46 C04B14/48 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/52 C08J9/00 C08J9/12 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention)

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US class:

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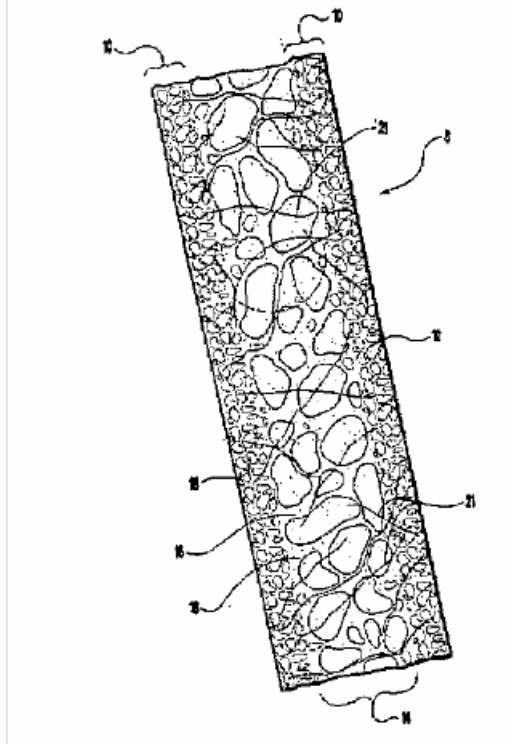
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US10240089, US10196309, US10077597, NL1010916, NL1010915, EP1293443, EP1265957, AU778476,
AU775754,

Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a starch-bound cellular matrix reinforced with substantially uniformly dispersed fibers. High strength articles that have adequate flexibility and toughness immediately or very shortly after being demolded without the need for subsequent conditioning are molded from compositions having a starch-based binder and fibers that are uniformly dispersed by means of a high yield stress fluid fraction within the starch-based composition. In a two-step mixing process, a preblended mixture is formed by gelating a portion of the starch-based binder or other thickening agent in water to form a liquid phase having high yield stress into which the fibers are substantially uniformly dispersed. The fibers preferably have an average length of at least about 2 mm and an aspect ratio of at least about 25:1. The remaining starch-based binder, water, and other desired admixtures, such as mold-release agents, inorganic fillers, rheology-modifying agents, plasticizers, integral coating or sealing materials, and dispersants, are added to the preblended mixture to form a moldable starch-based composition, which is molded between heated molds to produce form-stable articles having a desired shape and a selectively controlled foamed structural matrix. Such articles can replace articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic-based materials and have especial utility in the mass-production of containers, particularly food and beverage containers.

**28) Family number: 33376245** (US5705238A)

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Title: ARTICLES OF MANUFACTURE FASHIONED FROM SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
 US19930101500 19930803 US19930152354 19931119 US19930158824 19931124
 US19950472870 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5705238 A	19980106	US19950472870	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER JUST

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

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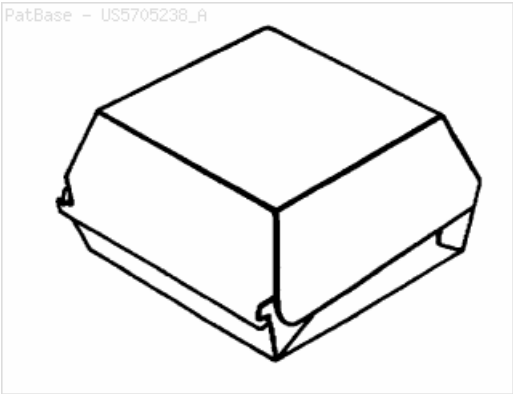
Forward Citations:

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CN104221536,

Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and then passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be controlled, pressed, scored, perforated, folded, and glued

to fashion articles for the sheets. They have especial utility in the mass production of containers, particularly food and beverage containers.



29) Family number: 33376248 (US5707474A) © PatBase

Title: METHODS FOR MANUFACTURING HINGES HAVING A HIGHLY INORGANICALLY FILLED MATRIX
Priority: US19920929898 19920811 US19920982383 19921125 US19930019151 19930217
US19930095662 19930721 US19930101500 19930803 US19930152354 19931119
US19930163681 19931206 US19940192965 19940207 US19950477204 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5707474 A	19980113	US19950477204	19950607

Probable Assignee: E KHASHOGGI IND LLC
Assignee(s):(std): KHASHOGGI E IND
Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES
Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05D3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/08 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C53/58 B32B37/12 (Advanced/Non-invention)

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US class:

156/257 264/133 264/151 427/292

[Classification Explorer](#)**Cited documents:**

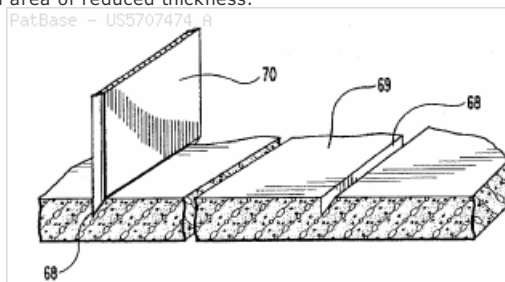
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Abstract:

A method for manufacturing a hinged sheet having an inorganically filled structural matrix includes mixing together a water-dispersible organic polymer binder, an inorganic aggregate material, a fibrous material, and water in order to form a moldable inorganically filled mixture in which the components therein are substantially homogeneously dispersed. The inorganically filled mixture is formed into a substantially hardened sheet having an inorganically filled matrix in a manner such that the water is removed by evaporation. The sheet is then scored to form a hinge in the inorganically filled matrix. Alternatively, a score can be pressed into a surface of the sheet prior to drying in order to form a scored sheet which is then dried. A hinged article having an inorganically filled structural matrix can also be formed by molding the inorganically filled mixture into an article in a manner such that the article includes at least one part that is hingedly attached to at least one other part by a hinge which defines an area of reduced thickness.

**30) Family number: 33376249** (US5709827A)

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Title:

METHODS FOR MANUFACTURING ARTICLES HAVING A STARCH-BOUND CELLULAR MATRIX

Priority:

US19920929898	19920811	US19920982383	19921125	US19930095662	19930721
US19930109100	19930818	US19940218971	19940325	US19940288667	19940809
US19940327524	19941021	US19940353544	19941209		

Family:	Publication number	Publication date	Application number	Application date
	US5709827 A	19980120	US19940353544	19941209
Probable Assignee:	EARTHSHELL SPE LLC			
Assignee(s):(std):	KHASHOGGI E IND			
Assignee(s):	E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; EARTHSHELL SPE LLC			
Inventor(s):(std):	ANDERSEN PER JUST ; HODSON SIMON K			

International class (IPC 8-9): B01F3/12 B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C33/36 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/06 C04B14/42 C04B14/46 C04B14/48 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/52 C08J9/00 C08J9/12 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B01F3/12 B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B13/00 B28B23/00 B28B3/00 B28B3/02 B28B3/20 B28B3/26 B28B7/40 B28C7/00 B29C33/00 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/04 B29C43/24 B29C43/34 B29C43/36 B29C44/02 B29C45/00 B29C49/00 B29C51/00 B29C51/10 B29C53/00 B29C55/18 B29C67/20 B29C67/24 B29C70/00 B29C70/04 B29C70/10 B29C71/00 B31B17/00 B32B13/00 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/02 C04B14/38 C04B16/00 C04B20/00 C04B22/00 C04B24/00 C04B26/00 C04B28/00 C04B38/00 C04B40/00 C04B41/45 C04B41/60 C04B7/00 C08J9/00 C08L1/00 C08L3/00 C08L5/00 C08L89/00 C08L97/00 E05D1/00 (Core/Invention)

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US class: 264/102 264/129 264/232 264/327 264/330 264/42 264/53

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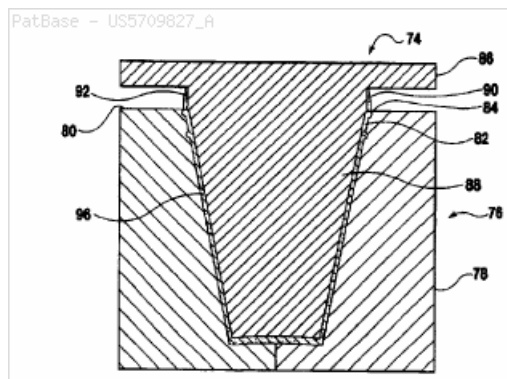
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Forward Citations: WO15056278, WO05089985, WO05089985, WO0119579, US9915331, US9890083, US9878484, US9850362,

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Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a starch-bound cellular matrix reinforced with substantially uniformly dispersed fibers. High strength articles that have adequate flexibility and toughness immediately or very shortly after being demolded without the need for subsequent conditioning are molded from compositions having a starch-based binder and fibers that are uniformly dispersed by means of a high yield stress fluid fraction within the starch-based composition. In a two-step mixing process, a preblended mixture is formed by gelating a portion of the starch-based binder or other thickening agent in water to form a liquid phase having high yield stress into which the fibers are substantially uniformly dispersed. The fibers preferably have an average length of at least about 2 mm and an aspect ratio of at least about 25:1. The remaining starch-based binder, water, and other desired admixtures, such as mold-release agents, inorganic fillers, rheology-modifying agents, plasticizers, integral coating or sealing materials, and dispersants, are added to the preblended mixture to form a moldable starch-based composition, which is molded between heated molds to produce form-stable articles having a desired shape and a selectively controlled foamed structural matrix. Such articles can replace articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic-based materials and have especial utility in the mass-production of containers, particularly food and beverage containers.



31) Family number: 33376250 (US5709913A)

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Title: METHOD AND APPARATUS FOR MANUFACTURING ARTICLES OF MANUFACTURE FROM SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19930157695 19931124
US19950475383 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5709913 A	19980120	US19950475383	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B5/16 B32B9/00 B65D13/00

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US class:

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428/36.9 428/36.92 428/43 428/532 428/906

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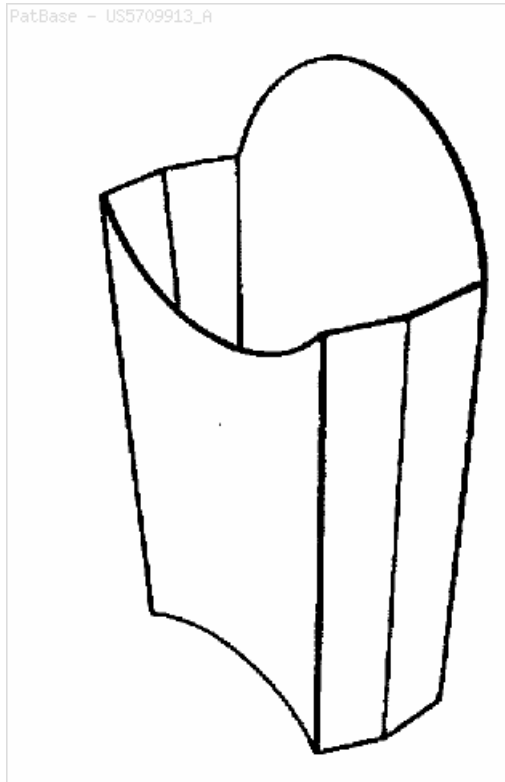
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Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and then passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheet. They have especial utility in the mass production of containers, particularly food and beverage containers.



32) Family number: 33376253 (US5736209A)

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Title: COMPOSITIONS HAVING A HIGH UNGELATINIZED STARCH CONTENT AND SHEETS MOLDED THEREFROM
Priority: US19930152354 19931119 US19930158824 19931124 US19940192965 19940207
US19960629539 19960409

Family:	Publication number	Publication date	Application number	Application date
	US5736209 A	19980407	US19960629539	19960409

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KASHOGGI IND LLC ; E KASHOGGI INDUSTRIES LLC ; E KHASHOGGI IND ; E KHASHOGGI IND LLC

Inventor(s):(std): ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE

International class (IPC 8-9): B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J5/04 C08J5/18 C08K3/00 C08L1/26 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C5/02 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention); B32B37/12 (Core/Non-invention)

International class (IPC 1-7): B32B1/08 B32B23/18 B32B5/02

CPC: Y10S428/906 Y10S977/707 B05B11/0037 B05B11/30 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/02 B29C43/08 B29C43/22 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/463 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/06 B29K2105/12 B29K2105/16 B29K2995/006 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132

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US class:

428/152 428/182 428/317.9 428/36.4 428/36.5 428/36.92 428/43 428/532 428/906

[Classification Explorer](#)

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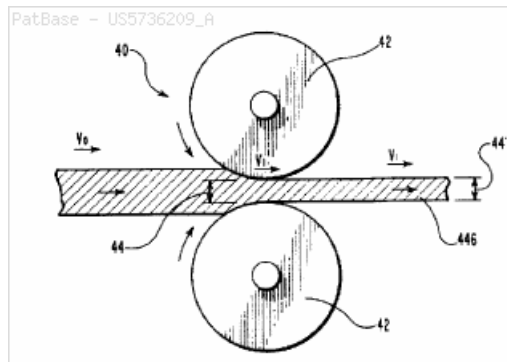
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EP1128947, CN102039735, AU2010280469,

Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, a cellulosic ether, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and cellulosic ether form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



33) Family number: 31985253 (US5169566A)

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Title: ENGINEERED CEMENTITIOUS CONTAMINANT BARRIERS AND THEIR METHOD OF MANUFACTURE

Priority: US19890418027 19891010 US19900526231 19900518 US19900565602 19900810
US19900619317 19901128 WO1991US03488 19910517 US19920834109 19920210
US19920856257 19920325 US19920981615 19921125 CA19922084003 19921127
US19930050705 19930421 US19930050958 19930421 US19930109100 19930818
US19940257811 19940607 US19940326013 19941018 US19950376890 19950120

Family:	Publication number	Publication date	Application number	Application date
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	CA2084003 AA	19940528	CA19922084003	19921127
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	US5695811 A	19971209	US19940257811	19940607
	WO9117875 A1	19911128	WO1991US03488	19910517

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): CONCRETE TECHNOLOGY CORP ; KHASHOGGI E IND ; KHASHOGGI IND E

Assignee(s): KHASHOGGI IND ; ANDERSEN PER JUST ; ESSAM KHASHOGGI ; NATIONAL CEMENT AND CERAMICS LABORATORIES INC ; HODSON SIMON K ; JENNINGS HAMLIN M ; KELZENBERG ANTHONY J ; E KHASHOGGI IND A PARTNERSHIP OF CALIFORNIA ; E KHASHOGGI IND ; E KHASHOGGI IND A PARTNERSHIP OF CA ; E KHASHOGGI IND LLC ; E KHASHOGGI IND

Inventor(s):(std): ANDERSEN PER J ; ANDERSEN PER JUST ; HODSON SIMON K ; JENNINGS HAMLIN M ; KELZENBERG ANTHONY J ; STUCKY GALEN

Inventor(s): SIMON K HODSON ; JENNINGS HAMLIN ; HAMLIN M JENNINGS

Agent(s): CASSAN MACLEAN

Designated states: AT AU BE BG BR CA CH DE DK ES FI FR GB GR HU IT JP KP KR LI LU NL NO RO SE SU

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US class: 106/122 106/605 106/606 106/672 106/723 106/820 252/626 252/628 252/629 252/633 264/102 264/104 264/122 264/128 264/234 264/237 264/255 264/28 264/333 264/336 264/345 264/348 264/71 264/82 264/85 264/86 264/87 264/DIG.43 427/133 427/136 427/140 427/299 427/301 427/309 427/355 427/403 427/427 428/312.4 428/317.9 428/542.8 428/703 428/913 588/16 588/252

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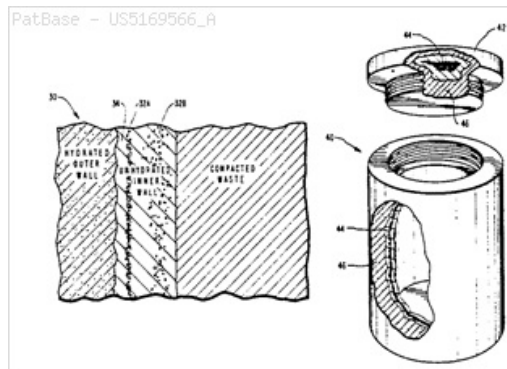
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Abstract:

Novel cementitious contaminant barriers are formed by positioning a hydraulic cement composition into a predetermined configuration and then hydrating the cement composition. The contaminant barriers of the present invention include at least one liquid, gas, or ion getter capable of binding with or absorbing liquids, ions, or gases which may penetrate the barrier. The contaminant barriers of the present invention may be engineered to include mixtures of different getters, single and multiple layers of different getters, multiple layers of cement and getters, and a host of different getter, cement, mixture, and layer combinations. Novel waste containers are advantageously prepared utilizing contaminant barriers within the scope of the present invention. The waste containers may be prepared by surrounding waste material with at least one getter and with a powdered hydraulic cement composition and then compressing the cement and getter around the waste material. Preformed waste containers may also be prepared within the scope of the present invention. Use of reinforcing fibers and aggregates to improve the mechanical properties of the hazardous waste container is disclosed.



34) Family number: 33376258 (US5800647A)

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Title: METHODS FOR MANUFACTURING ARTICLES FROM SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19930157695 19931124

Family:	Publication number	Publication date	Application number	Application date
	US5800647 A	19980901	US19930157695	19931124

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/10 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08K13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

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US class:

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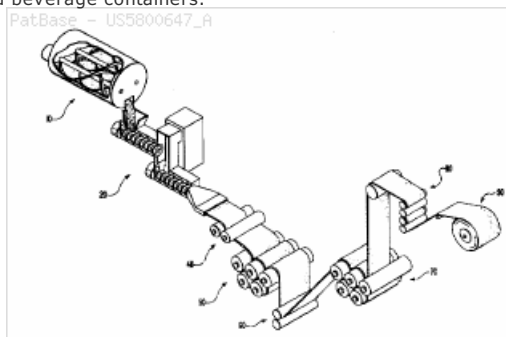
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Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



35) Family number: 33376260 (US5810961A)

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Title: METHODS FOR MANUFACTURING MOLDED SHEETS HAVING A HIGH STARCH CONTENT
Priority: US19930152354 19931119 US19930158824 19931124 US19940192965 19940207
US19960631676 19960409

Family:	Publication number	Publication date	Application number	Application date
	US5810961 A	19980922	US19960631676	19960409

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE

Inventor(s): CHRISTIANSEN BRUCE J

International class (IPC 8-9): B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C47/88 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J3/02 C08J5/18 C08L1/28 C08L3/02 C08L5/12 E05D1/02 (Advanced/Invention); B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B29K1/00 B29L7/00 B32B37/12 (Advanced/Non-invention); B32B37/12 (Core/Non-invention)

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[Classification Explorer](#)

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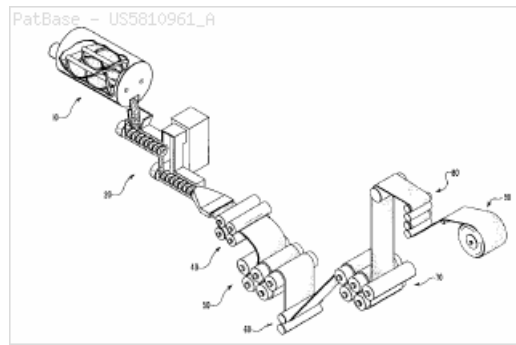
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CN102039735,

Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, a cellulosic ether, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and cellulosic ether form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



36) Family number: 48961260 (US2011120349A)

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Title: EXTRUDED FIBER REINFORCED CEMENTITIOUS PRODUCTS HAVING STONE-LIKE PROPERTIES AND METHODS OF MAKING THE SAME

Priority: US20090624911 20091124 CN201080062134 20101119 EP20100785273 20101119
US20100511493 20101119 WO2010US57446 20101119 US20120511493 20120523
US20150710493 20150512

Family:	Publication number	Publication date	Application number	Application date
	CN102712103 A	20121003	CN201080062134	20101119
	CN106082826 A	20161109	CN201610452841	20101119
	DE602010036260 D1	20161020	DE201060036260T	20101119
	EA028213 B1	20171031	EA20120000774	20101119
	EA201200774 A1	20130130	EA20120000774	20101119
	EP2504136 A1	20121003	EP20100785273	20101119
	EP2504136 B1	20160907	EP20100785273	20101119
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	MX2012005981 A1	20121123	MX20120005981	20101119
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	US2012270971 AA	20121025	US20100511493	20101119
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Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): ANDERSEN PER JUST ; E KHASHOGGI IND LLC ; KHASHOGGI E IND ; HODSON SIMON K

Assignee(s): E KHASHOGGI IND LLC SANTA BARBARA ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER JUST ; JUST ANDERSEN PER ; JUST ANDERSON PER

Inventor(s): ANDERSEN PERJUST ; SIMON K HODSON ; PER JUST ANDERSEN

Agent(s): MUELLER FOTTNER STEINECKE RECHTSANWALTS U PATENTANWALTSPARTNERSCHAFT MBB; SMAGGASGALLE GILLIAN HELEN; ZHONGZI IP; STEFAN J; VENABLE LLP; GOFF CHRISTOPHER M ET AL

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 RO RS RU 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

International class (IPC 8-9): B28B B28B1/52 B28B11/00 B28B3/20 B28B3/26 C04B C04B14/06 C04B16/00 C04B16/02 C04B16/06 C04B18/26 C04B20/00 C04B24/00 C04B24/26 C04B24/38 C04B28/00 C04B28/02 C04B40/00 C04B40/02 C04B7/00 (Advanced/Invention); C04B103/30 C04B111/00 (Advanced/Non-invention)

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European class: B28B1/52 B28B1/52E B28B11/00E B28B3/20 B28B3/26 C04B28/02 M04B111/00M14 M04B201/20 M04B201/50

US class: 106/638 106/638S 106/712 106/805 106/805S 106/808 106/808S 264/211 264/211S 524/4 524/4S 524/5

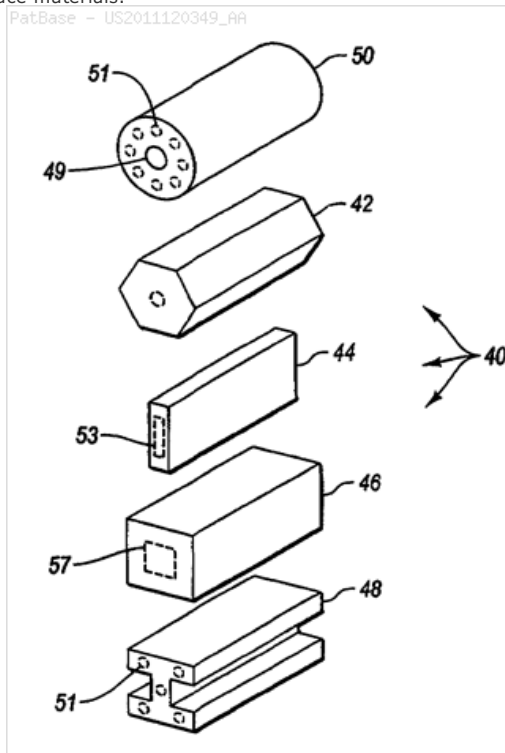
[Classification Explorer](#)

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Forward Citations: US9908813, US9890083, US9701583, US9475732, US9410361, US9375899, US9243444, US9080372, US9027296, US8915033, US8881494, US8839593, US2016012935, US2015344367, US2015266338, US2014262626, US2011283657, US10240089, US10196309, US10077597, CN107285689, CN106542780, CN106542780, CN106414579, CN106145897, CN105884274, CN105884274, CN105130361, CN105026142,

Abstract:
A cementitious composite product that can function as a substitute for stone and solid surface materials, such as granite, marble, and engineered stone is provided. Furthermore methods for manufacturing the cementitious composite product using an extrudable

cementitious composition that can be extruded or otherwise shaped into stone-like building products that can be used as a substitute for many known stone products is disclosed. In one embodiment, the cementitious composite products can be manufactured more cheaply to be as tough or tougher and more durable than stone and solid surface materials.



37) Family number: 33376262 (US5830548A)

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Title: ARTICLES OF MANUFACTURE AND METHODS FOR MANUFACTURING LAMINATE STRUCTURES INCLUDING INORGANICALLY FILLED SHEETS

Priority: US19920929898 19920811 US19930027451 19930308 US19930101500 19930803
US19930154436 19931119 US19930157695 19931124 US19940218971 19940325
US19950378880 19950126 US19960630210 19960409 US19960631676 19960409

Family:	Publication number	Publication date	Application number	Application date
	US5830548 A	19981103	US19960630210	19960409

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER JUST

International class (IPC 8-9): B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B65D65/38 B65D65/46 C04B16/02 C04B20/00 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C53/58 B32B37/12 (Advanced/Non-invention); B28B1/00 B28B1/52 B28B11/00 B28B13/00 B28B23/00 B28B3/00 B28B3/02 B28B3/20 B28B3/26 B28B7/40 B28C7/00 B29C43/00 B29C43/02 B29C43/04 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/44 B29C51/00 B29C51/10 B29C53/00 B29C55/18 B29C67/24 B29C70/04 B31B17/00 B32B13/00 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B65D65/38 B65D65/46 C04B16/00 C04B20/00 C04B26/00 C04B28/00 C04B40/00 C08L1/00 C08L3/00 C08L5/00 C08L89/00 C08L97/00 (Core/Invention); B05B11/00 B05C1/08 B05C3/00 B05C5/02 B32B37/12 (Core/Non-invention)

International class (IPC 1-7): B32B23/18 B32B3/28 B32B5/16 B65D85/84

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US class: 206/524.3 206/524.7 428/116 428/152 428/155 428/182 428/317.9 428/323 428/35.8 428/36.4 428/36.6
428/36.91 428/43 428/532 428/906

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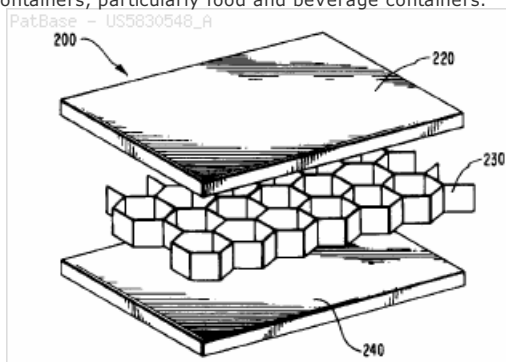
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Abstract:

Compositions and methods for manufacturing composite laminate structures incorporating sheets having a moldable matrix are disclosed. Suitable compositions are prepared by mixing together a water dispersable organic binder, water, and appropriate additives (such as aggregates and fibers) which impart predetermined properties so that a sheet formed therefrom has the desired performance criteria. The compositions are formed into sheets by first extruding them into a sheet and then calendaring the sheet using a set of rollers. The calendered sheets are dried in an accelerated manner to form a substantially hardened sheet. The drying process is performed by heated rollers and/or a drying chamber. The inorganically filled sheets so formed may have properties substantially similar to sheets made from presently used materials like paper, cardboard, polystyrene, or plastic. Such sheets can be rolled, pressed, scored, perforated, folded, and glued before or after being incorporated into composite laminate structures. Such composite laminate structures have especial utility in the mass production of containers, particularly food and beverage containers.



38) Family number: 33376264 (US5851634A)

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Title: HINGES FOR HIGHLY INORGANICALLY FILLED COMPOSITE MATERIALS
Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19930163681 19931206
US19940192965 19940207

Family:	Publication number	Publication date	Application number	Application date
	US5851634 A	19981222	US19940192965	19940207

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05D3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/08 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14

C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention);
B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC) B32B3/30 E05F1/08
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US class: 16/221 16/277 16/385 428/159 428/168 428/172 428/182 428/317.9 428/339 428/532

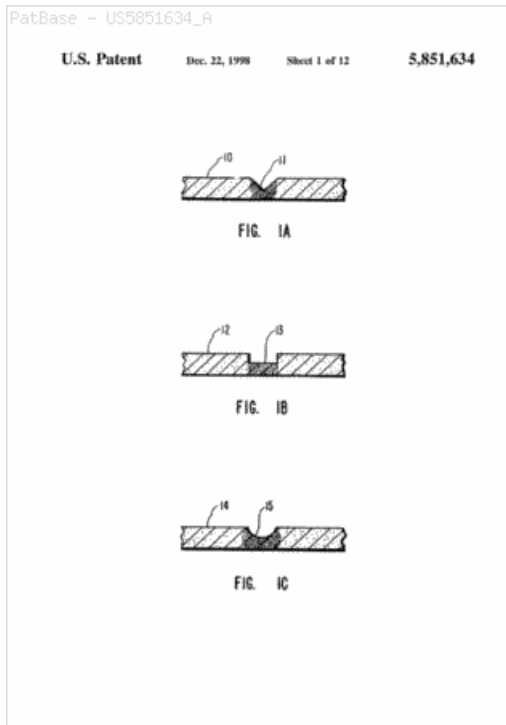
[Classification Explorer](#)

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Forward Citations: WO19042764, WO16141006, WO08128589, WO04009309, WO04009309, WO03041930, WO02085736, WO0206131, USRE39339, US9890083, US9701583, US9475732, US9410361, US9375899, US9243444, US9080312, US9027296, US8927622, US8915033, US8881494, US8741443, US8658714, US8604123, US8501260, US8382888, US8372240, US8268417, US8257525, US8256369, US8152510, US8087921, US7790090, US7690321, US7651327, US7578114, US7553363, US7481645, US7431783, US7255915, US7208209, US6572909, US6168857, US6083586, US2012090116, US2011155275, US2011100860, US2010162942, US2006198989, US2006144497, US2006124641, US2005257873, US2005224154,

Abstract:

A hinge for use in inorganically filled composite materials is provided. The hinge has an inorganically filled structural matrix comprising a water-dispersable organic polymer binder, an aggregate material, and a fibrous material. The hinge allows inorganically filled materials to be bent along a line without breakage of the material. The hinge is preferably formed by scoring a formed sheet of inorganically filled material. The hinge is particularly useful in containers that require bending of various container parts, such as in food containers and boxes made from inorganically filled materials.



39) Family number: 33376268 (US5976235A)

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Title: COMPOSITIONS FOR MANUFACTURING SHEETS HAVING A HIGH STARCH CONTENT
Priority: US19930152354 19931119 US19930158824 19931124 US19940192965 19940207
US19960629539 19960409 US19980018725 19980204

Family:	Publication number	Publication date	Application number	Application date
	US5976235 A	19991102	US19980018725	19980204

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE

Inventor(s): CHRISTIANSEN BRUCE J

International class (IPC 8-9): B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J5/04 C08J5/18 C08K3/00 C08L1/26 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C5/02 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention); B32B37/12 (Core/Non-invention)

International class (IPC 1-7): C04B14/38 C08L3/02

CPC: Y10S428/906 Y10S977/707 B05B11/0037 B05B11/30 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/02 B29C43/08 B29C43/22 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/463 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/06 B29K2105/12 B29K2105/16 B29K2995/006 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/18 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D43/162 B65D65/38 B65D65/466 B65D2565/385 C04B26/02 C04B26/28 C04B26/285 C04B40/00 C04B2111/00612 C04B2111/00948 C08J2303/02 C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 Y10T428/1372 Y10T428/1376 Y10T428/1397 Y10T428/15 Y10T428/24446 Y10T428/24694 Y10T428/249986 Y10T428/31971 Y02W30/97 Y02W90/11 B31B50/32 B31B2105/0022 B32B9/04 B32B3/266 B32B3/28 B32B9/02 B32B23/04

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European class:

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US class:

106/162.51 106/164.01 106/172.1 106/206.1 106/217.01 106/287.35 106/400 536/102 977/707

[Classification Explorer](#)

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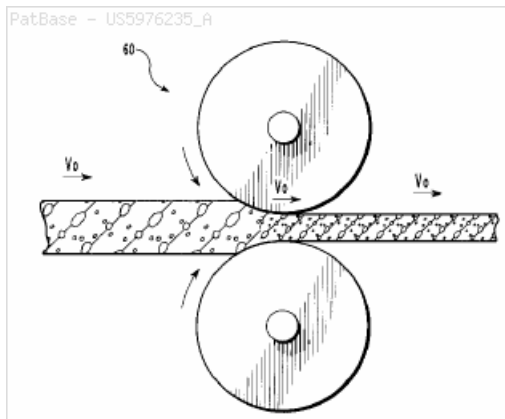
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Forward Citations:

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US2006154007, US2006110498, US2005147695, US2005089606, US2004265453, US2004091581,
US10240089, US10196309, US10077597,

Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, a cellulosic ether, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and cellulosic ether form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



Title: MOLDED STARCH-BOUND CONTAINERS AND OTHER ARTICLES HAVING NATURAL AND/OR SYNTHETIC POLYMER COATINGS

Priority: US19920982383 19921125 US19930095662 19930721 US19930109100 19930818
US19940218971 19940325 US19940288664 19940809 US19940288667 19940809
US19960691861 19960802 US19990246163 19990208

Family:	Publication number	Publication date	Application number	Application date
	US6030673 A	20000229	US19990246163	19990208

Probable Assignee: EARTHSHELL SPE LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC ; EARTHSHELL SPE LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): A61K47/36 B01F3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/36 B29C33/58 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/40 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B32/00 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/36 C04B7/52 C08J3/20 C08J9/00 C08J9/12 C08K7/02 C08L1/28 C08L101/00 C08L29/04 C08L3/00 C08L3/02 C08L31/04 C08L33/02 C08L5/02 C08L5/12 C08L5/14 C08L61/28 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B3/26 B32B31/06 B32B31/12

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US class: 156/78 206/524.3 206/524.7 427/316 427/399 428/317.3 428/317.9 428/318.8 428/319.1 428/319.3 428/319.7 428/36.4 428/36.5 428/913

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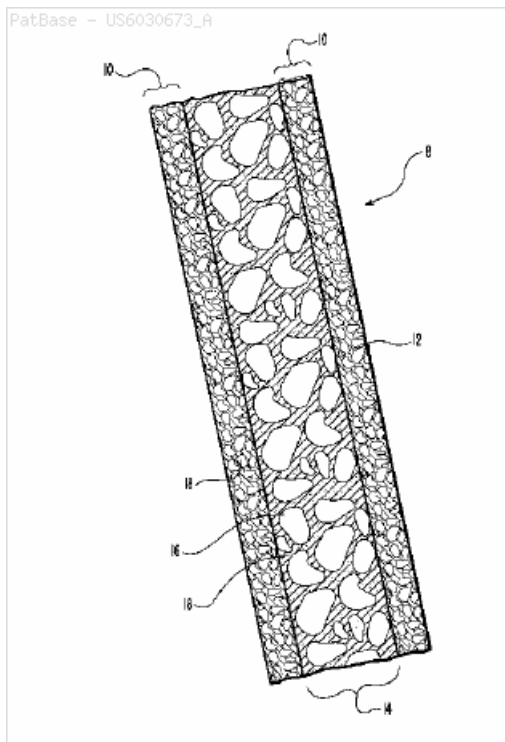
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Forward Citations:

WO11116051, WO09053720, WO03078267, WO03072640, WO03072640, WO03051738, USRE39339, US9890083, US9878464, US9840066, US9828441, US9802866, US9701583, US9598600, US9540810, US9475732, US9410361, US9375899, US9314938, US9266778, US9243444, US9080372, US9062190, US9027296, US8927622, US8915033, US8911843, US8881494, US8691340, US8658714, US8636011, US8627828, US8604123, US8507581, US8501260, US8469036, US8382888, US8360008, US8268417, US8268391, US8152510, US8127720, US8087921, US8043539, US7931949, US7909003, US7745011, US7553363, US7503430, US7481645, US7235256, US7210823, US6713624, US6652932, US6359040, US2015086803, US2012133243, US2011227254, US2011126776, US2010280149, US2010233468, US2010129643, US2009238912, US2009218347, US2009133704, US2009133703, US2008138458, US2008070026, US2008060871, US2008029045, US2007208125, US2007202228, US2007092712, US2007071918, US2007048357, US2007020315, US2006191548, US2006189238, US2006110498, US2006068661, US2005244521, US2005230864, US2005215146, US2005147695, US2005136765, US2005107231, US2005102897, US2005089606, US2004085772, US2004071968, US2004028901, US2004024102, US10240089, US10196309, US10098376, US10077597, ITMO20090097, EP2243612, EP2184308, EP1631613, EP1621312, EP1621312, EP1491313, EP1491313, EP1456094, EP1456094,

Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a particle packed, highly inorganically filled, cellular matrix are disclosed. Suitable inorganically filled mixtures are prepared by mixing together a starch-based binder, a solvent, inorganic aggregates, and optimal admixtures, e.g., fibers, mold-releasing agents, rheology-modifying agents, plasticizers, coating materials, and dispersants, in the correct proportions to form an article which has the desired performance criteria. The inorganically filled mixtures have a predetermined viscosity and are heated between molds at an elevated temperature and pressure to produce form-stable articles having a desired shape and a selectively controlled cellular, structure matrix. The molded articles may be placed in a high humidity chamber to obtain the necessary flexibility for their intended use. The articles may be manufactured to have properties substantially similar to articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic materials. They have especial utility in the mass-production of containers, particularly food and beverage containers.

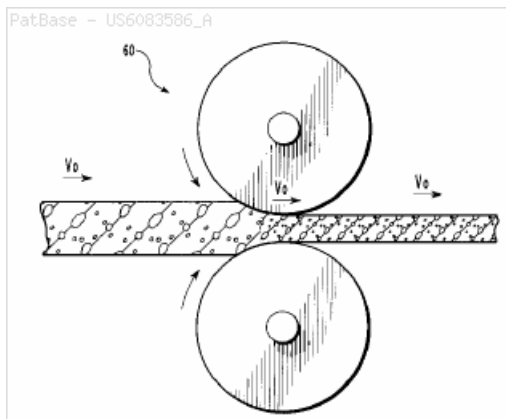


Priority:	US19930152354 19931119 US19960629539 19960409	US19930158824 19931124 US19980019907 19980206	US19940192965 19940207								
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Publication number	Publication date	Application number	Application date								
US6083586 A	20000704	US19980019907	19980206								
Probable Assignee:	E KHASHOGGI INDUSTRISE LLC										
Assignee(s):(std):	KHASHOGGI E IND										
Assignee(s):	E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC ; E KHASHOGGI INDUSTRISE LLC										
Inventor(s):(std):	ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE										
International class (IPC 8-9):	B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C49/00 B29C49/06 B29C51/00 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B26/02 C04B26/28 C04B40/00 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 (Advanced/Invention); B05C5/02 B29C49/04 B29C51/04 B29C51/08 B29C51/10 B29C53/58 B32B37/12 E05D1/02 (Advanced/Non-invention); B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/00 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/44 B29C49/00 B29C49/06 B29C51/00 B29C53/00 B29C55/18 B29C67/24 B29C70/04 B29C71/00 B31B17/00 B32B13/00 B32B27/04 B32B27/20 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B26/00 C04B40/00 C08J5/18 C08L1/00 C08L3/00 C08L5/00 C08L89/00 C08L97/00 (Core/Invention); B05C5/02 B29C49/04 B29C51/08 B29C51/10 B32B37/12 E05D1/00 (Core/Non-invention)										
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Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix, optionally reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, a cellulosic ether, optionally fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and cellulosic ether form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



42) Family number: 33376272 (US6168857B)

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Title:	COMPOSITIONS AND METHODS FOR MANUFACTURING STARCH-BASED COMPOSITIONS											
Priority:	US19960629539 19960409 US19980183895 19981030		US19980018725 19980204 US19980019907 19980206									
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Assignee(s):(std):	KHASHOGGI E IND											
Assignee(s):	E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC											
Inventor(s):(std):	ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE											
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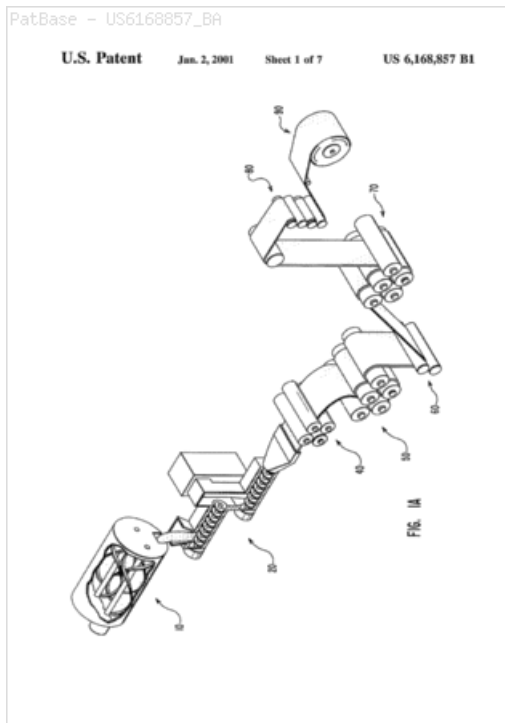
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Abstract:

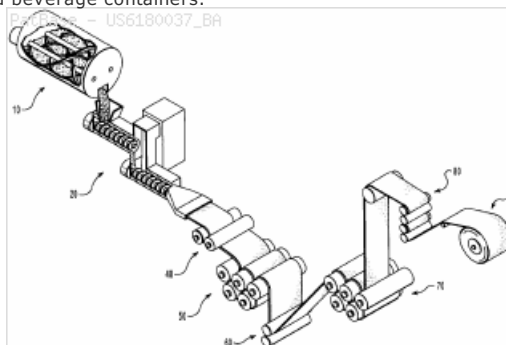
Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, an auxiliary water-dispersible organic polymer, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the auxiliary polymer to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and auxiliary polymer form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



Title:	METHODS FOR THE MANUFACTURE OF SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX			
Priority:	US19920929898 19920811 US19930101500 19930803	US19920982383 19921125 US19930154436 19931119	US19930095662 19930721 US19950473369 19950607	
Family:	Publication number	Publication date	Application number	Application date
	US6180037 BA	20010130	US19950473369	19950607
Probable Assignee:	E KHASHOGGI IND LLC			
Assignee(s):(std):	KHASHOGGI E IND			
Assignee(s):	E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC			
Inventor(s):(std):	ANDERSEN PER JUST ; HODSON SIMON K			
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US class:	264/108 264/129 264/132 264/133 264/175 264/204			
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Abstract:

Compositions and methods for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, cardboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



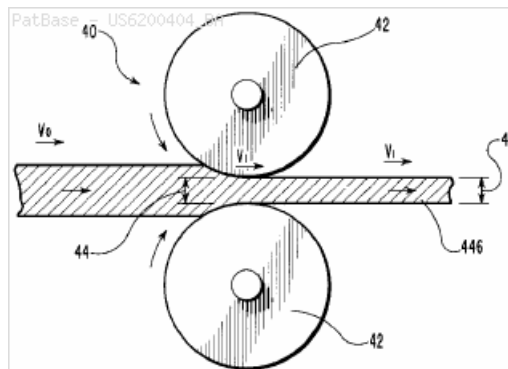
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WO09051819, WO08137285, US9901888, US9896803, US9890083, US9701583, US9518360, US9475732, US9410361, US9375899, US9353482, US9284104, US9267011, US9243444, US9162421, US9149980, US9139957, US9139473, US9090021, US9080372, US9045277, US9040120, US9039651, US9034478, US9027296, US8927622, US8915033, US8881494, US8758564, US8673398, US8658714, US8604123, US8501260, US8382888, US8360008, US8349443, US8268417, US8152510, US8127720, US8087921, US7951436, US7943218, US7909003, US7553363, US7495044, US7481645, US6939818, US6348116, US2013145664, US2012255672, US2011287273, US2011200844, US2011126776, US2010303883, US2010280149, US2010221560, US2009301667, US2009238912, US2009218347, US2009061126, US2008268158, US2008256821, US2008230001, US2008160327, US2008038560, US2008029045, US2007202228, US2007152530, US2007148383, US2007051034, US2006258783, US2006110498, US2005089606, US2004265453, US2004169306, US2004091581, US2004024102, US2002081422, US10240089, US10196309, US10077597, RU2681908, RU2948696, EP2045073, EP2045073, EP2045073, CN102993467, CN102837254, CN102167845,

Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, an auxiliary water-dispersible organic polymer, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the auxiliary polymer to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and auxiliary polymer form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



45) Family number: 57419281 (US2014274658A)

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Title: POLYSILOCARB MATERIALS AND METHODS

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Probable Assignee: PALLIDUS INC

Assignee(s):(std): BRICCO BRUCE A ; DUKES DOUGLAS ; KEITH GEORGE ; HOPKINS ANDREW ; ELY JOHN ; DYK THOMAS ; HOPKINS ANDREW R ; DUKES DOUGLAS M ; DIWANJI ASHISH P ; MUELLER MICHAEL ; LAND MARK ; MELIOR TECHNOLOGY INC ; MELIOR INNOVATIONS INC ; MOELLER TIMOTHY ; LAND MARK S ; MOELLER TIM C ; MUELLER MICHAEL J ; MOLNAR MICHAEL ; MOELLER TIMOTHY C ; MELIOR TECH INC ; BENAC BRIAN ; BENAC BRIAN L ; PALLIDUS INC ; MELIOR INNOVATIONS ; SHERWOOD WALTER ; WILDING JR OLIVER ; SHERWOOD WALTER J

Assignee(s): WILDING OLIVER ; MELIOR INNOVEJSHNZ INK ; BRICCO BRICCO A ; SANDGREN GLENN ; LETTUCE BOX INC

Inventor(s):(std): LIAO WEN P ; BENING DAVID ; LANDTISER RICHARD ; MOELLER TIMOTHY ; DYK THOMAS ; ELY JOHN ; HOPKINS ANDREW ; RINZLER CHARLES C ; MOELLER TIMOTHY C ; MUELLER MICHAEL J ; SHERWOOD WALTER J ; BRICCO BRUCE A ; DUKES DOUGLAS M ; MOELLER TIM C ; LAND MARK S ; BENAC BRIAN L ; HOPKINS ANDREW ; WILDING OLIVER ; MUELLER MICHAEL ; KEITH GEORGE ; BENAC BRIAN ; DUKES DOUGLAS ; LAND MARK ; SHERWOOD WALTER ; WILDING JR OLIVER ; HOPKINS ADREW R ; DUKES DOUGLAS L ; SANDGREN GLEN ; HOPKINS ANDREW R ; TAN YI ; SANDGREN GLENN ; BRICCO BRICCO A ; DIWANJI ASHISH P ; HOPKINS ANDREW P ; MOLNAR MICHAEL ; DIWANJI ASHISH

Inventor(s): MICHAEL MUELLER ; DOUGLAS DUKES ; BRIAN BENAC ; GEORGE KEITH ; OLIVER WILDING ; BENAK BRAJAN L ; LEND MARK S ; SENDGREN GLENN ; DYKUS DUGLAS M ; SHERVUD UOLTER DZH ; KHOPKINS ENDRYU R ; DIVANDZHI ASHISH P ; WALTER SHERWOOD ; TIMOTHY MOELLER ; ANDREW HOPKINS ; JOHN ELY ; THOMAS DYK ; MARK LAND

Agent(s): SPRUSON AND FERGUSON ; CASSAN MACLEAN ; CASSAN MACLEAN IP AGENCY INC ; BUNGARTZ CHRISTOPHERSEN PARTNERSCHAFT MBB PATENTANWALTE ; BUNGARTZ CHRISTOPHERSEN PARTNERSCHAFT MBB PATENTANWALTE ; ITOH SHIGERU ; YURIDICHESKAYA GORODISSKIJ I PARTNER Y OOO FA ; STEPTOE AND JOHNSON LLP ; GLEN P ; BELVIS LAW LLC ; BELVIS GLEN P ; BELVIS GLEN P 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 DJ 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 JO JP KE KG KH KM KN KP KR KW 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

International class (IPC 8-9): A61K8/25 A61K8/89 A61Q3/02 B01D39/20 B01D53/22 B01D67/00 B01D71/04 B01J2/02 B01J2/04 B01J2/06 B24D3/00 B24D3/04 B24D3/28 B28B11/16 B28B11/24 B28B3/26 B82Y30/00 C01B31/18 C01B31/20 C01B31/30 C01B31/36 C01B32/40 C01B32/956 C01B32/977 C01B33/021 C01B33/037 C01B33/113 C04B33/135 C04B35/14 C04B35/515 C04B35/52 C04B35/524 C04B35/56 C04B35/565 C04B35/571 C04B35/589 C04B35/626 C04B35/63 C04B35/64 C04B35/65 C04B35/80 C07F7/08 C07F7/18 C08G77/00 C08G77/12 C08G77/20 C08G77/50 C08G85/00 C08J3/24 C08J5/00 C08K3/34 C08K5/5425 C08K7/02 C08L25/00 C08L83/00 C08L83/04 C08L83/06 C08L83/14 C09B69/10 C09C1/00 C09C1/28 C09D101/18 C09D101/28 C09D105/00 C09D107/02 C09D11/00 C09D11/037 C09D11/14 C09D133/14 C09D163/00 C09D175/16 C09D183/04 C09D201/00 C09D5/18 C09D5/29 C09D5/32 C09D7/12 C09J1/00 C09J119/00 C09J183/04 C09K21/02 C09K21/14 C09K8/588 C09K8/66 C09K8/80 C1B33/021 C1B33/037 C23C16/32 C30B23/00 C30B23/02 C30B25/00 C30B25/02 C30B25/18 C30B25/20 C30B28/02 C30B29/06 C30B29/36 E21B10/46 E21B15/00 E21B17/00 E21B17/01 E21B33/06 E21B33/12 E21B43/01 E21B43/10 E21B43/12 E21B43/26 E21B43/267 F41H5/02 H01L21/02 H01L29/16 H01L29/66 (Advanced/Invention); C01B33/113 C08G77/00 C08G77/12 C08G77/20 C30B29/36 F41H5/02 (Advanced/Non-invention)

CPC: C09K2208/00 E21B43/01 B01D53/22 B01D67/0067 B01D71/04 B01D2323/12 B01D2323/06 B01D2323/21 B01D2325/02 C04B2235/6586 B01D39/20 C09K8/66 C09D133/14 C09D163/00 C09D101/28 C09D101/18 C09D105/00 C09D11/00 A61K8/25 C09J119/006 C09D11/037 A61K2800/412 A61K2800/43 C09D183/04 C04B2235/408 C04B2235/5296 C04B2235/6567 B01D69/141 B01D71/024 B01D2256/16 C01B3/503 C04B35/589 C04B2235/5248 C04B2235/616 E21B17/00 E21B17/01 E21B17/085 E21B33/1208 C04B38/0022 C04B35/6264 C04B2235/40 E21B10/46 E21B43/10 E21B33/12 E21B15/00 E21B43/121 E21B33/06 C08J2383/07 C01P2004/51 C01P2004/62 C09C1/0081 C08J5/00 E21B43/26 E21B43/267 C09K8/588 C01B31/301 C23C16/325 C01P2002/30 C01P2006/32 C30B23/00 C30B23/025 C30B29/06 H01L29/1608 H01L29/66068 H01L29/66893 H01L21/02381 H01L21/0262 F41H5/0414 C04B37/005 C04B37/045 C04B2235/95 C04B2237/083 C04B2237/365 C04B2237/385 C01B33/113 B01J2/04 C08L83/00 B01J2/003 B01J2/06 C04B2235/76 C04B2235/766 C04B2235/767 C04B2235/9684 H01L21/02378 H01L21/02529 B01J2/18 C04B35/63 C04B2235/6021 B28B3/26 B28B11/16 B26D1/28 B26D7/26 B29B9/065

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C09D183/14 C09K8/805 C09C1/0021 C09C2200/10 C01P2002/02 C01P2004/20 C01P2004/80
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US class: 106/197.01 106/203.3 106/217.7 106/285 106/287.13 106/31.68 106/31.69 106/475 106/491 106/504
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A1, DE2843234 A1, CN1984769 A, CN105452190 A, CN102299338 A, CN101932631 A, CA2433002 AA,

Forward Citations: WO19023082, WO19009827, WO18201115, WO18183585, WO18177707, WO18177706, WO18174993,
WO18156161, WO18125861, WO18049231, WO18031915, WO18029457, WO17197180, WO17156312,
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US10105655, US10087360, US10017686, EP3382068, EP3382067, EP3197847, EP3110895, EP3017015,
CN107236438, CN107108234, CN106336218, CN106277956, CN106277956, CN106084990, CN105838110,
CN105745299, CN105712629, CN105566703,

Abstract:

Silicon (Si) based materials and methods of making those materials. More specifically, methods and materials having silicon, oxygen and carbon that form filled and unfilled plastic materials and filled and unfilled ceramics.

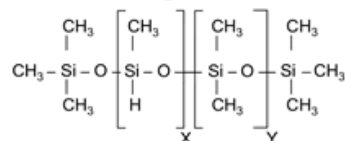


FIG. 1

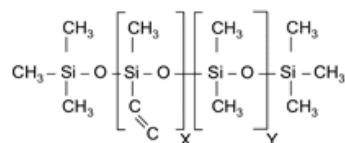


FIG. 2

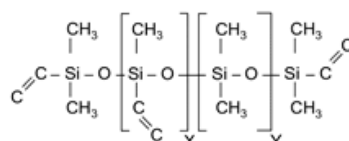


FIG. 3

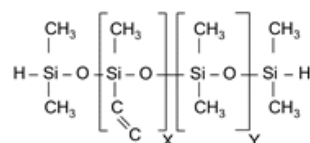


FIG. 4

46) Family number: 30017282 (EP1167316A2)

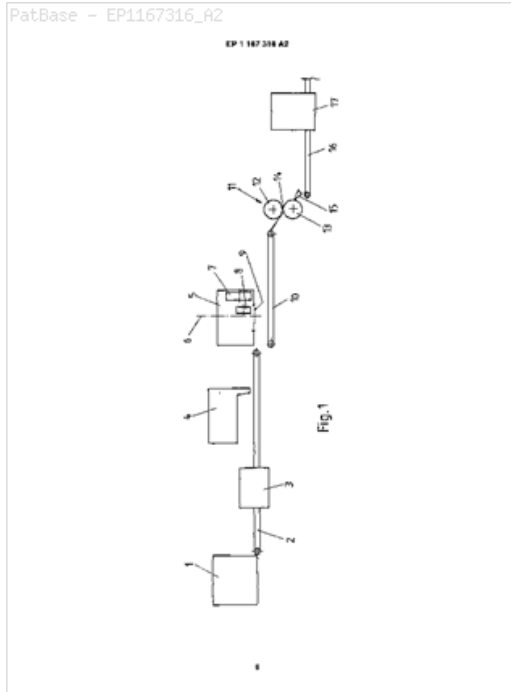
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Title: BULK FLOORING MATERIAL**Priority:** AT20000001116 20000629

Family:	Publication number	Publication date	Application number	Application date
	EP1167316 A2	20020102	EP20010115154	20010622
	EP1167316 A3	20031217	EP20010115154	20010622

Probable Assignee: POEZ PARKETT U OEKOLOGISCHER**Assignee(s):(std):** LOSS JOHANN ; POEZ PARKETT U OEKOLOGISCHER ; POEZ PARKETT UND OEKOLOGISCHER**Assignee(s):** POEZ PARKETT UND OEKOLOGISCHER WOHNBEDARF HANDELS ; POEZ PARKETT UND OEKOLOGISCHER WOHNBEDARF HANDELS UND BERATUNGS GMBH ; POEZ PARKETT U OEKOLOGISCHER WOHNBEDARF HANDELS U BERATUNGS GMBH**Inventor(s):(std):** LOSS JOHANN**Designated states:** AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR**International class (IPC 8-9):** B28B1/52 B28B3/12 C04B18/02 C04B28/00 E04F15/12 (Advanced/Invention); B28B1/52 B28B3/00 C04B18/00 C04B28/00 E04F15/12 (Core/Invention)**International class (IPC 1-7):** C04B18/24 C04B28/00**CPC:** Y02W30/97 B28B1/525 B28B3/126 B28B23/0025 C04B18/021 C04B28/001 C04B2111/60 E04F15/12**European class:** B28B1/52E B28B23/00D B28B3/12C C04B18/02B C04B28/00B E04F15/12 M04B111/60[Classification Explorer](#)**Cited documents:** US5397392 A, DE4123224 A1, DE19541119 C1, BE397978 A,**Abstract:**

Bulk material consists of a mixture of loam and/or clay in the unburned form, and plant fibrous material based on wood. The material is in the form of plate-like particles. An Independent claim is also included for a process for the production of bulk material comprising mixing loam and/or clay with plant fibrous material in the form of sawdust and feeding through a roller. Preferred Features: The particles have a thickness of 0.7-2, preferably 0.7-1.5 mm, and a diameter of 2-10 mm. The bulk material contains (in volume percent): 40-85, preferably 55-75 loam and/or clay, and 15-80, preferably 25-45 plant fibrous material based on wood.

**47) Family number: 33376295** (RU2172749C)

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Title: COMPOSITION FOR MANUFACTURING SHEET AND STARCH-BONDED SHEET (VARIANTS)
Priority: US19960629539 19960409 RU19980120498 19970409 WO1997US05934 19970409
Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: E KHASHOGGI IND LLC
Assignee(s):(std): KHASHOGGI E IND
Assignee(s): E KHASHOGGI INDUSTRIES LLC ; E. KHASHOGGI INDASTRIZ, EHL-EHL-SI ; ONG SHAODE ; HODSON SIMON K ; ANDERSEN PER J ; CHRISTENSEN BRUCE J ; E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES
Inventor(s):(std): ONG SHAODE ; HODSON SIMON K ; CHRISTENSEN BRUCE J ; ANDERSEN PER JUST ; ANDERSEN PER J
Inventor(s): BRUCE J CHRISTENSEN ; KRISTENSEN BRJUS DZH. ; KHODSON SAJMON K. ; SIMON K HODSON ; SHAODE ONG ; PER J ANDERSEN
Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; CASSAN MACLEAN
Designated states: AM AT AZ BE BY CH DE DK ES FI FR GB GR IE IT KE LI LU MC NL PT SD SE SZ
International class (IPC 8-9): B05B11/00 B05C5/02 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C49/00 B29C49/04 B29C49/06 B29C51/00 B29C51/04 B29C51/08 B29C51/10 B29C53/06 B29C53/58 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/14 B32B5/02 B32B5/16 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J5/04 C08J5/18 C08K13/04 C08K3/00 C08L1/26 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C5/02 B29C49/04 B29C51/08 B29C53/58 B32B37/12 B32B5/16 C08J5/04 C08K3/00 (Advanced/Non-invention)
International class (IPC 1-7): B32B5/16 C08J5/04 C08J5/18 C08K13/04 C08K3/00 C08L1/02 C08L1/26 C08L3/02
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European class:

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JP class F-Term:

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4F071/AA32 4F071/AA35 4F071/AA37 4F071/AA41 4F071/AA43 4F071/AA51 4F071/AA70 4F071/AA73
4F071/AA78 4F071/AB03 4F071/AB06 4F071/AB17 4F071/AB18 4F071/AB21 4F071/AB24 4F071/AB26
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4J002/DL00 4J002/DM00 4J002/FA04 4J002/FD01

JP class F-Index:

C08J5/04 C08J5/18/CEP C08K3/00 C08K3/013 C08L1/26 C08L3/02

JP class Facet:

CEP

[Classification Explorer](#)

Cited documents:

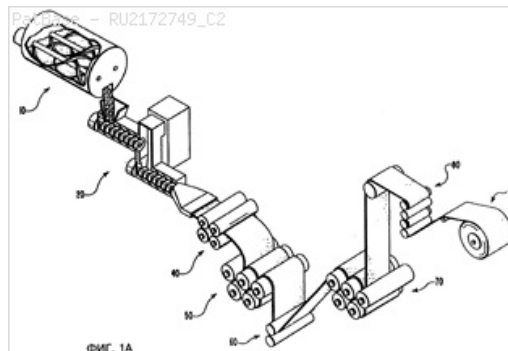
JP62041399, EP0261820 A1,

Forward Citations:

WO15137533, WO09075122, US9296174, US8147979, US8048257, US7960452, RU2639229, RU2603988,
KR101347898, JP2011084709, JP2010518329, GB2459524, GB2459524, CN104059239,

Abstract:

FIELD: manufacture of common paper and cardboard. SUBSTANCE: composition is prepared by mixing water, granules of unmodified and ungelatinized starch, cellulose ether, fibrous materials and substantially homogeneous optional inorganic mineral filler dispersed in composition. Composition has ultimate from about 2 kPa to about 5 kPa. Fibrous material has length to thickness ratio exceeding 10:1 and is substantially homogeneously distributed throughout composition. Composition is molded into sheets by passing then between one or plurality of heated rolls to prepare crude sheets. When heated, cellulose ether forms envelope onto external surface of sheet and starch granules stick to rolls as starch further becomes gelatinized. Starch and cellulose ether form bonding sheet matrix in which fibers are dispersed and optionally inorganic filler. Various products are made from sheets, more particularly containers for foodstuffs and beverages. The resulting sheets have properties which are not inferior to those from cardboard, plastic material or metal. Manufacture of such sheets are economical and ecologically safe. EFFECT: improved properties of the composition. 77 cl, 10 dwg, 65 ex, 25 tbl



48) Family number: 33376296 (EP1007320B1)

© PatBase

Title:

METHODS FOR MANUFACTURING MOLDED SHEETS HAVING A HIGH STARCH CONTENT

Priority:

US19960631676 19960409

WO1997US05794 19970409

Family:

Publication number **Publication date** **Application number** **Application date**

AT299793 E	20050815	AT19970922292T	19970409
AU199728005 A1	19971029	AU19970028005	19970409
AU712982 B2	19991118	AU19970028005	19970409
BRPI9710428 A	19990817	BR1997PI10428	19970409
CA2248982 AA	19980915	CA19972248982	19970409
CA2248982 C	20020730	CA19972248982	19970409
DE69733779 D1	20050825	DE19976033779	19970409
DE69733779 T2	20060524	DE19976033779T	19970409
EP1007320 A1	20000614	EP19970922292	19970409
EP1007320 A4	20010314	EP19970922292	19970409
EP1007320 B1	20050720	EP19970922292	19970409
JP2000508258 T2	20000704	JP19970536442T	19970409
JP3296565 B2	20020702	JP19970536442T	19970409
KR19990087469 A	19991227	KR19980706895	19970409
NZ332697 A	20000623	NZ19970332697	19970409

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): E KHASHOGGI INDUSTRIES ; E KHASHOGGI INDUSTRIES LLC ; KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND LLC ; ONG SHAO DE ; HODSON SIMON K ; ANDERSON PER J ; CHRISTENSEN BRUCE J ; E KHASHOGGI IND

Inventor(s):(std): ANDERSEN PER J ; ANDERSON PER J ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAO DE ; SIMON K HODSON ; SHAO DE ONG ; PER J ANDERSEN ; BRUCE J CHRISTENSEN ; HODSON K ; CHRISTENSEN J ; ANDERSEN J

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; CASSAN MACLEAN

Designated states: AM AT AZ BE BY CH DE DK ES FI FR GB GR IE IT KE LI LU MC NL PT SD SE SZ

International class (IPC 8-9): B05B11/00 B05C5/02 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C47/88 B29C49/00 B29C49/04 B29C49/06 B29C51/00 B29C51/04 B29C51/08 B29C51/10 B29C53/06 B29C53/58 B29C55/18 B29C67/24 B29C70/02 B29C70/50 B29C71/00 B29D7/01 B31B17/00 B32B13/02 B32B27/04 B32B37/12 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J3/02 C08J5/04 C08J5/18 C08L1/28 C08L3/02 C08L5/12 E05D1/02 (Advanced/Invention); B05C5/02 B29C43/08 B29C43/22 B29C47/00 B29C47/88 B29C49/04 B29C51/08 B29C53/58 B29K1/00 B29L7/00 B32B37/12 C08J3/02 (Advanced/Non-invention)

International class (IPC 1-7): B28B1/52 B28B23/00 B29C43/22 B29C43/24 B29C47/00 B29C47/88 B29C70/02 B29D7/01 B29K1/00 B29L7/00 C08J3/02 C08J5/04 C08L3/02

CPC: Y02W30/97 Y02W90/11 B05B11/0037 B05B11/30 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/08 B29C43/22 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/463 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/06 B29K2105/12 B29K2105/16 B29K2995/006 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/18 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/00 B32B37/12 B65D43/162 B65D65/38 B65D65/466 B65D2565/385 C04B26/00 C04B26/02 C04B26/28 C08J5/18 C08J2303/02 C08J2323/02 C08L1/286 C08L3/02 C08L5/12 E05D1/02 E05Y2900/602 B31B50/32 B31B2105/0022 B32B9/04 B32B3/28 B32B9/02 B32B23/04 B32B23/22 B32B2307/7163 B32B2439/00 B32B37/144 Y02A40/961 B29C48/0017 B29C48/022 B29C48/05 B29C48/08 B29C48/09 B29C48/13 B29C48/15 B29C48/38 B29C48/465 B29C48/91

European class: B05B11/00B5 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B23/00 B28B23/00Z B28B3/12C B28B3/20 B29C43/00B B29C43/22 B29C43/22B B29C43/24 B29C43/34 B29C43/46 B29C44/04A B29C45/00E B29C47/00B B29C47/50 B29C47/52B B29C49/00B B29C49/06B2B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/24 B29C67/24C B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/00 B32B37/14B B32B5/02 B32B5/18 B32B9/00 B65D43/16B B65D65/38 B65D65/46C C04B26/00 C04B26/02 C04B26/28 C08J5/18 C08L1/28F C08L3/02 C08L5/12 E05D1/02 L05B11/30 L05C5/02E L29C43/00 L29C43/08 L29C43/34B L29C43/46 L29C43/46A2 L29C47/00J10 L29C47/00J5 L29C47/00J6 L29C47/00L7 L29C47/02 L29C49/00F L29C49/04 L29C49/06 L29C51/04 L29C51/08 L29C51/08B L29C51/10 L29C53/58 L29C791/00E4 L29C795/00D L29K1/00 L29K105/06 L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29K995/00F14B L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D565/38Y7 M08J303/02 M08J323/02 P05D1/02 P05Y900/602

JP class F-Term: 4F070 4F070/AA02 4F070/AA03 4F070/AA18 4F070/AA25 4F070/AA26 4F070/AA29 4F070/AA36 4F070/AA47 4F070/AA52 4F070/AA62 4F070/AB11 4F070/AC04 4F070/AC06 4F070/AC15 4F070/AC16 4F070/AC20 4F070/AC23 4F070/AC27 4F070/AC28 4F070/AC36 4F070/AC72 4F070/AD02 4F070/AD03 4F070/AE01 4F070/AE02 4F070/CA01 4F070/CA11 4F070/CA20 4F070/CB02 4F070/CB11 4F070/CB12 4F204 4F204/AA01 4F204/AB07 4F204/AB11 4F204/AB16/C 4F204/AB17 4F204/AB18 4F204/AB19 4F204/AB25 4F204/AB25/B 4F204/AB26 4F204/AC01 4F204/AG01 4F204/AG03 4F204/AG04 4F204/AG07 4F204/AG30 4F204/AH54 4F204/AH57 4F204/AH58 4F204/AH81 4F204/AR12 4F204/AR15 4F204/AR20 4F204/FA06 4F204/FA07 4F204/FB02 4F204/FF01 4F204/FF06 4F204/FF21 4F204/FF47 4F204/FG08 4F204/FN15 4F204/FN17 4F204/FN21 4F204/FN22 4F204/FN30 4F204/FQ32 4F204/FW06 4F204/FW21 4F204/FW23 4F204/FW31 4F204/FW37 4F204/FW41 4F204/FW43 4F204/FW50 4F207 4F207/AA01 4F207/AB11 4F207/AB16 4F207/AB25 4F207/AG01 4F207/AR06 4F207/KK12 4F207/KL41 4F207/KL83

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JP class Facet: ZAB

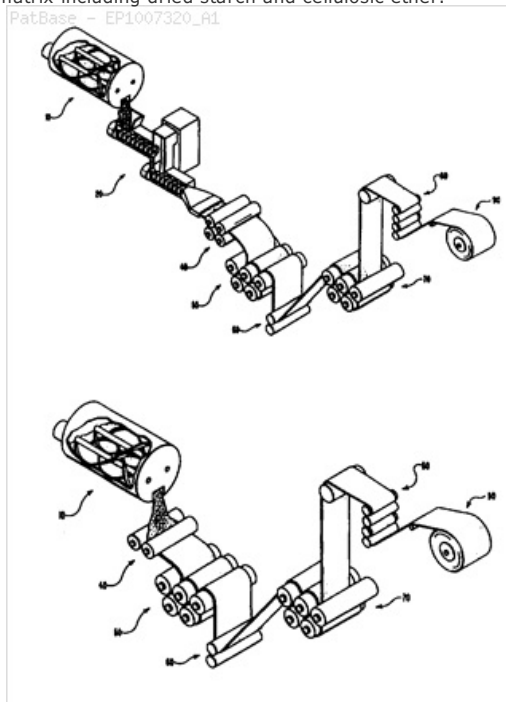
[Classification Explorer](#)

Cited documents: WO9412328 A1, US5626954 A, US5508072 A, US5453310 A, US5385764 A,

Forward Citations: WO13177271, WO13177271, US7858684, TWI381018, KR101053549, KR100802316,

Abstract:
(Claim 1) 1. A method for manufacturing a starch-bound sheet comprising the steps of:(a) mixing together water, ungelatinized starch granules, a cellulosic ether, a fibrous material, and optionally an inorganic aggregate filler to form a moldable mixture;(b) forming the moldable mixture into an initial green sheet by passing the mixture between at least one set of forming rollers (40) having a temperature such that a portion of the cellulosic ether thermally precipitates so as to reduce adhesion of the initial green sheet to the

forming rollers upon gelatinization of the ungelatinized starch granules in step (c);(c) passing the initial green sheet between at least one set of rollers having a temperature such that at least a portion of the ungelatinized starch granules become gelatinized and in order to form an intermediate green sheet; and(d) heating the green sheet in order to remove a portion of the water from the intermediate green sheet in order to form a hardened sheet having a binding matrix including dried starch and cellulosic ether.



49) Family number: 33376297 (EP0775173B1)

© PatBase

Title: STARCH-BOUND CELLULAR MATRIX

Priority: US19940288664 19940809 US19940288667 19940809 WO1995US08803 19950713

Family:

Publication number	Publication date	Application number	Application date
AT226612 E	20021115	AT19950925645T	19950713
AU199529710 A1	19960307	AU19950029710	19950713
AU705277 B2	19990520	AU19950029710	19950713
AU705277 C	20070329	AU19950029710	19950713
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KR977004832 A	19970906	KR19977000866	19970210
NZ289770 A	19990128	NZ19950289770	19950713
RU97103998 A	19990520	RU19970103998	19970309

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND ; KHASHOGGI IND LLC SUBSTITUTED

Assignee(s): E KHASHOGGI INDUSTRIES LLC SUBSTITUTED UNDER S24 1 FROM E ; E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI IND LLC FROM E ; E KHASHOGGI IND LLC SUBSTITUTED UNDER S24 ; E KHASHOGGI IND LLC SUBSTITUTED UNDER S24 1 FROM E ; E KHASHOGGI INDUSTRIES ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K ; HODSON K ; ANDERSEN JUST

Inventor(s): PER JUST ANDERSEN ; SIMON K HODSON

Agent(s): FISHER ADAMS KELLY ; FISHER ADAMS KELLY PTY LTD ; FISHER ADAMS KELLY CALLINANS ; SPRUSON AND FERGUSON

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8-9): A61K47/36 B01F3/12 B05B11/00 B05C1/08 B05C3/18 B05C5/02 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/36 B29C33/58 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C53/58 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/40 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B32/00 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/36 C04B7/52 C08J3/20 C08J9/00 C08J9/12 C08K7/02 C08L1/28 C08L101/00 C08L29/04 C08L3/00 C08L3/02 C08L31/04

C08L33/02 C08L5/02 C08L5/12 C08L5/14 C08L61/28 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); A61K47/36 B05B11/00 B05C1/08 B05C3/18 B05C5/02 B27M3/00 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C53/58 B32B37/12 B65D1/00 C08J3/20 C08L101/00 C08L89/06 E05D1/02 (Advanced/Non-invention); A61K47/36 B27N3/00 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/56 B29C43/00 B29C43/04 B29C43/34 B29C43/36 B29C44/02 B29C67/20 B29C71/00 B32B5/18 B65D1/00 B65D43/16 B65D65/46 C04B20/00 C04B26/00 C04B40/00 C08J3/20 C08J9/00 C08K7/00 C08L101/00 C08L29/00 C08L3/00 C08L31/00 C08L33/00 C08L61/00 C08L89/00 (Core/Invention); B05B11/00 B05C5/02 E05D1/00 (Core/Non-invention)

International class (IPC 1-7):

A61K47/36 B27M3/00 B28B1/52 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/58 B65D1/09 C08J3/20 C08K7/02 C08L101/00 C08L29/04 C08L3/00 C08L3/02 C08L3/04 C08L31/04 C08L33/02 C08L61/28 C08L89/06

CPC:

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European class:

B01F3/12B2 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B11/00E3 B28B11/24 B28B11/24D B28B13/02C B28B13/06 B28B23/00 B28B23/00Z B28B23/00Z1 B28B3/00 B28B3/02 B28B3/12C B28B3/20 B28B3/26E B28B7/42 B28C7/02 B29C33/36 B29C39/00B B29C39/42 B29C43/00B B29C43/02 B29C43/06 B29C43/08 B29C43/34 B29C43/36 B29C43/38 B29C44/04A B29C45/00E B29C49/00B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/20C B29C67/22D1 B29C67/24 B29C67/24C B29C70/02A4 B29C70/12 B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/14B B32B5/02 B32B5/14 B32B5/18 B65D11/02 B65D43/16B B65D5/00 B65D65/38 B65D65/46C C04B14/06G C04B16/02 C04B20/00D2 C04B20/00F C04B22/00H C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/02B C04B26/28 C04B26/28B C04B28/00 C04B28/02 C04B38/00B C04B40/00 C04B40/00D1 C04B40/00D7 C04B40/06A2 C04B41/45 C04B41/61 C04B7/52H C08J9/00N C08J9/12 C08L1/28 C08L1/28F C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 L01F3/12G L05B11/00B5 L05B11/30 L05C1/08P L05C1/08P2 L05C3/18 L05C5/02E L29C33/10 L29C33/20 L29C43/00 L29C43/06 L29C43/08 L29C43/34B L29C43/36C2 L29C43/36C2B L29C43/36H2 L29C43/58D1 L29C47/00L4 L29C47/00L7 L29C47/02 L29C49/46B1A L29C53/58 L29C795/00D L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29K93/00 L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D301/20 L65D565/38Y7 M08J303/00 P05D1/02 P05Y900/602

JP class F-Term:

3E033 3E033/AA01 3E033/AA08 3E033/AA09 3E033/AA10 3E033/BA30 3E033/BB02 3E033/BB04 3E033/CA20 3E033/DA01 3E033/DD01 3E033/EA04 3E033/EA05 3E033/EA09 3E033/EA10 3E033/FA01 4C076 4C076/AA95 4C076/DD21A 4C076/DD23/X 4C076/DD25/A 4C076/DD38 4C076/DD41/C 4C076/DD43/X 4C076/DD46 4C076/DD57/F 4C076/EE06/A 4C076/EE07/A 4C076/EE09/A 4C076/EE18/F 4C076/EE23/A 4C076/EE30/A 4C076/EE32/A 4C076/EE36/A 4C076/EE38 4C076/EE41/A 4C076/EE43/A 4C076/EE47/A 4C076/EE55/C 4C076/EE60/P 4C076/FF05 4C076/FF09 4C076/FF16 4C076/FF35 4C076/FF57 4C076/FF70 4C076/GG11 4F070 4F070/AA03 4F070/AA62 4F070/AB11 4F070/AC04 4F070/AC06 4F070/AC12 4F070/AC16 4F070/AC18 4F070/AC23 4F070/AC27 4F070/AC28 4F070/AC36 4F070/AC40 4F070/AC42 4F070/AC43 4F070/AC72 4F070/AC80 4F070/AC82 4F070/AC83 4F070/AC84 4F070/AC85 4F070/AC93 4F070/AC94 4F070/AC96 4F070/AD02 4F070/AD04 4F070/AE01 4F070/AE02 4F070/AE04 4F070/AE08 4F070/AE13 4F070/AE14 4F070/AE17 4F070/AE28 4F070/AE30 4F070/FB06 4F070/FB08 4F070/FC05 4F201 4F201/AA01 4F201/AB03 4F201/AB07 4F201/AB11 4F201/AB16 4F201/AB19 4F201/AD16 4F201/AE10 4F201/AH52 4F201/AH55 4F201/AM28 4F201/AR06 4F201/AR11 4F201/BA02 4F201/BA06 4F201/BC01 4F201/BC02 4F201/BC37 4F201/BD02 4F201/BK11 4F201/BL43 4F201/BQ09 4F201/BQ16 4F201/BR50 4F202 4F202/AA49 4F202/AB01 4F202/AB03 4F202/AB06 4F202/AB07 4F202/AB11 4F202/AB12 4F202/AB19 4F202/AB25 4F202/AD02 4F202/AD03 4F202/AD04 4F202/AD05 4F202/AD06 4F202/AD16 4F202/AE10 4F202/AG03 4F202/AG27 4F202/AH55 4F202/AH56 4F202/AJ09 4F202/AR02 4F202/AR06 4F202/AR12 4F202/AR14 4F202/AR15 4F202/AR20 4F202/CA09 4F202/CA11 4F202/CB01 4F202/CD25 4F202/CL02 4F202/CM41 4F202/CM44 4F202/CM54 4F202/CM67 4F202/CN01 4F202/CN21 4F202/CN24 4F202/CP01 4J002 4J002/AB04/1 4J002/DE14/6 4J002/DE18/6 4J002/DE23/6 4J002/DG05/6 4J002/DJ00/6 4J002/DJ01/6 4J002/DJ03/6 4J002/DJ05/6 4J002/DL00/6 4J002/FD01/0 4J002/FD01/6 4J002/FD02/0 4J002/FD14/0 4J002/FD16/0 4J002/FD20/0 4J002/GG01

JP class F-Index:

A61K47/36/B B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/58 B65D1/00/A B65D1/00/110 C08J3/20/Z C08K7/02 C08L29/04/B C08L3/00 C08L31/04/B C08L33/02 C08L61/28

[Classification Explorer](#)

Cited documents:

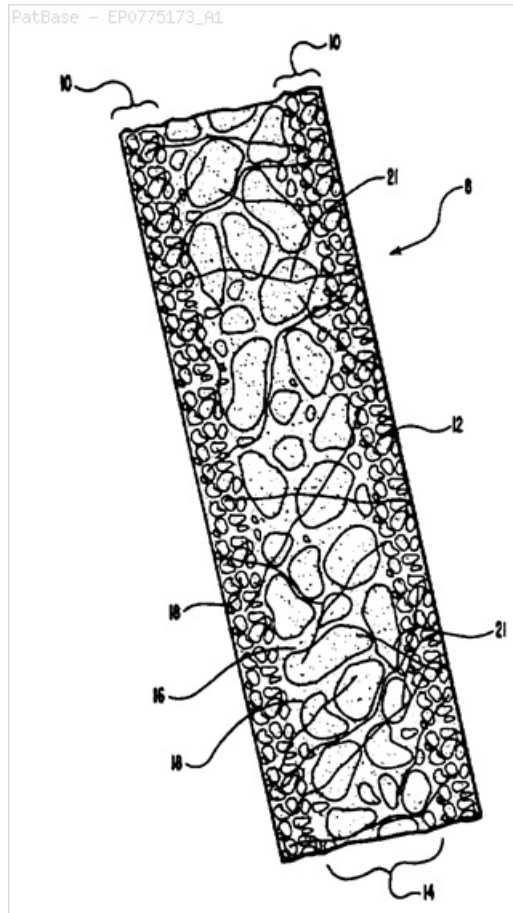
WO9112186, US5095054, US5017268, US4613627 A, EP0587078 A1, EP0524920 A1,

Forward Citations:

JP2006021356, EP2106419, DE102004031078,

Abstract:

(Claim 1) 1. a starch-based binder that has been substantially gelatinized by water and then hardened through the removal of a substantial quantity of the water by evaporation; and

**50) Family number: 33376301** (RU2142878C)

© PatBase

Title: MANUFACTURED ARTICLE, METHOD OF THIS ARTICLE MANUFACTURE, SYSTEM FOR THIS ARTICLE MANUFACTURE

Priority: US19920982383 19921125 US19930152354 19931119 US19930154436 19931119
WO1993US11490 19931124

Family:	Publication number	Publication date	Application number	Application date
	AU5729794 A1	19940622	AU19940057297	19931124
	AU675687 B2	19970213	AU19940057297	19931124
	BRPI9307526 A	19990831	BR1993PI07526	19931124
	CA2143004 C	20070501	CA19932143004	19931124
	EP0678068 A1	19951025	EP19940903306	19931124
	EP0678068 A4	19980401	EP19940903306	19931124
	JP9507463 T2	19970729	JP19930513404T	19931124
	KR100316469 B1	20020228	KR19950702104	19931124
	KR19957004099 A	19951117	KR19957002104	19931124
	PH1993047323 B	19990705	PH19930047323	19931125
	RU2142878 C1	19991220	RU19950114456	19931124

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): I KHASHIODZHI INDUSTRIES ; E KHASHOGGI INDUSTRIES LLC ; HODSON SIMON K ; ANDERSEN PER JUST ; E KASHOGGI IND ; E KASHOGGI INDUSTRIES ; E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Inventor(s): KHODSON SIMON ; PER JUST ANDERSEN ; SIMON K HODSON ; ANDERSEN PER DZHAST

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; CASSAN MACLEAN

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8-9): B05B11/00 B05C5/02 B28B1/00 B28B1/52 B28B11/00 B28B21/00 B28B21/72 B28B23/00 B28B3/12 B28B3/20 B28C5/40 B29C43/00 B29C43/02 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C49/00 B29C51/00 B29C53/06 B29C53/58 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B1/02 B32B1/08 B32B13/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B14/02 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/14 C04B24/24 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B40/00 C08J5/18 C08K13/02 C08L1/00 C08L1/28 C08L101/00 C08L29/02 C08L29/04 C08L3/00 C08L3/02 C08L33/02 C08L33/24 C08L39/00 C08L39/06 C08L5/02 C08L5/12 C08L5/14 C08L71/00 C08L71/02

C08L75/00 C08L89/06 C08L91/08 C08L97/02 C09D133/04 C09D133/06 C09D161/20 C09D161/28
C09D167/00 C09D167/04 C09D171/00 C09D171/02 D21F11/00 E05D1/02 (Advanced/Invention);
B05C5/02 B28B21/00 B29C43/08 B29C53/58 B32B13/00 B32B37/12 C08L1/00 C08L101/00 C08L39/00
C08L71/00 C08L75/00 C09D133/04 C09D133/06 C09D161/20 C09D167/00 C09D167/04 C09D171/00
D21F11/00 (Advanced/Non-invention);
B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B21/00 B28B23/00 B28B3/00 B28B3/20 B28C5/00
B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/44 B29C49/00 B29C51/00
B29C53/00 B29C55/18 B29C67/24 B29C70/04 B29C71/00 B31B17/00 B32B1/00 B32B13/00 B32B27/04
B32B27/20 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B14/02 C04B16/00 C04B20/00
C04B22/00 C04B24/00 C04B26/00 C04B28/00 C04B40/00 C08J5/18 C08K13/00 C08L1/00 C08L101/00
C08L29/00 C08L3/00 C08L33/00 C08L39/00 C08L5/00 C08L71/00 C08L75/00 C08L89/00 C08L91/00
C08L97/00 C09D133/04 C09D133/06 C09D161/20 C09D167/00 C09D167/04 C09D171/00 D21F11/00
E05D1/00 (Core/Invention);
B05C5/02 B29C43/04 B32B37/12 (Core/Non-invention)

International class (IPC 1-7):

B28B21/00 B28B21/72 B32B1/02 B32B1/08 B32B13/00 B32B3/06 B32B5/12 C04B26/00 C04B28/02
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CPC:

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C04B40/00 C04B40/0092 C04B2111/00129 C04B2111/00612 C04B2111/00948 C04B2111/50 C08J5/18
C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06
C08L97/02 E05Y2900/602 B31B50/32 B31B2105/0022 B32B1/02 B32B1/08 B32B5/18 B32B13/04
B32B13/06 B32B13/12 B32B13/14 B32B27/34 B32B2266/0228 B32B2439/00 B32B2597/00 B32B13/02
B32B27/20 E05D1/02 B29C48/001 B29C48/0011 B29C48/0012 B29C48/0017 B29C48/0019 B29C48/0022
B29C48/07 B29C48/08 B29C48/09 B29C48/13

European class:

B05B11/00B5 B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B11/00E3 B28B23/00 B28B23/00Z
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B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B5/02 B32B9/00
B65D43/16B B65D65/38 B65D65/46C C04B14/06G C04B16/02 C04B20/00D2 C04B22/04 C04B24/14
C04B24/38 C04B26/00 C04B26/02 C04B26/02B C04B26/28 C04B26/28B C04B28/00 C04B28/02
C04B40/00 C04B40/00W C08J5/18 C08L1/28 C08L1/28F C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14
C08L89/06 C08L97/02 E05D1/02 L29C43/00 L29C43/02B1 L29C43/02B2 L29C43/08 L29C43/34B
L29C43/36H2 L29C43/46 L29C43/46A2 L29C43/46A3 L29C43/46A4 L29C43/46B L29C47/00J4 L29C47/00J5
L29C47/00J6 L29C47/00L L29C47/00L12 L29C47/00L4 L29C47/00L5 L29C47/00L7 L29C47/00L9 L29C53/58
L29C795/00D L29K1/00 L29K105/04 L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29L24/00
L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B31/00A8B L32B37/12
L65D565/38Y7 M04B111/00M14 M04B111/00T6 M04B111/00T66 M04B111/50 M08J323/02 P05D1/02
P05Y900/602

JP class F-Term:

4F100 4F100/AA00/C 4F100/AA03/B 4F100/AA07/A 4F100/AA07/H 4F100/AA08/A 4F100/AA08/B
4F100/AA08/H 4F100/AA19/B 4F100/AA19/H 4F100/AA20/B 4F100/AA20/H 4F100/AB01/C 4F100/AC03/H
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JP class F-Index:

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JP class Facet:

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WO8103170 A1, WO8000959 A1, US5108679 A, US4808780 A, US4623150 A, US4264367 A, FR2418829 A1,
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A1,

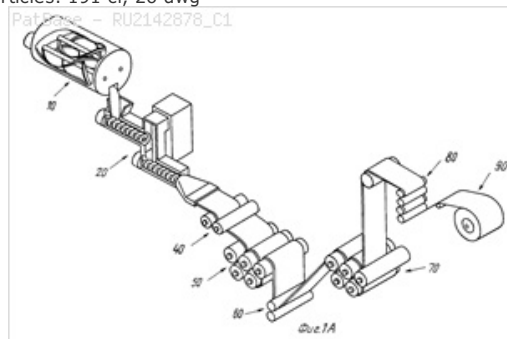
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RU2481298, RU2476632, KR100954846, KR100823101, JP2013083154, JP2006501625, JP2002519222,
ITUB20156254, CN102827445, CN102827445,

Abstract:

FIELD: articles, methods and equipment for their manufacture. SUBSTANCE: invention includes manufacture of sheets having matrix filled with numerous inorganic substances produced by mixing of organic polymer binder, water, one or more inorganic aggregate

materials, fibers and selected additional mixtures in preset proportions to obtain sheet with preset properties. Mixtures with inorganic substances are formed into sheets by the first extrusion of mixture and subsequent passing of extruded material through rolls. Sheets rolled by rolls are dried by accelerated method to obtain hardened sheet by rolling with hot rollers and/or in drying chamber. Sheets containing inorganic substances may have properties essentially similar to sheets manufactured from traditional such as paper, cardboard, polystyrene, plastic and metal. Such sheets may be rolled, pressed, marked, perforated, bent or cemented. Particularly, these sheets are applicable in mass manufacture of such articles as food containers and containers for beverages, and as packing materials. EFFECT: manufactured ecologically safe high-quality material and articles. 191 cl, 26 dwg



51) Family number: 33376306 (AU699154B) © PatBase

Title: SHEETS AND ARTICLES MADE FROM HIGHLY INORGANICALLY FILLED COMPOSITIONS, AND METHODS FOR MAKING SAME

Priority: US19920982383 19921125 US19930152354 19931119 US19930154436 19931119
AU19940057297 19931124 WO1993US11490 19931124

Family:	Publication number	Publication date	Application number	Application date
	AU199457297 A1	19940622	AU19940057297	19931124
	AU199671941 A1	19970306	AU19960071941	19961125
	AU699154 B2	19981126	AU19960071941	19961125

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): CONCRETE TECHNOLOGY CORP ; E KHASHOGGI IND LLC ; KHASHOGGI E IND

Assignee(s): E KHASHOGGI HOLDINGS LP ; E KHASHOGGI IND

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K ; SIMON K HODSON ; PER JUST ANDERSEN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD

International class (IPC 8-9): B05B11/00 B05C5/02 B28B1/00 B28B1/52 B28B11/00 B28B21/00 B28B21/72 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C49/00 B29C51/00 B29C53/06 B29C53/58 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B1/02 B32B1/08 B32B13/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B40/00 C08J5/18 C08L1/00 C08L1/28 C08L101/00 C08L29/02 C08L29/04 C08L3/00 C08L3/02 C08L33/02 C08L33/24 C08L39/00 C08L39/06 C08L5/02 C08L5/12 C08L5/14 C08L71/00 C08L71/02 C08L75/00 C08L89/06 C08L91/08 C08L97/02 C09D133/04 C09D133/06 C09D161/20 C09D161/28 C09D167/00 C09D167/04 C09D171/00 C09D171/02 D21F11/00 E05D1/02 (Advanced/Invention); B05C5/02 B28B21/00 B29C43/08 B29C53/58 B32B13/00 B32B37/12 C08L1/00 C08L101/00 C08L39/00 C08L71/00 C08L75/00 C09D133/04 C09D133/06 C09D161/20 C09D167/00 C09D167/04 C09D171/00 D21F11/00 (Advanced/Non-invention); B28B21/00 C08J5/18 D21F11/00 (Core/Invention); B32B37/12 (Core/Non-invention)

International class (IPC 1-7): B28B21/00 B28B21/72 B32B1/08 B32B13/00 B32B3/06 B32B5/12 C08J5/18

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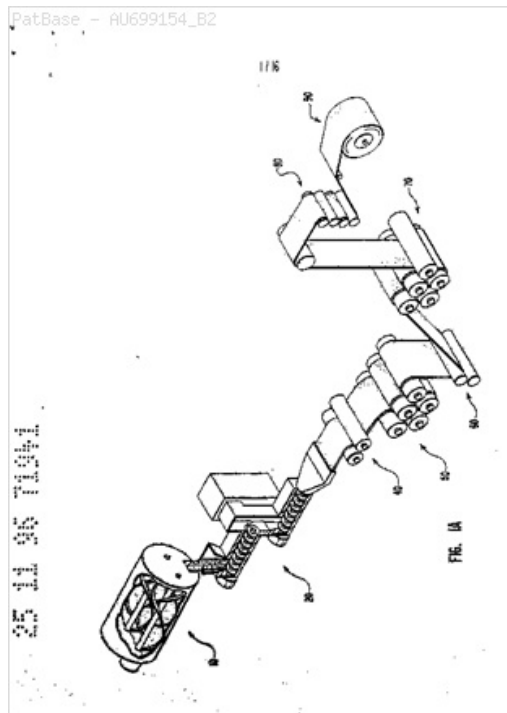
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[Classification Explorer](#)

Cited documents: US5108679 A,

Abstract:

1. A sheet having an inorganically filled matrix comprising: a water-dispersible organic polymer binder; a fibrous material substantially homogeneously dispersed throughout the inorganically filled matrix; and an inorganic aggregate material having a concentration in a range from about 40 percent to about 95 percent by weight of total solids in the inorganically filled matrix; wherein the inorganically filled matrix has a thickness less than about 1 cm. I" sss J -i



52) Family number: 33376308 (WO9412328A1)

© PatBase

Title: HIGHLY INORGANICALLY FILLED COMPOSITIONS

Priority: US19920982383 19921125 US19930152354 19931119 US19930154436 19931119
WO1993US11490 19931124

Family:	Publication number	Publication date	Application number	Application date
	AU7194196 A1	19970306	AU19960071941	19961125
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	CN1062004 C	20010214	CN19931020375	19931125
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	NZ259123 A	19970224	NZ19930259123	19931124
	WO9412328 A1	19940609	WO1993US11490	19931124

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): CONCRETE TECHNOLOGY CORP ; KHASHOGGI E IND

Assignee(s): ANDERSEN PER JUST ; E KHASHOGGI HOLDINGS LP ; E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI IND ; HODSON SIMON K

Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER JUST

Inventor(s): ANDERSEN PER J ; P J ANDERSON ; S K HODSON ; SK HODSON ; SIMON K HODSON ; PJ ANDERSON ; PER JUST ANDERSON ; PER JUST ANDERSEN

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ
LK LU MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA VN

International class (IPC 8-9): B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B21/00 B28B21/72 B28B23/00 B28B3/12 B28B3/20
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B05C5/02 B29C43/08 B29C53/58 B32B37/12 (Advanced/Non-invention);
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European class:

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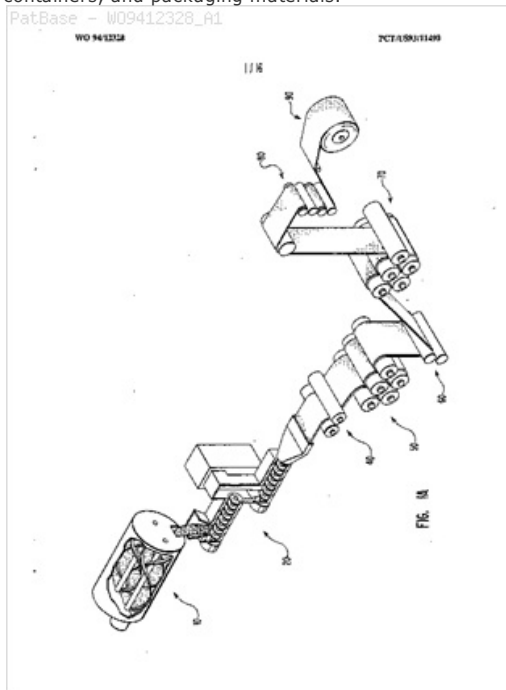
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US6066278, US10118325, US10093268, TWI583518, ITUB20156254, EP3299352, EP3299352, EP3051968,
EP1308263, EP1308263, EP1194099, EP1155794, EP1155794, EP1007320, EP1007320, EP0913243,
EP0913243, EP0816299, EP0816299, EP0743899, EP0743899, EP0714383, EP0714383, EP0713481,
EP0713481, EP0688261, EP0688261, EP0686082, EP0686082, EP0662029, EP0662029, CN106746999,
CN104589635, CN104446248, CN103466170, CN103288386, CN103275340, CN103110978, CN103056955,
CN102431076, CN102373648, CN102373648,

Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures (40) and then passing the extruded materials between a set of rollers (50). The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have particular utility in the mass production of articles, such as food and beverage containers, and packaging materials.



Title:

HINGES FOR HIGHLY INORGANICALLY FILLED COMPOSITE MATERIALS

Priority:

US19940192965 19940207 WO1995US00239 19950103

Family:

Publication number	Publication date	Application number	Application date
CA2179272 AA	19960617	CA19952179272	19950103
WO9521056 A1	19950810	WO1995US00239	19950103

Probable Assignee:

KHASHOGGI E IND

Assignee(s):(std):

KHASHOGGI E IND

Assignee(s):

ANDERSEN PER JUST ; E KHASHOGGI IND ; E KHASHOGGI INDUSTRIES ; HODSON SIMON K

Inventor(s):(std):

HODSON SIMON K ; ANDERSEN PER JUST

Agent(s):

BARRIGAR AND MOSS

Designated states:

AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UZ VN

International class (IPC 8-9):

B01F3/12 B05D3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/08 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B1/04 B32B13/02 B32B27/04 B32B27/20 B32B3/04 B32B37/14 B32B5/02 B32B5/04 B32B5/18 B32B9/00 B65D1/00 B65D43/16 B65D5/00 B65D5/48 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7):

B32B1/04 B32B3/04 B32B5/04 B65D5/48 E05D5/00

CPC:

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European class:

B01F3/12B2 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B11/00E3 B28B11/08E B28B13/02C B28B13/06 B28B23/00 B28B23/00Z B28B23/00Z1 B28B3/00 B28B3/02 B28B3/12C B28B3/20 B28B3/26E B28B7/42 B28C7/02 B29C43/00B B29C43/22B B29C43/34 B29C43/46 B29C44/04A B29C45/00E B29C47/00J5 B29C49/00B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/22D1 B29C67/24 B29C67/24C B29C67/24C2 B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/14B B32B5/02 B32B5/18 B32B9/00 B65D11/02 B65D43/16B B65D5/00 B65D65/38 B65D65/46C C04B14/06G C04B16/02 C04B20/00D2 C04B20/00F C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/02B C04B26/28 C04B26/28B C04B28/00 C04B28/02 C04B38/00B C04B38/02 C04B40/00 C04B40/00D C04B40/00D7 C04B41/00V C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L1/28F C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 L01F3/12G L05B11/00B5 L05C1/08P L05C1/08P2 L05C3/18 L05C5/02E L29C43/00 L29C43/08 L29C43/14A1 L29C43/34B L29C43/46A2 L29C43/46A3 L29C47/00J4 L29C47/00J5 L29C47/00L L29C47/00L12 L29C47/00L4 L29C47/00L5 L29C47/00L7 L29C47/00L9 L29C47/02 L29C49/00F L29C49/04 L29C49/46B1A L29C53/58 L29C795/00D L29K1/00 L29K105/04 L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D301/20 L65D565/38Y7 M04B111/00P30B M04B111/00T66 M04B111/00T70 M04B111/50 M08J323/02 P05D1/02 P05Y900/602

[Classification Explorer](#)

Cited documents:

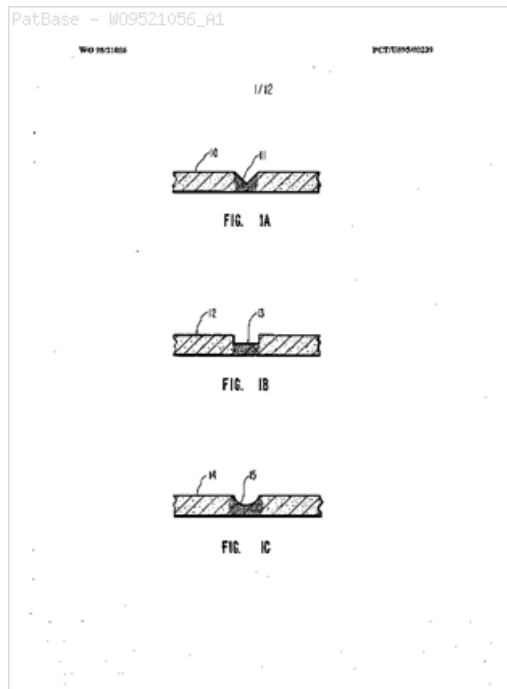
US5039003 A, US5017268 A,

Forward Citations:

WO15096968, WO15086199, NL2011080, NL2011080, EP2886300, EP2886300, EP0686082, EP0686082, CN105829068, CN105829068,

Abstract:

A hinge for use in inorganically filled composite materials is provided. The hinge has an inorganically filled structural matrix comprising a water-dispersible organic polymer binder, an aggregate material, and a fibrous material. The hinge allows inorganically filled materials to be bent along a line without breakage of the material. The hinge is preferably formed by scoring a formed sheet of inorganically filled material (50). The hinge is particularly useful in containers that require bending of various container parts, such as in food containers and boxes made from inorganically filled materials.



54) Family number: 33376312 (WO9605254A1)

© PatBase

Title: STARCH-BOUND CELLULAR MATRIX

Priority: US19940288664 19940809 US19940288667 19940809 WO1995US08803 19950713

Family:

Publication number	Publication date	Application number	Application date
CA2197059 AA	19970207	CA19952197059	19950713
WO9605254 A1	19960222	WO1995US08803	19950713

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): ANDERSEN PER JUST ; E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; HODSON SIMON K

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

Agent(s): RIDOUT AND MAYBEE LLP

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG UZ VN

International class (IPC 8-9): A61K47/36 B01F3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/36 B29C33/58 B29C33/60 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/40 B65D65/46 C04B14/06 C04B14/38 C04B16/02 C04B20/00 C04B22/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B32/00 C04B38/00 C04B40/00 C04B40/06 C04B41/45 C04B41/61 C04B7/36 C04B7/52 C08J3/20 C08J9/00 C08J9/12 C08J9/28 C08K3/00 C08K5/00 C08K7/02 C08L1/28 C08L101/00 C08L29/04 C08L3/00 C08L3/02 C08L31/04 C08L33/02 C08L5/02 C08L5/12 C08L5/14 C08L61/28 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05B11/00 B05C1/08 B05C3/18 B05C5/02 B29C53/58 B32B37/12 E05D1/02 (Advanced/Non-invention)

International class (IPC 1-7): B27M3/00 B29C33/60 B65D65/46 C08J9/28 C08K3/00 C08K5/00 C08K7/02 C08L101/00 C08L3/02 C08L89/06

CPC: Y10S428/913 B01F3/1214 B01F2003/125 B05B11/0037 B05B11/30 B05C1/0826 B05C1/0834 B05C3/18 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/00 B28B3/02 B28B3/126 B28B3/20 B28B3/2645 B28B7/42 B28B11/00 B28B11/003 B28B11/008 B28B11/24 B28B11/245 B28B13/021 B28B13/06 B28B23/00 B28B23/0081 B28B23/0087 B28C7/02 B29C33/10 B29C33/20 B29C33/36 B29C39/003 B29C39/42 B29C43/00 B29C43/003 B29C43/02 B29C43/06 B29C43/08 B29C43/34 B29C43/36 B29C43/38 B29C44/0407 B29C45/0013 B29C49/0005 B29C51/002 B29C51/04 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/202 B29C67/24 B29C67/242 B29C70/025 B29C70/12 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/3615 B29C2043/3621 B29C2043/3623 B29C2043/3689 B29C2043/5841 B29C2049/4608 B29C2795/007 B29K2003/00 B29K2005/00 B29K2089/00 B29K2093/00 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144 B65D5/00 B65D11/02 B65D43/162 B65D65/38 B65D65/466 B65D2301/20 B65D2565/385 C04B7/527 C04B14/064 C04B16/02 C04B20/002 C04B20/0048 C04B22/002 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B38/0006 C04B40/00 C04B40/0032 C04B40/006 C04B40/0616 C04B41/45 C04B41/61 C08J9/12 C08J2303/00 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 E05Y2900/602 Y10T428/1348 Y10T428/1372 Y10T428/1376 Y10T428/24992 Y10T428/249961

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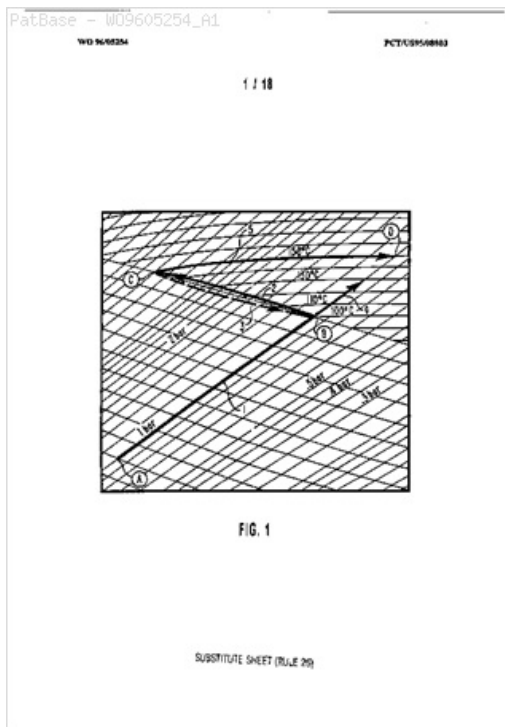
[Classification Explorer](#)

Cited documents: WO9112186 A1, US5095054 A, US5017268 A,

Forward Citations: WO9813184, WO0220238, US7967904, US7083673, US6878199, US6254814, RU2597906, NL1004138,
EP1356145, EP1356145, EP1265957, EP1265957, EP1265957, EP1229075, EP1229075, EP0895847,
EP0895847, CN103252827, AT512358, AT512358,

Abstract:

Compositions and methods of manufacturing articles, particularly containers and packaging materials, having a particle packed, highly inorganically filled, cellular matrix (8) are disclosed. Suitable inorganically filled mixtures are prepared by mixing together a starch-based binder, a solvent, inorganic aggregates, and optimal admixtures, e.g., fibers, mold-releasing agents, rheology-modifying agents, plasticizers, coating materials, and dispersants, in the correct proportions to form an article which has the desired performance criteria. The inorganically filled mixtures have a predetermined viscosity and are heated between molds at an elevated temperature and pressure to produce form-stable articles having a desired shape and a selectively controlled cellular structure matrix (8). The molded articles may be placed in a high humidity chamber to obtain the necessary flexibility for their intended use. The articles may be manufactured to have properties substantially similar to articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic materials. They have special utility in the mass production of containers, particularly food and beverage containers.



55) Family number: 32786324 (OA7750A)

© PatBase

Title: Procédé appareil et machine pour la fabrication de briques en terre comprimée. Method and apparatus machine for making bricks compressed earth. (Machine translation)

Priority: OA19840058344 19840719

Family:	Publication number	Publication date	Application number	Application date
	OA7750 A	19850830	OA19840058344	19840719

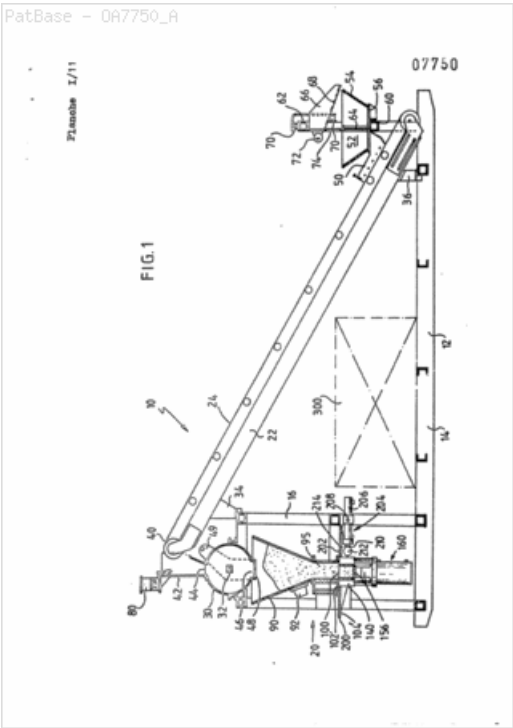
Probable Assignee: RECH ET TECH S A R E T SA DE

Assignee(s):(std): RECH ET TECH S A R E T SA DE

Assignee(s): S A DE RECHERCHE ET D ETUDES TECHNIQUES S A R E T ; RECH ET TECH S A R E T DE SA

Inventor(s):(std): ROBERT AUGIET
Inventor(s): AUGIET ROBERT
International class (IPC 8-9): B28B15/00 B28B3/02 (Advanced/Invention); B28B15/00 B28B3/02 (Core/Invention)
International class (IPC 1-7): B28B1/14 B28B5/00 B28B7/10 E04C1/04
CPC: B28B3/027 B28B15/00
European class: B28B15/00 B28B3/02E
[Classification Explorer](#)
Forward Citations: WO07051455, WO07051455,

Abstract:
Source: OA7750A [FR] [Source: Claim 1] 1. Procède pour la fabrication de briques de construction a l'aide d'un materiau a base de terre, caracterise par les etapes suivantes.: - on place l'ouverture d'un moule comprenant une chambre a volume variable (230) dont le fond est constitue par un piston (156) sous un magasin d'alimentation (95) en materiau compressible a base de terre; - on descend le piston jusqu'en une position prefixee defini- nissant dans la chambre une quantite dosee de materiau s'écoulant par gravite; - on deplace alors l'ouverture du moule transversalement par rapport a la direction d'écoulement de produit jusqu'en une position faisant face a une plaque de compression (132); - on comprime par le piston le contenu de ladite chambre entre le piston et cette plaque jusqu'a une valeur de pression predeterminee, et cela a l'aide d'un verin pilote en pression; - on deplace a nouveau le moule parallelement au plan de la plaque de compression pour degager ladite ouverture par rapport a ladite plaque et on fait monter le piston vers cette ouverture pour ejecter le produit (231), et cela a l'aide de ce meme verin. **Machine translation:** [Source: Claim 1] 1. Method for the manufacture of building bricks with a material to be ground-based, characterized by the following steps.: - opening it up a mold comprising a variable volume chamber (230), the bottom is is a piston (156) in a food store (95) of compressible material has land base; - Descend until the piston position • A FIXED DEFINED, ning in the room a metered amount of material flowing by gravity; - Then moves the mold opening transversely to the flow direction of the product to a position facing a pressure plate (132); - Is compressed by the piston the contents of said chamber between the piston and the plate up to a value of pressure predetermined and that using a bailer pilot pressure; - It moves again the mold parallel to the plane of the pressure plate to disengage said opening with respect to said plate and raises the piston to this opening to eject the product (231), and that using that same bailer.



56) Family number: 56783346 (US2014179509A) © PatBase

Title: POROUS GLASS CERAMIC COMPOSITION AND METHOD FOR MANUFACTURING THE SAME
Priority: US20120726034 20121222 US20150622673 20150213
Family:

Publication number	Publication date	Application number	Application date
EP2752395 A1	20140709	EP20130162767	20130408
US2014179509 AA	20140626	US20120726034	20121222
US2015158760 AA	20150611	US20150622673	20150213

Probable Assignee: KING ABDUL AZIZ CITY FOR SCIENCE AND TECHNOLOGY KACST
Assignee(s):(std): KING ABDUL AZIZ CITY FOR SCIENCE AND TECHNOLOGY ; KING ABDULAZIZ CITY FOR SCIENCE AND TECHNOLOGY KACST ; UNIVERSIT DI PADOVA ; KING ABDULAZIZ CITY SCI AND TECH
Assignee(s): UNIVERSITA DI PADOVA ; KING ABDUL AZIZ CITY FOR SCIENCE AND TECHNOLOGY KACST
Inventor(s):(std): BINHUSSAIN MOHAMMED A ; MARANGONI MAURO ; COLOMBO PAOLO ; ALTAMIMI ABDULAZIZ ; ALAJMI AMER M ; ATALASI HAMAD H ; BERNARDO ENRICO ; BINMAJED MAJED A ; BINHUSSAIN MOHAMMED
Agent(s): GODDAR HEINZ J

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8-9): B28B1/00 C03C1/00 C03C10/00 C03C11/00 C03C14/00 C03C27/00 C03C27/02 (Advanced/Invention)

CPC: C03C27/00 C03C27/02 C03C10/0063 B28B1/004 C03C2204/00 C03C14/006 C03C1/002 C03C11/00 C03C14/00 C03C2214/14 C03C2214/20

US class: 264/603 264/621 264/628 264/638 264/645 264/651 264/679 427/180 427/201 501/32

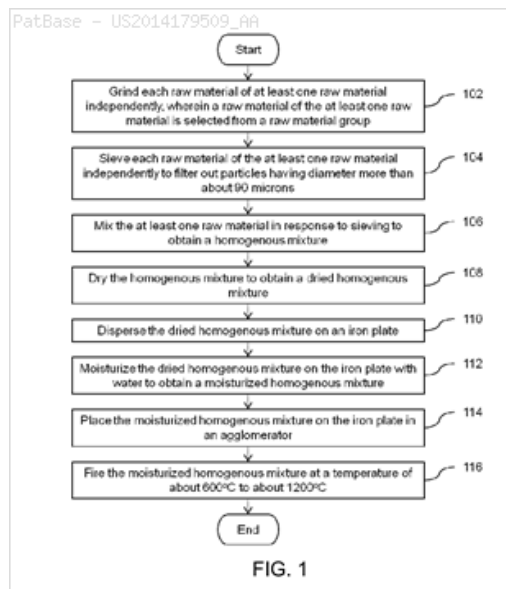
[Classification Explorer](#)

Cited documents: US8959954 BB, US8641961 BB, US7524452 BB, US3700472 A, US2062514 A, US2015016895 AA, US2014243182 AA, US2014179509 AA, US2014174126 AA,

Forward Citations: WO17181191, US9290409, US2019106621, US2015158760, US2014174126, RU2608095, RU2600252, CN106892565, CN104445956,

Abstract:

The invention provides a porous glass ceramic composition manufactured using conventional raw materials and one or more waste materials, wherein the waste materials are capable of producing glass forming oxides, glass modifying oxides and pore forming oxides. The waste materials are selected from a group that includes cullet, pozzolanic waste and fly ash. The invention also provides a method for manufacturing the porous glass ceramic composition.



57) Family number: 43049361 (US2009108507A)

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Title: METHOD FOR MANUFACTURE OF TRANSPARENT CERAMICS

Priority: US20070993744P 20070914 US20080283610 20080911 WO2008US10692 20080912

Family:	Publication number	Publication date	Application number	Application date
	CN101855187 A	20101006	CN200880107037	20080912
	JP2010538959 T2	20101216	JP20100524877T	20080912
	JP4805410 B2	20111102	JP20100524877T	20080912
	US2009108507 AA	20090430	US20080283610	20080911
	US7799267 BB	20100921	US20080283610	20080911
	WO09038674 A2	20090326	WO2008US10692	20080912
	WO09038674 A3	20090618	WO2008US10692	20080912

Probable Assignee: PENN STATE RES FOUND

Assignee(s):(std): JUWONDO GARNIA Y ; KUPP ELIZABETH R ; LEE SANG HO ; MESSING GARY L ; PENN STATE RES FOUND ; STEVENSON ADAM J

Assignee(s): PENN STATE RESEARCH FOUNDATION ; THE PENN STATE RESEARCH FOUNDATION

Inventor(s):(std): KUPP ELIZABETH R ; MESSING GARY L ; LEE SANG HO ; STEVENSON ADAM J ; JUWONDO GARNIA Y ; SANG HO LEE

Agent(s): FUJITA KAZUKO; JOHN A PARRISH LAW OFFICES OF JOHN A PARRISH; LAW OFFICES OF JOHN A PARRISH; PARRISH JOHN A

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 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 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): B28B1/00 C04B35/44 C04B35/50 C04B35/622 C04B35/632 C04B35/64 H01S3/16 (Advanced/Invention); B28B1/00 C04B35/44 C04B35/50 C04B35/64 H01S3/16 (Core/Invention)

CPC: C04B35/44 B28B1/002 B28B1/30 B28B5/027 B32B18/00 C04B35/01 C04B35/115 C04B35/443 C04B35/486 C04B35/50 C04B35/505 C04B35/597 C04B35/6261 C04B35/6264 C04B35/62685 C04B35/632 C04B35/63416 C04B35/6342 C04B35/63424 C04B35/63436 C04B35/63444 C04B35/63488 C04B35/638 C04B35/645 C04B35/6455 C04B2235/3203 C04B2235/3206 C04B2235/3208 C04B2235/3213 C04B2235/3215 C04B2235/3217 C04B2235/3222 C04B2235/3224 C04B2235/3225 C04B2235/3227

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C04B2235/6565 C04B2235/6567 C04B2235/6581 C04B2235/764 C04B2235/77 C04B2235/9653
C04B2237/343 C04B2237/582 C09K11/7774 C04B2235/75

European class: C04B35/44 C04B35/50 C09K11/77S6

US class: 264/605 264/605P 264/650 501/152 501/153

JP class F-Term: 4G031 4G031/AA01 4G031/AA03 4G031/AA04 4G031/AA05 4G031/AA06 4G031/AA07 4G031/AA08
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4G031/CA01 4G031/CA08 4G031/GA04 4G031/GA06 4G031/GA08 4G031/GA11 4G033 5F172 5F172/AE03
5F172/AF01 5F172/AF02 5F172/AF03 5F172/AF04 5F172/AF05 5F172/AF06

JP class F-Index: C04B35/44 C04B35/443 C04B35/50 C04B35/505 C04B35/622 C04B35/632 H01S3/16

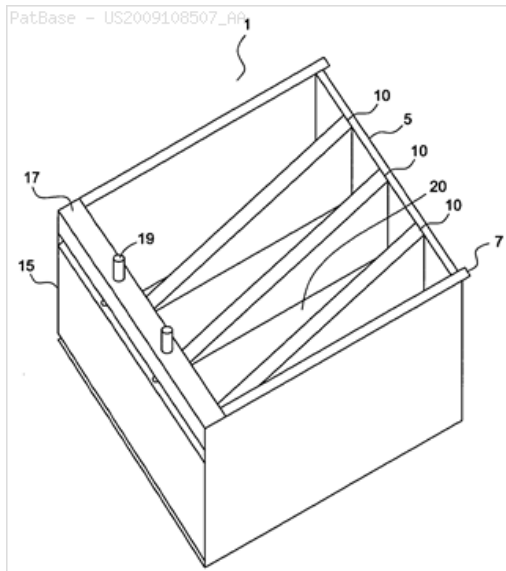
[Classification Explorer](#)

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US6887569 BA, US6844285 BA, US6830463 BB, US6817550 BB, US6496250 BA, US5695828 A, US5672554
A, US5484750 A, US5378665 A, US4847221 A, US2010048378 AA, US2006100088 AA, JP2006352085 A2,
JP2001220223 A2, JP2000185971 A2, JP11273699 A2, JP10218663 A2,

Forward Citations: WO18174814, WO18019316, WO16003965, WO15181066, WO15087350, WO13025713, WO12178159,
WO12116114, WO12075018, WO12040046, WO12006289, WO11115820, WO11097137, WO10150250,
US9876247, US9624136, US9567518, US9522848, US9499740, US9384888, US9309156, US9130131,
US9102875, US9090513, US8968600, US8922111, US8871139, US8871114, US8846172, US8828531,
US8695476, US8541330, US8502442, US8329090, US8324798, US8283843, US8207663, US8176831,
US8169136, US7922965, US2016229701, US2016002117, US2014356993, US2014094357, US2013292882,
US2012218736, US2011227476, US2011210658, US2011203452, US2010257997, US2010105539,
US2009283925, US2009212697, US2009087615, TWI538981, TWI531552, RU2473514, KR101810885,
JP2015203004, JP2010235388, EP3342764, EP2949633, EP2949633, EP2823017, EP2744870, EP2678404,
EP2646524, EP2530061, EP2445988, EP2236479, DE102014210071, DE102014105470, CN107140969,
CN106045517, CN105293930, CN104715994, CN104628375, CN103435358, CN103347982, CN102584238,
CN102584238, CN102433088, CN102173800, CN101985399, CN101985397,

Abstract:

The disclosed invention relates to a method of manufacture of transparent ceramics such as yttrium aluminum garnet by tape casting. The method entails forming a mixture of ceramic oxide, dispersant and organic solvent, milling the mixture to produce a first slurry, mixing the first slurry with an organic binder and a plasticizer to form a treated slurry, milling the treated slurry to produce milled slurry, tape casting the milled slurry to produce cast tape, drying the cast tape to produce dried tape, stacking portions of dried tape to form an assembly, compressing the assembly to produce a preform, heating the preform to produce a green preform, and sintering the green preform to produce transparent yttrium aluminum garnet. The method may be used to produce a unitary ceramic product having differing transparent sections as well as transparent ceramic product having a dopant gradient across a portion of the thickness of the product.



58) Family number: 5003367 (EP0024748A2)

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Title: CONSTRUCTION AND/OR APPLICATION IN RELATION TO THE GENERATION OR THE USE OF PRESSURES, FORCES, FLOWS AND MOVEMENTS IN AND BY MEANS OF HYDRAULIC OR HYDRO-PNEUMATIC SYSTEMS.

Priority: NL19790000219 19790111 NL19790000988 19790208 NL19790001395 19790222
NL19790004427 19790606 NL19790004566 19790611 NL19790006784 19790912
EP19800200114 19800208

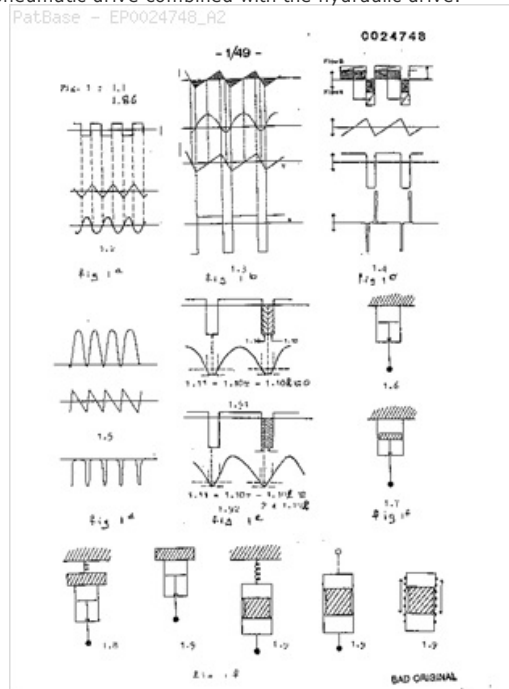
Family:	Publication number	Publication date	Application number	Application date
	EP0024748 A2	19810311	EP19800200114	19800208
	EP0024748 A3	19810826	EP19800200114	19800208
	NL7900219 A	19800715	NL19790000219	19790111
	NL7900988 A	19800812	NL19790000988	19790208
	NL7901395 A	19800826	NL19790001395	19790222
	NL7904427 A	19800715	NL19790004427	19790606
	NL7904566 A	19801215	NL19790004566	19790611
	NL7906784 A	19801215	NL19790006784	19790912

NL8002517 A	19810901	NL19800002517	19800501
NL8100028 A	19810901	NL19810000028	19810106

Probable Assignee: PROWECO BV
Assignee(s):(std): PROWECO BV
Assignee(s): PROWECO B V ; PROWECO B V POSTBUS 3106 TE 6202 NC MAASTRICHT
Inventor(s):(std): VAN DEN BERG JOHANNES VINCENTI ; TEERLING EPPENS HARMANNA REINA ; TEERLING LEONARD
Inventor(s): VAN DEN BERG JOHANNES VINCENTIUS
Designated states: AT BE CH DE FR GB IT NL SE
International class (IPC 8-9): B06B1/18 B23P19/02 B26D7/08 B28B1/08 B30B15/22 E02D5/76 E02D5/80 E02D7/00 E02D7/10 E02D7/24 E04G21/12 E21B4/18 E21B47/00 E21B7/26 F15B21/12 (Advanced/Invention); B06B1/18 B23P19/02 B26D7/08 B28B1/08 B30B15/16 E02D5/74 E02D5/80 E02D7/00 E04G21/12 E21B4/00 E21B47/00 E21B7/00 F15B21/00 (Core/Invention)
International class (IPC 1-7): B02C1/00 B06B1/00 B06B1/18 B06B1/20 B21J9/12 B28B3/00 B30B15/22 E01C19/30 E02D11/00 E02D7/00 E02D7/10 E02D7/18 E04G21/12 F01B11/04 F15B1/02 F15B21/12 F16H43/00 F16L1/02
CPC: B06B1/183 F15B21/125 B23P19/027 B26D7/08 B30B15/22 B28B1/08 E02D5/76 E02D5/808 E02D7/00 E02D7/24 E21B4/18 E21B7/26 E21B47/00 E02D7/10 E04G21/12 F15B21/12
European class: B06B1/18B B23P19/027 B23P19/02D B23P19/033 B26D7/08 B28B1/08 B30B15/22 E02D5/76 E02D5/80F E02D7/00 E02D7/10 E02D7/24 E04G21/12 E21B4/18 E21B47/00 E21B7/26 F15B21/12 F15B21/12B
[Classification Explorer](#)
Cited documents: US2755898 A, FR2162686 A2, FR1557449 A, DE2418858 A1,
Forward Citations: US6058632, US4838023, EP0156939, EP0042919, EP0042919, CN105603976, CN103774850, CN103774850, CN103104568, CN103104568,

Abstract:

The main object of this invention is the generation of pressures, forces, flows and motion and several methods are given in principle concerning the application of the hydraulic scheme as well as the constructions which are especially suitable for the generation. Characteristic for these hydraulic schemes are the consistent pressure or volume controlled schemes and the flexible adjustment between the motion of the piston and the motion of the hydraulic flow. With this a universal rotating control valve is important; characteristic of it is the adjustability of the relative opening times in different phases. Further a mass motion reactor which transforms kinetic energy into pressure. The applications are mainly related to transport under influence of shock, asymmetric vibrations, dynamic effects by asymmetric vibrations and effects on the frictional resistance by vibrations and savings in and simplification of constructions by replacement of static forces which require a frame through dynamic forces where the reaction is supplied by the inertia of a mass, where this is useful for the speed, and the simplicity is the pneumatic drive combined with the hydraulic drive.



59) Family number: 22739428 (US3097929A)

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Title: METHOD FOR CONTINUOUS MANUFACTURE OF CERAMIC SHEATHING
Priority: US19560578485 19560416
Family:

Publication number	Publication date	Application number	Application date
US3097929 A	19630716	US19560578485	19560416

Probable Assignee: GLADDING MCBEAN AND CO
Assignee(s):(std): GLADDING MCBEAN AND CO
Inventor(s):(std): RAGAN RANDALL C
International class (IPC 8-9): B28B3/12 (Advanced/Invention); B28B3/00 (Core/Invention)

CPC: B28B3/123
European class: B28B3/12B
US class: 264/112 264/148 264/175

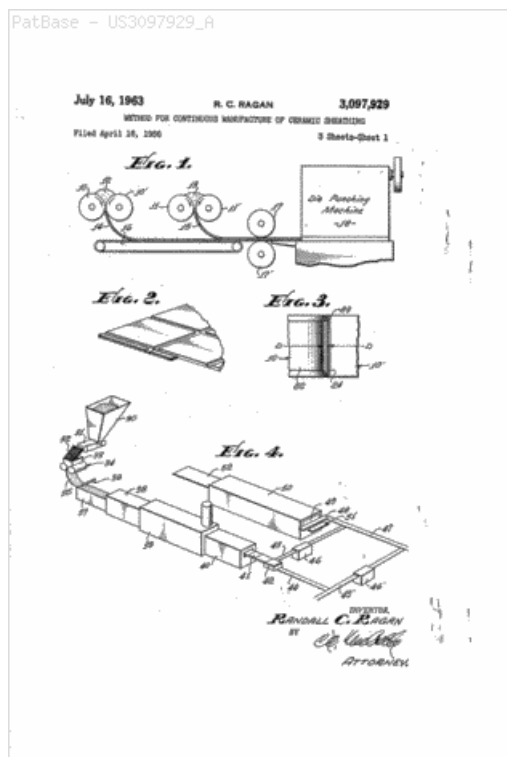
[Classification Explorer](#)

Cited documents: US854823 A, US778715 A, US2758336 A, US2756459 A, US2714239 A, US2601712 A, US2601105 A, US2552937 A, US2552553 A, US2425626 A, US2371353 A, US2230309 A, US204957 A, US1980270 A, US1941403 A, US1819686 A, US1643059 A, US1534768 A, US1369752 A, US1342192 A, GB512547 A, GB400535 A,

Forward Citations: WO06074790, US8616009, US8061147, US7494507, US7396505, US7396501, US7077867, US6863862, US6800095, US6793681, US6709463, US6676704, US6660109, US6596225, US6517583, US6514289, US6494918, US6402787, US6391236, US6332936, US6293987, US6162311, US6030472, US5928741, US5879722, US5851634, US5849155, US5830548, US5830305, US5800647, US5753308, US5738921, US5709913, US5707474, US5705242, US5705239, US5705238, US5702787, US5691014, US5665442, US5660904, US5658603, US5631053, US5582670, US5580624, US5545450, US5506046, US5340422, US4990080, US4517144, US3222434, US2009113897, US2004042922, JP2008527301,

Abstract:

(Claim 1) 1. In a method of continuously forming a strip of com-pacted, coherent, homogeneous and dense ceramic body composition, said strip having smooth, calendered surfaces and a moisture content of between about seven per cent and seventeen percent, the steps of: continuously depositing a free-flowing ceramic body composition by gravity into a zone between a pair of converging cylin-drical surfaces of equal radius moving concurrently down-ward toward a gap; continuously removing a continuous, dense, compacted and flexible strip of ceramic body from said gap; and Controlling the density and thickness of the strip in accordance with the relation $R R + T$ to 0.98, wherein R is the radius of each of the cylindrical surfaces and T is the thickness of the strip.



60) Family number: 33376435 (EP1308263A2)

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Title: HIGHLY INORGANICALLY FILLED COMPOSITIONS
Priority: US19920982383 19921125 US19930152354 19931119 US19930154436 19931119
EP19940903306 19931124

Family:	Publication number	Publication date	Application number	Application date
	EP1308263 A2	20030507	EP20030001160	19931124
	EP1308263 A3	20030521	EP20030001160	19931124

Probable Assignee: KHASHOGGI E IND
Assignee(s):(std): KHASHOGGI E IND
Assignee(s): E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC
Inventor(s):(std): HODSON SIMON K ; ANDERSEN PER JUST
Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8-9): B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B21/00 B28B21/72 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C49/00 B29C51/00 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B1/02 B32B1/08 B32B13/00 B32B13/02 B32B27/04 B32B27/20 B32B5/02 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B14/06 C04B16/02 C04B20/00 C04B22/04 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B40/00 C08J5/18 C08L1/00 C08L1/28 C08L101/00 C08L29/02 C08L29/04 C08L3/00 C08L3/02 C08L33/02 C08L33/24 C08L39/00 C08L39/06 C08L5/02 C08L5/12 C08L5/14 C08L71/00 C08L71/02 C08L75/00 C08L89/06 C08L91/08 C08L97/02 C09D133/04 C09D133/06 C09D161/20

C09D161/28 C09D167/00 C09D167/04 C09D171/00 C09D171/02 D21F11/00
E05D1/02 (Advanced/Invention);
B05C5/02 B29C43/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B05B11/00 B28B1/00 B28B1/52 B28B23/00 B28B3/20 B29C43/00 B29C51/00 B29C67/24 B29C70/50 B32B5/02 C04B14/06 C04B28/02 C08L1/28

CPC:

Y02W30/97 B05B11/0037 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B11/008 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/08 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C49/0005 B29C51/002 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/022 B29C2043/023 B29C2043/3433 B29C2043/3689 B29C2043/463 B29C2043/464 B29C2043/465 B29C2043/466 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/04 B29K2105/12 B29K2105/16 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B9/00 B32B27/04 B32B37/12 B65D43/162 B65D65/38 B65D65/466 B65D2565/385 C04B14/064 C04B16/02 C04B20/002 C04B22/04 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/026 C04B26/28 C04B26/285 C04B28/00 C04B28/02 C04B40/00 C04B40/0092 C04B2111/00129 C04B2111/00612 C04B2111/00948 C04B2111/50 C08J5/18 C08J2323/02 C08L1/28 C08L1/286 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05Y2900/602 B31B50/32 B31B2105/0022 B32B13/02 B32B1/02 B32B1/08 B32B5/18 B32B13/04 B32B13/06 B32B13/12 B32B13/14 B32B27/20 B32B27/34 B32B2266/0228 B32B2439/00 B32B2597/00 E05D1/02 B29C48/001 B29C48/0011 B29C48/0012 B29C48/0017 B29C48/0019 B29C48/0022 B29C48/07 B29C48/08 B29C48/09 B29C48/13

European class:

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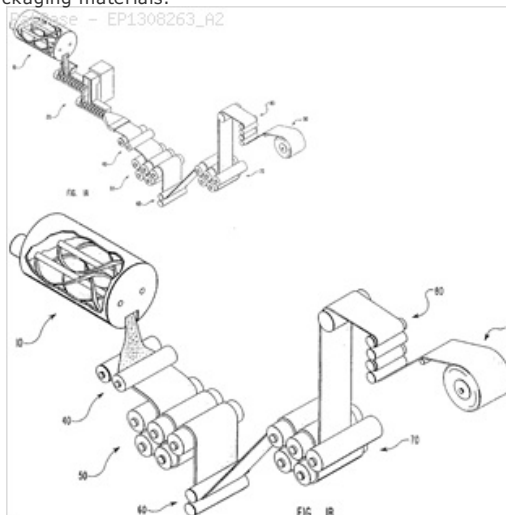
WO9419172 A1, WO9412328 A1, WO9404330 A1, WO9105714 A1, WO8700828 A1, FR2418829 A1, EP0055035 A1,

Forward Citations:

WO14093795, WO06015643, WO04037533, WO04037533, US9993098, US9975687, US9957365, US9840049, US9783649, US9758655, US9758293, US9758292, US9731888, US9725202, US9713906, US9694962, US9688456, US9624348, US9562140, US9358772, US9346605, US9283734, US9150344, US9102802, US9102461, US9067705, US8883280, US10046880, US10011696, RU2482083, JP2008509016, CN107756628, CN105817384, CN105196410, CN103216058,

Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and then passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have particular utility in the mass production of articles, such as food and beverage containers, and packaging materials.



61) Family number: 44016466 (US2009291316A)

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Title: TWO-COLORED SHAPED CERAMIC PARTS

Priority: AT20080000811 20080521

Family:

Publication number	Publication date	Application number	Application date
AT506893 A1	20091215	AT20080000811	20080521
AT506893 B1	20100415	AT20080000811	20080521

CN101633202 A	20100127	CN200910163956	20090520
EP2123185 A2	20091125	EP20090006449	20090513
HK1139896 A1	20100930	HK20100105975	20100615
US2009291316 AA	20091126	US20090468213	20090519

Probable Assignee: D SWAROVSKI AND CO

Assignee(s):(std): BIEBL MICHAEL ; HATZL HANNES ; RAUCH THOMAS ; SWAROVSKI AND CO

Assignee(s): D SWAROVSKI AND CO

Inventor(s):(std): BIEBL MICHAEL ; HANNES HATZL ; HATZL HANNES ; MICHAEL BIEBL ; RAUCH THOMAS ; THOMAS RAUCH

Agent(s): HOFINGER STEPHAN; CLT PATENT AND TRADEMARK HK LTD; WENDEROTH LIND AND PONACK LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

International class (IPC 8-9): A44C17/00 A44C27/00 B28B B28B3/20 B28C B28C1/10 B28C1/18 B29B9/00 B44C1/26 C04B C04B33/14 C04B35/18 C04B35/622 C04B35/626 C04B35/628 C04B35/64 (Advanced/Invention); A44C17/00 A44C27/00 B28B3/20 B29B9/00 B44C1/00 C04B33/02 C04B35/18 C04B35/622 C04B35/626 C04B35/64 (Core/Invention)

CPC: C04B33/14 C04B35/18 C04B35/62695 C04B35/62802 C04B2235/3418 C04B2235/3463 C04B2235/604 C04B2235/94 C04B2235/9661 B28B1/005 A44C17/007 B44C1/22 B44C1/26 B44F5/00

European class: A44C17/00G B44C1/22 B44C1/26 B44F5/00

US class: 264/603 264/73 264/75 428/542.2

[Classification Explorer](#)

Cited documents: US7001528 BB, US6793873 BB, US6620214 BB, US6312627 BA, US6274080 BA, US5935515 A, US5711906 A, US5695712 A, US5656562 A, US5443615 A, US5376321 A, US5368791 A, US5118457 A, US5008053 A, US4824623 A, US4320074 A, US4271109 A, US4166147 A, US4089920 A, US3760049 A, EP0700796 B1, DE3445189 C2,

Forward Citations: WO12156325, US9186227, US2015209984, US2014135200, US10245763, JP6121404, JP2014522365, CN105130504, CN103764598, CN103764598,

Abstract:

A process for the production of at least two-colored shaped ceramic parts from a granular ceramic raw material having a first of the at least two colors, wherein the second of the at least two colors is added as a colored pigment or a colored pigment substance and the surface of the granular ceramic raw material is at least partially coated, wherein the coated granular ceramic raw material is then pressed into a solid form.



62) Family number: 1881486 (AT551981A)

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Title: VERFAHREN ZUR HERSTELLUNG VON KERAMISCHEN ZIEGELN, INSBESONDERE HOHLZIEGELN

Priority: AT19810005519 19811222

Family:

Publication number	Publication date	Application number	Application date
AT376926 B	19850125	AT19810005519	19811222
AT551981 A	19840615	AT19810005519	19811222

Probable Assignee: WIENERBERGER BAUSTOFFIND AG

Assignee(s):(std): WIENERBERGER BAUSTOFFIND AG

Assignee(s): WIENERBERGER BAUSTOFFINDUSTRIE AKTIENGESELLSCHAFT

International class (IPC 8-9): B28B11/16 B28B11/24 B28B3/20 (Advanced/Invention); B28B11/00 B28B11/14 B28B3/20 (Core/Invention)

International class (IPC 1-7): B28B11/16 B28B15/00

CPC: B28B11/16 B28B3/20 B28B11/243

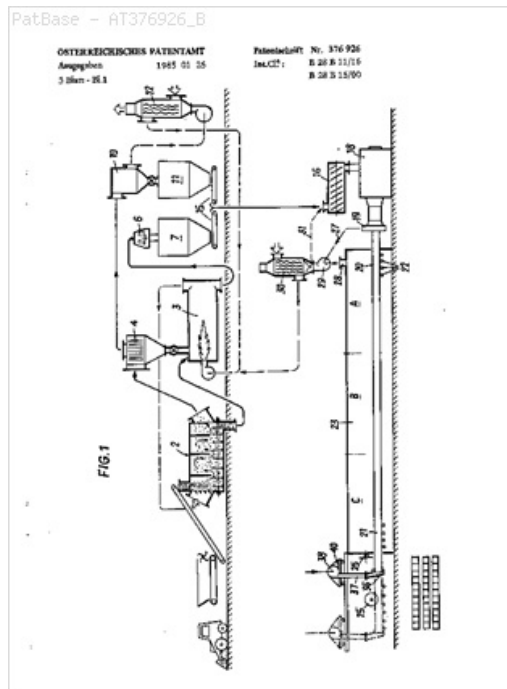
European class: B28B11/16 B28B11/24C B28B3/20

[Classification Explorer](#)

Cited documents: DE2838739 A1,

Abstract:

Source: AT376926B [DE] [Source: Claim 1] 4. Verfahren nach einem der Ansprueche 1 bis 3, dadurch gekennzeichnet, dass der gebrannte Strang (21) bzw. die gebrannten Strangstuecke (20a) in an sich bekannter Weise sowohl in Querrichtung als auch in Laengsrichtung in einzelne Ziegel unterteilt werden. **Machine translation:** [Source: claim 1] 4. process according to one of claims 1 to 3, characterised in that the burnt strand (21) or the burnt strand pieces (20a) are divided in itself known way laterally as well as longitudinally in individual brick.



63) Family number: 8838495 (US6210625B)

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Title: Method for producing granulated material

Priority: JP19960032443 19960220 JP19970039664 19970118 WO1997JP00429 19970218
JP19970036662 19970220

Family:	Publication number	Publication date	Application number	Application date
	AU199716737 A1	19970910	AU19970016737	19970218
	EP0897745 A1	19990224	EP19970902719	19970218
	EP0897745 A4	20030514	EP19970902719	19970218
	JP10202082 A2	19980804	JP19970039664	19970118
	JP10258223 A2	19980929	JP19970036662	19970220
	US6210625 BA	20010403	US19990147152	19990329
	WO9730782 A1	19970828	WO1997JP00429	19970218

Probable Assignee: MIKUNI KK

Assignee(s):(std): INAMURA SHINPEI ; MATSUSHITA MITSUHIRO ; MIKUNI KK ; MIKUNI KOGYO KK

Assignee(s): MIKUNI CORP

Inventor(s):(std): INAMURA SHINPEI ; MATSUSHITA MITSUHIRO

Inventor(s): MITSUHIRO MATSUSHITA ; SHINPEI INAMURA

Designated states: AT AU BE CH CN DE DK ES FI FR GB GR IE IT KR LU MC NL PT SE US

International class (IPC 8-9): B01J2/00 B01J2/14 B28B1/00 B28B1/30 B28B7/34 C04B38/00 C04B38/06 C08L101/14
H01F1/06 (Advanced/Invention);
B01J2/00 B01J2/14 B28B1/00 B28B1/30 B28B7/34 C04B38/00 C04B38/06 C08L101/00
H01F1/032 (Core/Invention)

International class (IPC 1-7): B01J2/00 B01J2/14 B28B1/30 B28B7/34 B29B9/00 C04B35/00 C04B38/00 C04B38/06 C08L101/14

CPC: B01J2/006 B28B1/004 B28B1/30 B28B7/342 C04B38/009

European class: B01J2/00D B28B1/00C B28B1/30 B28B7/34B C04B38/00P

US class: 264/109 264/125 264/232 264/234 264/610 264/628 264/635 264/636 419/5 419/61 419/66 426/514

JP class F-Term: 4G004 4G004/BA00 4G019 4J002 4J002/BF02/1 4J002/BG01/1 4J002/BN01/1 4J002/DA06/6 4J002/DE02/7
4J002/DE07/6 4J002/DE09/6 4J002/DF01/6 4J002/DJ00/6 4J002/DJ01/6 4J002/DJ03/6 4J002/DM00/6
4J002/FA10/1 4J002/FB27/6 4J002/FB28/6 4J002/FB29/7 4J002/FD01/6 4J002/FD09/6 4J002/FD20/6
4J002/FD31/6 4J002/GA00 4J002/GB00 4J002/GC00 4J002/GD05 4J002/GE00 4J002/GH00 4J002/GJ01
4J002/GL00 4J002/GM05 4J002/GN00 4J002/GP03 4J002/GQ00 4J002/GR00 4J002/GT00 4J002/HA09
4G019/GA01 4G019/GA02 4G019/GA04 5E040 5E040/AB03 5E040/CA01 5E040/CA13 5E040/HB17

JP class F-Index: B01J2/00/B B01J2/14 C04B38/06/J C08L101/14 B01J2/00/Z C04B38/00/304/Z H01F1/06/A H01F1/11

[Classification Explorer](#)

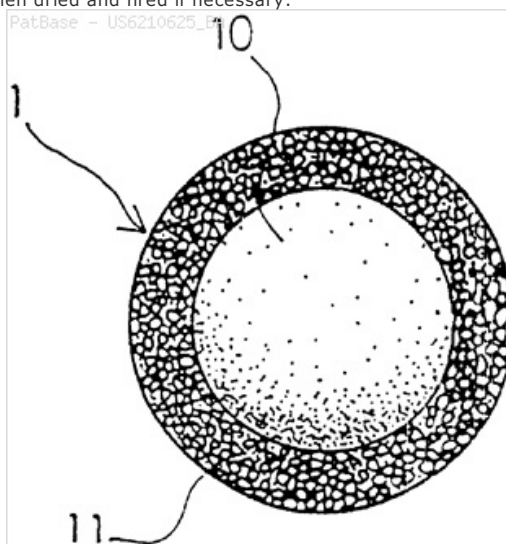
Cited documents: US5521253 A, US5158804 A, US5157084 A, US4919973 A, JP63149306 A2, JP62230455 A2, JP61215238 A2, JP48055192 A2, JP3154630 A2, JP2277544 A2, JP2263716 A2,

Forward Citations: WO17178978, WO13116179, WO12118993, WO11050434, WO11050434, WO10117137, WO10117137, WO06056093, WO05070654, WO04073961, WO04073961, WO04073889, WO04027901, WO04027901, WO03106148, WO03106147, WO03106146, WO03032439, US9962885, US9943981, US9925721, US9921017, US9914169, US9891030, US9885516, US9874394, US9840042, US9835369, US9833942, US9815243, US9770867, US9688911, US9656423, US9470485, US9359266, US9351445, US9084409, US8733288, US8722137, US8603578, US8469196, US8409618, US8318029, US8298667, US8288452,

US8277801, US8178476, US8096267, US8075997, US8012533, US8003212, US7958847, US7914892, US7887918, US7883773, US7879350, US7867613, US7794737, US7722802, US7678447, US7678367, US7666410, US7625578, US7622134, US7611756, US7571814, US7521410, US7491444, US7459209, US7438875, US7431912, US7429421, US7413912, US7402330, US7343710, US7198867, US7105144, US7067187, US6887570, US6572920, US6538318, US6528446, US6436372, US2017064438, US2015040833, US2014338257, US2013306912, US2011203525, US2011146985, US2010215754, US2010211034, US2009267275, US2009220817, US2009163887, US2009137433, US2009041819, US2009038798, US2009032254, US2009032253, US2008057019, US2008000943, US2007267784, US2007166541, US2007109650, US2006258040, US2006254988, US2006216493, US2006210634, US2006177661, US2006122706, US2006039945, US2005238570, US2005224008, US2005215420, US2005186140, US2005131363, US2005092657, US2005084464, US2005084438, US2005084412, US2005056229, US2004200128, US2004142041, US2003157007, US2002169065, US10244308, US10226919, US10222116, US10220568, US10220567, US10213831, US10179365, US10161669, US10117429, US10105931, US10059062, US10059058, US10052819, US10052682, US10041724, US10030905, US10018406, JP5990471, JP4478777, JP4373053, JP3862485, JP2014141371, JP2008227099, JP2007518605, JP2006342054, JP2004026602, JP2002048417, EP1580177, EP1513671, EP1496015, EP1121975, EP1121975, CN106746832, CN106746832, CN106587692, CN104150799, CN104150799,

Abstract:

The invention is a method of making a novel spherical form of granulated products that can be effectively used in various product forms in drug, fertilizer, foodstuff, feed, agricultural chemical, catalyst, ceramics, powder metallurgy, detergent, plastic, and bio-material fields, for instance, as catalysts, lightweight materials, sound-insulating materials, microcapsules, and lightweight aggregates. To obtain a granulated product which is a spherical solid shell having a spherical space therein, a polymer having high water absorption properties is swollen by the absorption of water therein, and then brought in contact with a powder to form a powder layer all over the surface of the swollen polymer particle. This spherical particle is then dried and fired if necessary.



64) Family number: 20968504 (GB920507A)

© PatBase

Title: Method and means for continuous manufacture of a ceramic strip of material

Priority: GB19590038840 19591116

Family:

Publication number	Publication date	Application number	Application date
GB920507 A	19630306	GB19590038840	19591116

Probable Assignee: GLADDING McBEAN AND CO

Assignee(s):(std): GLADDING McBEAN AND CO

Inventor(s):(std): RAGAN RANDALL CREECH

International class (IPC 8-9): B28B1/52 B28B3/12 (Advanced/Invention); B28B1/52 B28B3/00 (Core/Invention)

International class (IPC 1-7): B28B1/00

CPC: B28B1/526 B28B3/126

European class: B28B1/52F B28B3/12C

[Classification Explorer](#)

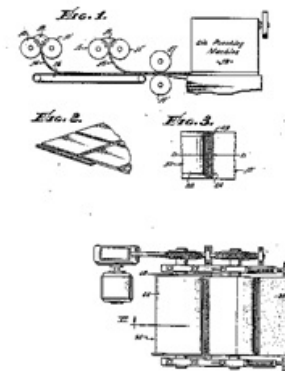
Forward Citations: US3458930, EP1529762, EP1132357, EP1132357,

Abstract:

920.507. Moulding ceramic materials. GLADDING McBEAN and CO. Nov. 16, 1959, No. 38840/59. Class 87(2). A method of moulding finely divided ceramic material, containing not less than 30% of particles passing a 60 mesh sieve, into a strip comprises passing the material downwardly by gravity to the nip of a pair of rollers travelling at the same speed, wherein the relationship between the thickness of the strip and the radius R of the rollers is $R/R+T = 0A950$ to $0A980$ and continuously discharging the moulded strip. Compositions of ceramic materials and sieve sizes are given. In Fig. 1 the material is rolled by rollers 10, 10¹ and discharged on to a belt 16 where it is coated with glazing material from rollers 11, 11¹ and fed to a stamping machine 18. In Figs. 5 and 6 the rollers are worm driven and one roller 64 has end flanges whose height is between 1A5 and 4 times the nip gap. The material is discharged on to an adjustable guide 67 and thence to a transverse cutting knife 71, angularly adjustable to travel with the strip to cut squarely and operated electrically by a cam on a roller 75, and to side trimmers 81 and ploughs 85. The cutting knives 71, 85 may only score the strip which may be fed through rollers 97, 98, Fig. 8, to a roller 99 located beneath the nip of the rollers 97, 98 to break the strip across the score marks. The rollers 10, 10¹, may be profiled to impress on the strip a pattern of tiling, Fig. 2 (not shown), and one roller, Fig. 3 (not shown), may be have protruding bevelled edges to form a chamfer 4 on the sides of the rolled strip, Curing ovens

and cooling means are provided.

PatBase - GB920507_A



65) Family number: 33378515 (US5868824A)

© PatBase

Title: INORGANICALLY FILLED, STARCH-BASED COMPOSITIONS FOR MANUFACTURING CONTAINERS AND OTHER ARTICLES HAVING A THERMODYNAMICALLY CONTROLLED CELLULAR MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930109100 19930818 US19940218971 19940325 US19940288664 19940809
US19940288667 19940809 US19960691861 19960802

Family:	Publication number	Publication date	Application number	Application date
	US5868824 A	19990209	US19960691861	19960802

Probable Assignee: EARTHSHELL SPE LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC ; EARTHSHELL SPE LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): A61K47/36 B01F3/12 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B11/24 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29B9/12 B29C31/04 B29C33/02 B29C33/10 B29C33/36 B29C33/58 B29C39/00 B29C39/42 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C44/04 B29C45/00 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/20 B29C67/24 B29C70/02 B29C70/12 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/14 B32B5/18 B65D1/00 B65D43/16 B65D5/00 B65D65/38 B65D65/40 B65D65/46 B65D65/48 B65D65/50 B65D65/52 B65D65/54 B65D65/56 B65D65/58 B65D65/60 B65D65/62 B65D65/64 B65D65/66 B65D65/68 B65D65/70 B65D65/72 B65D65/74 B65D65/76 B65D65/78 B65D65/80 B65D65/82 B65D65/84 B65D65/86 B65D65/88 B65D65/90 B65D65/92 B65D65/94 B65D65/96 B65D65/98 B65D65/100 B65D65/102 B65D65/104 B65D65/106 B65D65/108 B65D65/110 B65D65/112 B65D65/114 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106/162.51 106/164.01 106/205.01 106/206.1 106/217.01 106/287.35 106/400 536/102

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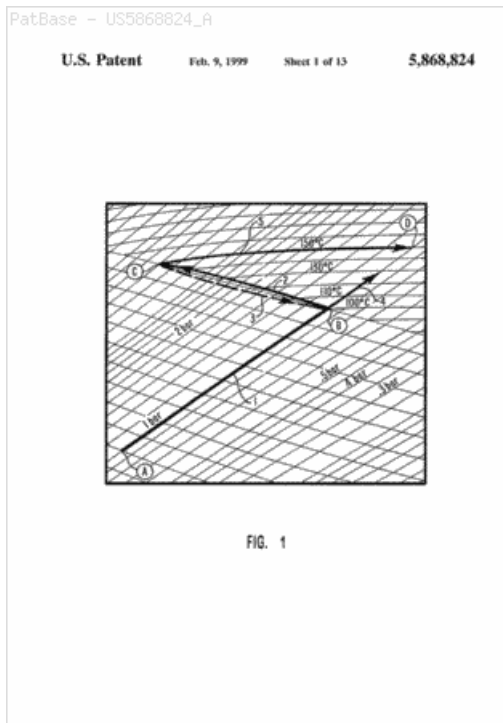
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Abstract:

Compositions, methods, and systems for manufacturing articles, particularly containers and packaging materials, having a particle packed, highly inorganically filled, cellular matrix are disclosed. Suitable inorganically filled mixtures are prepared by mixing together a starch-based binder, a solvent, inorganic aggregates, and optimal admixtures, e.g., fibers, mold-releasing agents, rheology-modifying agents, plasticizers, coating materials, and dispersants, in the correct proportions to form an article which has the desired performance criteria. The inorganically filled mixtures have a predetermined viscosity and are heated between molds at an elevated temperature and pressure to produce form-stable articles having a desired shape and a selectively controlled cellular, structural matrix. The molded articles may be placed in a high humidity chamber to obtain the necessary flexibility for their intended use. The articles may be manufactured to have properties substantially similar to articles presently made from conventional materials like paper, paperboard, polystyrene, plastic, or other organic materials. They have especial utility in the mass-production of containers, particularly food and beverage containers.



66) Family number: 33378516 (US5879722A)

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Title:	SYSTEM FOR MANUFACTURING SHEETS FROM HYDRAULICALLY SETTABLE COMPOSITIONS			
Priority:	US19920929898 19920811	US19920982383 19921125	US19930095662 19930721	
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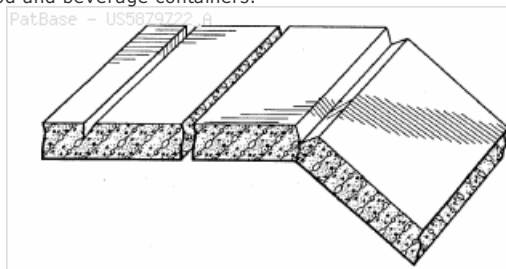
Probable Assignee:	E KHASHOGGI IND LLC
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Assignee(s):	E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGI IND ; E KHASHOGI INDUSTRIES
Inventor(s):(std):	ANDERSEN PER JUST ; HODSON SIMON K
International class (IPC 8-9):	B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C47/14 B29C48/305 B29C49/00 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B29D7/01 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B9/00 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C49/06 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)
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Forward Citations: WO03097227, US9999989, US9909718, US9890083, US9701583, US9616591, US9579822, US9475732, US9410361, US9375899, US9296124, US9243444, US9080372, US9027296, US8915033, US8881494, US8604123, US8535039, US8518176, US8017535, US8015725, US7381768, US7323990, US6867254, US6765153, US6672754, US6290885, US6182375, US6164034, US2012304482, US2012276310, US2012097048, US2011177190, US2008256821, US2008241490, US2008145630, US2008047160, US2006125141, US2006083833, US2005237195, US2004177580, US2003083423, US2001050879, US10245611, US10240089, US10239230, US10238119, US10196309, US10077597, US10076853, US10059033, US10052793, US0999989, TW1583518, EP1515796,

Abstract:

Systems for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, cardboard, polystyrene, plastic, or metal. The systems yield sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.



67) Family number: 33378517 (US5928741A)

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Title: LAMINATED ARTICLES OF MANUFACTURE FASHIONED FROM SHEETS HAVING A HIGHLY INORGANICALLY FILLED ORGANIC POLYMER MATRIX

Priority: US19920929898 19920811 US19920982383 19921125 US19930095662 19930721
US19930101500 19930803 US19930152354 19931119 US19950485097 19950607

Family:	Publication number	Publication date	Application number	Application date
	US5928741 A	19990727	US19950485097	19950607

Probable Assignee: E KHASHOGGI IND LLC

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ANDERSEN PER JUST ; HODSON SIMON K

International class (IPC 8-9): B01F3/12 B05B11/00 B28B1/00 B28B1/52 B28B11/00 B28B13/02 B28B13/06 B28B23/00 B28B3/00 B28B3/02 B28B3/12 B28B3/20 B28B3/26 B28B7/42 B28C7/02 B29C43/00 B29C43/02 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/38 B29C43/46 B29C45/00 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/16 B32B9/00 B32B9/04 B65D43/16 B65D5/00 B65D65/38 B65D65/46 C04B14/00 C04B14/06 C04B14/10 C04B14/18 C04B14/20 C04B14/24 C04B14/28 C04B14/38 C04B16/02 C04B20/00 C04B22/04 C04B24/00 C04B24/14 C04B24/38 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B28/02 C04B38/00 C04B38/02 C04B40/00 C04B41/45 C04B41/61 C08J5/18 C08L13/02 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C1/08 B05C3/18 B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B23/18 B32B5/16 B65D85/84

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[Classification Explorer](#)

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US882538 A, US591168 A, US5411639, US5372877, US5362777, US5362776, US5360586, US5354424, US5346541, US5340558, US5338349, US5320669, US5317119, US5317037, US5316624, US5314754, US5308879, US5300333, US5298273, US5294299, US5290355, US5290350, US5288765, US5288318, US5284672, US5279658, US5278194, US5277764, US5277762, US5275774, US5273821, US5272181, US5269845, US5268187, US5266368, US5264080, US5264030, US5262458, US5258430, US5256711, US5252271, US5248702, US5240561, US5232496, US5224595, US5221435, US5208267, US5206087, US5194206, US5186990, US5185382, US5184995, US5178730, US5167894, US5160676, US5160368, US5156718, US5154771, US5153037, US5151130, US5141983, US5141797, US5139615, US5134179, US5132155, US5126014, US5126013, US5122231, US5110413, US5108679, US5108677, US5106880, US5104669, US5104487, US5102596, US5096650, US5095054, US5089186, US5085366, US5082500, US5076985, US5071512, US5061346, US5051217, US5049237, US5047086, US5043196, US5039560, US5039378, US5039003, US5037600, US5035930, US5035707, US5030282, US5021093, US5018379, US5017268, US4999056, US4985119, US4983275, US4979992, US4976131, US4975473, US4963603, US4963309, US4957754, US4957558, US4952278, US4948429, US4944595, US4943349, US4941922, US4939192, US4935097, US4927656, US4927655, US4927573, US4927043, US4925530, US4923665, US4921250, US4919758, US4912069, US4895598, US4892590, US4892589, US4889594, US4889428, US4888059, US4879173, US4872913, US4868142, US4863655, US4861649, US4846932, US4842649, US4840672, US4836940, US4833191, US4828650, US4814012, US4799961, US4797161, US4789244, US4786670, US4784693, US4775580, US4772439, US4755494, US4754589, US4753710, US4749444, US4746481, US4735660, US4711669, US4710422, US4707221, US4707187, US4680023, US4673438, US4655981, US4650523, US4642137, US4640715, US4637860, US4636345, US4623150, US4622026, US4621763, US4619636, US4613627, US4595623, US4588443, US4585486, US4581003, US4571233, US4562218, US4552463, US4551384, US4549930, US4545854, US4536173, US4533581, US4533393, US4529663, US4529662, US4529653, US4524828, US4522772, US4508595, US4497662, US4490130, US4487657, US4470877, US4462835, US4460348, US4452596, US4445970, US4428775, US4428741, US4427610, US4415366, US4410571, US4410366, US4406703, US4394930, US4383862, US4379198, US4378271, US4377440, US4373992, US4373957, US4370166, US4362679, US4353748, US4329177, US4328136, US4326891, US4313997, US4310996, US4306059, US4305758, US4303690, US4299790, US4287247, US4279695, US4272198, US4271228, US4269657, US4261754, US4257710, US4249991, US4248664, US4244781, US4239716, US4234344, US4233368, US4233080, US4230502, US4225383, US4225357, US4225247, US4210490, US4209336, US4188231, US4187768, US4185923, US4172154, US4159302, US4158989, US4157998, US4149550, US4135940, US4133619, US4132555, US4124550 A, US4121402 A, US4117060 A, US4117059 A, US4093690 A, US4089691 A, US4085001 A, US4084980 A, US4080213 A, US4077809 A, US4076846 A, US4073658 A, US4072549 A, US4070953 A, US4070199 A, US4070196 A, US4053346 A, US4044166 A, US4043862 A, US4040851 A, US4017324 A, US4017321 A, US4002482 A, US3998651 A, US3989534 A, US3968004 A, US3954490 A, US3952130 A, US3927163 A, US3917781 A, US3914359 A, US3908523 A, US3904341 A, US3902912 A, US3857715 A, US3855908 A, US3841885 A, US3827895 A, US3824107 A, US3806571 A, US3770859 A, US3759729 A, US3754954 A, US3753749 A, US3745891 A, US3697366 A, US3683760 A, US3579366 A, US3558071 A, US3526172 A, US3520707 A, US3492385 A, US3470005 A, US3468993 A, US3459632 A, US3458329 A, US3432317 A, US3393261 A, US3356779 A, US3306961 A, US3305613 A, US3253978 A, US3215549 A, US3169877 A, US3149986 A, US3117014 A, US3097929 A, US3052595 A, US3042578 A, US3030258 A, US3027266 A, US3007222 A, US3006615 A, US2968561 A, US2959489 A, US2943013 A, US2917778 A, US2837435 A, US2820713 A, US2793957 A, US2754207 A, US2700615 A, US2629667 A, US2549507 A, US2496895 A, US2432971 A, US2307629 A, US2205735 A, US2170102 A, US2045099 A, US1965538 A, US1954117 A, US1932150 A, US1874974 A, US128980 A, US1234692 A, US1223834 A, US109669 A,

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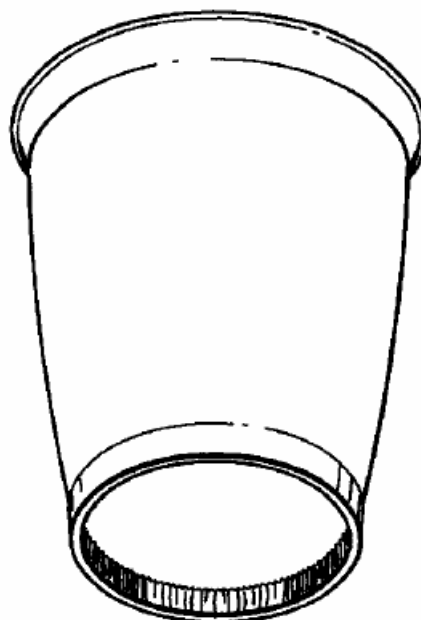
WO17064559, WO15157168, WO14025877, WO11117750, WO10149633, WO09055067, WO08131194, WO03055768, WO02085736, USRE39339, US9975687, US9957365, US9951248, US9913553, US9890083, US9884716, US9849655, US9840049, US9802871, US9783649, US9777143, US9777129, US9771499, US9758655, US9758293, US9758292, US9731888, US9730468, US9725202, US9713906, US9701583, US9694962, US9688456, US9657200, US9656793, US9624348, US9604769, US9580629, US9562140, US9522499, US9475732, US9410361, US9375899, US9243444, US9187288, US9145251, US9102444, US9080372, US9066613, US9062190, US9027296, US9016525, US8927622, US8915255, US8915033, US8899318, US8881494, US8826959, US8753012, US8741443, US8733070, US8658714, US8652617, US8608018, US8604123, US8597554, US8541074, US8507581, US8501260, US8448809, US8389107, US8382888, US8336729, US8297072, US8268417, US8152510, US8096035, US8087921, US7958704, US7954306, US7578114, US7553363, US7481645, US7381768, US7361408, US7282273, US6869475, US6867254, US6811646, US6794004, US6596118, US6544629, US6527991, US6521322, US6386426, US6296795, US6168857, US6083586, US2017204303, US2017182726, US2016215166, US2015297004, US2014283447, US2014274632, US2014238586, US2014087109, US2014072676, US2013200664,

US2013022769, US2012056352, US2011210164, US2011200757, US2011123809, US2011086158, US2010280149, US2010081008, US2010077939, US2010015420, US2009255624, US2009238912, US2009218347, US2009108006, US2009098303, US2009095759, US2009095758, US2009094994, US2008260304, US2008187742, US2008098900, US2008003384, US2007292569, US2007202228, US2007166512, US2007114145, US2007092718, US2007082202, US2006110498, US2005274093, US2005158524, US2005089606, US2004265453, US2003083423, US10240089, US10208429, US10196309, US10100231, US10100204, US10099459, US10077597, US10046880, US10011696, RU2676430, JP2017514026, FR2946961, EP3129547, EP3061590, EP2888092, EP2636792, EP2636792, EP2552246, EP1775328, EP1381544, EP1072636, EA025866, CN106164348, CN103241209, CN102821625,

Abstract:

Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix. Suitable inorganically filled mixtures are prepared by mixing together an organic polymer binder, water, one or more aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures and the passing the extruded materials between a set of rollers. The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic, or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have especial utility in the mass production of containers, particularly food and beverage containers.

PatBase - US5928741_A



68) Family number: 991518 (US3641229A)

© PatBase

Title: METHOD OF MAKING A PERMEABLE CERAMIC MOLD USED AS A SUBSTITUTE FOR PLASTER OF PARIS MOLDS

Priority: US19620194048 19620511 US19650511407 19651203 US19680735161 19680223
US19700056104 19700701 US19710195509 19711113

Family:	Publication number	Publication date	Application number	Application date
	US3641229 A	19720208	US19700056104	19700701
	US3824112 A	19740716	US19710195509	19711113

Probable Assignee: RESEARCH CORP

Assignee(s):(std): RESEARCH CORP

Assignee(s): RES CORP US

Inventor(s):(std): LAWRENCE W ; COFFIN L ; LAWRENCE WILLIS G ; COFFIN LEON B

Inventor(s): COFFIN L US ; LAWRENCE W US ; LEON B COFFIN ; WILLIS G LAWRENCE

International class (IPC 8-9): B28B1/02 B28B7/34 C04B35/16 (Advanced/Invention); B28B1/00 B28B7/34 C04B35/16 (Core/Invention)

International class (IPC 1-7): B28B7/34 C04B21/00 C04B21/06 C04B29/00 C04B35/22

CPC: Y10S425/044 B28B1/02 B28B7/344 B28B7/346 C04B35/16

European class: B28B1/02 B28B7/34C B28B7/34D C04B35/16

US class: 106/38.3 106/38.35 106/38.9 249/66.1 264/43 264/621 264/86 264/87 425/DIG.44 501/119 501/122 501/125 501/80

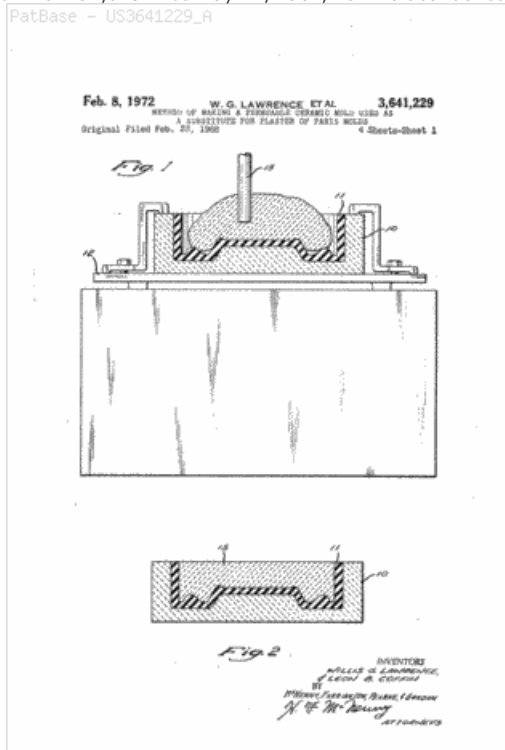
[Classification Explorer](#)

Forward Citations: WO05051567, WO0005045, WO0005045, US9115029, US7967589, US5632925, US5395572, US5288443, US4954460, US4818457, US4698157, US4552329, US4338272, US4271109, US4248637, US4191805, US4143104, US4083527, US4076779, US3993727, US2014128242, US2011309550, US2010009021, FR2968236, FR2431468, EP2460632, EP2460632, EP0567339, DE2634301,

Abstract:

ABSTRACT OF THE DISCLOSURE

A permeable ceramic structure having controlled pore size and useful as substitutes for plaster of paris molds is prepared by forming a uniform admixture of refractory 20 material such as wollastonite or mullite, a fluxing material such as borax or glass frit, a hydrolyzed ethyl silicate, and optionally an alkalizing agent such as magnesia. After molding the hydrolyzed ethyl silicate is completely decomposed to ethyl alcohol and hydrated silica gel by action of 25 heat or the alkalizing agent which causes the mixture to set or harden. The ethyl alcohol is then removed in a controlled rate at 35-40 degrees F. and a high humidity atmosphere to avoid cracking. The dried shape is then fired at a temperature above the melting point of the fluxing material, 30 but below the melting point of the refractory material to form a ceramic bond. This application is a continuation of Ser. No. 735,161 35 filed Feb. 23, 1968, now abandoned, which is a continuation-in-part application of our co-pending patent application Ser. No. 511,407 filed Dec. 3, 1965, now abandoned, which is a continuation application of our co-pending application Ser. No. 194,048. filed May 11, 1962, now 40 abandoned.



69) Family number: 650538 (FR2004171A)

© PatBase

Title: MOULDING CERAMIC OBJECTS USING ELECTRICALLY - CHARGED MOULDS

Priority: US19680714050 19680318

Family:	Publication number	Publication date	Application number	Application date
	FR2004171 A1	19691121	FR19690007720	19690318
	JP48033248 B4	19731012	JP19690020349	19690318

Probable Assignee: GLASBOCK PRODUCTS INC

Assignee(s):(std): GLASBOCK PRODUCTS INC

International class (IPC 8-9): B28B1/26 C25D1/14 (Advanced/Invention);
B28B1/26 C25D1/00 (Core/Invention)

International class (IPC 1-7): B28B1/00 B28B1/26 B28B21/00 C04B33/00 C25D1/14

CPC: B28B1/269 C25D1/14

European class: B28B1/26F C25D1/14

JP class F-Term: 4G052 4G052/CA03 4G052/CB01 4G052/CB12

JP class F-Index: B28B1/26

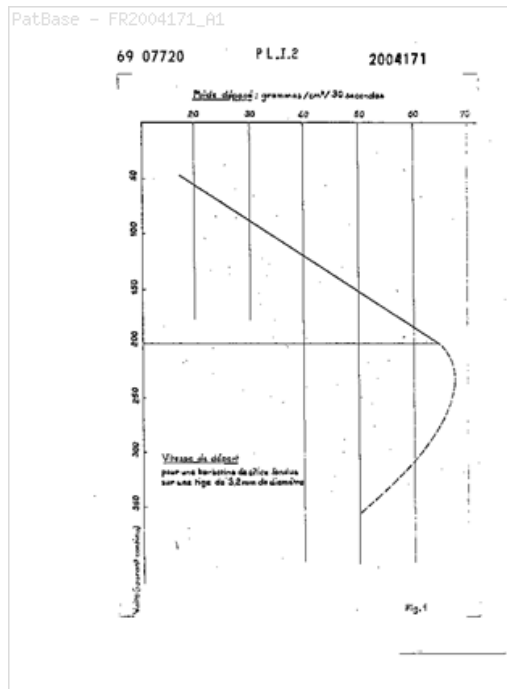
[Classification Explorer](#)

Cited documents: JP35016683 A2, JP31010056 A2,

Forward Citations: WO08054596, WO08054596, WO08042277, US7875217, FR2532955, FR2197654, EP0220159, EP0220159,

Abstract:

Ceramic objects may be moulded effectively and economically by casting into a mould formed of Al, Cu or graphite or made of some non-conductive material such as wax or synthetic resin coated with a conducting material. The ceramic slip may be constituted of 50-91 percent by weight of particles of 0.015-4.76mm diameter of SiO₂, Al₂O₃, Cr₂O₃ and other non-metallic compounds of such sort dispersed in 50-9 percent weakly conducting polarised organic liquids and water. A potential of 10-800 volts is applied across the slip using the metal conducting mould as negative electrode and a conical Al rod, coated with a release agent and inserted in the centre of the mould cavity, as positive electrode. The passage of current through the slip causes the ceramic compound to flow to the mould walls concentrating the liquid agent near the positive electrode. If the mould has a simple contour consisting of straight lines and curves, it may be withdrawn readily from the mould. The moulded object has a shrinkage of about 0.5 percent.



70) Family number: 63911540 (US2016316819A)

© PatBase

Title: POROUS CERAMIC MATERIAL, MANUFACTURING METHOD AND USE THEREOF

Priority: WO2015CN078092 20150430

Family:

Publication number	Publication date	Application number	Application date
US2016316819 AA	20161103	US20150814093	20150730
US9648909 BB	20170516	US20150814093	20150730
WO16172959 A1	20161103	WO2015CN078092	20150430

Probable Assignee: LI JIAN

Assignee(s):(std): HONGMING ZHOU ; JIAN LI ; LI JIAN ; SHENZHEN SMOORE TECH LTD ; SHENZHEN SMOORE TECHNOLOGY LTD ; ZHOU HONGMING

Inventor(s):(std): ZHOU HONGMING ; XIAO KAIWEN ; XIA QINGLU ; LIU PINGKUN ; LI JIAN

Agent(s): JEFFREY D ; WEISS AND MOY PC ; ADVANCE CHINA IP LAW OFFICE

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 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

International class (IPC 8-9): A24F47/00 B05B17/00 B28B1/24 B28B11/24 C03C11/00 C04B38/00 C04B38/06 (Advanced/Invention)

CPC: A24F47/008 B28B1/24 B05B17/00 B28B11/243 C03C11/00

US class: 501/80

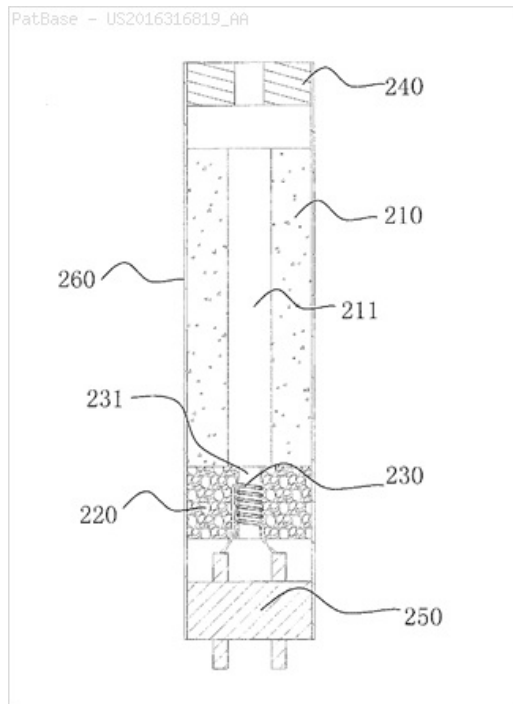
[Classification Explorer](#)

Cited documents: US7578865 BB, US2015359262 AA, CN1644277 A, CN1046684 A, CN103771426 A, CN103030385 A, CN102219547 A, CN101844934 A,

Forward Citations: USD842536, USD836541, USD825102, US9844233, US2017215481, US2017164653, US10244793, US10201190, US10172393, US10159282, US10117466, US10117465, US10111470, US10104915, US10076139, US10070669, US10058130, US10058129, US10058124, US10045568, US10045567, CN108013512,

Abstract:

The present invention relates to a manufacturing method of a porous ceramic material, which includes the following steps: mixing a silicate material and a porogen to obtain a premix, wherein the silicate material includes sodium silicate and other compounds being at least one selected from the group consisting of oxides, nitrides, and carbides; drying the premix to obtain a silicate aggregate; mixing the silicate aggregate and an adhesive to obtain an injection molding material, wherein in a weight percentage, the silicate aggregate is in the range of from 50 percent to 60 percent, the adhesive is in the range of from 40 percent to 50 percent; injection molding the injection molding material to obtain a green body; and degumming and calcinating the green body successively to obtain the porous ceramic material. In the aforementioned manufacturing method of the porous ceramic material, the space-holder method is combined with the injection molding method, such that the obtained porous ceramic material has a high porosity, controllable pore sizes and good mechanical properties. In addition, compared with the dry pressing process, the use of the injection molding process can significantly improve the production efficiency, and is suitable for large-scale production.

**71) Family number: 43752545** (US2009324933A)

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Title: COMPOSITE STRUCTURE FORMATION METHOD, CONTROLLED PARTICLE AND COMPOSITE STRUCTURE FORMATION SYSTEM

Priority: JP20080060189 20080310 US20080055469P 20080523 JP20090053493 20090306
 WO2009JP54344 20090306 US20090381225 20090309 US20120544059 20120709
 US20160195096 20160628 US20170403582 20170111

Family:

Publication number	Publication date	Application number	Application date
CN101960048 A	20110126	CN200980108025	20090306
CN101960048 B	20121003	CN200980108025	20090306
EP2264222 A1	20101222	EP20090718673	20090306
EP2264222 A4	20140604	EP20090718673	20090306
JP2009242942 A2	20091022	JP20090053493	20090306
JP5304333 B2	20131002	JP20090053493	20090306
KR101228004 B1	20130201	KR20107022512	20090306
KR20100121695 A	20101118	KR20107022512	20090306
TW200950886 A	20091216	TW20090107694	20090310
TWI460015 B	20141111	TW20090107694	20090310
US2009324933 AA	20091231	US20090381225	20090309
US2012276388 AA	20121101	US20120544059	20120709
US2016303593 AA	20161020	US20160195096	20160628
US2017113235 AA	20170427	US20170403582	20170111
US8241703 BB	20120814	US20090381225	20090309
US9404186 BB	20160802	US20120544059	20120709
US9573149 BB	20170221	US20160195096	20160628
US10046344 BB	20180814	US20170403582	20170111
WO09113463 A1	20090917	WO2009JP54344	20090306

Probable Assignee: TOTO LTD

Assignee(s):(std): HATONO HIRONORI ; MIZUKANE MASAHIRO ; OKAMOTO OSAMU ; TOTO LTD

Inventor(s):(std): HIRONORI HATONO ; MASAHIRO MIZUKANE ; MIZUKANE MASAHIRO ; HATONO HIRONORI ; OKAMOTO OSAMU ; OSAMU OKAMOTO

Inventor(s): OKAMOTO, Osamu ; HATONO, Hironori ; MIZUKANE, Masahiro

Agent(s): HOFFMANN EITL; CARRIER BLACKMAN AND ASSOCIATES; CARRIER BLACKMAN AND ASSOCIATES PC; JOSEPH P; WILLIAM D; CARRIER JOSEPH P; SABOURIN ANNE G; HYUGAJI MASAHIKO ET AL

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 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 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): B01J13/00 B01J2/16 B01J4/00 B01J8/18 B02C19/00 B02C19/06 B05B1/26 B05B7/14 B05C19/00 B05D1/12 B05D7/12 B28B19/00 B32B5/16 C23C24/04 (Advanced/Invention); B01J13/00 B05B1/26 B05B12/08 B05B7/14 B05D7/12 C23C24/04 (Advanced/Non-invention); B01J13/00 B02C19/06 B05B1/26 B05B7/14 B05C19/00 B05D1/12 B05D7/12 B32B5/16 C23C24/00 (Core/Invention); B01J4/00 B01J8/18 (Core/Non-invention)

CPC: B05B7/1404 B05D1/12 Y10T428/25 Y10T428/2982 B05B7/144 B28B19/00 B05B7/1445 B01J2/16 B02C19/0043 B05B12/085 B02C19/066 B02C19/065 C23C24/04

European class: B05D1/12 C23C24/04 L05B7/14A

US class: 1/1 118/308 118/308S 427/180 427/185 427/185S 427/201 427/426 427/427 428/323 428/323P 428/402 428/402S

JP class F-Term: 4F033 4F033/QA01 4F033/QB05 4F033/QB13/Y 4F033/QD03 4F033/QD11 4F033/QD18 4F033/QE05 4F033/QH10 4K044 4K044/BA11 4K044/BA12 4K044/BA13 4K044/BA17 4K044/BA18 4K044/BA19 4K044/BB11 4K044/CA23 4K044/CA27 4K044/CA29 4K044/CA71

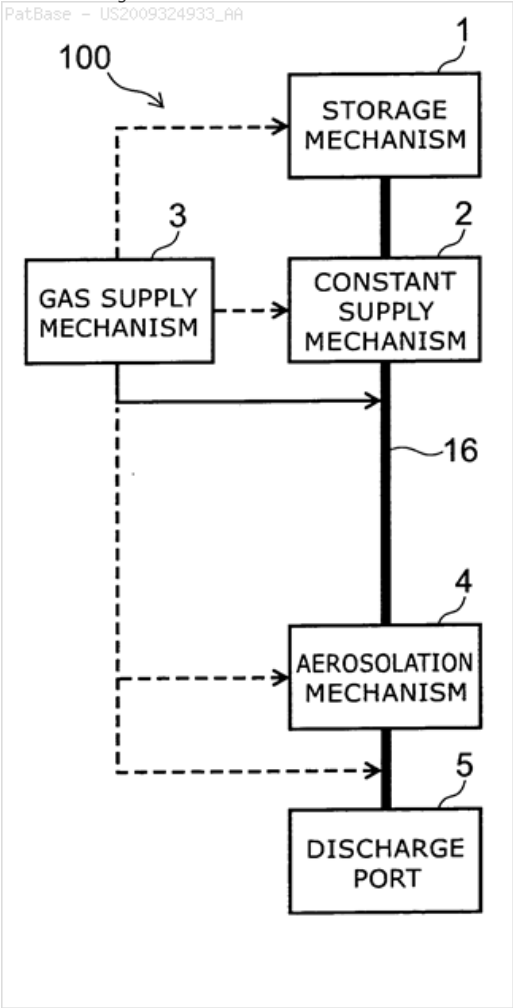
JP class F-Index: B05B7/14 C23C24/04

[Classification Explorer](#)

Cited documents: US7878143 BB, US7153567 BA, US2007231480 AA, US2006099336 AA, JP3348154 B2, JP200801968, JP2008007968 A2, JP2008001968 A2, JP2007291502 A2, JP200682023, JP2006233334 A2, JP2006219764 A2, JP2006219764, JP2006200013 A2, JP2006082023 A2, JP200523365, JP2005023365 A2, EP1583163 A2, EP1231294 A1,

Forward Citations: WO12099350, WO12099350, US2016233121, US2014123739, US10053765, TWI568499, KR101380836, JP2014511260, DE102014204177, CN103501888,

Abstract:
A composite structure formation method based on an aerosol deposition method by which an aerosol with brittle material fine particles dispersed in a gas is sprayed toward a substrate to form a structure made of the brittle material fine particles, the composite structure formation method includes: storing a plurality of controlled particles in a storage mechanism, the controlled particle being an assembly packed with a plurality of particles including the brittle material fine particles; supplying the controlled particles from the storage mechanism to an aerosolation mechanism; disaggregating the supplied controlled particles in the aerosolation mechanism to form an aerosol; and spraying the aerosol toward the substrate to form a composite structure having the structure and the substrate.



72) Family number: 63551588 (US2016264461A)

© PatBase

Title:	HYDROPHOBIC FINISH COMPOSITIONS WITH EXTENDED FLOW TIME RETENTION AND BUILDING PRODUCTS MADE THEREOF			
Priority:	US20150133216P 20150313 WO2016US21970 20160311	US20150973330 20151217 US20180168107 20181023	US20160066417 20160310	
Family:	Publication number	Publication date	Application number	Application date
	AU2016233641 AA	20171019	AU20160233641	20160311
	AU2016233641 AA	20160922	AU20160233641	20160311
	BR112017018494 A2	20180417	BR20171118494	20160311

CA2979225 AA	20170908	CA20162979225	20160311
CN107406688 A	20171128	CN201680012552	20160311
EP3268332 A1	20180117	EP20160714111	20160311
IN201717034774 A	20171215	IN201717034774	20170929
JP2018507839 T2	20180322	JP20170546635T	20160311
KR20170128369 A	20171122	KR20177027148	20160311
MX2017010974 A1	20171018	MX20170010974	20160311
US2016264461 AA	20160915	US20160066417	20160310
US2016264787 AA	20160915	US20150973330	20151217
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US10155692 BB	20181218	US20150973330	20151217
WO16149081 A1	20160922	WO2016US21970	20160311

Probable Assignee: UNITED STATES GYPSUM CO

Assignee(s):(std): UNITED STATES GYPSUM CO

Assignee(s): BLACKBURN DAVID R ; DONELAN JEFFREY W ; DUBEY ASHISH ; LEE CHRIS C ; PENG YANFEI

Inventor(s):(std): ASHISH DUBEY ; CHRIS C LEE ; DAVID R BLACKBURN ; JEFFREY W DONELAN ; YANFEI PENG ; PENG YANFEI ; LEE CHRIS C ; DUBEY ASHISH ; DONELAN JEFFREY W ; BLACKBURN DAVID R

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; JAMES AND WELLS INTELLECTUAL PROPERTY; GOWLING WLG CANADA LLP; FINDLAY ALICE ROSEMARY; VORYS SATER SEYMOUR AND PEASE LLP; SAHU PRADIP; PETTI PHILIP T; VENTURINO ANTHONY 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

International class (IPC 8-9): B28B11/04 B28B19/00 B28B23/00 B32B13/08 B32B13/12 B32B13/14 B32B29/00 B32B5/26 C04B11/27 C04B14/42 C04B18/08 C04B24/04 C04B24/26 C04B24/42 C04B28/02 C04B28/14 C04B40/06 C04B41/00 C04B41/45 C04B41/46 C04B41/48 C04B41/50 C04B41/52 C04B41/63 C04B41/70 C04B7/26 C09D1/00 C09D201/00 C09D5/00 C09D7/12 E04C2/04 E04C2/06 E04C2/26 E04F15/18 (Advanced/Invention); C04B111/00 C04B111/27 C04B111/60 (Advanced/Non-invention)

CPC: C09D5/00 C04B14/42 C04B28/14 C04B7/26 C09D7/12 B32B13/12 C09D201/00 C04B2111/60 C09D1/00 C09D7/40 C04B28/02 C04B24/04 C04B24/42 C04B2103/0066 C04B2103/54 C04B20/0048 C04B18/08 C04B41/46 C04B41/4922 C04B14/042 C04B14/06 C04B14/08 C04B14/10 C04B14/106 C04B14/14 C04B14/16 C04B14/18 C04B14/20 C04B14/28 C04B14/30 C04B14/303 C04B18/101 C04B18/141 C04B22/143 C04B24/2623 C04B24/2641 C04B24/2676 C04B24/2682 C04B24/2688 C04B2103/0088 C04B41/4539 C04B41/4869 C04B41/4876 C04B41/4955 B28B11/046 B28B23/0006 B32B5/26 B32B13/08 B32B13/14 B32B29/005 B32B2255/02 B32B2255/26 B32B2260/021 B32B2260/023 B32B2260/046 B32B2262/02 B32B2307/712 B32B2307/7265 B32B2307/73 B32B2419/04 B32B2419/06 B32B2607/00 C04B28/021 C04B41/009 C04B41/4501 C04B41/483 C04B41/5076 C04B41/52 C04B41/63 C04B41/70 C04B2111/00612 C04B2111/27 E04C2/043 E04C2/06 E04C2/26 E04F15/18 Y02W30/92 Y02W30/94 D06M11/79 D06M13/192 D06M13/513 D06M2200/12 D06N3/0022 D06N3/0063

US class: 428/339 442/327

JP class F-Term: 4G112 4G112/MC12

JP class F-Index: C04B18/08/Z C04B24/04 C04B24/26/A C04B24/42/A

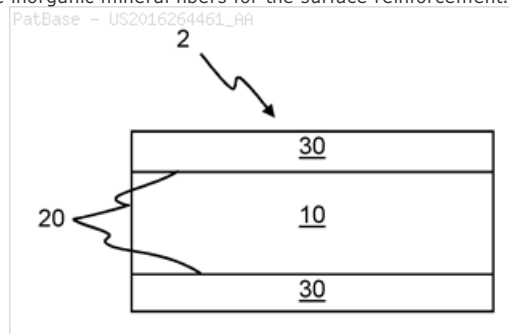
[Classification Explorer](#)

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Forward Citations: US10248407, US10223101, US10207475, CN107351477,

Abstract:

Disclosed are hydrophobic finish compositions and cementitious articles made with the hydrophobic finish compositions. In some embodiments, the article is a waterproof gypsum panel surface reinforced with inorganic mineral fibers that face a flexible and hydrophobic cementitious finish possessing beneficial waterproofing properties. These waterproof gypsum panels have many uses, such as, tile backer board in wet or dry areas of buildings, exterior weather barrier panel for use as exterior sheathing, interior wall and ceiling, and roof cover board having water durability and low surface absorption. The flexible and hydrophobic cementitious finish can include fly ash, film-forming polymer, preferably silane compound (e.g., alkyl alkoxysilane), an extended flow time retention agent including either one or more carboxylic acids, salts of carboxylic acids, or mixtures thereof, and other optional additives. Preferably a pre-coated non-woven glass fiber mat is employed to provide the inorganic mineral fibers for the surface reinforcement.



Title: FORMED BUILDING MATERIALS

Priority: US20080101631P 20080930 US20080110489P 20081031 US20090149610P 20090203
US20090246042P 20090925 US20090571398 20090930 US20100826209 20100629
US20110475204P 20110413 US20110191209 20110726 US20110285534 20111031

Family:

Publication number	Publication date	Application number	Application date
US2012082839 AA	20120405	US20110285534	20111031
US8869477 BB	20141028	US20110285534	20111031

Probable Assignee: CALERA CORP

Assignee(s):(std): BOURCIER WILLIAM ; CALAS GUILLAUME ; CALERA CORP ; CAMIRE CHRIS ; CHEN IRVIN ; DEVENNEY MARTIN ; LU PENG ; HA ERIC ; KENDALL TREAVOR

Inventor(s):(std): CHEN IRVIN ; DEVENNEY MARTIN ; CALAS GUILLAUME ; KENDALL TREAVOR ; HA ERIC ; LU PENG ; CAMIRE CHRIS ; BOURCIER WILLIAM

Agent(s): CALERA CORP; VANDANA

International class (IPC 8-9): B28B17/02 B32B13/00 B32B13/04 B32B13/08 B32B17/06 B32B29/00 C04B14/00 C04B18/06 C04B22/10 C04B28/14 C04B7/14 C04B7/36 E01C13/08 E01C5/04 E01C5/06 E04C2/02 E04C2/04 E04C5/08 (Advanced/Invention); C04B103/00 C04B111/00 (Advanced/Non-invention)

CPC: C04B28/02 C04B18/162 C04B18/08 C04B22/106 B01D2257/504 B28B17/02 C04B28/14 C04B2103/0086 C04B2111/00017 C04B2111/0062 C04B2111/00629 E01C5/04 E01C5/06 E01C5/065 C04B28/04 B28B5/00 C04B14/28 C04B16/04 C04B22/10 Y10T428/31996 Y02W30/92 Y02W30/94 Y02W30/95 Y02W30/97

European class: B28B17/02 C04B22/10 C04B28/14 E01C5/04 E01C5/06 E01C5/06B L01D257/504 M04B103/00W26 M04B111/00E M04B111/00T6B M04B111/00T6B4

US class: 106/15.05 106/15.050S 106/464 106/638 106/705 106/705S 106/772 106/772S 106/789 106/789S 106/817 106/817S 156/39 156/39S 423/220 423/430 428/221 428/221P 428/446 428/446S 428/537.7 428/537.700S 52/223.6 52/309.17 52/791.1

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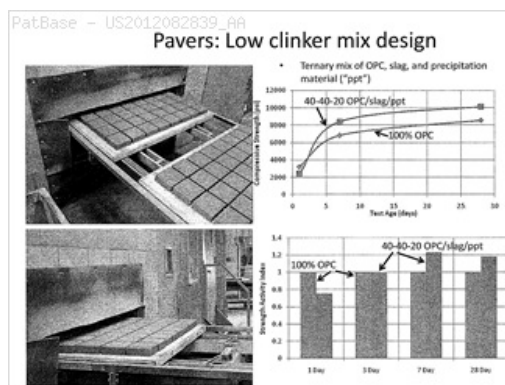
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US2004126293 AA, US2004111968 AA, US2004109927 AA, US2004094279 AA, US2004052865 AA, US2004040715 AA, US2004040671 AA, US2004028963 AA, US2004014845 AA, US2004007476 AA, US2003229572 AA, US2003213937 AA, US2003188668 AA, US2003170159 AA, US2003146163 AA, US2003126899 AA, US2003123930 AA, US2003027023 AA, US2003017088 AA, US2002155103 AA, US2002151017 AA, US2002127474 AA, US2002009410 AA, US2001054253 AA, US2001023655 AA, US2001022952 AA, US1986736 A, US1924503 A, US1897725 A, US1865833 A, US1823269 A, US1785365 A, US1759361 A, US1678345 A, US1655171 A, US1543942 A, US1493579 A, US1176747 A, US1172930 A, US1169766 A, RU1819854, NL7607470 A, JP7265688 A2, JP7061842 A2, JP63312988, JP59100280, JP51102357 A1, JP4317721 A2, JP3184892 B2, JP3170363 A2, JP3020491, JP2009279530 A2, JP2006076825 A2, JP2006075717 A2, JP2005052762, JP2004174370, JP2003041388, JP2002273163 A2, JP2000226402 A2, JP10305212 A2, JP10287461 A2, GB911386 A, GB2371810 A1, GB2210035 A1, GB2208163 A1, GB2050325 A1, 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Forward Citations:

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Abstract:

Formed building materials comprising a sequestered CO₂ are provided. The building materials of the invention include a composition comprising a carbonate/bicarbonate component. Additional aspects of the invention include methods of making and using the formed building materials.



74) Family number: 34110654 (EP1745901A3)

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Title: METHOD AND DEVICE FOR PRODUCING A MOULDED BRICK, MOULDED BRICK AND CONSTRUCTION OF AT LEAST TWO MOULDED BRICKS VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES FORMSTEINS, FORMSTEIN UND BAUWE

Priority: DE200510034807 20050721 DE200610022516 20060515 DE200610034073 20060720
EP20060015133 20060720 EP20060015130 20060720

Family:	Publication number	Publication date	Application number	Application date
	DE102006022516 A1	20070201	DE200610022516	20060515
	DE102006034073 A1	20070405	DE200610034073	20060720
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	HU027193 T2	20161028	HU20060015133T	20060720
	PL1745902 T3	20160930	PL20060015133T	20060720

Probable Assignee: ROCKWOOL INT AS

Assignee(s):(std): ROCKWOOL INT ; ROCKWOOL INT A S ; ROCKWOOL INT AS ; ROCKWOOL MINERALWOLLE

Assignee(s): DEUTSCHE ROCKWOOL MINERALWOLL GMBH AND CO OHG

Inventor(s):(std): KLOSE GERD RUEDIGER ; PAULITSCHKE WENER ; PAULITSCHKE WERNER ; PIEPER DIPL ING HERBERT ; PIEPER HERBERT ; PIEPER HERBERT DIPL ING

Inventor(s): PIEPER DIPL ING

Agent(s): KILBURN AND STRODE LLP; STENGER WATZKE AND RING;
RAUSCHWANISCHECKBRINKMANNINTELLECTUAL PROPERTY; STENGER WATZKE RING; RAUSCH
WANISCHECK BERGMANN BRINKMANN; CARPINTERO MARIO; CAMPELLO REYES

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO RS
SE SI SK TR YU

International class (IPC 8-9): B28B11/00 B28B11/04 C04B26/12 C04B26/32 C04B28/24 C04B28/26 C04B30/02 E04B1/14 E04B2/02
E04B2/16 E04B2/42 E04C1/40 E04C1/41 (Advanced/Invention);
B28B11/00 B28B11/04 E04B1/02 E04B2/02 E04B2/42 E04C1/00 (Core/Invention)

CPC: Y02W30/97 C04B26/12 C04B26/32 C04B28/24 C04B28/26 C04B30/02 C04B2111/00612 E04B2002/0291
Y02P40/63 E04B2/16 B28B11/042 B28B11/043 E04B2002/0208 E04B2002/0226 E04B2002/0293
B29C44/186 B29C44/445 B29K2025/06 B29L2031/102

European class: B28B11/04B B28B11/04B1 C04B26/12 C04B26/32 C04B28/24 C04B28/26 C04B30/02 E04B2/16
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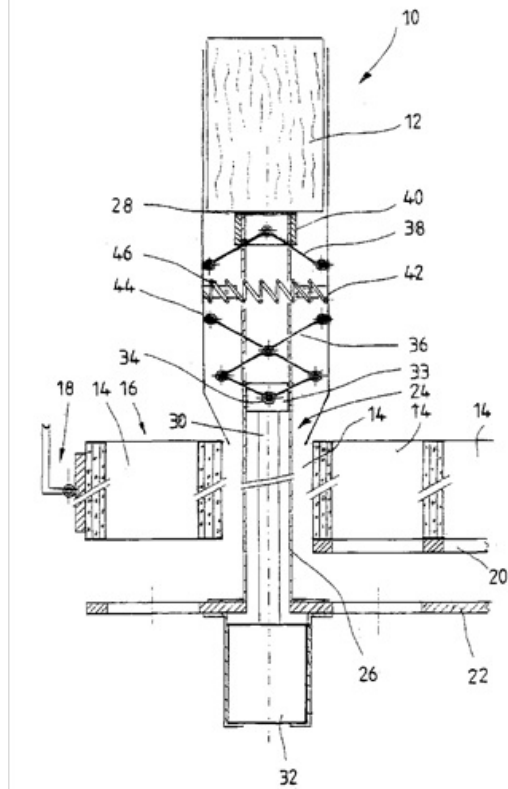
[Classification Explorer](#)

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A1, DE2532873 A1, DE10217548 A1, DE10217548 A1, DE10034342 A1, DE10034342 A1, AT367680 B,
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Forward Citations: WO18130680, WO17194677, US8371024, FR3027615, FR2963034, EP3348534, EP2431145, EP2431145,
EP1995029, EP1995029, DE102015108255, DE102015013405, DE102010045927, DE102010045927,
DE102009045329, DE102009045329, DE102007061451, DE102007031906, CZ304720,

Abstract:

The method involves partially inserting an filling made of an insulating material into a channel (14) of a moulded brick (16), where a cuboid shaped body of the brick consists of two parallel large surfaces that are aligned parallel and are at a distance to each other, and a right angled running side surfaces. The channel runs parallel to the side surfaces and is right angled to the large surfaces. A portion of the channel is filled with free flowing or blister insulating particles made of mineral fibers with or without adhesive cement. Independent claims are also included for the following: (1) a moulded brick, particularly a building brick, clay brick with a cuboid shaped body (2) a device for implementing the method for producing a moulded brick (3) a building, particularly a wall that consists of two moulding bricks.



75) Family number: 22930659 (DE664650A)

Title: SCHNECKENPRESSE FUER TON O. DGL. MIT ZWEIMALIGER ENTLUEFTUNG SCREW PRESS FOR SOUND OR THE LIKE. TWO TIMES vent (Machine translation)

Priority: DE1935H145153 19351002

Family:	Publication number	Publication date	Application number	Application date
	DE664650 A	19380915	DE1935H145153	19351002

Probable Assignee: HAENDLE AND SOEHNE KARL

Assignee(s):(std): HAENDLE AND SOEHNE KARL

Assignee(s): KARL HAENDLE AND SOEHNE

International class (IPC 8-9): B28B3/22 B30B11/24 (Advanced/Invention); B28B3/20 B30B11/22 (Core/Invention)

International class (IPC B28B3/22 1-7):

CPC: B28B3/22 B30B11/245

European class: B28B3/22 B30B11/24D

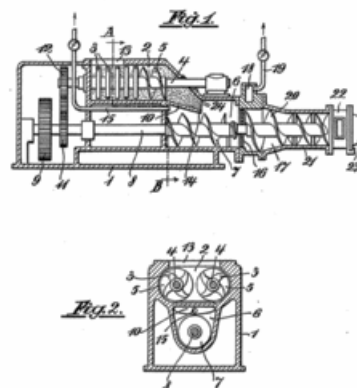
Classification Explorer

Forward Citations: US2785455, US2507492, DE881013, CN103042599, CN103042599,

Abstract:

Source: DE664650A [DE] (Claim 1) 1. PATENTANSPRUECHE: i. Schneckenstrangpresse fuer Ton u. dgl. mit zweimaliger Entleertung, da' durch gekennzeichnet, dass der ersten Entleertungskammer ein Doppelwellenmischer vorgeschaltet ist, der ueber der Strang presse gelagert und mit ihr durch einen sich allmaechlich verjuegendenden Kanal ver bunden ist, welcher durch das in ihm befindliche Pressgut zugleich einen Luft- dichten Abschluss zwischen Mischer und Strangpresse bildet... 2. Strangpresse nach Anspruch i, da durch gekennzeichnet, dass das Mundstueck des Verbindungskanals zwischen Mischer und Presse in der ersten Entleertungskammer liegt und flach oder flachrund ausgebildet und am Ende des Verbindungskanals eine an sich bekannte Zerkleinervorrichtung fuer das Pressgut vor gesehen ist.

Machine translation: (claim 1) 1 PATLNTANSPRUECHE: i screw extruder for clay, etc., with two-time vent, daz 'through in that the first decision is luftungskammer a Doppelwellennm @upstream Ischer, storage of over the line press, and with it tied Ver by a gradually tapered channel, which by him in findliche be pressed material also forms a tight seal between luft-mixer and extruding machine... seen for extrusion press as claimed in claim i, since -acterized in that the mouthpiece of the connecting channel between the mixer and press in the first vent is located chamber and formed to be flat or gently rounded and at the end of the connecting channel a known comminution device for before the pressing is.

**76) Family number: 21649664** (FR1452185A)

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Title: PROCEDE ET DISPOSITIF POUR LA FABRICATION D'ARTICLES CERAMIQUES MOULES, GLACES OU NON
GLACES METHOD AND DEVICE FOR MAKING CERAMIC DIES, ICE ICE OR NOT (Machine translation)

Priority: FR19650026046 19650726

Family:	Publication number	Publication date	Application number	Application date
	FR1452185 A	19660225	FR19650026046	19650726

Probable Assignee: ARMROCK PRODUCTS INC

Assignee(s):(std): ARMROCK PRODUCTS INC

International class (IPC 8-9): B28B11/24 B28B15/00 C04B33/32 (Advanced/Invention);
B28B11/00 B28B15/00 C04B33/32 (Core/Invention)

International class (IPC 1-7): B28B1/26

CPC: B28B11/243 B28B15/00 C04B33/32

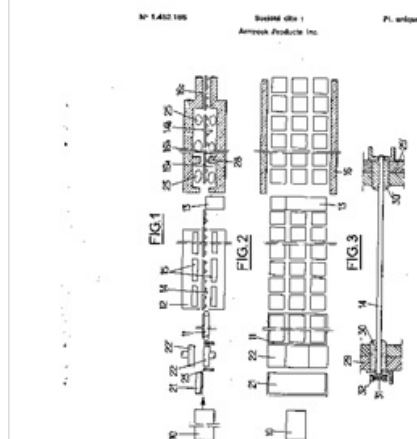
European class: B28B11/24C B28B15/00 C04B33/32

[Classification Explorer](#)

Abstract:

Source: FR1452185A [FR] [Source: Claim 1] 1. R_9SUME La presente invention a pour objet A. Un procede pour la fabrication de dalles ceramiques, glacees ou non, de dimensions uni formes, procede presentant les caracteristiques sui vantes prises isolement ou en combinaison: Il' On cuit les dalles en une seule operation de cuisson, et on utilise un melange pratiquement sec d'un liant melange de facon intime et d'une matiere minerale ayant la durete physique de la chamotte broyee et de talc mineral, avec une grosseur des grains telle que 100 percent des parti cules passenta travers un tamis ayant des mailles de 0,6mm, la repartition de la grosseur des grains etant celle obtenue par un broyage usuel et connue comm se pretant au moulagea froid a la presse; on produit avec ce melange des articles moules -de forme requise dans un outil de moulagea la presse sous une pression d'envi ron 140a 350 kg/cm2, on amene les articles moulesa la presse depuis l'outil de moulage et en couche uniquea un four de sechage, on sou met la couche unique des articles moules et seches a un chauffage uniformea partir du haut ou du bas ou, simultanement, du haut et du bas a une temperature de sechage de 250 a 370 OC et au-delà, pendant une duree allant de 3 a 10 mi nutes, en vue d'obtenir les articles moules secs et solides ayant la forme et les dimensions re quises, ces articles etant vehiculesa plat et enduits, le cas echeant, d'une glacure; on les achemine ensuite vers un poste de cuisson qu'ils traversent, en position horizontale, sous forme de couche unique, tandis qu'on applique de la chaleur du haut ou du bas ou, simultanement, du haut et du bas, et on amene les articles moules dans la pre miere zone du poste de cuisson, pendant une duree d'environ 2a 3 minutes, a la temperature de re- chauffage d'environ 540a 760 OC, on les soumet dans la seconde zone de cuisson, toujours sous forme de couche unique et de la meme maniere, a des temperatures de cuisson de 870 a 1150 OC et on les refroidit dans une troisieme zonea environ 315 a 430OC, pour les refroidir ensuitea Pair libre jusqu'a une temperature permettant leur manipulation, les operations de sechage et de cuis son etant executees pendant le transport continu des articles moules; 20 'On utilise un materiau de depart dont 85.5%o' ou -davantage sont retenus sur un tamis ayant des mailles de 0,037 mm et on effectue le sechage a une temperature d'environ 200OC pendant une duree d'environ 7 minu s; 30 On effectue le chauffage et la cuisson conti nue sans qu'une partie des accessoires du four soit avancee avec les articles moules; 40 Les articles moules, en particulier des dalles, sont transportes pendant l'operation. de sechage et de cuisson sur des rouleaux; 50 On utilise un materiau de depart dont 85 51o ou davantage passenta travers un tamis ayant des mailles de 0,075 Tnm et on effectue la cuisson pen dant une duree d'environ 6 a 12 minutes; 60 On utilise comme liant du silicate de sodium et/ou de l'argile plastique; 7" Pour obtenir des articles moules, en parti culier pour la fabrication de dalles non trieies de dimensions pratiquement uniformes, et de couleur, le cas echeant, egaleme nt uniforme, presentanta l'etat cuit une resistance excellente contre le choc thermique en raison de la soliditea -sec et de la souplesse du liant et qui n'exigent pas de mate riaux ayant un coefficient de dilatation particu lierement faible, on utilise un melange intime d'un liant, en particulier de silicate de sodium, et d'une matiere minerale broyee non plastique, d'une gros seur des grains d'environ 0,6mm et moins, ayant des proprietes de dilatation analoguesa celles de la glacure eventuellement utilisee et une porosite s'eleventa environ 15 a 40 percent de son volume; 80 La matiere minerale non plastique utilisee presente une porosite d'environ 15 a 25 percent c de son volume; 9" On utilise comme liant environ 15 a 30 c,e en poids d'argile plastique; 100 La matiere minerale non plastique a une grosseur des grains d'environ 0,6 mm et moins, et un coefficient de dilatation semblablea celui de la glacure;. Ile On utilise comme materiau de depart de l'argile cuite ou de la chamotte broyee, de la cen

dre volcanique, du carbure de silicium ou du cyanite ayant une grosseur des grains de 0,074 mm ou moins, et on ajoute 8 a 10 percent en poids de silicate de sodium d'une densite d'environ 400 Baume avec broyage simultane, on brasse Pagglo- mere granuleux de silicate de sodium et de cha motte pour former une substance uniforme tres fine, et on introduit cette substance dans un moule de compression pour la soumettre a une pression d'environ 140a 350 kg/cm², puis on porte le materiau comprime a une temperature d'environ 200a 215 OC pendant au moins 7 minutes pour une epaisseur de 6,35 mni; 120 On amene la masse de moulage melangee au silicate de sodium avant son introduction dans la presse au taux d'humidite necessaire pour le moulage a la presse; 131) Dans Particle moule comprime et non cuit, la chamotte moulee est constituee par un melange de materiau dont 40 percent ont en poids une grosseur des grains de 0,42 mm et 60 ge une grosseur des grains de 0,15 mm et moins; 140 D-in Particle moule comprime et non cuit, la chamotte broyee est constituee par un melange de materiau dont 15 qo' ont une grosseur des grains de 0,15 a 0,1 mm, 10 percent de 0,01 a 0,075 mm et 75 percent de 0,075 mm et moins. B. Le produit industriel nouveau que constitue un four de cuisson servanta la mise en #uvre du procede vise sous A, presentant les caracteristiques suivantes, prises isolement ou en combinaison: ISO Il comporte une maconnerie en briques refractaires et une ouverture centrale horizontale allant de bout en bout et renferme une rangee de rouleaux horizontaux tournant de facon continue et dispose avec un ecart mutuel de l'ouverture horizontale, des dispositifs et un entrainement a vitesse constante pour ces rouleaux, ces rouleaux constituant le dispositif tout entier pour le transport des articles moules, en particulier des dalles, a travers le four; ces rouleaux sont places en direction d'avance des dalles passant sur eux a un ecart les uns des autres qui est inferieure la moitie de la dimension de la dalle en direction d'avance, le four comportant, en outre, une premiere zone de rechauffage munie d'elements de chauffage places au-dessus et en dessous des rouleaux, une zone de cuisson centrale comportant des dispositifs de chauffage au-dessus et en dessous de chaque rangee de rouleaux et, enfin, une zone de refroidissement ainsi que des parois entre la zone de cuisson et la zone de refroidissement, servanta proteger cette derniere contre la chaleur venant de la zone de cuisson; 160 Les parois superieures et inferieures de la maconnerie sont placees a proximite des rouleaux et les parois entre la zone de cuisson et la zone de refroidissement s'etendent a partir des parois superieures et inferieures et comportent chacune une partie placee au-dessus de l'ouverture et une partie placee en dessous de cette ouverture; 170 Les rouleaux sont constitues par un materiau ceramique fortement refractaire et tournent des deux cotes dans des paliers formes par un materiau isolant elastique, par exemple des fibres ceramiques. **Machine translation:** [Source: Claim 1] R_9SUME 1. The present invention relates to a method for A. manufacturing ceramic tiles, icy or not, size uniform, method with the features taken following isolation or in combination: It 'slabs are cooked in a single baking operation, and using a substantially dry mixture of a binder mixed intimately and of an inorganic material having the physical hardness of the ground chamotte and talc mineral with a size of grains such that 100 percent of particles pass through a sieve having meshes of 0,6mm, the distribution of the grain size being that obtained by conventional grinding and known comm TEND cold moulage to the press; are produced with this mixture molds items - from required shape in a press tool moulage under a pressure of 140a 350 kg / cm², it brings articles moulded the press for the molding tool and a layer unique drying furnace, penny puts the single layer articles molds and dried in a heating uniform area from the top or bottom or, simultaneously, the top and base a temperature drying DE250 OCA 370 OC and beyond, for a period QE3 from 10 minutes, in order to obtain dry solid articles and molds in the shape and dimensions required, these articles being vehicules flat and coatings, if appropriate, a glaze; then they are moving towards a cooking station they cross in a horizontal position, as a single layer, and that applies heat up or down or, simultaneously, the top and bottom, and it brings the molded articles in the first area of the cooking station for a duration d'environ 2a 3 minutes, the temperature of re-heating d'environ 540a 760 OC, are subjected in the second cooking zone, always in the form of single layer and in the same way, a cooking temperature de 870 has 1150 OC and cooled in a third zone about 315 to 430OC, to cool ensuite Pair free up to a temperature handling, drying the operations and cooking being performed during the continuous transportation of the items molds; 20 'a starting material is used which 85.5 # o' -more or are retained on a sieve having meshes de 0,037 mm and drying is carried out at a temperature of about 200oC for a minute, about 7 s duration; 30 is carried out heating and cooking continue without that part of the oven accessories or items with advanced molds; 40 Sections molds, in particular slabs, are transported during Poperation. drying and firing on rollers; 50 used a starting material dont 85 51o or more pass through a sieve having meshes de 0,075 Tnm and performing the cooking pending a period of about 6 to 12 minutes; 60 is utilisee relying sodium silicate and / or of plastic clay; 7 "For molds items, in particular for making unsorted practically uniform in size slabs, and color, if any, also uniform, the state presentant a cooked excellent resistance against thermal shock due to the solidite -sec and flexibility of the binder and does not require materials having a coefficient of expansion particularly low, an intimate mixture of a binder is used, especially sodium silicate and a mineral matter FLOUR not plastic, a large size grains environ 0,6mm less, with expansion properties analogous those of glaze used and possibly a porosity is approximately 15 eleventa 40 percent of its volume; 80 the mineral matter not plastic used has a porosity of approximately 15 to 25 percent of its volume v; 9 "is used as binder has approximately 15 30 c, e by weight d'argile plastic; 100 The non-plastic mineral matter has a grain size of about OFFL mm or less, and a coefficient of expansion than the glaze semblable; 110 Island is utilisee material of flights from fired clay or crushed chamotte, the cen volcanic dre, silicon carbide or kyanite with a grain size of 0.074 mm or less, and ajoute 8 10 percent by weight sodium silicate with a density of about 400 Baume with simultaneous grinding, stirring is Pagglo- mother granular sodium silicate and clod chain to form a very fine uniform substance, and introducing the substance in a compression mold for the soumettre a une pression d'environ 140a 350 kg / cm², then the door materiau comprimee an environ 200a temperature 215 OC for at played in 7 minutes to a thickness de 6,35 mni; 120 It brings the molding compound mixed with sodium silicate before its introduction in the press necessary moisture content for the press moulage; 131) In Particle mold compresses and uncooked, ground grog is constituted by a mixture of material with 40 percent by weight o have a big grain size of 0.42 mm and 60 ge a grain size of less 0.15 mm; D-140 in Particle mold compresses and uncooked, milled fireclay is constituted by a mixture of material dont 15 qo 'have a size of de 0,15 grains 0.1 mm, 10 percent has de 0,01 0,075mm and 75 percent de 0,075 mm and less. B. The new industrial product is a cooking oven servanda setting #uvre process covered Sous A, presenting the following characteristics: taken singly or in combination: ISO It includes a masonry brick refractories and a central opening horizontally from end to end and contains a row of horizontal rollers rotating continuously and disposed with a mutual gap of the horizontal opening, devices and entrainement a constant speed for these rollers, these rollers constituting the entire device for transport articles molds, in particular slabs, through the furnace; these rollers are placed in the direction of advance of the slabs passing over eux a gap from one another which is inferieure half the dimension of the slab feeding direction, the furnace comprising, in addition, a premiere reheating zone provided with seats heaters above and below the row WPL, a central cooking zone having above the heaters and below each row of rollers, and finally a cooling zone so -that walls between the cooking zone and the cooling zone, Servanta protect the latter against the heat coming from the cooking zone; 160 The upper and lower walls of masonry are close placees rolls and the walls between the cooking zone and cooling zone etendent from the upper and lower walls and each have a place part above the opening and part positioned below the opening; The rollers 170 are constituted by a highly refractory ceramic material and turn on both sides in bearings forms by insulating elastic materials, such as ceramic fibers.

**77) Family number: 23038670** (FR1271493A)

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Title: PROCEDE DE FABRICATION CONTINUE D'OBJETS CERAMIQUES TRES MINCES MANUFACTURING PROCESS CONTINUOUS OBJECTS CERAMICS VERY THIN (Machine translation)

Priority: FR19590811616 19591130

Family:	Publication number	Publication date	Application number	Application date
	FR1271493 A	19610915	FR19590811616	19591130

Probable Assignee: GLADDING

Assignee(s):(std): GLADDING

Assignee(s): GLADDING MC BEAN AND CO

International class (IPC 8-9): B28B17/00 B28B3/12 B28B5/02 H01B3/02 (Advanced/Invention); B28B17/00 B28B3/00 B28B5/00 H01B3/02 (Core/Invention)

International class (IPC 1-7): C04B39/00

CPC: B28B17/0018 B28B3/126 B28B5/027 H01B3/02

European class: B28B17/00C B28B3/12C B28B5/02C2 H01B3/02

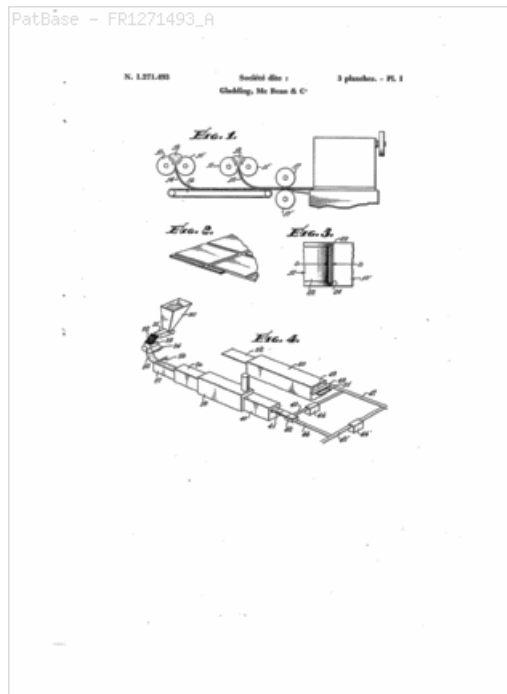
[Classification Explorer](#)

Forward Citations: WO9719796, WO9719796, WO13050845, WO03095382, ITRE20110081, FR2839509, EP2763827, EP0667523, EP0667523, EP0536584, EP0536584, EP0497151, DE4102469,

Abstract:

Source: FR1271493A [FR] (Claim 1) 1 Procédé pour transformer de façon continue une matière céramique finement divisée, non coïncée et capable de couler librement en une mince bande continue cohérente et à densité homogène pourvue de faces planes consistant à déplacer positivement de haut en bas deux surfaces coniques cylindriques dures à la même vitesse linéaire vers un intervalle ménagé entre elles, et à déposer par gravité une matière céramique finement broyée et capable de couler librement, cette matière con tenant au minimum 30 percent o de particules aptes à traverser un tamis ayant 24 mailles au centimètre, à assurer le passage continu à travers ledit inter valle d'une bande cohérente, dense, continue et rendue compacte ayant l'épaisseur désirée, et à régler la densité et l'épaisseur de cette bande sui- vant la relation - $EMI0009.0033$ dans laquelle T est l'épaisseur que doit posséder la bande et R est le rayon de chacune des surfaces cylindriques précitées.

Machine translation: (Claim 1) a method of converting a continuous basis of a finely divided ceramic material, non-peaceful corner and able to flow freely in a thin continuous band coherent and homogeneous gene density provided with flat faces of moving positively downward two cylindrical surfaces con upset hard at the same speed to a linear interval struck between them, and a deposit by gravity and finely ground ceramic material capable of flowing freely, this matter con taking at least 30 percent of particles capable o has pass through a sieve having 24 meshes per centimeter, was ensure a continuous flow through said inter interval of a coherent band, dense, continuous and compacted with the desired thickness, and set the density and thickness of this band following - tion the relationship - $EMI0009.0033$ where T is the thickness that must possess the tape and R is the radius of each cylindrical surfaces ABOVE.

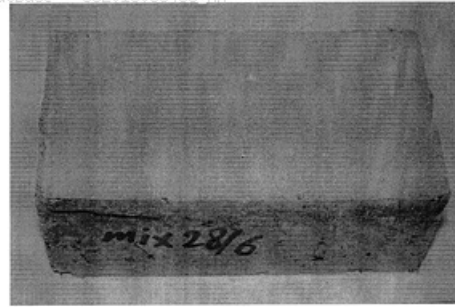


78) Family number: 54254674 (US2016068433A)

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Title:	CEMENT BINDER																																																																	
Priority:	GB20130007622 20130426		EP20140719845 20140425		WO2014GB51300 20140425																																																													
Family:	<table><tr><th>Publication number</th><th>Publication date</th><th>Application number</th><th>Application date</th><th></th></tr><tr><td>CA2910362 AA</td><td>20151023</td><td>CA20142910362</td><td>20140425</td><td></td></tr><tr><td>DE602014026190 D1</td><td>20180628</td><td>DE201460026190T</td><td>20140425</td><td></td></tr><tr><td>EP2989063 A1</td><td>20160302</td><td>EP20140719845</td><td>20140425</td><td></td></tr><tr><td>EP2989063 B1</td><td>20180530</td><td>EP20140719845</td><td>20140425</td><td></td></tr><tr><td>ES2676413 T3</td><td>20180719</td><td>ES20140719845T</td><td>20140425</td><td></td></tr><tr><td>GB201307622 A0</td><td>20130612</td><td>GB20130007622</td><td>20130426</td><td></td></tr><tr><td>GB2513417 A1</td><td>20141029</td><td>GB20130007622</td><td>20130426</td><td></td></tr><tr><td>GB2513417 B2</td><td>20150429</td><td>GB20130007622</td><td>20130426</td><td></td></tr><tr><td>US2016068433 AA</td><td>20160310</td><td>US20140786864</td><td>20140425</td><td></td></tr><tr><td>US10227257 BB</td><td>20190312</td><td>US20140786864</td><td>20140425</td><td></td></tr><tr><td>WO14174312 A1</td><td>20141030</td><td>WO2014GB51300</td><td>20140425</td><td></td></tr></table>						Publication number	Publication date	Application number	Application date		CA2910362 AA	20151023	CA20142910362	20140425		DE602014026190 D1	20180628	DE201460026190T	20140425		EP2989063 A1	20160302	EP20140719845	20140425		EP2989063 B1	20180530	EP20140719845	20140425		ES2676413 T3	20180719	ES20140719845T	20140425		GB201307622 A0	20130612	GB20130007622	20130426		GB2513417 A1	20141029	GB20130007622	20130426		GB2513417 B2	20150429	GB20130007622	20130426		US2016068433 AA	20160310	US20140786864	20140425		US10227257 BB	20190312	US20140786864	20140425		WO14174312 A1	20141030	WO2014GB51300	20140425	
Publication number	Publication date	Application number	Application date																																																															
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WO14174312 A1	20141030	WO2014GB51300	20140425																																																															
Probable Assignee:	COVENTRY UNIV																																																																	
Assignee(s):(std):	COVENTRY UNIV ; UNIV COVENTRY																																																																	
Assignee(s):	GANJIAN ESHMAIEL																																																																	
Inventor(s):(std):	GANJIAN ESHMAIEL																																																																	
Inventor(s):	ESHMAIEL GANJIAN																																																																	
Agent(s):	BERESKIN AND PARR LLP SENCRL SRL; GOLDING LOUISE ANN; ISERN JORGE; WITHROW AND TERRANOVA PLLC; GUSTAFSON VINCENT K; DEHNS																																																																	
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																																																																	
International class (IPC 8-9):	B28B1/16 C04B111/10 C04B28/08 C04B7/153 C04B7/17 E01C5/06 E01C5/22 E04C1/00 (Advanced/Invention); C04B111/10 (Advanced/Non-invention)																																																																	
CPC:	C04B28/082 B28B1/16 E01C5/065 E01C5/22 E04C1/00 C04B7/153 C04B28/08 C04B2111/1037 C04B18/143 C04B18/162 C04B7/17 Y02P40/143 Y02W30/94 Y02W30/95																																																																	
US class:	106/640 106/644 106/789 264/256 428/703																																																																	
Classification Explorer																																																																		
Cited documents:	WO9814410 A1, WO09064929 A2, WO0000448 A1, US2008017077 AA, JP2013006743 A2, GB2375347 A1,																																																																	

Abstract:
The invention provides a binder composition comprising: (a) ground granulated blast furnace slag (GGBS), (b) basic oxygen slag (BOS), and (c) an alkaline inorganic waste material selected from by-pass dust (BPD), cement kiln dust (CKD), and mixtures thereof. The use of such a composition as a binder in a concrete mix, concrete mixes comprising such a composition, methods of manufacturing concrete articles, and concrete articles such as paving blocks are also provided.

**79) Family number: 58178684** (US2015000558A)

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Title: FORMED BUILDING MATERIALS

Priority: US20080101631P 20080930 US20080110489P 20081031 US20090149610P 20090203
 US20090246042P 20090925 US20090571398 20090930 US20100826209 20100629
 US20110475204P 20110413 US20110191209 20110726 US20110285534 20111031
 US20140488835 20140917

Family:

Publication number	Publication date	Application number	Application date
US2015000558 AA	20150101	US20140488835	20140917

Probable Assignee: CALERA CORP

Assignee(s):(std): CALERA CORP

Inventor(s):(std): BOURCIER WILLIAM ; CALAS GUILLAUME ; CAMIRE CHRIS ; CHEN IRVIN ; DEVENNEY MARTIN ; HA ERIC ; KENDALL TREAVOR ; LU PENG

International class (IPC 8-9): B28B5/00 C04B14/28 C04B16/04 C04B28/04 (Advanced/Invention)

CPC: C04B28/04 C04B14/28 C04B16/04 B28B5/00 B01D2257/504 B28B17/02 C04B22/10 C04B28/02 C04B28/14 C04B2103/0086 C04B2111/00017 C04B2111/0062 C04B2111/00629 E01C5/04 E01C5/06 E01C5/065 Y10T428/31996 Y02W30/92 Y02W30/94 Y02W30/95 Y02W30/97

US class: 106/15.05 106/18.26 106/672 106/679 264/258 264/261 264/299 524/4

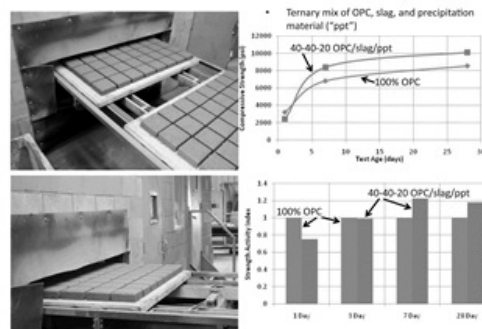
[Classification Explorer](#)

Cited documents: US8869477 BB, US8006446 BB, US3847632 A,

Forward Citations: US9988317, US9790703, US9267211, US9260314,

Abstract:

Formed building materials comprising a sequestered CO₂ are provided. The building materials of the invention include a composition comprising a carbonate/bicarbonate component. Additional aspects of the invention include methods of making and using the formed building materials.

Pavers: Low clinker mix design**80) Family number: 64741691** (US4588443A)

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Title: SHAPED ARTICLE AND COMPOSITE MATERIAL AND METHOD FOR PRODUCING SAME

Priority: DK19800001945 19800501 DK19810000538 19810206 DK19810000907 19810227
 DK19810001957 19810501 WO1981DK00048 19810501 EP19810103363 19810504
 CA19810377702 19810515 FI19810004231 19811231

Family:

Publication number	Publication date	Application number	Application date
AT38218 E	19881115	AT19810103363T	19810504
AU198170787 A1	19811126	AU19810070787	19810501
BR8108596 A	19820406	BR19810008596	19810501
CA1197269 A1	19851126	CA19810377702	19810515

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DK163298 B	19920217	DK19810001957	19810501
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EP0042935 A1	19820106	EP19810103363	19810504
EP0042935 B1	19881026	EP19810103363	19810504
EP0042935 B2	19970910	EP19810103363	19810504
ES501814 A0	19830901	ES19810501814	19810430
ES8308523 A1	19830901	ES19810501814	19810430
FI72307 B	19870130	FI19810004231	19811231
FI814231 A	19811231	FI19810004231	19811231
FI814231 L	19811231	FI19810004231	19811231
FI88499 B	19930215	FI19900004527	19900913
FI88499 C	19930525	FI19900004527	19900913
FI904527 A0	19900913	FI19900004527	19900913
JP4048743 B4	19920807	JP19810501447T	19810501
JP57500645 T2	19820415	JP19810501447T	19810501
MX159969 A	19891017	MX19810188252	19810710
NO166634 B	19910513	NO19810004495	19811230
NO166634 C	19930929	NO19810004495	19811230
NO814495 A	19811230	NO19810004495	19811230
NO814495 L	19811230	NO19810004495	19811230
US4588443 A	19860513	US19810336380	19811230
WO8103170 A1	19811112	WO1981DK00048	19810501
ZA8102919 A	19820526	ZA19810002919	19810501

Probable Assignee:

DENSIT A S

Assignee(s):(std):

AALBORG PORTLAND CEMENT ; BACHE H ; DENSIT AS

Assignee(s):

DENSIT A S ; BACHE HANS H ; AKTIESELSKABET AALBORG PORTLAND CEMENT FABRIK ; AALBORG AS ; AALBORG FORTLAND CEMENT FAB AB ; AALBORG PORTLAND CEMENT FABRIK ; AALBORG PORTLAND CEMENT FABRIK AS ; AALBORG PORTLAND CEMENT FABRIK AKTIESELSKABET ; AALBORG PORTLAND CEMENT FABRIK A CORP AS ; AALBORG PORTLAND CEMENT FABRIK A CORP OF DENMARK AS ; DENSITO AS

Inventor(s):(std):

BACHE H ; BACHE H H ; BACHE HANS H ; BACHE HANS HENRIK

Inventor(s):

BACHE HH ; BATSHIE HANSU HENRIKU ; HANS HENRIK BACHE

Agent(s):

PHILLIPS ORMONDE FITZPATRICK; STEWART AND KOLASH LTD

Designated states:

AT AU BE BR CH DE FI FR GB IT JP LI LU NL NO SE SU US

International class (IPC 8-9):

B28B23/00 B32B13/00 C04B14/00 C04B14/02 C04B14/30 C04B14/32 C04B18/04 C04B18/10 C04B18/14 C04B20/00 C04B22/06 C04B24/22 C04B28/00 C04B28/02 C04B28/04 C04B30/00 C04B40/00 C04B41/45 C04B41/68 C04B7/13 E06B1/00 (Advanced/Invention); B28B23/00 B32B13/00 C04B14/00 C04B14/02 C04B18/04 C04B20/00 C04B22/00 C04B24/00 C04B28/00 C04B30/00 C04B40/00 C04B41/45 C04B41/60 C04B7/00 E06B1/00 (Core/Invention); B32B C04B (Subclass/Invention)

International class (IPC 1-7):

B32B13/00 C04B13/02 C04B13/04 C04B14/00 C04B14/02 C04B14/04 C04B15/00 C04B18/04 C04B20/00 C04B28/00 C04B28/02 C04B28/04 C04B31/00 C04B31/02 C04B7/13 E01D7/00 E06B1/00

CPC:

C04B40/00 B28B23/0081 C04B18/146 C04B28/04 C04B30/00 Y02W30/94 Y02W30/91

European class:

B28B23/00Z C04B18/14F C04B28/04 C04B30/00 C04B40/00

US class:

106/644 106/672 106/676 106/681 106/703 106/711 106/717 106/726 106/737 106/816 106/89 106/90 106/97 106/98 428/2 428/542.2

JP class F-Term:

4G012 4G012/MA01 4G012/PA02 4G012/PA04 4G012/PA12 4G012/PA15 4G012/PA24 4G012/PB04 4G012/PB25 4G012/PC11 4G012/PC12 4G028 4G028/DA01 4G028/DA02 4G028/DB01 4G028/DB06 4G028/DB07 4G028/DB11 4G028/DC01 4G028/DC05 4G112 4G112/MA01 4G112/PA02 4G112/PA04 4G112/PA12 4G112/PA15 4G112/PA24 4G112/PB04 4G112/PB25 4G112/PC11 4G112/PC12

JP class F-Index:

C04B14/02/Z C04B14/30 C04B14/32 C04B18/10/B C04B20/00/B C04B22/06/A C04B24/22/A C04B28/00 C04B41/68

[Classification Explorer](#)

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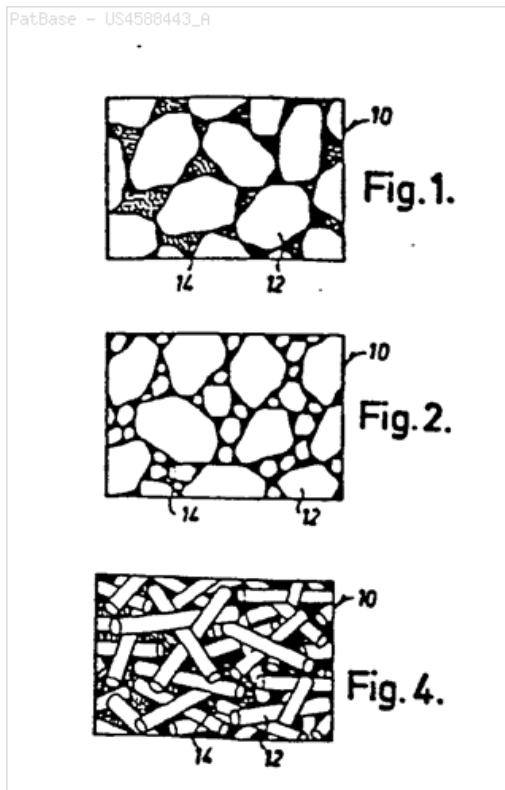
Forward Citations:

WO9610477, WO9420274, WO9419172, WO9412693, WO9318190, WO9310972, WO9013524, WO8905712, WO8301592, WO8201674, WO14079920, WO12127064, WO10118744, WO09127198, WO09127198, WO09081277, WO07057510, WO05077857, WO05077857, WO04011219, WO03101727, WO0181687, WO0067973, USRE39339, USD819836, USD802174, USD792986, USD781464, USD761447, USD583569, US9790418, US9719254, US9689175, US9500112, US9423158, US9404480, US9302448, US9267211, US9260314, US9144630, US9133581, US9067383, US8993462, US8992679, US8936081, US8894830, US8883104, US8869477, US8857118, US8855982, US8834688, US8821633, US8745942, US8618445, US8603424, US8603238, US8597554, US8557102, US8555698, US8501320, US8491858, US8470275, US8470088, US8431100, US8409380, US8357270, US8333944, US8308470, US8297018, US8283026, US8281535, US8278372, US8192542, US8163081, US8137444, US8119707, US8083923, US8043025, US8039774, US8028438, US8006446, US7998571, US7993570, US7993511, US7993500, US7966250, US7939336, US7931809, US7923111, US7914685, US7906028, US7875163, US7815880, US7771684, US7754169, US7753618, US7744761, US7735274, US7713615, US7641731, US7603793, US7597952, US7524555, US7468154, US7452418, US7389569, US7347895, US7048795, US6857322, US6723162, US6679626, US6510743, US6467118, US6415824, US6358603, US6309570, US6200404, US6180037, US6168857, US6167912, US6108998, US6092350, US6090195, US6083586, US6081955, US6070378, US6044607, US6030673, US6023806, US5976235, US5928741, US5879722, US5851634, US5849155, US5843544, US5830548, US5830545, US5830305, US5810961, US5800756, US5800647, US5798151, US5794402, US5783126, US5778463, US5776388, US5769939, US5766525, US5753308, US5738921,

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Abstract:

PCT No. PCT/DK81/00048 Sec. 371 Date Dec. 30, 1981 Sec. 102(e) Date Dec. 30, 1981 PCT Filed May 1, 1981 PCT Pub. No. WO81/03170 PCT Pub. Date Nov. 12, 1981. Densified systems and articles made therefrom which contain a composite material comprising a coherent matrix of homogeneously arranged inorganic particles (A) of a size of from about 50 ANGSTROM to about 0.5 3/4, such as silica dust, and densely packed particles (B) having a size of from 0.5-100 mu such as Portland Cement and which are at least one order of magnitude larger than the particles A, and embedded in the matrix, solid particles C made from material having a strength exceeding that of ordinary sand and stone used for ordinary concrete, such as refractory grade bauxite and a surface active dispersing agent. Particles A are homogeneously distributed and especially densely packed, in the void volume between the particles B and are made from an easily flowable composite material containing a very low amount of liquid such as water and an extremely high amount of a dispersing agent such as a concrete superplasticizer. High quality concrete made from a Portland Cement/silica dust matrix with refractory grade bauxite embedded therein exhibits high compressive strength and may be used as a replacement for plastic, glass and steel. High performance fiber/metal matrix composites with substantially improved compressive strength and abrasion resistance are produced.



81) Family number: 63842726 (US2017062873A)

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Title:	LITHIUM STUFFED GARNET SETTER PLATES FOR SOLID ELECTROLYTE FABRICATION			
Priority:	US20150148337P 20150416	WO2016US27886 20160415	WO2016US27922 20160415	
	US20160286509 20161005	US20170431645 20170213	US20170787623 20171018	
	US20170794948 20171026			
Family:	Publication number	Publication date	Application number	Application date
	CN107709269 A	20180216	CN201680035342	20160415

EP3283449 A1	20180221	EP20160780898	20160415
EP3283449 A4	20181121	EP20160780898	20160415
EP3283450 A1	20180221	EP20160780923	20160415
EP3283450 A4	20181017	EP20160780923	20160415
JP2018518797 T2	20180712	JP20170553934T	20160415
KR20170137876 A	20171213	KR20177032997	20160415
KR20170140280 A	20171220	KR20177033000	20160415
US2017062873 AA	20170302	US20160286509	20161005
US2017153060 AA	20170601	US20170431645	20170213
US2018045465 AA	20180215	US20170794948	20171026
US2018094858 AA	20180405	US20170787623	20171018
US9970711 BB	20180515	US20160286509	20161005
WO16168691 A1	20161020	WO2016US27886	20160415
WO16168723 A1	20161020	WO2016US27922	20160415

Probable Assignee: QUANTUMSCAPE CORP
Assignee(s):(std): QUANTUMSCAPE CORP
Inventor(s):(std): HOLME TIM ; DONNELLY NIAL ; CHOI ANNA ; IYER SRIRAM ; XU GENGFU
Agent(s): HGF LTD; SQUIRE PATTON BOGGS US LLP; OSTOMEL TODD 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 NZ 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

International class (IPC 8-9): B28B7/00 B30B15/34 C04B35/01 C04B35/10 C04B35/119 C04B35/44 C04B35/48 C04B35/486 C04B35/488 C04B35/50 C04B35/622 C04B35/626 C04B35/634 C04B35/64 F27B17/02 F27B21/02 F27D5/00 H01B13/00 H01M10/04 H01M10/052 H01M10/0525 H01M10/0562 H01M10/0585 H01M10/06 H01M4/139 H01M4/62 (Advanced/Invention)

CPC: H01M10/0525 B28B7/0097 C04B2235/3248 C04B2235/65 C04B35/48 C04B35/64 C04B2235/3203 C04B2235/3217 C04B2235/3227 C04B2235/6025 F27D5/0006 H01M10/0481 F27B17/02 F27B21/02 B30B15/34 H01M2300/0071 F27D2005/0081 H01M10/0562 C04B35/50 C04B35/62209 C04B2235/40 C04B2235/5427 C04B2235/658 C04B35/62218 C04B35/6261 C04B35/6342 C04B35/63424 C04B35/10 C04B35/119 C04B35/44 C04B35/486 C04B35/4885 C04B2235/3222 C04B2235/3244 C04B2235/447 C04B2235/764 C04B2235/777 C04B2235/785 C04B2235/786 C04B2235/94 C04B2235/9623 C04B2235/963 H01M10/052 H01M10/0585

US class: 429/320
JP class F-Term: 4G031 5E078 5E078/LA01 5E078/AA14 5E078/AA15 5E078/DA11 5E078/DA18 5E078/DA19 5E078/DA20 5E078/LA02 5E078/LA07 5E078/LA08 5E078/ZA02 5E078/ZA07 5E079 5G323 5H029 5H029/AJ02 5H029/AJ06 5H029/AJ11 5H029/AJ14 5H029/AL12 5H029/AM12 5H029/AM14 5H029/CJ02 5H029/CJ03 5H029/CJ06 5H029/CJ08 5H029/CJ14 5H029/CJ28 5H029/CJ30 5H029/DJ09 5H029/EJ05 5H029/HJ00 5H029/HJ01 5H029/HJ02 5H029/HJ04 5H029/HJ05 5H029/HJ08 5H029/HJ09 5H029/HJ14 5H029/HJ15 5H029/HJ20 5H050 5H050/AA02 5H050/AA12 5H050/AA14 5H050/AA19 5H050/BA16 5H050/BA17 5H050/CB12 5H050/DA13 5H050/EA12 5H050/GA02 5H050/GA03 5H050/GA04 5H050/GA05 5H050/GA08 5H050/GA10 5H050/GA15 5H050/GA27 5H050/GA30 5H050/HA00 5H050/HA01 5H050/HA02 5H050/HA04 5H050/HA05 5H050/HA08 5H050/HA09 5H050/HA14 5H050/HA15 5H050/HA17

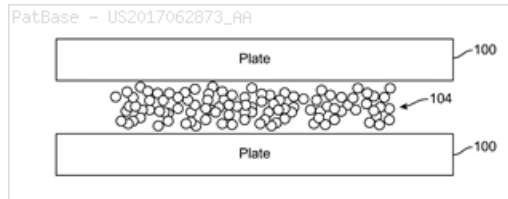
JP class F-Index: C04B35/44 C04B35/50 H01B13/00/Z H01G11/56 H01G9/032 H01M10/052 H01M10/0562 H01M4/139 H01M4/62/Z

[Classification Explorer](#)

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Forward Citations: US2016049688, US10008740,

Abstract:
 Setter plates are fabricated from Li-stuffed garnet materials having the same, or substantially similar, compositions as a garnet Li-stuffed solid electrolyte. The Li-stuffed garnet setter plates, set forth herein, reduce the evaporation of Li during a sintering treatment step and/or reduce the loss of Li caused by diffusion out of the sintering electrolyte. Li-stuffed garnet setter plates, set forth herein, maintain compositional control over the solid electrolyte during sintering when, upon heating, lithium is prone, to diffuse out of the solid electrolyte.



82) Family number: 4507808 (DE3543828A1)

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Title: BRICK ROLLER-SHUTTER BOX, BRICK BODY FOR SUCH A ROLLER-SHUTTER BOX, METHOD, EXTRUSION DIE AND PRODUCTION INSTALLATION FOR MANUFACTURING SUCH A BRICK BODY ZIEGEL-ROLLADENKASTEN, ZIEGELKOERPER FUER EINEN SOLCHEN ROLLA

Priority: DE19853543828 19851212

Family:	Publication number	Publication date	Application number	Application date
	DE3543828 A1	19870625	DE19853543828	19851212
	DE3543828 C2	19890713	DE19853543828	19851212

Probable Assignee: HAAS GUENTER

Assignee(s):(std): HAAS GUENTER

Assignee(s): HAAS GUENTER 8901 ADELSRIED DE

Inventor(s):(std): HAAS GUENTER

Inventor(s): HAAS GUENTER 8901 ADELSRIED DE

International class (IPC 8-9): B28B15/00 B28B3/26 E06B9/17 (Advanced/Invention);
B28B15/00 B28B3/26 E06B9/17 (Core/Invention)

International class (IPC 1-7): B28B15/00 B28B3/26 E06B9/17

CPC: E06B2009/17092 E06B9/17015 B28B3/26 B28B15/00 E06B2009/17069

European class: B28B15/00 B28B3/26 E06B9/17B2 P06B9/17G

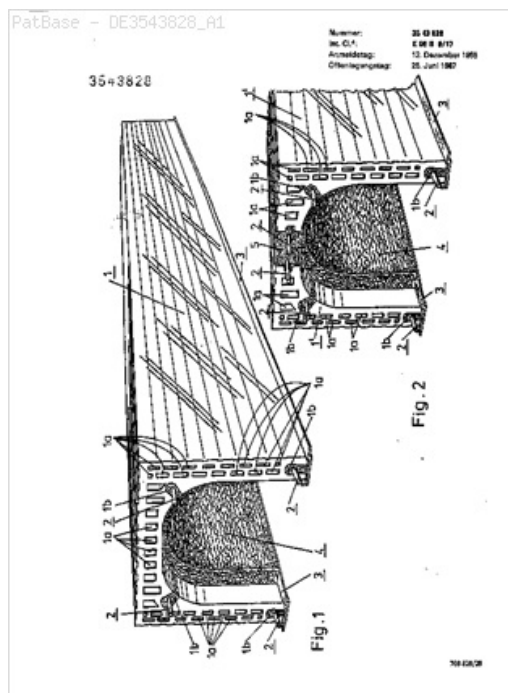
[Classification Explorer](#)

Cited documents: DE935712 A, DE2536086 B1,

Forward Citations: EP0670411, DE4407174,

Abstract:

The invention comprises a brick roller-shutter box with a cross-sectionally U-shaped brick body which is passed through by ducts 1a in the longitudinal direction in the manner of a hollow brick, is closed off on the end sides by covers equipped with roller-shutter bearing elements, is reinforced by longitudinally running reinforcement irons 2 and consists over its entire length of a single uninterrupted homogeneous and self-supporting brick component. As a modification of this, the brick body can also consist of two in each case cross-sectionally L-shaped brick body halves 1' which in each case over their entire length represent a single uninterrupted homogeneous and self-supporting brick component and which are interconnected in the U top region over their entire length by a binder bridge 5. The roller-shutter box according to the invention is self-supporting, more labour-saving in its manufacture and more favourable with regard to its heat insulation than the known brick roller-shutter boxes. If the reinforcement is prestressed, the roller-shutter box according to the invention can also be used as a bearing component in constructions. The invention also comprises a brick body for such a brick roller-shutter box, a method and an installation for manufacturing such a brick body as well as an extrusion press die for such an installation.



83) Family number: 67662811 (US2017362440A)

© PatBase

Title: PROCESS FOR MANUFACTURING BORON NITRIDE AGGLOMERATES

Priority: US20160342245P 20160527 US20170608509 20170530 WO2017US35010 20170530

Family:

Publication number	Publication date	Application number	Application date
CN109476480 A	20190315	CN201780042730	20170530
EP3464175 A1	20190410	EP20170803754	20170530
US2017362440 AA	20171221	US20170608509	20170530
WO17205873 A1	20171130	WO2017US35010	20170530

Probable Assignee: SAINT GOBAIN CERAM AND PLASTICS INC

Assignee(s):(std): SAINT GOBAIN CERAM AND PLASTICS INC

Assignee(s): SAINT GOBAIN CERAMICS AND PLASTICS INC

Inventor(s):(std): BAHON ELODIE ; JUDAS PIERRE LOUP ; NAHAS NABIL

Agent(s): ZIMMERMANN AND PARTNER PATENTANWALTE MBB; MERKEL EDWIN V 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 DJ 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 KH KM KN KP KR KW 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

International class (IPC 8-9): B01J2/10 B28B11/24 C01B21/06 C01B21/064 C04B18/02 C04B35/58 C04B35/583 C08K3/38 C09C1/00 C09C3/04 (Advanced/Invention)

CPC: C09C1/0081 B28B11/243 C09C3/045 C08K3/38 C01B21/0648 C08K2003/385 C01P2006/80 C04B18/02 C04B35/583 C04B35/6262 C04B35/6263 C04B35/62635 C04B35/62655 C04B35/62675 C04B35/62695 C04B35/632 C04B35/634 C04B2235/3217 C04B2235/3224 C04B2235/3232 C04B2235/3418 C04B2235/3895 C04B2235/5296 C04B2235/5427 C04B2235/5436 C04B2235/608 C04B2235/72 C04B38/009 B01J2/10

[Classification Explorer](#)

Cited documents: WO16203164 A1, US5681883 A, US4904625 A, US4846409 A, US2016060112 AA, US2015137026 AA, US2012282469 AA, US2011319492 AA, US2003165611 AA,

Abstract:

Disclosed are methods for forming boron nitride-containing aggregates that exhibit improved wear by attrition, and resulting filled polymers that exhibit significantly improved thermal conductivity. The boron nitride-containing aggregates are prepared according to a method that includes wet granulating boron nitride powder with a granulation solution to form wet boron nitride-containing granules; and drying the wet boron nitride-containing granules to cause evaporation of solvent in the granulation solution, thereby forming boron nitride-containing granules. Sintering achieves the desired boron nitride-containing aggregates.

PatBase - US2017362440_AA

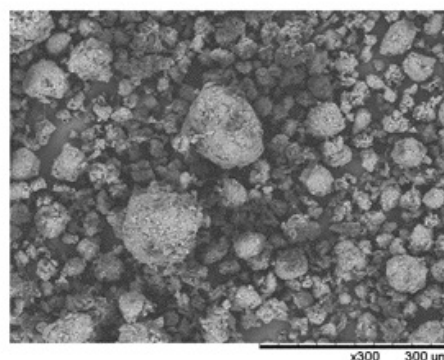


FIG. 1

84) Family number: 30514816 (US2004079060A)

© PatBase

Title: CERAMIC EXHAUST FILTER

Priority: US20020281179 20021028 WO2003US23796 20030730 US20040833298 20040428

US20040008787 20041210 US20050737237 20051116 US20050737237P 20051116

US20050305988 20051219 US20050323430 20051230 US20050322588 20051230

US20050322777 20051230 US20050322544 20051230 US20050323429 20051230

WO2006US28530 20060721 US20060465758 20060818 US20060465754 20060818

US20060468166 20060829 US20060534142 20060921 WO2007US63935 20070314

US20070695585 20070402 US20070736388 20070417 US20070753011 20070524

US20070837365 20070810 US20070859309 20070921 US20070869139 20071009

US20070930195 20071031 US20080034431 20080220 US20080104977 20080417

US20080104969 20080417 WO2008US63495 20080513 US20080057169P 20080529

US20080172217 20080712 WO2008US81757 20081030 US20080263004 20081031

US20090349138 20090106 US20090364014 20090202 US20090402795 20090312

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US20090473562 20090528
US20100753935 20100405

WO2009US40245 20090410
US20090481954 20090610

US20090433248 20090430
WO2009US62276 20091028

Family:

Publication number	Publication date	Application number	Application date
AT452695 E	20100115	AT20030809923T	20030730
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AU2006317688 AA	20070531	AU20060317688	20060721
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AU2007284302 BB	20120209	AU20070284302	20070314
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CA2660833 AA	20090202	CA20072660833	20070314
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CN101505847 B	20110907	CN200780030663	20070314
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CN1787869 B	20100512	CN20038025728	20030730
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EP1558362 A4	20061018	EP20030809923	20030730
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Probable Assignee: GEO2 TECHNOLOGIES INC

Assignee(s):(std): DICHIARA ROBERT A JR ; GEO2 TECHNOLOGIES INC ; LACHENAUER ROBERT G ; LUI JAMES JENQ ; LIU JAMES JENQ ; GORDON TIMOTHY ; MARSHALL JAMES ; GEO2 TECHNOLOGIES INC ; GEO2 TECHNOLOGIES INC ; DUTTA BIPRODAS ; GEO2 TECH INC ; ZUBERI BILAL ; PILLAI SUNILKUMAR C ; PILLAI SUNIKUMAR C

; WEINSTEIN JERRY G ; WEINSTEIN JERRY C ; ALWARD GORDON S ; CARTY WILLIAM M ; CARTY WILLIM M ; DAHL RACHEL A ; DICHIAIRA JR ROBERT A ; DICHIAIRA ROBERT A ; HCT INVESTMENTS INC

Assignee(s): HCT I NV

Inventor(s):(std): ALWARD GORDON ; ALWARD GORDON S DICHIAIRA ROBER ; DICHIAIRA ROBERT A ; DICHIAIRA ROBERT A JR ; DICHIAIRA JR ROBERT A ; PELLI S C ; WILLIAM M CARTY ; ZUBERI BILAL ; LASHYNAWILLE R G ; KARTY W M ; DUTA B ; WEINSTEIN JERRY G ; WEINSTEIN JERRY C ; BIPRODAS DUTTA ; BILAL ZUBERI ; ALWARD GORDON S ; PILLAI SUNILKUMAR C ; PILLAI SUNIKUMAR C ; JENQ LUI JAMES ; JENQ LIU JAMES ; JAMES JENQ LIU ; GORDON TIMOTHY ; DUTTA BIPRODAS ; DAHL RACHEL A ; CARTY WILLIM M ; CARTY WILLIAM M ; MARSHALL JAMES M ; MARSHALL JAMES ; LUI JAMES JENQ ; LIU JAMES JENQ ; LIU JAMES JENG ; LACHENAUER ROBERT G

Inventor(s): LACHENAUER ROBERT ; LIU JAMES ; PILLAI SUNIKUMAR ; PILLAI SUNILKUMAR ; WILLAIM M CARTY ; B DUTA ; W M KARTY ; SUNILKUMAR C PILLAI ; S C PELLI ; ROBERT G LACHENAUER ; RACHEL A DAHL ; R G LASHYNAWILLE ; DAHL RACHEL ; CARTY WILLIAM ; ROBERT A JR DICHIAIRA ; WEINSTEIN JERRY ; DICHIAIRA ROBERT ; DICHIAIRA ROBERT AJR ; GORDON S ALWARD ; JR ROBERT A ; LUI JAMES ; ALWARD GORDON S DICHIAIRA ROBERT A JR ; DICHIAIRA

Agent(s): PIZZEYS ; PIZZEYS PATENT AND TRADE MARK ATTORNEYS ; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD ; SMART AND BIGGAR ; VIERING JENTSCHURA AND PARTNER ; NTD PATENT AND TRADE MARK AGENCY LTD ; HIROE AND ASSOCIATES PATENT PROFESSIONAL CORP ; STERNE KESSLER GOLDSTEIN AND FOX PLLC ; BINGHAM MCHALE LLP ; GEO2 TECHNOLOGIES ; ODEA ARTHUR J ; O DEA ARTHUR J

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 RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): C08J3/20 B01D B01D24/00 B01D35/06 B01D39/00 B01D39/06 B01D39/14 B01D39/20 B01D46/00 B01D46/04 B01D46/24 B01D46/52 B01D50/00 B01D51/00 B01D53/00 B01D53/02 B01D53/34 B01D53/46 B01D53/56 B01D53/86 B01D53/94 B01D59/00 B01D59/26 B01J B01J20/00 B01J21/00 B01J21/02 B01J21/16 B01J23/00 B01J23/02 B01J23/04 B01J23/10 B01J23/14 B01J23/22 B01J23/34 B01J23/42 B01J23/44 B01J23/46 B01J23/50 B01J23/52 B01J23/78 B01J29/89 B01J31/02 B01J32/00 B01J35/02 B01J35/04 B01J35/06 B01J37/02 B01J37/04 B01J37/08 B01J8/02 B21D51/16 B28B B28B1/00 B28B1/48 B28B1/52 B28B11/14 B28B3/00 B28B3/20 B29C B29C44/04 B29C47/00 B29C47/38 B29C48/39 B29C65/00 B29C67/20 B29D24/00 B32B18/00 B32B19/00 B32B3/12 B82Y30/00 C01B33/26 C01G23/00 C03C10/14 C04B C04B14/38 C04B24/00 C04B30/02 C04B33/32 C04B35/00 C04B35/03 C04B35/04 C04B35/10 C04B35/111 C04B35/14 C04B35/18 C04B35/19 C04B35/195 C04B35/478 C04B35/486 C04B35/622 C04B35/628 C04B35/636 C04B35/638 C04B35/64 C04B35/71 C04B35/76 C04B35/80 C04B38/00 C04B38/06 C08J9/00 D01F9/08 F01N F01N3/00 F01N3/02 F01N3/021 F01N3/022 F01N3/027 F01N3/035 F01N3/06 F01N3/10 F01N3/20 F01N3/28 F01N3/30 H01J1/30 H01J9/02 (Advanced/Invention); B01D39/00 B01D39/20 B01D46/42 B01D51/00 F01N3/02 F01N3/022 F01N3/10 F01N3/28 (Advanced/Non-invention); B01D24/00 B01D35/06 B01D39/00 B01D39/02 B01D39/14 B01D39/20 B01D46/00 B01D46/04 B01D46/24 B01D50/00 B01D53/00 B01D53/34 B01D53/46 B01D53/56 B01D53/86 B01D53/94 B01J29/00 B01J32/00 B01J35/00 B01J37/00 B01J8/02 B21D51/16 B28B1/00 B28B1/52 B28B3/20 B29C44/02 B29C47/00 B29C47/38 B29C65/00 B29C67/20 B29D24/00 B32B18/00 B32B19/00 B32B3/12 C01B33/00 C03C10/00 C04B14/38 C04B24/00 C04B30/00 C04B35/00 C04B35/03 C04B35/10 C04B35/14 C04B35/18 C04B35/64 C04B35/71 C04B35/80 C04B38/00 C04B38/06 F01N3/00 F01N3/02 F01N3/022 F01N3/035 F01N3/10 F01N3/28 H01J1/30 H01J9/02 (Core/Invention); B01D B01J B28B B29C C04B F01N (Subclass/Invention)

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European class: B01D39/20D2B B01D39/20D4B B01D39/20F B01D39/20F4 B01D39/20H4 B01D39/20H4B B01D39/20H4D B01D39/20H6 B01D46/00B B01D46/00F20D B01D46/00R20 B01D46/00R20C B01D46/00S10 B01D46/24F B01D46/24F8 B01D46/24F8A B01D46/24F8B2 B01D46/24F8D10 B01D46/24F8D12 B01D46/52F B01D53/88B B01D53/94F2C B01D53/94H B01D53/94L2 B01D63/06F B01D67/00M12 B01J19/30 B01J20/20 B01J20/28D28B B01J35/04 B28B1/52 B28B3/26D B28C5/40C B29C67/20 B32B18/00 C03C13/00 C04B33/36 C04B35/111 C04B35/14 C04B35/18 C04B35/19 C04B35/195 C04B35/478 C04B35/486 C04B35/622F2D2 C04B35/626A10B C04B35/626A22 C04B35/628F C04B35/636B C04B35/638 C04B35/76

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US class:

181/231 181/231S 210/435 210/496 210/509 210/510.1 264/156 264/162 264/176.1 264/176.100S
264/29.1 264/29.100S 264/299 264/345 264/42 264/42P 264/44 264/45.1 264/45.100P 264/46.1
264/46.100P 264/48 264/49 264/49S 264/621 264/628 264/630 264/630S 264/631 264/631S 264/640
264/651 264/87 264/DIG.48 29/890 422/168 422/169 422/169S 422/170 422/170P 422/171 422/171P
422/171S 422/173 422/173S 422/177 422/177P 422/177S 422/178 422/178S 422/179 422/180 422/180P
422/180S 422/181 422/182 422/211 422/211P 422/211S 422/255 422/255P 423/210 423/212 423/212P
423/212S 423/213.2 423/213.5 423/215.5 423/215.500P 423/235 423/235P 423/239.1 423/239.100P
423/239.100S 423/239.2 423/239.200S 423/327.2 423/327.200S 425/113 425/113S 428/116 428/116P
428/116S 428/131 428/131S 428/218 428/218S 428/304.4 428/304.400S 428/312.2 428/312.200S
428/312.6 428/312.600S 428/312.8 428/312.800S 428/688 428/688S 455/523 501/4 501/4P 501/6 501/7
501/80 501/80S 501/9 501/95.1 501/95.100S 501/95.2 501/95.200S 502/150 502/150S
502/240 502/263 502/263S 502/300 502/300S 502/302 502/302S 502/319 502/319S 502/325 502/325S
502/330 502/330S 502/339 502/339S 502/340 502/340S 502/353 502/353S 502/407 502/415 502/439
502/527.14 502/80 502/80P 55/282.3 55/385.1 55/385.100P 55/385.3 55/385.300S 55/483 55/484 55/486
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60/301S 60/311 60/311S

JP class F-Term:

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3G091/GB06 3G091/GB07 3G091/GB10 3G190 3G190/AA02 3G190/AA05 3G190/AA06 3G190/AA07
3G190/AA12 3G190/AA13 3G190/BA01 3G190/BA41 3G190/BA43 3G190/CA13 3G190/CA14 3G190/CA15
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4G031/BA26 4G031/BA27 4G031/CA01 4G031/CA10 4G031/GA02 4G031/GA03 4G031/GA04 4G031/GA08
4G031/GA11 4G047 4G047/CA05 4G047/CB04 4G047/CC03 4G047/CD05

JP class F-Index:

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F01N3/10/A B01D39/14/A B01D39/20/D B01J32/00 B01J35/04/301/N B01J35/04/331/B B01J37/04
B01J37/08 B28B3/20/K C04B38/00/303/Z B01D46/00/302 B01D53/36/C B01D53/86 B01D53/94
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C04B35/478 C04B38/06/D

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CN101805199, CN101795856, CN101765570, AU2007286908, AU2007286908, AU2004319871,

Abstract:

An improved, efficient, and regenerable exhaust emission filter and filter system are provided which incorporate the use of an inorganic, non-woven fiber filter element. The filter is able to capture exhaust pollutants and particulates through the interwoven nature of the filter element and due to area enhancements applied to the filter element including microscopic enhancements. The filter has an improved life and is able to combust a greater percentage of trapped particulates due to the high temperatures the filter element can withstand. The filter element if formed from a non-woven fiber block which is machined or shaped into a filter foundation. The filter element can have a multitude of coatings and catalysts applied and can be wrapped in insulation and a casing. The improved exhaust emission filter is particularly useful for diesel engine exhausts.

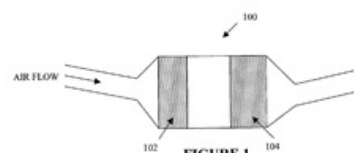
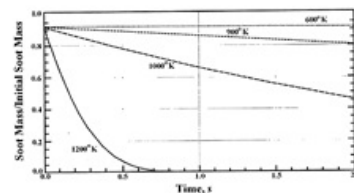
FIGURE 1
(PRIOR ART)

FIGURE 2

85) Family number: 62922841 (US2018021980A)

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Title: COMPOSITION COMPRISING CALCIUM MAGNESIUM COMPOUND(S) AS COMPACTS**Priority:** EP20150150706 20150109 WO2016EP50287 20160108**Family:**

Publication number	Publication date	Application number	Application date
AU2016205963 AA	20170727	AU20160205963	20160108
BR112017014482 A2	20180206	BR20171114482	20160108
CA2972934 AA	20170704	CA20162972934	20160108
CL2017001767 A1	20180119	CL20170001767	20170704
CN107107008 A	20170829	CN201680005051	20160108
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KR20170102480 A	20170911	KR20177018622	20160108
MX2017008896 A1	20180430	MX20170008896	20160108
PE16622017 A1	20171115	PE20170001184	20160108
TH182680 A	20190110	TH20171003813	20160108
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US2018021980 AA	20180125	US20160541762	20160108
WO16110572 A1	20160714	WO2016EP50287	20160108
ZA201704528 A	20181128	ZA20170004528	20160108

Probable Assignee: S A LHOIST RECH ET DEVELOPPEMENT**Assignee(s):(std):** LHOIST RECH AND ; LHOIST RECH AND DEV SA ; S A LHOIST RECH ET DEV ; S A LHOIST RECHERCH ET DEVELOPPEMENT ; S A LHOIST RECH ET DEV EN ABREGE L R D SOC ANONYME ; S A LHOIST RECH ET DEVELOPPEMENT**Assignee(s):** S A LHOIST RECHERCH ET DEVELOPPEMENT ; LHOIST RECHERCH ET DEVELOPPEMENT SA ; CHOPIN THIERRY ; CRINIERE GUILLAUME ; LHOIST RECHERCH ET DEVELOPPEMENT EN ABREGE LRD SA ; LHOIST RECHERCH ET DEVELOPPEMENT SA**Inventor(s):(std):** CHOPIN THIERRY ; CRINIERE GUILLAUME ; GUILLAUME CRINIERE ; THIERRY CHOPIN**Agent(s):** GRIFFITH HACK; ROBIC; BERESKIN AND PARR LLP SENCRL SRL; ESTUDIO CAREY LTDA; GEVERS PATENTS; GEVERS AND ORES; MAULITTA PRAMULASARI SPD; ASAMURA PATENT OFFICE PC**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

International class (IPC 8-9): B01J2/22 B28B3/06 B32B18/00 B32B37/10 C01B33/24 C01F1/00 C01F11/00 C01F11/02 C01F11/22 C01F5/00 C01F7/00 C01F7/02 C01G49/00 C02F1/68 C04B35/03 C04B35/515 C04B35/622 C04B35/64 C09C1/02 C09K17/06 C21C C21C1/02 C21C5/28 C21C5/36 C21C5/48 C21C7/00 C21C7/04 C21C7/076 C22B C22B1/16 C22B1/20 C22B26/22 C22C24/00 (Advanced/Invention); C22B1/16 (Core/Invention)

CPC: C22B1/16 Y02P10/242 B01J2/22 B32B18/00 B32B37/10 C01F1/00 C04B35/03 C04B35/622 C04B35/64 C09C1/02 C21C1/02 C21C5/28 C21C5/48 C21C7/00 C21C7/04 C22C24/00 B28B3/06 C09K17/06 C02F1/68 B30B15/32 C21C7/076 C21C2007/0062 C22B1/20 C22B26/22 C04B35/515

JP class F-Term: 4G076 4G076/AA02 4G076/AA05 4G076/AA10 4G076/AB02 4G076/AB11 4G076/AB16 4G076/AB30 4G076/BC08 4G076/BH01 4G076/CA02 4G076/CA11 4G076/CA12 4G076/CA25 4G076/CA26 4G076/CA27 4G076/CA28 4G076/CA40 4G076/DA28 4G076/DA29 4G076/DA30 4K013 4K013/EA01 4K013/EA02 4K013/EA03 4K013/EA04 4K013/EA05 4K013/EA08 4K013/EA09 4K013/EA16 4K013/EA18 4K013/EA19 4K013/EA20 4K013/EA25 4K013/EA28 4K013/EA32 4K070 4K070/AC11 4K070/AC12 4K070/AC13 4K070/AC14 4K070/AC15 4K070/AC16 4K070/AC18 4K070/AC24 4K070/AC25 4K070/AC27 4K070/AC28

JP class F-Index: C01F11/02/B C01F5/00 C21C5/36 C21C7/04/A C21C7/04/B C21C7/04/C C21C7/04/E

[Classification Explorer](#)

Cited documents: US7105114 BB, JP2000248309 A2,

Forward Citations: WO18007634, BE1023886,

Abstract:

Composition comprising at least one calcium-magnesium compound and a second compound chosen in the group consisting of B₂O₃, NaO₃, calcium aluminate, calcium silicate, calcium ferrite such as Ca₂Fe₂O₅ or CaFe₂O₄, Al, Mg, Fe, Mn, Mo, Zn, Cu, Si, CaF₂, C, CaC₂, CaSi, CaMg, CaFe, FeMn, FeSi, FeSiMn, FeMo; TiO₂, an oxide or a hydroxide of molybdenum, copper, zinc, and their mixture, in the form of compacts formed with compacted and shaped particles of calcium-magnesium compounds, having a Shatter Test Index of less than 20 percent and the manufacturing process thereof.

86) Family number: 33376868 (WO9737827A1)

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Title: METHODS FOR MANUFACTURING MOLDED SHEETS HAVING A HIGH STARCH CONTENT

Priority: US19960631676 19960409

Family:

Publication number	Publication date	Application number	Application date
DK1007320 T3	20051121	DK19970922292T	19970409
ES2246512 T3	20060216	ES19970922292T	19970409
WO9737827 A1	19971016	WO1997US05794	19970409

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI IND LLC ; E KHASHOGGI INDUSTRIES ; E KHASHOGGI INDUSTRIES LLC

Inventor(s):(std): ONG SHAODE ; HODSON SIMON K ; CHRISTENSEN BRUCE J ; ANDERSEN PER J

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN YU

International class (IPC 8-9): B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/06 B29C43/22 B29C43/24 B29C43/34 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C47/88 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J3/02 C08J5/18 C08L1/28 C08L3/02 C08L5/12 E05D1/02 (Advanced/Invention); B05C5/02 B29C43/08 B29C49/04 B29C51/08 B29C53/58 B29K1/00 B29L7/00 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B28B1/52 B28B23/00 B29C43/24 B29C47/00

CPC: Y02W30/97 Y02W90/11 B05B11/0037 B05B11/30 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/08 B29C43/22 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/463 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/06 B29K2105/12 B29K2105/16 B29K2995/006 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/18 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/00 B32B37/12 B65D43/162 B65D65/38 B65D65/466 B65D2565/385 C04B26/00 C04B26/02 C04B26/28 C08J5/18 C08J2303/02 C08J2323/02 C08L1/286 C08L3/02 C08L5/12 E05D1/02 E05Y2900/602 B31B50/32 B31B2105/0022 B32B9/04 B32B3/28 B32B9/02 B32B23/04 B32B23/22 B32B2307/7163 B32B2439/00 B32B37/144 Y02A40/961 B29C48/0017 B29C48/022 B29C48/05 B29C48/08 B29C48/09 B29C48/13 B29C48/15 B29C48/38 B29C48/465 B29C48/91

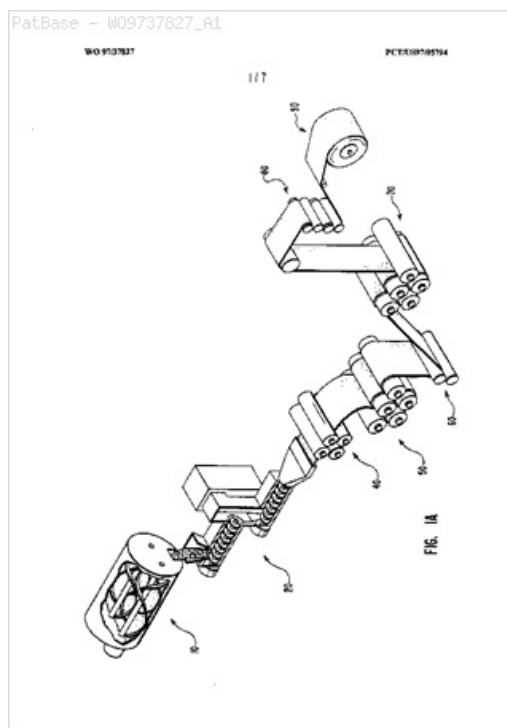
European class: B05B11/00B5 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B23/00 B28B23/00Z B28B23/00Z1 B28B3/12C B28B3/20 B29C43/00B B29C43/22 B29C43/22B B29C43/24 B29C43/34 B29C43/46 B29C44/04A B29C45/00E B29C47/00B B29C47/50 B29C47/52B B29C49/00B B29C49/06B2B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/24 B29C67/24C B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/00 B32B37/14B B32B5/02 B32B5/18 B32B9/00 B65D43/16B B65D65/38 B65D65/46C C04B26/00 C04B26/02 C04B26/28 C08J5/18 C08L1/28F C08L3/02 C08L5/12 E05D1/02 L05B11/30 L05C5/02E L29C43/00 L29C43/08 L29C43/34B L29C43/46 L29C43/46A2 L29C47/00J10 L29C47/00J5 L29C47/00J6 L29C47/00L7 L29C47/02 L29C49/00F L29C49/04 L29C49/06 L29C51/04 L29C51/08 L29C51/08B L29C51/10 L29C53/58 L29C791/00E4 L29C795/00D L29K1/00 L29K105/06 L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29K995/00F14B L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D565/38Y7 M08J303/02 M08J323/02 P05D1/02 P05Y900/602

Cited documents: US5626954 A, US5508072 A,

Forward Citations: US7858684, EP1502726, EP1502726, EP0964000,

Abstract:

Methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together (10) water, unmodified and ungelatinized starch granules, a cellulosic ether, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers (40) to form green sheets. The heated rollers (40) cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers (40) upon gelation of the starch. The green sheets are passed between heated rollers (50) to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation.



87) Family number: 33376869 (WO9737842A1)

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Title: COMPOSITIONS HAVING A HIGH UNGELATINIZED CONTENT

Priority: US19960629539 19960409

Family:	Publication number	Publication date	Application number	Application date
	WO9737842 A1	19971016	WO1997US05934	19970409

Probable Assignee: KHASHOGGI E IND

Assignee(s):(std): KHASHOGGI E IND

Assignee(s): E KHASHOGGI IND ; E KHASHOGGI INDUSTRIES

Inventor(s):(std): ANDERSEN PER JUST ; CHRISTENSEN BRUCE J ; HODSON SIMON K ; ONG SHAODE

Inventor(s): ANDERSEN PER J

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN YU

International class (IPC 8-9): B05B11/00 B27N3/00 B28B1/00 B28B1/52 B28B11/00 B28B23/00 B28B3/12 B28B3/20 B29C43/00 B29C43/02 B29C43/06 B29C43/08 B29C43/22 B29C43/24 B29C43/34 B29C43/36 B29C43/46 B29C44/04 B29C45/00 B29C47/00 B29C47/50 B29C47/52 B29C49/00 B29C49/06 B29C51/00 B29C51/04 B29C51/10 B29C53/06 B29C55/18 B29C67/24 B29C70/50 B29C71/00 B31B17/00 B32B13/02 B32B27/04 B32B27/20 B32B37/14 B32B5/02 B32B5/18 B32B9/00 B65D43/16 B65D65/38 B65D65/46 C04B16/02 C04B26/00 C04B26/02 C04B26/28 C04B28/00 C04B40/00 C08J5/04 C08J5/18 C08K3/00 C08L1/26 C08L1/28 C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 (Advanced/Invention); B05C5/02 B29C49/04 B29C51/08 B29C53/58 B32B37/12 (Advanced/Non-invention)

International class (IPC 1-7): B32B5/16 C08L3/02

CPC: Y10S428/906 Y10S977/707 B05B11/0037 B05B11/30 B05C5/0245 B27N3/002 B27N3/007 B28B1/00 B28B1/52 B28B3/126 B28B3/20 B28B11/00 B28B11/003 B28B23/00 B28B23/0081 B28B23/0087 B29C43/00 B29C43/003 B29C43/02 B29C43/08 B29C43/22 B29C43/222 B29C43/24 B29C43/34 B29C43/46 B29C44/0407 B29C45/0013 B29C49/0005 B29C49/0047 B29C49/04 B29C49/06 B29C49/063 B29C51/002 B29C51/04 B29C51/08 B29C51/082 B29C51/10 B29C53/063 B29C53/58 B29C55/18 B29C67/24 B29C67/242 B29C70/50 B29C71/0009 B29C2043/3433 B29C2043/463 B29C2049/4608 B29C2791/006 B29C2795/007 B29K2001/00 B29K2003/00 B29K2005/00 B29K2089/00 B29K2105/06 B29K2105/12 B29K2105/16 B29K2995/006 B29L2024/00 B29L2031/608 B29L2031/712 B29L2031/7132 B31D1/005 B32B5/02 B32B5/18 B32B9/00 B32B13/02 B32B27/04 B32B27/20 B32B37/12 B32B37/144

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European class:

B05B11/00B5 B27N3/00B B27N3/00R B28B1/00 B28B1/52 B28B11/00 B28B11/00E B28B23/00 B28B23/00Z B28B23/00Z1 B28B3/12C B28B3/20 B29C43/00B B29C43/02 B29C43/22 B29C43/22B B29C43/24 B29C43/34 B29C43/46 B29C44/04A B29C45/00E B29C47/00B B29C47/00J5 B29C47/50 B29C47/52B B29C49/00B B29C49/06B2B B29C51/00B B29C51/04 B29C51/10 B29C53/06B B29C55/18 B29C67/24 B29C67/24C B29C70/50 B29C71/00C B31B1/32 B31B17/00 B31D1/00H1 B32B13/02 B32B27/04 B32B27/20 B32B37/14B B32B5/02 B32B5/18 B32B9/00 B65D43/16B B65D65/38 B65D65/46C C04B26/02 C04B26/28 C04B26/28B C04B40/00 C08J5/18 C08L1/28 C08L1/28F C08L3/00 C08L3/02 C08L5/02 C08L5/12 C08L5/14 C08L89/06 C08L97/02 E05D1/02 L05B11/30 L05C5/02E L29C43/00 L29C43/08 L29C43/34B L29C43/46 L29C43/46A2 L29C47/00J10 L29C47/00J4 L29C47/00J5 L29C47/00L L29C47/00L13 L29C47/00L4 L29C47/00L7 L29C47/00L8 L29C47/00L9 L29C49/00F L29C49/04 L29C49/06 L29C49/46B1A L29C51/04 L29C51/08 L29C51/08B L29C51/10 L29C53/58 L29C791/00E4 L29C795/00D L29K1/00 L29K105/06 L29K105/12 L29K105/16 L29K3/00 L29K5/00 L29K89/00 L29K995/00F14B L29L24/00 L29L31/60C L29L31/712 L29L31/7132 L31B201/26A1A L31B217/08A L32B37/12 L65D565/38Y7 M04B111/00T6 M04B111/00T66 M08J303/02 M08J323/02 P05D1/02 P05Y900/602

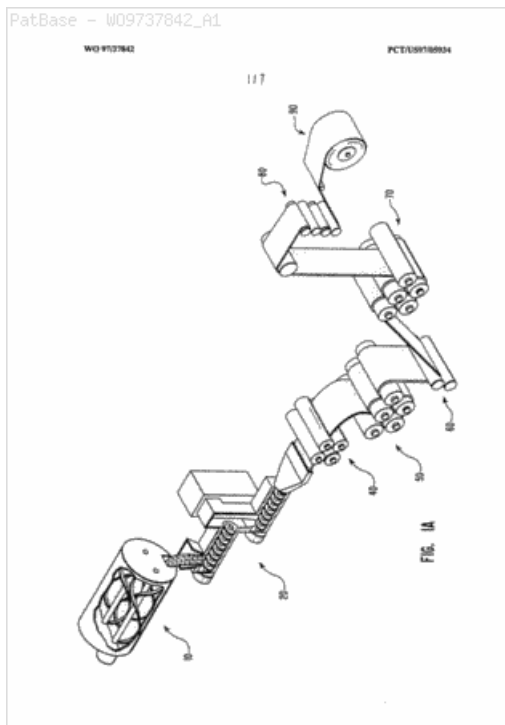
[Classification Explorer](#)

Cited documents: US5376320 A,

Forward Citations: US8673398, US8349443, US8147979, US8048257, US7967904, US7960452, US7083673, US6878199, RU2487096, GB2564960,

Abstract:

Compositions and methods for manufacturing sheets having a starch-bound matrix reinforced with fibers and optionally including an inorganic mineral filler. Suitable mixtures for forming the sheets are prepared by mixing together water, unmodified and ungelatinized starch granules, a cellulosic ether, fibers, and optionally an inorganic mineral filler in the correct proportions to form a sheet having desired properties. The mixtures are formed into sheets by passing them between one or more sets of heated rollers to form green sheets. The heated rollers cause the cellulosic ether to form a skin on the outer surfaces of the sheet that prevents the starch granules from causing the sheet to adhere to the rollers upon gelation of the starch. The green sheets are passed between heated rollers to gelatinize the starch granules, and then to dry the sheet by removing a substantial portion of the water by evaporation. The starch and cellulosic ether form the binding matrix of the sheets with the fibers and optional inorganic filler dispersed throughout the binding matrix. The starch-bound sheets can be cut, rolled, pressed, scored, perforated, folded, and glued to fashion articles from the sheets much like paper or paperboard. The sheets are particularly useful in the mass production of containers, such as food and beverage containers.



88) Family number: 49822895 (US2011262640A)

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Title: METHODS FOR MAKING CONSTRUCTION MATERIAL USING ENZYME PRODUCING BACTERIA
Priority: US20100328233P 20100427 US20110093335 20110425 WO2011US33920 20110426
US20130834273 20130315 US20140270846 20140506 US20150939118 20151112
US20160248996 20160826

Family:	Publication number	Publication date	Application number	Application date
	EP2563739 A1	20130306	EP20110719406	20110426
	US2011262640 AA	20111027	US20110093335	20110425
	US2014239535 AA	20140828	US20140270846	20140506

US2016068438 AA	20160310	US20150939118	20151112
US2016362334 AA	20161215	US20160248996	20160826
US8728365 BB	20140520	US20110093335	20110425
US8951786 BA	20150210	US20130834273	20130315
US9199880 BB	20151201	US20140270846	20140506
US9428418 BB	20160830	US20150939118	20151112
US9796626 BB	20171024	US20160248996	20160826
WO11137106 A1	20111103	WO2011US33920	20110426

Probable Assignee: BIOMASON INC
Assignee(s):(std): BIOMASON INC ; DOSIER GINGER KRIEG
Inventor(s):(std): DOSIER GINGER KRIEG ; DOSIER GINGER K
Agent(s): WILLIAMS RICHARD ANDREW NORMAN; REMENICK PLLC; SCHNEDLER STEVEN C ET AL
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 RO RS RU 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

International class (IPC 8-9): B05D1/36 B28B17/00 C04B14/30 C04B24/12 C04B24/14 C04B28/10 C04B35/632 C04B40/00 C12N9/80 C12P1/04 D04H1/64 (Advanced/Invention); C04B103/00 C04B111/00 (Advanced/Non-invention)

CPC: B28B17/00 C04B24/126 C04B40/0039 C01B21/087 C04B14/06 C04B2103/0067 C04B22/124 C12P1/04 C04B35/632 C04B24/12 C04B14/305 C12N9/80 C12Y305/01005 C04B2111/00017 B33Y40/00 B33Y70/00 C04B28/10 C04B24/14 C04B30/00 C04B2103/0001

European class: C04B24/14 C04B28/10 C04B30/00 M04B103/00A

US class: 1/1 106/638 264/112 264/128 264/128S 427/215 427/215P 435/168 435/228 435/289.1 435/307.1

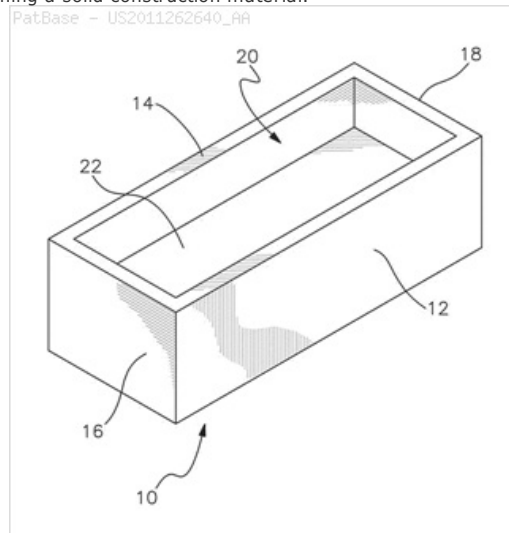
[Classification Explorer](#)

Cited documents: WO16010434 A1, WO14185781 A1, WO11126361 A1, WO10130712 A1, WO09093898 A1, WO08120979 A1, WO07070706 A2, WO06066326 A1, US9199880 BB, US9074134 BB, US8951786 BA, US8932400 BB, US8912244 BB, US8728365 BB, US8420362 BB, US8182604 BB, US6348147 BA, US5891205 A, US5143155 A, US4617326 A, US2017190617 AA, US2016264463 AA, US2016090328 AA, US2013112114 AA, US2012199046 AA, US2011027850 AA, US2011011303 AA, US2010086367 AA, US2008245272 AA, US2005103234 AA, US2005029187 AA, JP5284646 B2, EP2462232 A2, EP2429970 A1, EP2297062 A1, EP2247551 A1, EP2082999 A1, EP1893546 A1, EP1838642 A1, EP0631998 A1, EP0388304 A1, CN101270369 A, CA2591097 AA,

Forward Citations: WO18081542, WO17220768, WO17189106, WO16145190, WO16134478, US9910935, US9809738, US9796626, US9428418, US9328473, US9074134, US2015105891, US2015039113, US2014377014, US2014238267, US10125303, JP2018513096, EP3334799, EP3328960, EP3121156, EP2462232, EP2462232, EP2462232, CN105294051, CN104609453,

Abstract:

There is provided a method for producing construction material utilizing loose pieces of aggregate, enzyme producing bacteria, an amount of urea and an amount of calcium ions. A first solution is prepared which includes urease which is formed by enzyme producing bacteria. A second solution is prepared which includes urea and calcium ions. The first and second solutions are added to the loose aggregate. The calcium ions contribute to the formation of calcium carbonate wherein the calcium carbonate fills and bonds between at least some of the gaps between the loose pieces of aggregate forming a solid construction material.



89) Family number: 28170922 (US2001001218A)

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Title: STRENGTHENED, LIGHT WEIGHT CONSTRUCTION BOARD AND METHOD AND APPARATUS FOR MAKING THE SAME

Priority:	US19980195438 19981118	US19990129618P 19990617	US19990139618P 19990617
	US19990374589 19990813	WO1999US27267 19991118	US19990471448 19991223
	US20000547615 20000412	US20000696894 20001026	US20000696895 20001026
	US20000732852 20001208	WO2000US35176 20001222	US20010828994 20010409

Family:	Publication number	Publication date	Application number	Application date
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AU200017324 A1	20000605	AU20000017324	19991118
AU200017324 A5	20000605	AU20000017324	19991118
AU200125961 A1	20010703	AU20010025961	20001222
AU200125961 A5	20010703	AU20010025961D	20001222
CA2349248 AA	20010501	CA19992349248	19991118
CN1337847 A	20020227	CN19998015719	19991118
EP1130958 A1	20010912	EP19990960436	19991118
EP1130958 A4	20040915	EP19990960436	19991118
JP2004517018 T2	20040610	JP20000581875T	19991118
KR20010105290 A	20011128	KR20017006266	19991118
US2001001218 AA	20010517	US20000732852	20001208
US2002017222 AA	20020214	US20010828994	20010409
US6251979 BA	20010626	US19990374589	19990813
US6319312 BA	20011120	US19990471448	19991223
US6340388 BA	20020122	US20000547615	20000412
US6391958 BA	20020521	US20000696894	20001026
US6403688 BA	20020611	US20000696895	20001026
WO0028809 A1	20000525	WO1999US27267	19991118
WO0145932 A1	20010628	WO2000US35176	20001222

Probable Assignee: INNOVATIVE TECHNOLOGIES ENTERPRISES CORP

Assignee(s):(std): ADVANCED BUILDING MATERIALS CO ; ADVANCED CONSTRUCTION MATERIAL ; JOSEPH S LUONGO ; LUONGO JOSEPH S

Assignee(s): ADVANCED CONSTRUCTION MATERIALS CORP ; INNOVATIVE TECHNOLOGIES ENTERPRISES CORP

Inventor(s):(std): ADVANCED CONSTRUCTION MATERIAL ; LUONGO JOSEPH S

Inventor(s): ADVANCED CONSTRUCTION MATERIALS CORPORATION ; JOSEPH S LUONGO

Agent(s): RIDOUT AND MAYBEE 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 CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN 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 NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8-9): B28B11/24 B28B15/00 B28B19/00 B28B23/00 B29C39/14 B29C67/24 B32B13/00 B32B13/08 B32B29/00 C04B26/02 C04B26/04 C04B26/28 C04B28/14 C08K3/00 C08K3/30 C08K7/22 C08L101/12 C08L27/06 C08L3/02 C08L31/04 C08L75/04 E04B1/64 E04C2/04 (Advanced/Invention); C04B111/40 C04B14/12 C08K3/00 E04B1/64 E04C2/04 (Advanced/Non-invention); B28B11/00 B28B15/00 B28B19/00 B28B23/00 B29C39/00 B29C67/24 B32B13/00 B32B29/00 C04B26/00 C04B28/00 C08K3/00 C08K7/00 C08L75/00 E04C2/04 (Core/Invention)

International class (IPC 1-7): A01J21/00 A01J25/12 A01J25/15 A21C11/00 A21C3/00 A21C3/02 A23G1/20 A23G1/22 A23G3/00 A23G3/12 A23G3/16 A23P1/00 B21C3/00 B23B19/00 B23B23/00 B23B3/10 B28B11/00 B28B13/00 B28B15/00 B28B19/00 B28B21/00 B28B23/00 B28B3/00 B28B5/00 B29C39/20 B29C55/00 B29C61/00 B29C63/00 B29C67/02 B29C67/24 B29C71/00 B29D7/00 B29D9/00 B32B13/00 B32B13/08 B32B17/08 B32B31/00 B32B31/06 B32B31/14 B32B31/30 B32B5/16 C04B11/00 C04B111/40 C04B12/04 C04B14/12 C04B16/04 C04B16/08 C04B24/24 C04B26/02 C04B26/28 C04B28/14 C04B28/26 C04B38/00 C04B38/08 C08J3/00 C08K11/00 C08K3/00 C08K3/20 C08K3/30 C08K3/34 C08K3/38 C08K7/24 C08L101/12 C08L13/02 C08L27/06 C08L3/02 C08L3/10 C08L31/02 C08L31/04 C08L75/00 C08L75/04 C09D1/02 C09J1/02 D21H15/06 D21H5/00 E04B1/64 E04C2/04

CPC: Y10S106/02 C04B26/02 C04B2111/00612 B29C39/14 C04B26/04 C04B2111/28 Y10T428/249954 Y10T428/249956 Y10T428/249957 Y10T428/249958 Y10T428/249926 Y10T428/249968 B29C67/245 B32B29/00 C08K3/30 C08K7/22 C08K2003/3045 C08L75/04 Y10T428/31996 C04B26/28 B28B11/24 B28B15/00 B28B19/0092 B28B23/0087 C04B2111/0062 B32B2264/025 B32B2264/0292 E04C2/043 B32B2262/101 B32B2305/70 B32B2307/3065 B32B2607/00 B32B2607/02 B32B13/08 C04B28/14

European class: B28B11/24 B28B15/00 B28B19/00K B28B23/00Z1 B29C39/14 B29C67/24C3 B32B13/08 B32B29/00 C04B26/02 C04B26/04 C04B26/28B C04B28/14 C08K3/30 C08K7/22 C08L75/04 E04C2/04C M04B111/00T6 M04B111/00T6B M04B111/28 M08K3/30D

US class: 106/611 106/631 106/631S 106/672 106/675 106/677 106/680 106/698 106/778 106/779 106/783 106/DIG.2 156/346 156/346S 156/39 156/42 156/42S 156/43 156/43S 156/44 156/44S 156/45 156/45S 264/135 264/135S 264/261 264/261S 264/333 264/333S 264/42 264/42P 264/45.6 264/45.600S 425/308 425/308S 425/4 425/4.00CS 425/404 425/404S 425/449 425/449S 425/4C 428/292.7 428/305.5 428/305.500S 428/307.3 428/307.300S 428/307.7 428/307.700S 428/308.4 428/308.400S 428/312.4 428/449 428/537.7 428/703 524/423 524/442 524/444 524/445 524/448 524/449 524/5

JP class F-Term: 2E001 2E001/DB00 2E001/DE01 2E001/FA00 2E001/FA03 2E001/FA14 2E001/GA12 2E001/GA24 2E001/HA00 2E001/HC07 2E001/JA01 2E001/JA02 2E001/JD01 2E162 2E162/CA04 2E162/FA01 2E162/FA02 2E162/FD01 4G012 4G012/PA07 4G012/PA22 4G012/PB05 4G012/PB06 4G012/PB11 4G012/PB28 4G012/PB33 4G012/PB39 4G012/PC11 4G012/PC12 4G012/PD03 4G012/PE04 4G112 4G112/MD00 4G112/PA07 4G112/PA22 4G112/PB05 4G112/PB06 4G112/PB11 4G112/PB28 4G112/PB33 4G112/PB39 4G112/PC11 4G112/PC12 4G112/PD03 4G112/PE04 4J002 4J002/AB04/2 4J002/BD03/1 4J002/BF02/1 4J002/CK02/1 4J002/DG05/7 4J002/DJ00/6 4J002/DK00/8 4J002/GF00 4J002/GL00

JP class F-Index: C04B111:40 C04B28/14 C08K3/00 C08L101/12 C08L27/06 C08L3/02 C08L31/04/A C08L75/04 E04B1/64/Z E04C2/04/F

[Classification Explorer](#)

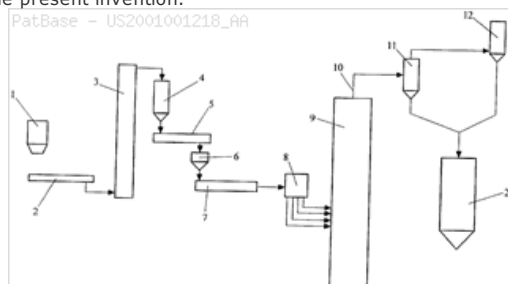
Cited documents: US6251979 BA, US5922447 A, US5888322 A, US5886306 A, US5879825 A, US5879446 A, US5874486 A, US5830548 A, US5830305 A, US5827457 A, US5810961 A, US5800756 A, US5749954 A, US5746822 A, US5725656 A, US5723226 A, US5720913 A, US5676905 A, US5653797 A, US5648154 A, US5582670 A, US5558710 A, US5536764 A, US5534059 A, US5482551 A, US5480923 A, US5437722 A, US5422387 A, US5350554 A, US5336318 A, US5309690 A, US5256222 A, US5250153 A, US4810569 A, US4695494 A, US4686253 A, US4514471 A, US4483946 A, US4433020 A, US4392896 A, US4369064 A, US4343127 A, US4328178 A, US4313997 A, US4297311 A, US4283229 A, US4174230 A, US4159302 A, US4148781 A, US4148660 A, US3988199 A, US3984596 A, US3720633 A, US3414467 A, US3305518 A, US3190787 A, US3103444 A, US3022184 A, US2809949 A, US2803575 A, FR2217937 A5, EP0754656 A1, EP0697382 A2, DE2702984 A1, DE2227679 A1,

Forward Citations: WO19035946, WO17184945, WO16138554, WO16079530, WO13181355, WO12161602, WO12087259, WO11129919, WO10117563, WO10059817, WO10059817, WO09117021, WO09117020, WO09064929, WO09025861, WO08150597, WO08116188, WO08043085, WO08039300, WO07106934, WO07084346,

WO07084346, WO06012651, WO06012651, WO05097499, WO04065319, WO04065319, WO04061042, WO04044086, WO04033581, WO03040055, WO02102586, WO02102586, USRE44070, US9963391, US9938192, US9919969, US9889579, US9840066, US9802866, US9770848, US9624109, US9593044, US9540287, US9522567, US9422193, US9388568, US9387649, US9382153, US9340455, US9266778, US9181132, US9085678, US9076428, US9045370, US8997924, US8992681, US8968466, US8932401, US8916277, US8748515, US8617718, US8591677, US8586508, US8580055, US8569214, US8568544, US8566041, US8535583, US8513167, US8495851, US8480916, US8470461, US8466216, US8445101, US8440296, US8399552, US8398764, US8388926, US8367195, US8349444, US8342102, US8337993, US8329308, US8298332, US8257489, US8204698, US8201501, US8197952, US8123988, US8070895, US8070878, US8066421, US8062478, US8057915, US8043278, US8038790, US8034203, US8012889, US7998547, US7963048, US7955587, US7923487, US7914914, US7906176, US7867597, US7776150, US7736720, US7731794, US7708847, US7696253, US7678856, US7678228, US7674251, US7566381, US7538152, US7503430, US7498014, US7488383, US7473713, US7473712, US7449085, US7435312, US7381261, US7297231, US7297207, US7294189, US7229529, US7217458, US7189307, US7105587, US7047701, US6902797, US6841232, US6783587, US6743830, US6616752, US6406537, US6403688, US2017183262, US2015329423, US2015329365, US2015184385, US2015030862, US2013131230, US2012027957, US2011195241, US2011192518, US2011190434, US2011168061, US2011165429, US2011046898, US2010280154, US2010247937, US2010239886, US2010236710, US2010203317, US2010186870, US2010152334, US2010139528, US2010136269, US2010129643, US2010115875, US2010101457, US2010077698, US2010009159, US2009308284, US2009239429, US2009239059, US2009130452, US2009053544, US2009025850, US2009011670, US2009011279, US2009011207, US2009010093, US2008314296, US2008308968, US2008300150, US2008300149, US2008299413, US2008286609, US2008254317, US2008245603, US2008245461, US2008190062, US2008171179, US2008149285, US2008099122, US2008075913, US2008070026, US2008060871, US2008060546, US2008057318, US2007292653, US2007267120, US2007216068, US2007191409, US2007172413, US2007120101, US2007116991, US2007102237, US2007059513, US2007059199, US2007048490, US2007042658, US2006283356, US2006278133, US2006278132, US2006272764, US2006252323, US2006182940, US2006178064, US2006162839, US2006156835, US2006124261, US2006057345, US2006054061, US2006009535, US2005274291, US2005250858, US2005228360, US2005221061, US2005048278, US2005019548, US2004168399, US2004092625, US2004092624, US2003153651, US2003115829, US2003092784, US2002139466, US2002128352, US10226960, US10132076, US10131577, US10125492, US10125049, US10066392, US10011528, RU2505410, KR100784495, JP2016536159, JP2015530340, JP2010532795, JP2002154857, ES2199680, EP3401290, EP3221528, EP3039092, EP3039092, EP2844623, EP2558428, EP2297257, EP2297257, EP2220010, EP2132385, EP2132385, EP2132385, EP1971813, EP1971813, EP1890980, EP1890980, EP1594813, EP1559698, EP1559698, EP1549723, EP1549723, DE2007018759, CN107571388, CN106977167, CN106892214, CN105705600, CN105705600, CN104760366, CN104703942, CN104387000, CN103898996, CN103758276, CN103758276, CN103523486, CN103523486, CN103496843, CN103496843, CN103104064, CN103104064, CN102632538, CN102503276, CN102503258, CN102267166, CN102248597, CN102209631, CN102049834, CN101935506, CN101811844, AU2011241030, AU2008216467, AU2006259581,

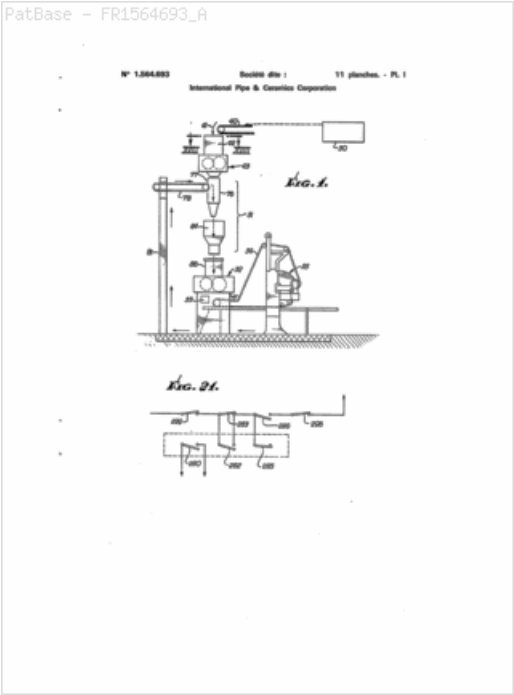
Abstract:

A novel construction board composition is disclosed comprising a unique combination of synthetic binders selected for their ability to establish a strengthened permanent bond in the final dry state for use in a construction board composition comprising primarily gypsum, and in a construction board composition comprising an expanded mineral such as Perlite which largely reduces the amount of gypsum over current gypsum construction board formulations, thus reducing the weight while maintaining the strength of the construction board structure. In a preferred embodiment, the lightweight, strengthened gypsum construction board of the present invention also comprises an optional covering veneer that is applied to provide increased strength, moisture resistance, and fire retardancy, and the back paper top ply is treated to provide increased flexural strength. Additionally, this invention relates to the unique manufacturing process to produce the improved gypsum construction board composition of the present invention in order to create a lightweight, strengthened, moisture resistant, and fire retardant construction board used to cover walls in construction applications. Still further, this invention relates to the apparatus for manufacturing the construction board composition of the present invention, including a method and apparatus for economically converting a standard gypsum construction board manufacturing facility into a facility for manufacturing the improved gypsum construction board of the present invention.



caracterisee par les phases suivantes: melange a la machine d'une charge de matiere de composition ceramique pour former un melange uniforme de matiere fragmentee; broyage de ladite matiere fragmentee par pilonnage sous pression tout en amenant ladite matiere entre deux cylindres a pression de facon a former avec cette matiere une masse consistante puis pulverisation et criblage de la masse rendue compacte pour fournir une matiere broyee de calibre de particule determine; alimentation avec ladite matiere broyee des cylindres a pression de formage de bandes; et compression de ladite matiere entre lesdits cylindres a pression de formage de bande pour former une bande mobile homogene et continue de matiere de composition ceramique: a. La phase d'humidification de ladite matiere premelangee de sorte que l'humidite de la matiere broyee de calibre de particule determine soit de 5 a 6 percent en poids; b. La phase de pulverisation et de criblage de ladite matiere fournit un calibre de particule sensiblement entre 8 et 100 mesh; c. La phase de modification des pressions de pilonnage de facon a conserver a la bande de matiere formee et continue une durete Shore dans l'intervalle 45 a 55; d. La phase de guidage de ladite bande continue et mobile de matiere sur un parcours vertical descendant depuis ledit cylindre de formage de bande; e. La phase d'application d'une pression laterale a la bande mobile de matiere de facon a assurer la continuite de la bande sur ledit parcours vertical; f. La phase de decoupage de ladite bande continue et mobile de matiere en flans separes de matiere pendant qu'elle se deplace sur ledit parcours vertical; g. La face de reception desdits flans de matiere et du deplacement intermittent desdits flans sur un parcours horizontal; h. La phase de decoupage a la presse d'une masse de ceramique pressee provenant desdits flans tout en laissant a la peripherie de ladite masse pressee une bavure a racler; i. La phase de recuperation de ladite bavure a racler et de renvoi de ladite bavure a racler recuperee a l'ecoulement de matiere premelangee pour pulverisation et criblage de facon a fournir la matiere broyee au calibre voulu.

Machine translation: (Claim 1) 1. A method for forming a homogeneous and continuous strip of material of ceramic composition, said strip being adapted to be cut into blanks which are made to the press articles of ceramic, method characterized by the following phases: a mixture of the machine a load of ceramic material composition to form a uniform mixture of fragmented material; grinding said material fragmented tamping pressure while bringing said material between two cylinders is pressure to form this matter with a mass consistent screening and then spray of the mass compacted to provide a ground material Template particle determined; supply with said ground material of the cylinders has forming pressure of bands; and compression of said matter between said cylinders has pressure band forming to form a strip mobile homogeneous and continuous ceramic composition of matter: a. Moistening phase of said premixed material so that the moisture of the ground material of particle size is determined from 5 to 6 percent by weight b. Phase spraying and screening said material provides a particle size of approximately 8 to 100 mesh; c. The phase change pressures shelling of a way to keep the strip material formed and continues a Shore hardness in the range 45 to 55 d. The guidance phase of said continuous strip and mobile of matter on a course descending vertical from said cylinder band forming; e. The implementation phase of a lateral pressure of a moving web of material to ensure the continuity of the band on said vertical path f. Decoupage phase of said web and mobile material blanks separated from matter as it moves about said vertical path; g. The face of said sheet material reception and displacement Intermittent said blanks on a horizontal path h. Phase blanking of a mass of ceramic Pressed blanks from said while leaving at the periphery of said body has a burr Pressed scrape; i. The recovery phase of said flash was scraping and removal of said flash has recovered scrape the flow of premixed material for spraying and screening to provide the ground material to the desired size.



91) Family number: 642950 (FR1566813A)

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Priority: FR19680146844 19680403

Family:	Publication number	Publication date	Application number	Application date
	FR1566813 A	19690509	FR19680146844	19680403

International class (IPC 8-9): B28B19/00 E04F13/14 (Advanced/Invention); B28B19/00 E04F13/14 (Core/Invention)

International class (IPC 1-7): B28B1/00 E04F15/02

CPC: B28B19/0007 E04F13/144

European class: B28B19/00A E04F13/14F

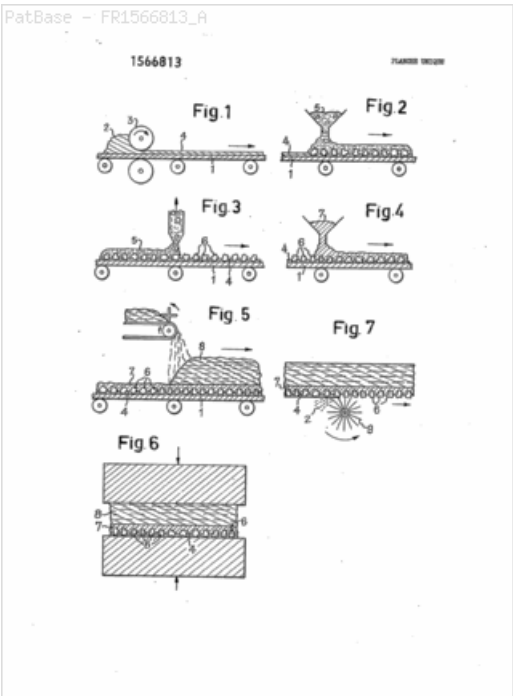
[Classification Explorer](#)

Forward Citations: EP0422340,

Abstract:

Source: FR1566813A [FR] (Claim 1) RESUME L'invention a pour objet: A/ Un procede pour recouvrir des elements de construction d'une couche de cailloux minéraux en saillie, dans lequel les differents composants de l'element de construction sont assemblees par un liant non organique, caracterise par les points suivants, consideres isolement ou en combinaison:1.) une couche fluide de materiau inerte est appliquee sur une bande support puis des cailloux minéraux dont la dimension est superieure a la granulometrie du materiau inerte sont introduits dans cette couche.fluide de facon qu'ils reposent sur la bande support, mais ne font saillie hors de ladite couche que jusqu'a hauteur de leur plan median, un liant non organique est mis en place sur la couche de cailloux et cette couche de liant est elle-meme recouverte de copeaux de bois revetus d'une matiere adhesive non organique jouant le role de materiau de remplissage, l'epaisseur de cette couche de materiau de remplissage etant superieure a celle de la couche de liant, toutes ces couches sont pressees sur la bande support et, apres prise du liant, les particules de materiau inerte non assemblees au liant sont enlevees des intervalles entre les cailloux;2.) une couche fluide de materiau inerte est appliquee sur une bande support, des eclats de pierre a faces approximativement planes sont introduits dans cette couche fluide prenant par leurs faces approximativement planes une p.osition parallele a la surface de la bande support, mais ne faisant saillie hors de ladite couche que jusqu'a hauteur de leur plan median, un liant non organique est mis en place sur cette couche d'eclats de pierre et cette couche de liant est elle-meme recouverte de copeaux de bois revetus d'une matiere adhesive non.organique, jouant le role de materiau de remplissage, l'epaisseur de cette couche de materiau de remplissage etant superieure a celle de la couche de liant; puis toutes ces couches sont pressees sur la bande support et, apres prise du liant, les particules de materiau inerte non assemblees a ce liant sont enlevees des intervalles entre les eclats de pierre.

Machine translation: (Claim 1) SUMMARY The invention relates to: A / A cover of the proceeds for construction elements of a layer of mineral rocks protruding, in which the different components of the construction element are assembled by a non-organic binder, characterized by following, taken alone or in combination: 1.) a fluid layer of inert material is applied on a carrier strip minerals and rocks whose dimension is higher than the particle size of inert material are introduced in this couche.fluide of way they are based on the support band, but does protrude out of said layer that up height of their median plane, a binder non organic is set up on the layer of pebbles and this layer of binder is it- same covered with wood chips coated with a material adhesive non organic playing the role of filling material, the thickness of this layer of filling material being greater than that of the binder layer, all these layers are pressed on the tape medium and, after setting of the binder, the particles of inert material not binding assemblies are removed at intervals between the stones; 2.) a fluid layer of inert material is applied on a carrier strip, the splinters of stone faces approximately plane are introduced in this fluid layer taking by their faces approximately planar one p.osition parallel to the surface of the support band, but does projecting out of said layer that up height of their median plane, a binder non organic is implemented on this layer of stone chips and the binder layer is itself covered with wood chips coated with a material adhesive non.organique, playing the role of filling material, the thickness of this layer of filling material being greater than that of the binder layer; then all these layers are pressed on the support band and, after setting of the binder, the particles of inert material not assembled has this binder are removed intervals between stone chips.



92) Family number: 10970958 (EP0716908A1)

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Title:	PROCESS AND APPARATUS FOR THE PRODUCTION OF CERAMIC PRODUCTS VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON KERAMISCHEN PRODUKTEN <TI			
Priority:	DE1994444774 19941215 DE19955008048 19951207			
Family:	Publication number	Publication date	Application number	Application date
	AT190897 E	20000415	AT19950119298T	19951207
	DE44444774 C1	19960307	DE1994444774	19941215
	DE59508048 D1	20000427	DE19955008048	19951207
	EP0716908 A1	19960619	EP19950119298	19951207
	EP0716908 B1	20000322	EP19950119298	19951207
	ES2146281 T3	20000801	ES19950119298T	19951207
Probable Assignee:	STROBEL KLAUS DIPL ING 95100 SELB DE			
Assignee(s):(std):	STROBEL KLAUS ; STROBEL KLAUS DIPL ING			
Assignee(s):	STROBEL KLAUS DIPL ING 95100 SELB DE			
Inventor(s):(std):	STROBEL KLAUS ; STROBEL KLAUS DIPL ING			

Designated states: AT CH DE ES FR GB IT LI

International class (IPC 8-9): B01D46/00 B01D46/24 B01J2/00 B28B1/16 B28B17/02 B28B3/00 B28C1/14 C04B33/02 C04B35/628 E04F17/02 (Advanced/Invention);
B01D46/00 B01D46/24 B01J2/00 B28B1/16 B28B17/00 B28B3/00 B28C1/00 C04B33/02 C04B35/626 E04F17/00 (Core/Invention)

International class (IPC 1-7): B01J2/00 B28B1/16 B28B3/00 B28C1/14 B28C3/00 C04B33/02 C04B35/628 C04B35/64 E04F17/02 F26B3/08

CPC: B01D46/0001 B01D46/2407 B28B3/003 B28B17/026 B28C1/14 C04B33/04 C04B33/30 C04B35/6263 C04B35/62695 C04B35/62805 C04B35/6365 C04B2235/5427 C04B2235/5436 C04B2235/5472

European class: B01D46/00B B01D46/24F B01D46/24F2 B01D46/24F6 B28B17/02C B28B3/00B B28C1/14 C04B33/04 C04B33/30 C04B35/626A10B C04B35/626A24 C04B35/628B2 C04B35/636B L01D267/20H M04B235/54D2 M04B235/54D4 M04B235/54F2

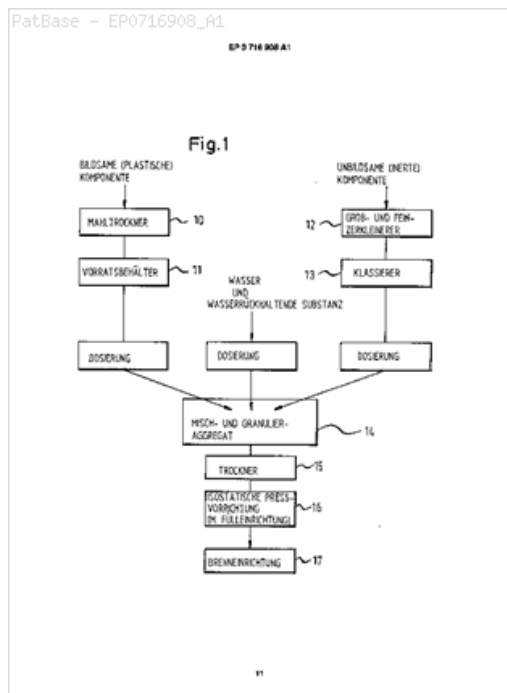
[Classification Explorer](#)

Cited documents: FR2509659 A2, DE4407299 C1, DE4314285 A1, DE3908172 A1, DE2829054 A1, DE2825611 C2, DE2552157 A1, DE1947099 A1,

Forward Citations: WO9837033, FR2759723, EP1895072, EP1895072, EP1009722, EP0773199, DE19846782, DE19629413,

Abstract:

Prod'n. of ceramic products, esp. thin-walled pipes, comprises preparing a ceramic mold consisting of a plastic component, esp. a clay mineral material, and an inert component, esp. a schamotte material, in which the mould is isostatically pressed and pressed into a moulding and then calcined. The improvement is that the prepn. process to form the mould comprises: (a) comminuting an inert component to an ave. particle size (d50) of 0.2-0.5 mm; (b) likewise comminuting the plastic component to an ave. particle size (d50) of 1-5 microns; (c) mixing the inert component with water; (d) intensively mixing the plastic component with the inert component; (e) encapsulating and granulating the inert component completely in the plastic component; and (f) drying the damp mould to a moisture of 4-8 percent. An appts. for carrying out the above process is also claimed.



93) Family number: 58449962 (DE102013215090A1)

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Title: VERFAHREN ZUR HERSTELLUNG EINES KERAMISCHEN FORMTEILS UND KERAMIKFORMTEIL METHOD FOR PRODUCING A CERAMIC FORM PART AND CERAMIC MOLDING (Machine translation)

Priority: DE201310215090 20130801

Family:

Publication number	Publication date	Application number	Application date
DE102013215090 A1	20150205	DE201310215090	20130801

Probable Assignee: BMW AG

Assignee(s):(std): BAYERISCHE MOTOREN WERKE AG ; BMW AG

Inventor(s):(std): CECCO CHRISTINA ; KUEDDE PETER ; LINDNER MATTHIAS ; SCHMIDT HARALD

International class (IPC 8-9): C04B35/622 (Advanced/Invention)

CPC: B28B1/24 C04B35/111 C04B35/14 C04B35/486 C04B35/505 C04B2235/3217 C04B2235/3225 C04B2235/3244 C04B2235/3418 C04B2235/602 C04B2235/6022 C04B41/009 C04B41/4529 C04B41/81 B28B17/026

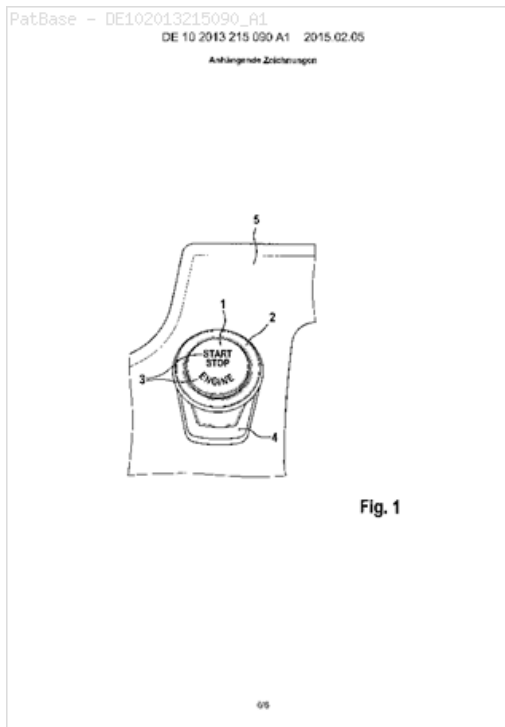
[Classification Explorer](#)

Cited documents: DE4427602 A1, DE19637680 A1, DE10207814 A1,
DE102009013387 A1

Forward Citations: EP3165989, DE102015117410, DE102015107404,

Abstract:

Source: DE102013215090A1 [DE] Die Erfindung betrifft ein Verfahren zur Herstellung eines keramischen Formteils, das die Schritte Bereitstellen von sekundaerer Oxidkeramik und Zerkleinern der sekundaeren Oxidkeramik umfasst. **Machine translation:** The invention relates to a method for producing a ceramic molding, comprising the steps of providing a secondary oxide ceramic and crushing the secondary oxide ceramic.

**94) Family number: 42100963** (US2010145469A)

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Title: BIOCERAMIC IMPLANTS HAVING BIOACTIVE SUBSTANCE**Priority:** US20070888708P 20070207 US20080526223 20080207 WO2008CA00248 20080207

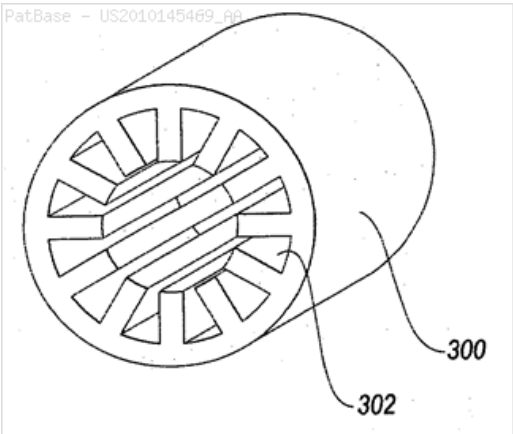
Family:	Publication number	Publication date	Application number	Application date
	CA2689675 AA	20080814	CA20082689675	20080207
	EP2114476 A1	20091111	EP20080714571	20080207
	EP2114476 A4	20121226	EP20080714571	20080207
	US2010145469 AA	20100610	US20080526223	20080207
	WO08095307 A1	20080814	WO2008CA00248	20080207

Probable Assignee: UNIV WUERZBURG J MAXIMILIANS**Assignee(s):(std):** BARRALET JAKE EDWARD ; GBURECK UWE ; UNIV MCGILL ; UNIV WUERZBURG J MAXIMILIANS**Assignee(s):** JULIUS MAXIMILIANS UNIV WUERZBURG ; JULIUS MAXIMILIANS UNIVERSITAET WUERZBURG ; MCGILL UNIV ; MCGILL UNIVERSITY**Inventor(s):(std):** GBURECK UWE ; BARRALET JAKE EDWARD**Agent(s):** NOVAGRAAF IP; DOWELL AND DOWELL PC; SHAPIRO COHEN**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 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**International class (IPC 8-9):** A61F2/28 A61J3/06 A61K9/24 A61L27/10 A61L27/34 A61L27/38 A61L27/52 A61L27/54 A61L27/56 B05D3/10 (Advanced/Invention); A61F2/28 A61J3/06 A61K9/24 A61L27/00 B05D3/10 (Core/Invention)**CPC:** B33Y10/00 B33Y80/00 A61F2/30767 A61F2/2875 A61F2/30771 A61F2/3094 A61F2002/2817 A61F2002/30062 A61F2002/30225 A61F2002/30785 A61F2002/3082 A61F2002/30948 A61F2002/30952 A61F2002/30957 A61F2002/30968 A61F2210/0004 A61F2230/0069 A61F2310/00179 A61F2310/00203 A61F2310/00239 A61F2310/00281 A61F2310/00293 A61F2310/00329 A61F2310/00592 A61F2310/0097 A61F2310/00976 A61L27/10 A61L27/306 A61L27/54 A61L2300/102 A61L2300/414 A61L2300/602 A61L2300/64 B28B1/00 B28B1/001 B28B7/465 B29K2709/02 B29L2031/7532 C04B35/447 C04B38/0054 C04B2111/00181 C04B2111/00836 C04B2235/3208 C04B2235/6026 B33Y70/00 B29C64/165**European class:** A61F2/30L A61L27/10 A61L27/30R A61L27/54 B28B1/00 B28B1/00A B28B7/46B B29C67/00R6 C04B35/447 C04B38/00H1 K61F2/28D K61F2/28S K61F2/30A1W1 K61F2/30A2Y3D K61F2/30L2 K61F2/30L2A9P K61F2/30L2G K61F2/30M K61F2/30M2B K61F2/30M2C K61F2/30M2M K61F2/30M6 K61F210/00A K61F230/00Y3 K61F310/00A6 K61F310/00A6A13 K61F310/00A6A40 K61F310/00A6C14 K61F310/00A6E K61F310/00A8 K61F310/00L33 K61F310/00L6 K61F310/00L66 K61L300/102 K61L300/414 K61L300/602 K61L300/640 L29K709/02 L29L31/7532 M04B111/00M18 M04B111/00T54 M04B235/32D4 M04B235/602K**US class:** 427/2.24 427/2.240S 623/23.56 623/23.560P[Classification Explorer](#)

Cited documents: WO05110437 A2, WO04101013 A1, WO03026714 A1, WO02067820 A1, US6905516 BA, US6767499 BA, US6495073 BB, US6280771 BA, US6027742 A, US5763092 A, US5370692 A, US5318779 A, US2005090575 AA, US2005087903 AA, US2004002770 AA, EP1731179 A2, EP1442755 A1, CA2561727 AA, CA2524982 AA, CA2460026 AA, CA2420194 AA,

Forward Citations: WO17083402, WO11123180, WO10094813, WO10092001, USD844795, US9987801, US9931296, US9925087, US9649811, US9642740, US9579421, US9539286, US9527247, US9492477, US9486483, US9463264, US9445939, US9415545, US9144487, US8603183, US8506985, US8470231, US2016023373, US2015140295, US2014193356, US10207027, US10188604, US10105259, US10099430, US10076538, US10076493, US10059031, US10045938, US10022889, US10022474, US10016937, US10016529, RU2606041, JP2017503674, EP3216598, EP3065902, EP2555751, EP2555751, EP2555751, EP2555751, DE102012219534, DE102010052914, DE102010052914, CN105617456, CN104337589, CN104260357, CN102327648, CN102316911, AU2011233663,

Abstract:
A bioceramic endoprosthesis includes a reservoir or deposition of a bioactive substance, such as an angiogenic growth factor, that can provide a biological function, such as vascularization of the endoprosthesis. Such a bioceramic can be prepared by a low temperature direct rapid prototyping inkjet printing system and process. Such a direct inkjet printing process includes the following: applying a ceramic powder to a substrate; inkjet printing a binder solution onto the ceramic powder so as to form a bound ceramic; inkjet printing a bioactive substance solution onto the bound ceramic, wherein the bioactive substance is printed on the bound ceramic at the low temperature (e.g., room temperature or within +/-10 degrees centigrade of 25 degrees centigrade); and repeating the process in order to form the bioceramic endoprosthesis.



95) Family number: 63364993 (US2016250607A)

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Title: VERTICAL SHAFT HIGH-SHEAR MIXER FOR DE-AGGLOMERATION, AND ASSOCIATED METHODS AND SYSTEMS

Priority: US20150634667 20150227

Family:

Publication number	Publication date	Application number	Application date
US2016250607 AA	20160901	US20150634667	20150227
WO16138456 A1	20160901	WO2016US19902	20160226

Probable Assignee: WATERSHED MATERIALS LLC

Assignee(s):(std): WATERSHED MAT LLC

Assignee(s): WATERSHED MATERIALS LLC

Inventor(s):(std): EASTON KHYBER ; EASTON DAVID CARR ; EASTON KHYBER J

Agent(s): GLENN MICHAEL A 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 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

International class (IPC 8-9): B01F7/00 B28C5/00 B28C5/32 (Advanced/Invention)

CPC: B01F7/00558 B28C5/32 B28C5/006 B01F2215/0047 B01F7/00041 B01F7/00066 B01F7/022 B01F7/086 B01F7/20 B01F13/1027 B01F15/0235 B01F15/0276 B28B3/022 B28B3/086 B28B7/007 B28B7/183 B28B7/28 B28B13/06 B28B17/0081 B28C5/143 B28C5/16 B28C7/0418 B28C9/002 C04B28/04 C04B40/0028 Y02W30/91 Y02W30/92 Y02W30/94 B02C23/18 B02C23/38

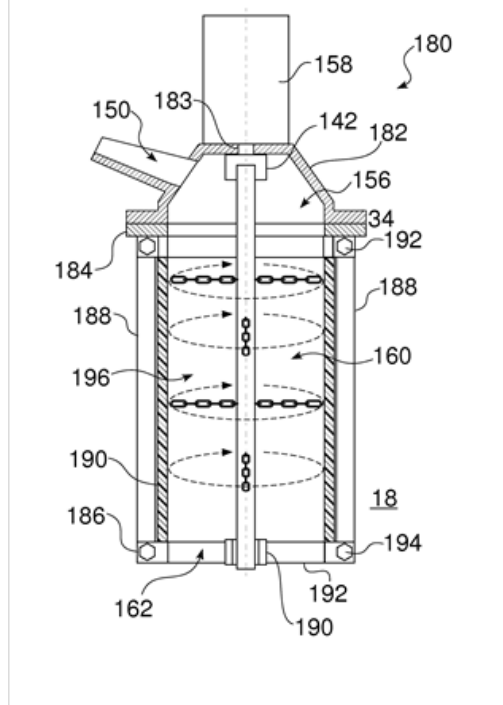
US class: 106/638

[Classification Explorer](#)

Cited documents: WO11127493 A1, US8974593 BB, US6039277 A, US5699969 A, US5697563 A, US5005980 A, US3342426 A, US2332701 A, US1963588 A, US1850308 A,

Forward Citations: US10253625, CN106696085,

Abstract:
Disclosed is a deagglomeration apparatus, to improve the quality of a mixture used for the production of concrete blocks. An illustrative embodiment of the deagglomerator comprises a vertical shaft high-shear mixer, wherein a rotational force (hydraulic or electric) is mounted to a vertical shaft onto which are mounted chains and/or knives, housed within a flexible rubber "boot" or tube. The deagglomerator is configured to be controllably powered, to rotate the shaft and the attached tools. Partially mixed formula is introduced to a top region of the deagglomerator, and falls downwardly past the rotating tools wherein the formula is pulverized and mixed, before exiting the lower area of the mixing region.

**96) Family number: 53806995** (WO13074252A1)

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Title: FORMED BUILDING MATERIALS**Priority:** US20110285534 20111031**Family:**

Publication number	Publication date	Application number	Application date
WO13074252 A1	20130523	WO2012US61450	20121023

Probable Assignee: CALERA CORP**Assignee(s):(std):** CALERA CORP**Inventor(s):(std):** BOURCIER WILLIAM ; CALAS GUILLAUME ; CAMIRE CHRIS ; CHEN IRVIN ; DEVENNEY MARTIN ; HA ERIC ; KENDALL TREAVOR ; LU PENG**Agent(s):** WILLIS MICHAEL A**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 IS IT JP KE KG KM KN KP KR KZ LA LC 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 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**International class (IPC 8-9):** B28B1/14 C04B14/28 C04B18/06 C04B38/02 C04B41/45 (Advanced/Invention)**CPC:** C04B28/02 B01D2257/504 B28B17/02 C04B28/14 C04B2103/0086 C04B2111/00017 C04B2111/0062 C04B2111/00629 E01C5/04 E01C5/06 E01C5/065 C04B28/04 B28B5/00 C04B14/28 C04B16/04 C04B22/10 Y10T428/31996 Y02W30/92 Y02W30/94 Y02W30/95 Y02W30/97[Classification Explorer](#)**Cited documents:** US5624493 A, US2004219090 AA, JP2000226402 A2,**Abstract:**

Formed building materials comprising a sequestered CO₂ are provided. The building materials of the invention include a composition comprising a carbonate/bicarbonate component. Additional aspects of the invention include methods of making and using the formed building materials.

