

**Search query (2):** [SP]: 1. a process for the production of a fiber cement sheet, comprising the steps of: (a) providing a fiber cementitious slurry comprising fibers, cement and water, (b) continuously discharging said fiber cementitious slurry on an endless water-permeable transport belt, and (c) removing excess of water from said fiber cementitious slurry through said water-permeable transport belt by suction, to form a fiber cement sheet with a predetermined thickness. 2. the process according to claim 1, wherein removing excess of water from said slurry by suction through said water-permeable transport belt takes place in at least three consecutive zones with different under-pressures. 3. the process according to claim 2, wherein the under-pressure of a first of said zones ranges between about 15 and about 65 mbar, in a second of said zones between about 65 and about 200 mbar and in a third of said zones between about 200 to about 550 mbar. 4. the process according to claim 1, wherein removing excess of water from said slurry by suction through said water-permeable transport belt takes place in at least four consecutive zones, the under-pressure of a first of said zones ranges between about 15 and about 65 mbar, in a second of said zones between about 65 and about 200 mbar, in a third of said zones between about 200 to about 550 mbar, and in a fourth of said zones between about 550 mbar and about 850 mbar. 5. the process according to claim 1, wherein step (c) of removing excess of water from said fiber cementitious slurry through said water-permeable transport belt is additionally performed by applying mechanical force. 6. the process according to claim 5, wherein the step of removing excess of water from said fiber cementitious slurry by applying mechanical force is performed by a mechanical belt press. 7. the process according to claim 1, wherein step (b) of continuously discharging the slurry on an endless water-permeable transport belt is performed by one or more flow-on systems through which said slurry is continuously dispensed on the belt. 8. the process according to claim 1, wherein step (b) of continuously discharging the slurry on an endless water-permeable transport belt is performed by one or more brush-like dispensing systems, through which said slurry is continuously and randomly sputtered on the belt. 9. the process according to claim 1, wherein step (b) of continuously discharging the slurry on an endless water-permeable transport belt is performed by one or more spraying systems, through which said slurry is continuously and randomly sprayed on the belt. 10. the process according to claim 1, further comprising the step of spraying a hydrophobic substance onto the discharged fiber cement slurry and/or onto the obtained fiber cement sheet. 11. the process according to claim 1, wherein the predetermined thickness of the dewatered fiber cement sheet ranges between about 8 mm and about 200 mm. 12. fiber cement sheet obtainable by the process according to claim 1. 13. apparatus for continuous production of fiber cement sheets, at least comprising: (i) one or more dispensing systems connected to a fiber cement source for continuously discharging a fiber cement slurry on an endless water-permeable transport belt, (ii) an endless water-permeable transport belt onto which the fiber cement slurry is discharged, and (iii) one or more devices installed adjacent to or near the water-permeable belt to achieve, facilitate and/or accelerate the removal of excess of water from the fiber cement slurry, thereby forming a fiber cement sheet with a predetermined thickness. 14. the apparatus according to claim 13, wherein said one or more devices installed adjacent to or near the water-permeable belt are one or more mechanical belt presses and/or one or more vacuum pumps. 15. the apparatus according to claim 13, wherein said one or more dispensing systems are one or more flow-on systems through which said slurry is continuously dispensed on the belt and/or one or more brush-like dispensing systems, through which said slurry is continuously and randomly sputtered on the belt and/or one or more spraying systems, through which said slurry is continuously and randomly sprayed on the belt. 16. the apparatus according to claim 14, wherein said one or more dispensing systems are one or more flow-on systems through which said slurry is continuously dispensed on the belt and/or one or more brush-like dispensing systems, through which said slurry is continuously and randomly sputtered on the belt and/or one or more spraying systems, through which said slurry is continuously and randomly sprayed on the belt. 17. the process according to claim 3, wherein removing excess of water from said slurry by suction through said water-permeable transport belt takes place in at least four consecutive zones, the under-pressure of a first of said zones ranges between about 15 and about 65 mbar, in a second of said zones between about 65 and about 200 mbar, in a third of said zones between about 200 to about 550 mbar, and in a fourth of said zones between about 550 mbar and about 850 mbar. 18. the process according to claim 2, wherein removing excess of water from said slurry by suction through said water-permeable transport belt takes place in at least four consecutive zones, the under-pressure of a first of said zones ranges between about 15 and about 65 mbar, in a second of said zones between about 65 and about 200 mbar, in a third of said zones between about 200 to about 550 mbar, and in a fourth of said zones between about 550 mbar and about 850 mbar. 19. the process according to claim 18, wherein step (c) of removing excess of water from said fiber cementitious slurry through said water-permeable transport belt is additionally performed by applying mechanical force. 20. the process according to claim 17, wherein step (c) of removing excess of water from said fiber cementitious slurry through said water-permeable transport belt is additionally performed by applying mechanical force.

**Results: 9**

**1) Family number: 67152241 (WO1822978A1)**

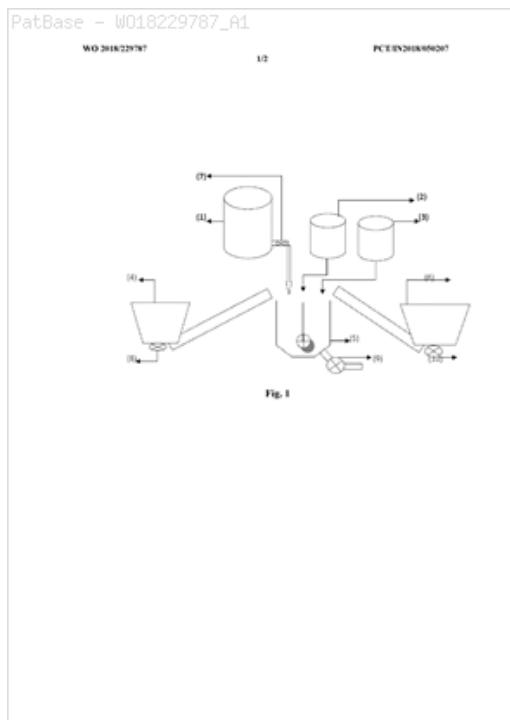
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**Title:** METHOD AND SYSTEM FOR PRODUCTION OF COLOUR ROOFING SHEET AND ROOFING SHEET THEREOF

**Abstract:** A method and a system to produce a fiber cement coloured roofing sheet having anti-fungal, anti-algal properties, excellent water repellence and high aesthetic value is disclosed herein. The method comprises forming multiple layers of fiber cement films using endless felt on plurality of separate sieve cylinders simultaneously; transferring the formed layers of fiber cement films on a rotating metallic drum in order to form a roofing sheet of a desired thickness; removing excess water from the roofing sheet on a moving felt using vacuum system and by squeezing the layer between a forming drum and a press roller; colouring the roofing sheet by spraying colour coating composition through an automated atomiser coating system on the last layer of the roofing sheet; and removing excess colour water from the roofing sheet by adjusting vacuum in a suction box.

**Classifications:**

**International (IPC 8-9):** B05B13/00 B28B1/00 B28B1/52 B28B11/00 B32B5/00 C09D5/14 E04D13/00 (Advanced/Invention)  
**CPC:** C09D5/14 E04D13/00 B28B1/527 B28B1/528 B28B11/04 C04B28/02 C04B41/4578 C04B2111/00594



| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| IN201721021072 A   | 20171006         | IN201721021072     | 20170616         |
| IN201822016128 A   | 20181221         | IN201822016128     | 20180428         |
| WO18229787 A1      | 20181220         | WO2018IN50207      | 20180411         |

**Priority:**

IN201721021072 20170616

**Probable Assignee:** EVEREST IND LTD

**Assignee(s):** (std): EVEREST IND LTD

**Inventor(s):** (std): GOSETTY BASAVARAJAPPA ; MALSHE VINOD CHINTAMANI ; RAO YENDURI SRINIVASA ; SHASTRI DIPENDRA PRADIP ; SONAR DEEPAK PRABHAKAR

**Agent(s):** NAIR GOPAKUMAR G

**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 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

**2) Family number: 1311284** (US3974024A)

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**Title:** Process for producing board of cement-like material reinforced by glass fiber

**Abstract:** This invention relates to a process for continuously producing a dense board of cement-like material reinforced by glass fiber, which comprises (1) preparing a slurry of cement-like material; (2) simultaneously spraying the cement-like slurry and short lengths of glass fiber on a suction conveyor in such a manner that the cement-like slurry stream and the glass fiber stream intersect on the suction conveyor to form a dense mat of an intimate mixture of the two; and (3) dehydrating the mat by pulse-like intermittent suction using one or more suction boxes before the cement-like material begins to set, and to an apparatus used in carrying out the process.

**Classifications:**

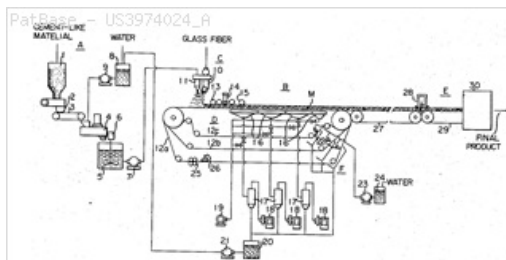
**International (IPC 8-9):** B28B1/52 B28B13/02 B28B17/02 B28B5/02 B29C63/00 B32B37/00 (Advanced/Invention); B28B1/52 (Advanced/Non-invention); B28B1/52 B28B13/00 B28B17/00 B28B5/00 B29C63/00 B32B37/00 (Core/Invention); B28B1/52 (Core/Non-invention)

**International (IPC 1-7):** B28B1/08 B28B1/42 B28B1/50 B28B1/52 B28B13/02 B28B23/02 B28B3/12 B28B5/02 B28C5/04 B28C5/40 B32B13/02 B32B31/18 B32B5/26 B32B5/32 E04C2/06

**CPC:** B32B13/02 B28B1/522 B28B1/526 B28B5/027 B28B17/02 B32B13/04 B32B2262/101 B32B2607/00

**European:** B28B1/52C B28B1/52F B28B17/02 B28B5/02C2

**US:** 106/676 106/680 156/62.8 156/78 162/101 162/125 162/156 162/209 162/213 264/42 264/70 264/87



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE2417558 A1       | 19741114         | DE19742417558      | 19740410         |
| FR2226255 A1       | 19741115         | FR19740013511      | 19740418         |
| FR2226255 B1       | 19780331         | FR19740013511      | 19740418         |
| GB1463769 A        | 19770209         | GB19740015012      | 19740404         |
| JP49130416 A2      | 19741213         | JP19730043106      | 19730418         |
| JP49130417 A2      | 19741213         | JP19730043108      | 19730418         |
| JP49130421 A2      | 19741213         | JP19730043107      | 19730418         |
| JP52033645 B4      | 19770830         | JP19730043106      | 19730418         |
| JP54002218 B4      | 19790203         | JP19730043107      | 19730418         |
| JP904393 C3        | 19780330         | JP19730043106      | 19730418         |
| JP969804 C3        | 19790831         | JP19730043107      | 19730418         |
| US3974024 A        | 19760810         | US19740455351      | 19740327         |

**Priority:**

JP19730033394 19730323 JP19730043106 19730418 JP19730043107 19730418  
JP19730043108 19730418 JP19730033394 19730521

**Probable Assignee:** ONODA CEMENT CO LTD

**Assignee(s):** (std): ONODA CEMENT CO LTD

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**Inventor(s):** YANO TSUYOSHI TOKIO ; TAKE TAKAO MITAKA ; SASANO TETSURO CHIBA ; ICHIKAWA KAZUMASA KOGANEI

**3) Family number: 15462298** (US6702966B)

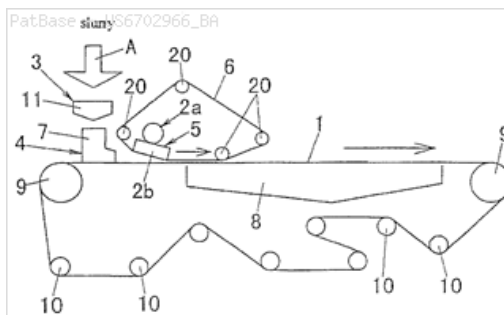
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**Title:** Method for manufacturing cement fiber sheets

**Abstract:** A method is provided for manufacturing cement fiber sheets by supplying slurry primarily including fibers and cement as main material components onto a permeable sheet, and suctioning and dewatering the slurry. The method includes a foreign matter removing operation for removing foreign matter in the slurry material before supplying it to the permeable sheet, a thickness control operation for bringing the slurry to a specified thickness after the foreign matter removing process, and a leveling operation for smoothing the slurry surface after the thickness control process. Thus, treatment for foreign matter contained in slurry as well as thickness control, is thoroughly carried out, so that the product surface quality is ensured.

**Classifications:**

**International (IPC 8-9):** B28B1/29 B28B1/30 B28B1/52 B28B11/08 B28B13/02 B28B17/02 B28B5/02 (Advanced/Invention); B28B1/00 B28B1/30 B28B1/52 B28B11/08 B28B13/00 B28B17/00 B28B5/00 (Core/Invention)  
**International (IPC 1-7):** B28B1/10 B28B1/30 B28B1/52 B28B11/08 B28B13/02 B28B5/02  
**CPC:** B28B1/29 B28B1/526 B28B17/02  
**European:** B28B1/29 B28B1/52F B28B17/02  
**US:** 264/257 264/333 264/70 264/87 425/197 425/224 425/371 425/447 425/449 425/85



#### Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| CN1129515 C        | 20031203         | CN20001009442      | 20000623         |
| CN1309013 A        | 20010822         | CN20001009442      | 20000623         |
| DE10031935 A1      | 20010823         | DE20001031935      | 20000630         |
| DE10031935 C2      | 20030313         | DE20001031935      | 20000630         |
| JP2001225309 A2    | 20010821         | JP20000037078      | 20000215         |
| US6702966 BA       | 20040309         | US20000608606      | 20000630         |

#### Priority:

JP20000037078 20000215

**Probable Assignee:** KMEW CO LTD

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**Assignee(s):** KUBOTA MATSUSHITADENKO EXTERIOR WORKS LTD ; KMEW CO LTD

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**Agent(s):** MORI ATSUO ; NISHIKAWA YOSHIKIYO

#### 4) Family number: 63529446 (US2018036908A)

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**Title:** PROCESS AND APPARATUS FOR MAKING A FIBER CEMENT SHEET

**Abstract:** The present invention relates to processes and apparatuses for producing fiber cement sheets as well as fiber cement sheets obtainable therewith. The processes according to the present invention at least comprise the steps of: (a) providing a cementitious slurry comprising fibers, (b) continuously discharging the slurry on an endless water-permeable transport belt, and (c) removing excess of water from the slurry through the water-permeable transport belt to form a fiber cement sheet with a predetermined thickness. By using a water-permeable transport belt for removing the excess of water from the fiber cement sheet, both the thickness and the density of the sheet can be accurately tuned, without resulting in a spring-back of the thickness of the sheet at the end of the production process. The present invention further relates to various uses of the fiber cement sheets obtainable by the processes of the invention in the building industry.

#### Classifications:

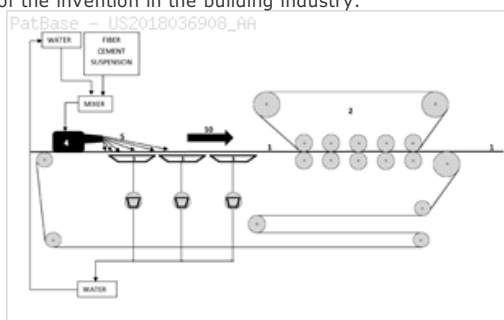
**International (IPC 8-9):** B28B B28B1/52 B28B5/02

B29C70/06 (Advanced/Invention);

B28B1/52 (Core/Invention)

**International (IPC 1-7):** B28B1/52

**CPC:** B28B1/526 B28B5/027



#### Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AR104669 AA        | 20170809         | AR2016P100425      | 20160217         |
| AU2016231368 AA    | 20170713         | AU20160231368      | 20160302         |
| BR112017014306 A2  | 20180102         | BR20171114306      | 20160302         |
| CA2973314 AA       | 20170707         | CA20162973314      | 20160302         |
| CL2017002200 A1    | 20180601         | CL20170002200      | 20170830         |
| CN107428026 A      | 20171201         | CN201680014750     | 20160302         |
| CO20170005864 A2   | 20170831         | CO20170005864      | 20170614         |
| EP3067177 A1       | 20160914         | EP20150158218      | 20150309         |
| EP3268193 A1       | 20180117         | EP20160707754      | 20160302         |
| ID201803641 A      | 20180406         | ID2017P0004059     | 20160302         |
| IN201717021280 A   | 20171208         | IN201717021280     | 20170617         |
| JP2018515357 T2    | 20180614         | JP20170548063T     | 20160302         |
| KR20170128401 A    | 20171122         | KR20177027807      | 20160302         |
| MX2017009088 A1    | 20171123         | MX20170009088      | 20160302         |
| PE11182017 A1      | 20170807         | PE20170001226      | 20160302         |
| PH2017501142 A     | 20180305         | PH20170501142      | 20170619         |
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| US2018036908 AA | 20180208 | US20160555330 | 20160302 |
| WO16142243 A1   | 20160915 | WO2016EP54459 | 20160302 |
| ZA201704262 A   | 20181031 | ZA20170004262 | 20160302 |

**Priority:**

EP20150158218 20150309 WO2016EP54459 20160302

**Probable Assignee:** ETERNIT NV

**Assignee(s):** (std): ETERNIT NV ; ETEX ENG NV ; ETEX ENGINEERING NV ; ETEX SERVICES NV

**Assignee(s):** VAN ACOLEYEN BERTRAND ; RYS MARTIN ; ETEX SERVICES N V ETERNIT N V ; ETEKS SERVICEZ NV ; ETERNIT N V

**Inventor(s):** (std): BERTRAND VAN ACOLEYEN ; MARTIN RYS ; RYS MARTIN ; VAN ACOLEYEN BERTRAND

**Inventor(s):** VAN AKOLEJEN BERTRAND ; RIS MARTIN ; VAN ACOLEYEN ; RYS ; MARTIN ; BERTRAND

**Agent(s):** FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; SMART AND BIGGAR; ESTUDIO VILLASECA Y CIA; HELENA CAMARGO WILLIAMSON; VAECK ELKE; MAULITTA PRAMULASARI SPD; FUKAMI PATENT OFFICE PC; MIKHAIYUK SOROKOLAT I PARTNERY PATENTNYE POVERENNYE; VAECK ELKE 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

**5) Family number: 69191712 (WO18065520A1)**

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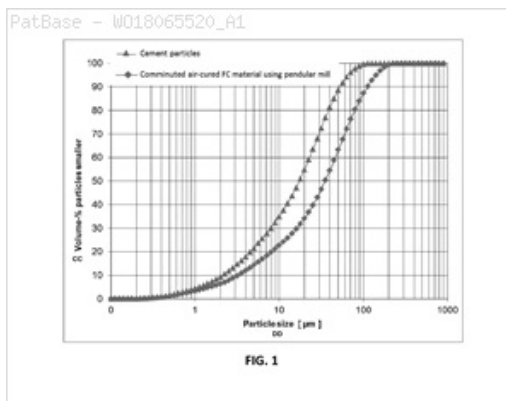
**Title:** METHODS FOR PRODUCING AIR-CURED FIBER CEMENT SHEETS

**Abstract:** The present invention relates to methods for the production of air-cured fiber cement products. More particularly, the present invention provides methods for the production of air-cured fiber cement products, at least comprising the steps of: (a) Providing cured fiber cement powder by comminuting cured fiber cement material; (b) Providing an aqueous fiber cement slurry comprising water, cementitious binder, natural or synthetic fibers and said cured fiber cement powder; (c) Providing a green fiber cement sheet; (d) Pressing said green fiber cement sheet; and (e) Air-curing said compressed fiber cement sheet thereby providing an air-cured fiber cement product.

**Classifications:**

**International (IPC 8-9):** C04B18/16 C04B28/04 (Advanced/Invention)

**CPC:** C04B18/167 C04B28/04 Y02W30/94 Y02W30/95 Y02W30/97



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| EP3305741 A1       | 20180411         | EP20160192657      | 20161006         |
| WO18065520 A1      | 20180412         | WO2017EP75346      | 20171005         |

**Priority:**

EP20160192657 20161006

**Probable Assignee:** ETEX SERVICES NV

**Assignee(s):** (std): ETEX SERVICES NV

**Inventor(s):** (std): HEYDEN LUC VAN D

**Agent(s):** VAECK ELKE; VAECK ELKE 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

**6) Family number: 69191713 (WO18065517A1)**

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**Title:** METHODS FOR PRODUCING AIR-CURED FIBER CEMENT PRODUCTS

**Abstract:** The present invention relates to methods for the production of air-cured fiber cement products. More particularly, the present invention provides methods for the production of air-cured fiber cement products, at least comprising the steps of: (a) Providing cured fiber cement powder by comminuting cured fiber cement material; (b) Providing an aqueous fiber cement slurry comprising water, cementitious binder, natural or synthetic fibers and between about 5M percent and about 40M percent of said cured fiber cement powder; (c) Providing a green fiber cement sheet; and (d) Air-curing said green fiber cement sheet thereby providing an air-cured fiber cement product.

**Classifications:**

**International (IPC 8-9):** C04B18/16 C04B28/04 (Advanced/Invention)

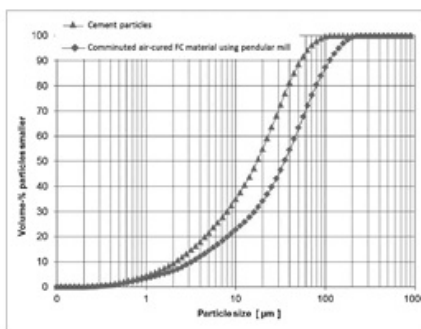


FIG. 1

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU2017339075 AA    | 20180412         | AU20170339075      | 20171005         |
| EP3305742 A1       | 20180411         | EP20160192660      | 20161006         |
| WO18065517 A1      | 20180412         | WO2017EP75342      | 20171005         |

**Priority:**

EP20160192660 20161006 WO2017EP75342 20171005

**Probable Assignee:** ETEX SERVICES NV**Assignee(s):** (std): ETEX SERVICES NV**Inventor(s):** (std): HEYDEN LUC VAN D**Agent(s):** SPRUSON AND FERGUSON; VAECK ELKE; VAECK ELKE 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

**7) Family number: 33101760 (US2006147681A)**

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**Title:** LIGHTWEIGHT, FIBER-REINFORCED CEMENTITIOUS PANELS

**Abstract:** Lightweight, fiber reinforced, cementitious panels possessing exceptional toughness for use as building components in applications such as roofing elements, siding elements, framing and sheathing elements, and substrate elements for installation of floor finishes in residential and other building construction types. The panels employ a continuous phase resulting from the curing of an aqueous mixture of inorganic binder, PVA fibers and lightweight filler. The inorganic binder may be, for example, hydraulic cement alone, or a combination of hydraulic cement and pozzolan/s, or a combination of hydraulic cement, alpha hemihydrate, active pozzolan and optionally lime. The PVA fibers reinforce the continuous phase and are randomly distributed throughout the composite. Typical panels of the invention have a density of 60-85 pcf.

**Classifications:**

**International (IPC 8-9):** B32B B32B23/02 B32B3/00 B44C B44C5/08 B44F B44F1/06 C04B111/00 C04B111/20 C04B14/18 C04B14/42 C04B16/00 C04B16/04 C04B16/06 C04B16/08 C04B18/00 C04B18/14 C04B20/00 C04B22/06 C04B28/00 C04B28/02 C04B28/04 C04B28/14 C04B35/80 C04B38/00 C04B7/02 E04C2/06 E04C2/26 E04F13/16 E04F15/10 (Advanced/Invention);

C04B111/00 C04B111/20 (Advanced/Non-invention); B28B1/52 B28B19/00 B28B5/02 B32B23/00 B32B3/00 B44C5/00 B44F1/00 C04B14/38 C04B16/00 C04B20/00 C04B28/00 C04B38/00 C04B7/00 (Core/Invention)

**International (IPC 1-7):** B28B 1/52 B28B 19/00 B28B 5/02 B28B1/32 B32B23/02 B32B23/02 B32B3/00 B32B3/00 C04B18/00 E04C2/26

**CPC:** Y10T428/19 Y10T428/192 Y10T428/24777 E04F13/16 C04B16/0641 C04B16/08 C04B28/14 C04B211/00318 C04B2201/20 E04C2/06 E04F15/10 Y02W30/94

**European:** C04B16/06D4 C04B16/08 C04B28/14 E04C2/06 E04F13/16 E04F15/10 M04B111/00P18 M04B201/20

**US:** 106/672 428/192 428/192P 428/57 428/58 428/60 428/60S

**Family:**

| Publication number | Publication date | Application number | Application date |
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#### Priority:

US20040025850 20041230 EP20050822674 20051025 JP20070549360 20051025  
JP20070549360T 20051025 WO2005US38631 20051025

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**Inventor(s):** DUBEY ASHISH GRAYSLAKE

**Agent(s):** GRIFFITH HACK; MACRAE AND CO; GOWLING LAFLEUR HENDERSON LLP; MARKS AND CLERK LUXEMBOURG LLP; FINDLAY ALICE ROSEMARY; MARKS AND CLERK; GE BO; ZEHRA YILDIRIM; STEVENS DAVIS MILLER AND MOSHER LLP; NOVAK DRUCE AND QUIGG LLP

**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 KM KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

#### 8) Family number: 49745828 (US8038790B)

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**Title:** HIGH PERFORMANCE NON-COMBUSTIBLE GYPSUM-CEMENT COMPOSITIONS WITH ENHANCED WATER DURABILITY AND THERMAL STABILITY FOR REINFORCED CEMENTITIOUS LIGHTWEIGHT STRUCTURAL CEMENT PANELS

**Abstract:** Structural cement panel for resisting transverse and shear loads equal to transverse and shear loads provided by plywood and oriented strain board, when fastened to framing for use in shear walls, flooring and roofing systems. The panels provide reduced thermal transmission compared to other structural cement panels. The panels employ one or more layers of a continuous phase resulting from curing an aqueous mixture of calcium sulfate alpha hemihydrate, hydraulic cement, coated expanded perlite particles filler, optional additional fillers, active pozzolan and lime. The coated perlite has a particle size of 1-500 microns, a median diameter of 20-150 microns, and an effective particle density (specific gravity) of less than 0.50 g/cc. The panels are reinforced with fibers, for example alkali-resistant glass fibers. The preferred panel contains no intentionally added entrained air. A method of improving fire resistance in a building is also disclosed.

#### Classifications:

**International (IPC 8-9):** C04B11/30 C04B14/04 C04B14/10 C04B14/18 C04B14/28 C04B14/42 C04B18/14 C04B18/24 C04B20/00 C04B20/10 C04B22/06 C04B24/40 C04B28/04 C04B28/14 E04B1/94 E04B5/02 E04C2/26 (Advanced/Invention); C04B28/14 E04B1/94 (Core/Invention)

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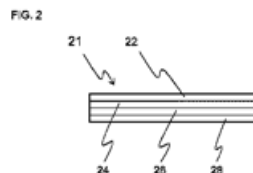
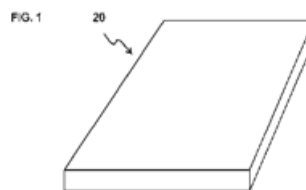
**CPC:** C04B28/146 B28B1/522 B28B5/027 B28B19/0092 B28B23/0087 C04B20/1051 C04B2111/2053 C04B2111/27 C04B2111/28 C04B2111/29 C04B2111/343 C04B2111/40 E04C2/049 Y02W30/94 C04B28/04 C04B2111/00612

**European:** C04B20/10D C04B28/04 C04B28/14H2 E04C2/04F M04B111/20P4 M04B111/27 M04B111/28 M04B111/29 M04B111/34B M04B111/40

**US:** 106/675 106/698 106/709 106/711 428/703 428/704

PatBase - US8038790\_BA

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| Publication number | Publication date | Application number | Application date |
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#### Priority:

US20100977801 20101223 EP20110808468 20111216 JP20130546242T 20111216  
WO2011US65333 20111216 JP20160132062 20160701

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

### 9) Family number: 1313938 (US4194946A)

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**Title:** Process for continuously preparing fiber reinforced cement

**Abstract:** Fiber reinforced cement is continuously prepared by forming a conveyor by connecting a plurality of suction boxes each having a perforated plate, contacting the perforated plates of the suction boxes with a filter cloth and moving the suction boxes with the filter cloth at a synchronous speed, feeding a cementitious slurry and a fiber on the filter cloth, removing excess water by suction from the cementitious slurry through a suction trough connected to a suction device, and releasing the suction on the suction boxes to separate the filter cloth from the perforated plates of the suction boxes.

#### Classifications:

**International (IPC 8-9):** B28B1/52 B28B5/02

B28B7/46 (Advanced/Invention);

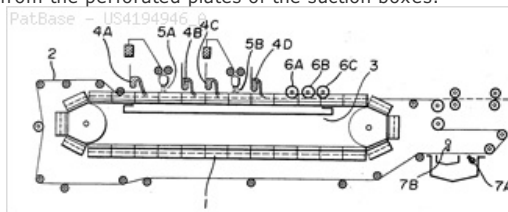
B28B1/52 B28B5/00 B28B7/40 (Core/Invention)

**International (IPC 1-7):** B28B1/26 B28B1/52 B28B5/02 B28C5/40 B32B13/02 C04B31/04 C04B31/06 C04B31/34 D21F1/32 D21F1/48 D21F11/04

**CPC:** B28B1/526 B28B5/028 B28B7/46

**European:** B28B1/52F B28B5/02C4 B28B7/46

**US:** 106/644 106/692 106/709 106/711 162/156 162/209 162/210 162/212 162/217 162/299 162/364 210/780 524/8



#### Family:

| Publication number | Publication date | Application number | Application date |
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#### Priority:

JP19760128804 19761028

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