



(51) International Patent Classification:

E04F 13/08 (2006.01) *B65D 85/46* (2006.01)
F24C 15/12 (2006.01)

(21) International Application Number:

PCT/GB2018/052861

(22) International Filing Date:

05 October 2018 (05.10.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1716248.8 05 October 2017 (05.10.2017) GB

(71) Applicant: **HOWDEN JOINERY LIMITED** [GB/GB];
40 Portman Square, London W1H 6LT (GB).

(72) Inventors: **CONROY, Andrew Kelvin**; c/o Howden Joinery Limited, 40 Portman Square, London Greater London W1H 6LT (GB). **HARRIS, Tony Ronald**; 30 Dudsbury Road, Dartford Kent DA1 3BU (GB).

(74) Agent: **SLINGSBY PARTNERS LLP**; 1 Kingsway, London, Greater London, WC2B 6AN (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: MULTI-THICKNESS WALL KIT

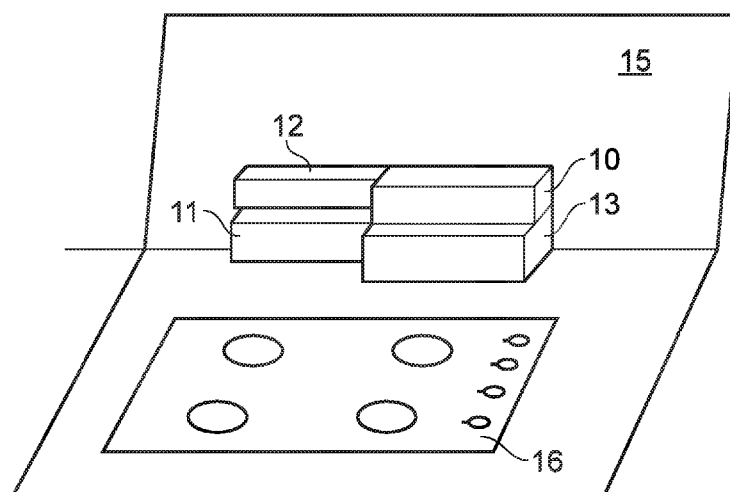


FIG. 4

(57) Abstract: A splashback kit for installing against a supporting structure comprising a plurality of substantially cuboidal blocks, each block having equal length and width to the other blocks in the kit but the blocks of the kit being of differing thickness, wherein the kit is packaged to be flat with the thickness-defining faces of the blocks being placed against each other.



MULTI-THICKNESS WALL KIT

This invention relates to splashbacks, for example for behind a hob in a kitchen.

Figure 1 shows part of a typical kitchen. The kitchen may comprise numerous cupboard units 1, an oven 2, a worktop 3, a hob 4 and an extractor fan 5. Cooking on the hob may cause solid, liquid or gaseous food debris to evaporate or splash from pots and pans and coat the surrounding wall area 6. To avoid damage to the wall, a splashback 7 is often installed behind the hob.

It is desirable for the splashback to match other components in the kitchen, for example to match the worktop. This allows for continuity of the appearance of the fixtures and fittings of a kitchen. Furthermore, a homeowner may want to make a feature of this area by installing a three-dimensional (3D) splashback.

Such 3D splashbacks can be difficult to manufacture, as they may require a bespoke design to fit around the components in an individual kitchen, which may itself be custom made, which can take time for the supplier to manufacture and deliver.

Some splashbacks are formed as one-piece 3D shapes prior to transporting to the customer. However, this can result in inefficient use of transit space because such splashbacks cannot be packaged flat, resulting in redundant space in boxes and transportation vehicles.

There is a need for a splashback kit which can be assembled on-site and delivered to the customer quickly and economically.

According to one aspect of the invention there is provided a splashback kit for installing against a supporting structure comprising a plurality of substantially cuboidal blocks, each block having equal length and width to the other blocks in the kit but the blocks

of the kit being of differing thickness, wherein the kit is packaged to be flat with the thickness-defining faces of the blocks being placed against each other.

The plurality of blocks may comprise at least two subsets, the blocks in each subset having the same thickness.

The plurality of blocks may comprise three subsets.

Each subset may be made from a different material.

When the kit is packaged, the total length along the thickness-defining dimension may be equal to the length of the blocks.

When the kit is packaged, the width-defining faces of the blocks may be aligned.

When the kit is packaged, the length-defining faces of the blocks may be aligned.

The splashback kit may comprise instructions to adhere a thickness-defining face of each block to a wall to form a splashback.

According to a second aspect of the invention there is provided a splashback formed by assembling the blocks of the splashback kit described above.

According to a third aspect of the invention there is provided a method of assembling a splashback from a splashback kit comprising a plurality of substantially cuboidal blocks, the method comprising: forming the blocks by cutting them from a preform, the blocks each having equal length and width to the other blocks in the kit but the blocks of the kit being of differing thickness; packing the blocks flat for transportation with their thickness-defining faces against each other; and assembling the kit at an installation site to form the splashback.

The assembling step may comprise adhering a thickness-defining face of each block against a vertical face of a supporting structure.

The assembling step may further comprise arranging the blocks such that their length axes are parallel.

The forming step may comprise cutting the blocks from a plurality of preforms each having a different thickness.

Each preform may be made from a different material.

The plurality of blocks may comprise at least two subsets, the blocks in each subset having a different thickness.

Each subset may be formed from a different preform.

The present invention will now be described by way of example with reference to the accompanying drawings. In the drawings:

Figure 1 shows part of a typical kitchen.

Figure 2 shows a splashback kit comprising a plurality of blocks with different thicknesses.

Figure 3 shows blocks of the type in Figure 2 packed for transportation.

Figure 4 shows the kit of Figure 2 partially assembled into a 3D splashback.

Figures 5A and 5B show examples of a 3D splashback formed from a kit.

Figure 2 shows a splashback kit comprising a number of blocks 10, 11, 12, 13. The blocks are cuboidal in shape. The blocks each have a length L and width W equal to

the lengths and widths of the other blocks in the kit. However, the blocks in the kit have a number of different thicknesses T . The kit may comprise any number of blocks depending on the area of wall to be covered by the splashback. The four blocks in Figure 2, each block having a different thickness, are just one example. Each block in the kit may have a different thickness to the other blocks in the kit. Preferably, some blocks may have the same thickness as other blocks in the kit.

Manufacturing the blocks such that they each have the same length and width as other blocks in the kit also allows the manufacturer to form and dispatch the parts quickly to the customer. Rather than manufacturing a custom 3D splashback in the workshop or factory, the blocks can be fabricated and then packaged ready for assembly of the kit to form the splashback on-site.

The blocks can be produced to have custom length and width as required by the customer. As the lengths and widths are the same for each block, the cutting jig used to cut the blocks can be kept fixed in the same position to cut the length and width of multiple blocks and only the thickness of the material being cut is required to be varied.

The blocks may be cut from preforms having different thicknesses. In this case, the blocks are formed by cutting the preforms to form blocks of the required length and width. This makes the process of forming the kit quick and efficient.

For example, the kit may comprise a plurality of blocks each having one of four possible thicknesses, as shown in Figure 2. Blocks having the same thickness may be cut from the same preform. For instance, preforms having thicknesses of 21, 28, 38 and 40mm may be available. The preforms may have a size such that at least two blocks may be cut from each preform. From each of the preforms, a plurality of blocks may be cut. For example, the resulting kit could comprise 40 blocks: 10 each of thickness 21, 28, 38 and 40mm. The preforms may each comprise a different material or they may be made from the same material.

The blocks and/or preforms could, for example, be formed of one or more lignocellulosic materials such as chip board, fibre board or hardboard. The blocks and/or preforms could alternatively be made from solid wood, such as oak or walnut. They could be coated on one or more of their surfaces with a protective or decorative covering such as a laminate, melamine paper, wood veneer or polymer sheet. Each preform may have a different decorative finish, or the preforms may have the same decorative finish.

During transportation, the blocks can be packed flat so that they fit inside a box 14 with a rectangular or square cross-section, as shown in Figure 3.

The blocks comprising the kit may be packed flat when the thickness-defining faces of the blocks are placed against each other. That is, the kit may be packed flat when the faces having an area corresponding to the length multiplied by the width are placed against each other.

This allows efficient packing of the blocks for transportation. Because the blocks have a length and width equal to the length and width of the other blocks in the kit, the blocks can be packed into a box with a width W_B and depth equal to the length of the blocks L and depth D_B equal to the width of the blocks W respectively. The length of the box L_B can be varied depending on the number of blocks in the kit. This will depend on the size of size of the splashback to be made and the specific thicknesses of the blocks in the kit. The kit may be packaged in more than one box for transportation if required. For example, one kit may be packaged flat in two separate boxes.

When the kit is packaged, the width-defining faces of the blocks, that is the faces having an area corresponding to the width multiplied by the thickness, may be aligned. The width-defining faces of the blocks may be flush. The length-defining faces, that is the faces having an area corresponding to the length multiplied by the thickness, may be aligned. The length-defining faces may be flush. When the length and width-defining faces of the block are aligned with each other, or are flush, the kit can be

packaged efficiently in a cuboidal box. This may minimise the amount of redundant space in the box and in the transportation vehicle.

When the blocks are packaged with their thickness-defining faces placed against each other, the total length of the packaged blocks along the thickness-defining dimension may be equal to the length of the blocks. This may allow the kit to be packaged in a box with a square cross-section. This is convenient for transportation.

The box may also contain other items in addition to the blocks. For example, the box may contain a set of instructions showing an installer how to assemble the kit to form a splashback.

Once packed efficiently, the box or boxes containing the blocks can then be delivered to the installation site. On site, the installer can unpack the blocks from the box and construct the splashback. This also allows the splashback to be more easily built to the customer's specification and allows it to be formed around any obstacles on the kitchen wall.

As illustrated in Figure 4, the kit is assembled by placing the blocks next to each other on the supporting wall 15 behind the hob 16 with a thickness-defining face, having an area equal to the length multiplied by the width of the blocks, being placed against the wall and the dimension corresponding to the thickness projecting out of the wall.

The individual blocks may be fixed in place on the wall with adhesive or fastening elements, such as screws, bolts or nails. The blocks may also be adhered to each other when fixing the blocks to the wall.

The blocks may be fixed in position such that the length-defining face of each block is aligned with the length-defining faces of adjacent blocks, or they can be staggered to form attractive offset pattern, as shown in Figures 5A and 5B respectively.

The blocks of such a kit may be formed from preforms comprising remnants of materials used in other areas of the kitchen, for example remnants of kitchen worktop. The kit can be conveniently manufactured by cutting pieces of worktop with different thicknesses to form blocks having the same length and width, packaging them in a box as shown in Figure 3 for efficient transportation, and assembling the 3D splashback from the kit on site.

For example, the blocks may be cut from different pieces of worktop with different thicknesses, for example 21, 28, 38 and 40mm or any other standard or custom worktop thickness. This may allow the manufacturer to utilise waste material in an effective way and also enables continuity of the appearance of the kitchen. This also allows the blocks to be cut and shipped to the customer quickly because the length and width of the blocks to be cut from the preform are the same for each block.

After assembly, the three-dimensional splashback described above may be used in combination with an additional splashback layer, such as a glass or plastic screen, fixed in front of the 3D backboard. This may allow for easier cleaning of the splashback assembly.

The applicant hereby discloses in isolation each individual feature described herein and any combination of two or more such features, to the extent that such features or combinations are capable of being carried out based on the present specification as a whole in the light of the common general knowledge of a person skilled in the art, irrespective of whether such features or combinations of features solve any problems disclosed herein, and without limitation to the scope of the claims. The applicant indicates that aspects of the present invention may consist of any such individual feature or combination of features. In view of the foregoing description it will be evident to a person skilled in the art that various modifications may be made within the scope of the invention.

CLAIMS

1. A splashback kit for installing against a supporting structure comprising a plurality of substantially cuboidal blocks, each block having equal length and width to the other blocks in the kit but the blocks of the kit being of differing thickness, wherein the kit is packaged to be flat with the thickness-defining faces of the blocks being placed against each other.
2. A splashback kit as claimed in claim 1, wherein the plurality of blocks comprises at least two subsets, the blocks in each subset having the same thickness.
3. A splashback kit as claimed in claim 2, wherein the plurality of blocks comprises at least three subsets, the blocks in each subset being of a different thickness to the blocks in the other subsets.
4. A splashback kit as claimed in any preceding claim, wherein each block is made from a lignocellulosic or wooden material.
5. A splashback kit as claimed in claim 4 as dependent on claim 2 or claim 3, wherein each subset is made from a different a lignocellulosic or wooden material.
6. A splashback kit as claimed in any preceding claim, wherein the total length of the kit along the thickness-defining dimension of the blocks is equal to the length of the blocks.
7. A splashback kit as claimed in any preceding claim, wherein the width-defining faces of the blocks are aligned.
8. A splashback kit as claimed in any preceding claim, wherein the length-defining faces of the blocks are aligned.

9. A splashback kit as claimed in any preceding claim, comprising instructions to adhere a thickness-defining face of each block to a wall to form a splashback.

10. A splashback formed by assembling the blocks of the splashback kit of any preceding claim with a thickness-defining face of each block adhered to a wall and with the blocks arranged adjacent each other

11. A method of assembling a splashback from a splashback kit comprising a plurality of substantially cuboidal blocks, the method comprising:

forming the blocks by cutting them from a preform, the blocks each having equal length and width to the other blocks in the kit but the blocks of the kit being of differing thickness;

packing the blocks flat for transportation with their thickness-defining faces against each other; and

assembling the kit at an installation site to form the splashback.

12. The method of claim 11, wherein the assembling step comprises adhering a thickness-defining face of each block against a vertical face of a supporting structure.

13. The method of claim 11 or claim 12, wherein the assembling step comprises arranging the blocks such that their length axes are parallel.

14. The method of any of claims 11 to 13, wherein each block is made from a lignocellulosic or wooden material.

15. The method of any of claims 11 to 14, wherein the forming step comprises cutting the blocks from a plurality of preforms each having a different thickness.

16. The method of claim 15, wherein each preform is made from a different lignocellulosic or wooden material.

17. The method of any of claims 11 to 16, wherein the plurality of blocks comprises at least two subsets, the blocks in each subset having a different thickness.

18. The method of claim 17, wherein the plurality of blocks comprises at least three subsets, the blocks in each subset being of a different thickness to the blocks in the other subsets.

19. The method of claim 17 or claim 18, wherein each subset is formed from a different preform.

1/3

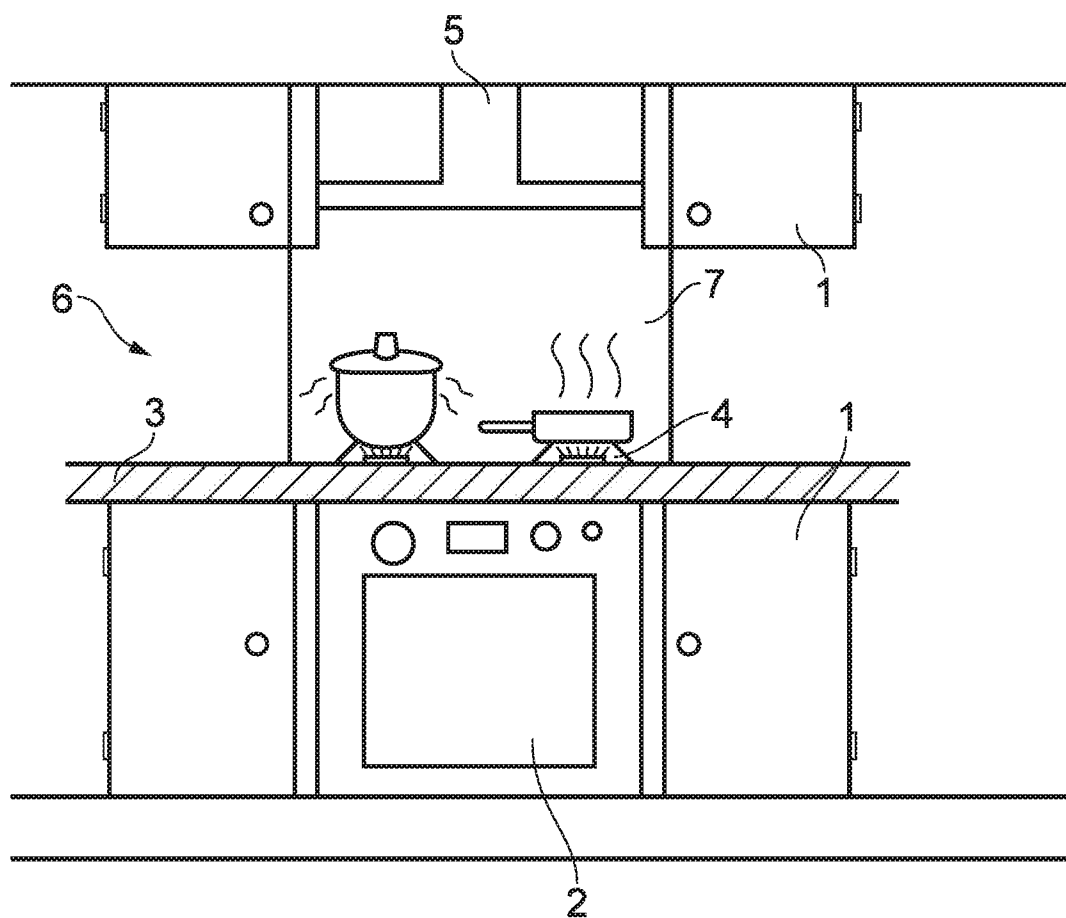


FIG. 1

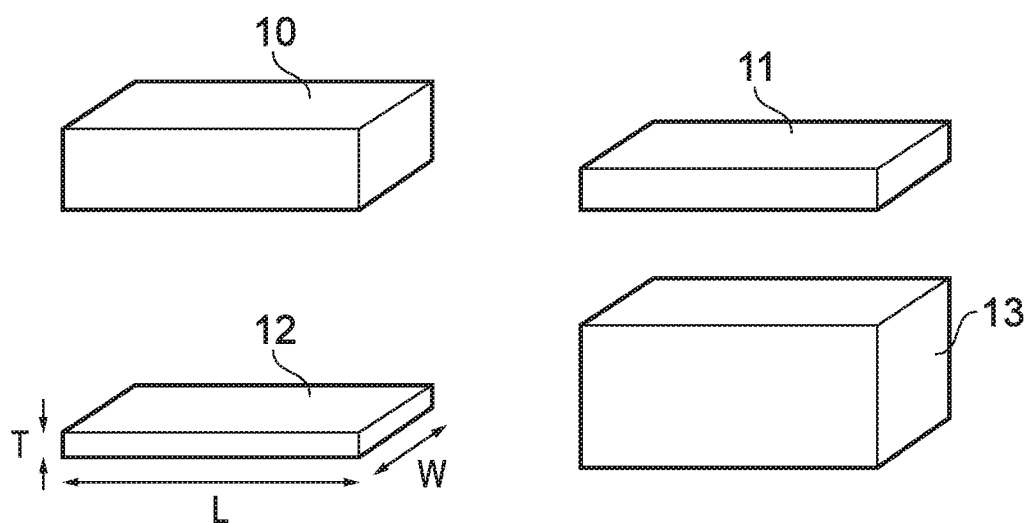


FIG. 2

2/3

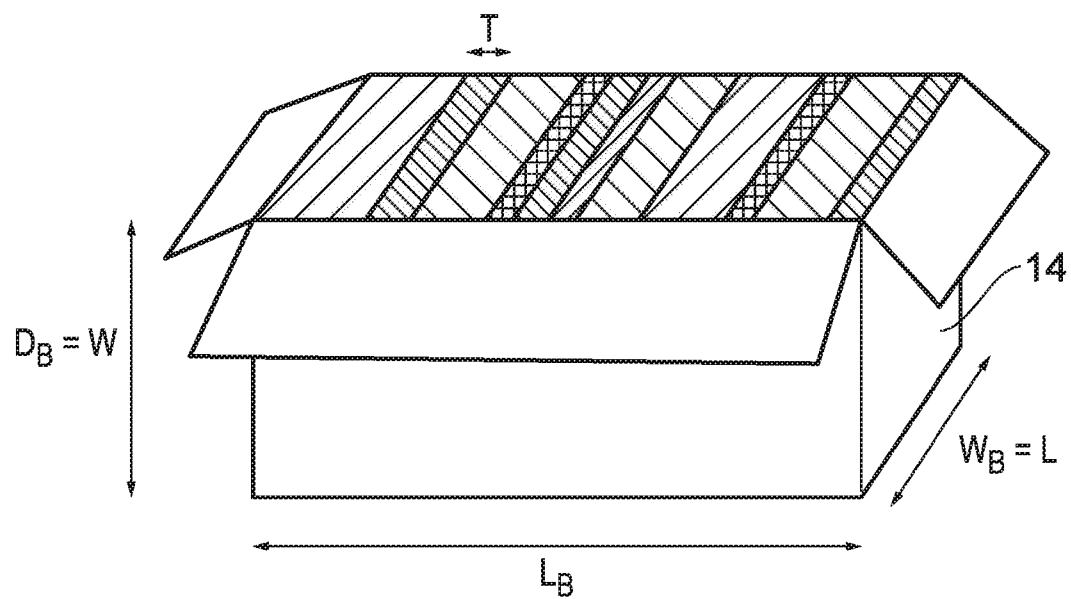


FIG. 3

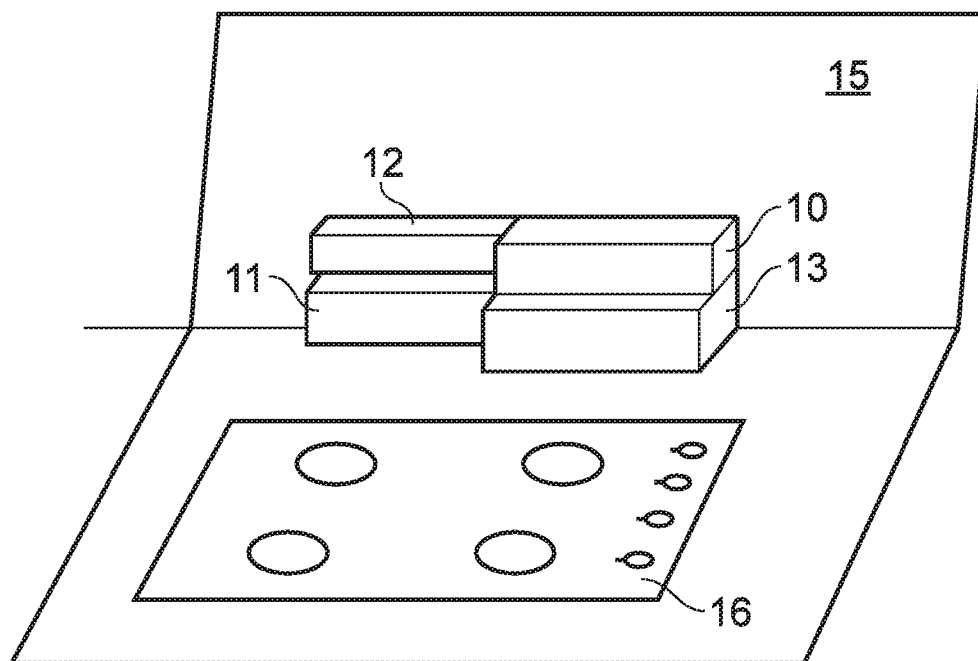


FIG. 4

3/3

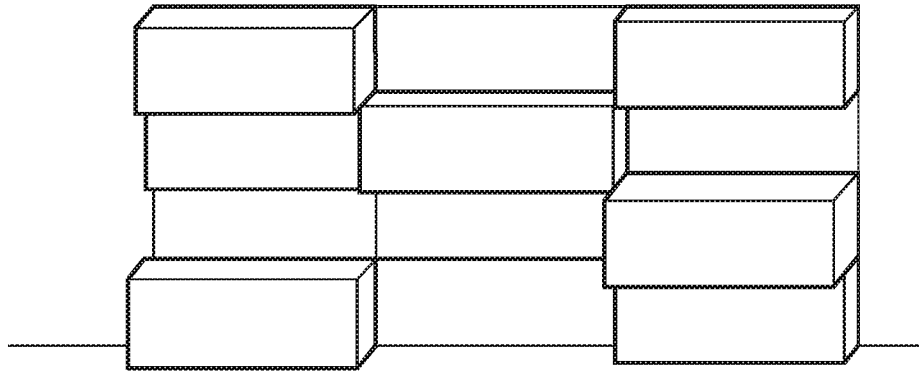


FIG. 5A

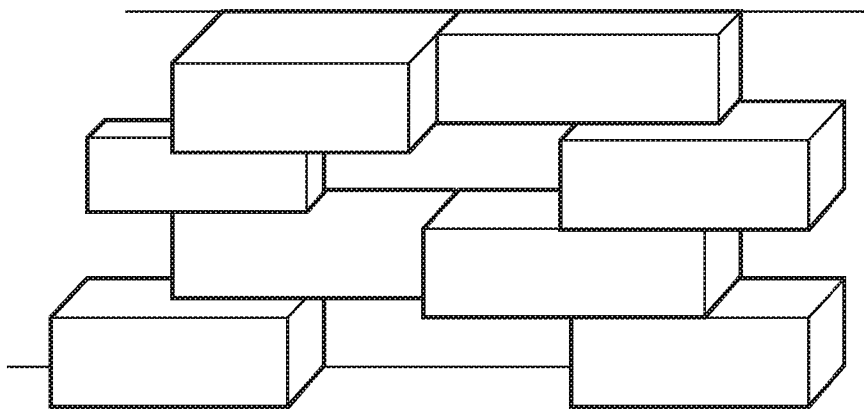


FIG. 5B

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2018/052861

A. CLASSIFICATION OF SUBJECT MATTER

INV. E04F13/08 F24C15/12 B65D85/46
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

E04F F24C B65D

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

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	AU 2008 203 492 A1 (TIMOTHY SHARPE) 19 March 2009 (2009-03-19) page 4, line 17 - page 5, line 25; figures -----	1-19
X	DIY Creators: "How to make back-splash in wood", 1 June 2016 (2016-06-01), page 1, XP054978949, Retrieved from the Internet: URL:https://www.youtube.com/watch?v=YI2hND sAapM [retrieved on 2018-12-11] the whole document ----- -/-	1-19



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

11 December 2018

Date of mailing of the international search report

19/12/2018

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Vigilante, Marco

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2018/052861

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2 811 086 A2 (LCF HOLDING OÜ [EE]) 10 December 2014 (2014-12-10) paragraphs [0015] - [0018]; claims; figures -----	1-19
A	EP 2 426 288 A1 (CERAMICHE MUTINA S R L [IT]) 7 March 2012 (2012-03-07) claims; figures 6-8 -----	1-19
A	Do And Brew - DIY: "How to install a ledger stone back-splash", 3 May 2017 (2017-05-03), page 1, XP054978950, Retrieved from the Internet: URL: https://www.youtube.com/watch?v=bMyvPtjzjd8 [retrieved on 2018-12-11] the whole document -----	1-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2018/052861

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
AU 2008203492 A1	19-03-2009	AU 2008203492 A1 NZ 570320 A	19-03-2009 24-12-2009
EP 2811086 A2	10-12-2014	NONE	
EP 2426288 A1	07-03-2012	EP 2426288 A1 IT 1402051 B1	07-03-2012 28-08-2013