

INTELLECTUAL PROPERTY OFFICE OF SINGAPORE
PATENT AGENTS QUALIFYING EXAMINATION 2019

PAPER C: INFRINGEMENT AND VALIDITY OF SINGAPORE PATENT

4 December 2019, Wednesday

1330 – 1730 hrs

Maximum Time: 4 Hours (includes reading time)

Maximum Marks: 100



INSTRUCTIONS TO CANDIDATES

1. This Question Paper consists of 20 pages, including the cover pages.
2. Type your answers in English. Answers in any other language will not be marked.
3. You are given one hard copy of the Question Paper. The soft copy of the Question Paper is also provided in the given laptop.
4. Only answers and/or drawings typed or indicated in the Answer Script template provided by the Examination Secretariat will be considered. Candidates should not change the given format of the Answer Script or type in the margin.
5. The information provided in the Question Paper may be obtained from actual situations or modified therefrom for the purpose of this examination. You should accept the facts given in the paper and assume that the prior art given is exhaustive.
6. You are to advise the client on the infringement and validity of the relevant patent(s), and on the other questions posed by the client. Your advice can be in the form of notes or a letter to the client, but in either case, you should provide the reasons for your advice. Marks are awarded more for the points selected for discussion and the reasoning displayed, rather than for the conclusions reached.

TO BE CONTINUED

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7. The maximum mark allocation for each category is as follows.

S/N	Category	Marks
1	Construction	29 marks
2	Infringement	23 marks
3	Validity – Novelty	11 marks
4	Validity – Inventive Step	17 marks
5	Advice and Miscellaneous Issues	20 marks
		100 marks

8. The documents provided in this Question Paper are:

- a. Cover Page (2 pages);
- b. Client Letter Dated 4 December 2019 including questions and notes (2 pages);
- c. Document A: Client's Press Release (3 pages including drawings);
- d. Document B: SG Patent SG11 (6 pages including drawings);
- e. Document C: US22 – US Patent No 5,012,022 (3 pages including drawings); and
- f. Document D: GB33 – GB Patent No 112233 (4 pages including drawings).

END

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Client Letter Dated 4 December 2019 (1/2)

4 December 2019

5 Dear Patent Attorney

I need your urgent advice. I own a company which is in business of developing and selling innovative kitchen accessories. My company's products are often featured in popular home decor' magazines and have been selling very well. For the past year or so, we have been selling our latest product "Dream Board" – a versatile, folding cutting board for preparing food that has interchangeable cutting surfaces. A press release explaining the design is enclosed **[Document A]**. The product is currently sold in all the major departmental stores and is one of our most popular and profitable products.

15 As you can imagine, I was rather dismayed to receive a letter yesterday from a well-known manufacturer of kitchen accessories and one of our key competitors, Mary Mary. Mary Mary claims that the "Dream Board" infringe one of their patents which is enclosed **[Document B]** and wants me to stop selling the product immediately. They want an undertaking from me within 14 days that I will discontinue my activities or they will "take action" against me.

20

Please could you advise me about the risks my company faces from Mary Mary?

Yours faithfully,

Barry Khoo

25 Barry Khoo

Barry Barry Pte Ltd

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Client Letter Dated 4 December 2019 (2/2)

Instructions

You perform some searches and confirm that [**Document B**] (a Singapore patent, "**SG11**")
5 was filed on 16 March 2004 with priority claim to a European patent application that was filed
on 21 April 2003 (the "**European Patent**", "**EP10**"). The Singapore patent was granted on 12
December 2006 , relying on the granted EP10, and is currently in force.

You also found that the European Patent was opposed by a third party in 2014 on the basis
10 that it is invalid in view of two prior publications - United States Patent Publication No. 5,
012,022, published on 16 February 1999 [**Document C**] ("**US22**") and United Kingdom Patent
No. GB 112233 ("**GB33**"), published on 22 March 1983 [**Document D**]. Mary Mary amended
the claims of the European Patent during the opposition proceedings. The European Patent
Office held that the patent as-amended was valid over the prior art. The European opposition
15 proceedings were concluded in 2016. No post-grant amendments were made to the Singapore
patent.

Document C was deemed withdrawn at the United States Patent and Trademark Office
through failure to respond to an official action. **Document D** has expired.

20 Prepare detailed notes for a memorandum of advice to the client.

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Document A: Client's Press Release (1/3)

1 November 2018

5 **GET ON BOARD WITH BARRY BARRY'S "DREAM BOARD"**

[0001] The "Dream Board" is a cutting board which provides interchangeable cutting surfaces that can be easily slid on and off a base. This allows the cutting board to be used with different food groups while helping to reduce cross-contamination of food. The cutting board can be
10 folded for easy storage.

[0002] Details can be seen in the figures below.

[0003] With reference to FIGURE 1, the cutting board comprises a base 100 made up of a
15 first section 101 that is attached to a second section 102 via a hinge 103. The hinge 103 has a rotational range of 180 degrees such that the first section 101 and the second section 102 can be opened to a flattened state alongside each other when in use or folded into a closed state for more compact storage. It shall be further noted that both the first section 101 and the second section 102 have indentations 104 that enable the hinge 103 to rotate the base 100
20 from the flattened state to the closed state, and vice versa.

[0004] The first section 101 includes a closure lip 107 on a distal end of the first section 101, whereas the second section 102 includes a magnetic closure 108 on a distal end. The magnetic closure 108 works in conjunction with the closure lip 107 to secure the first section
25 101 and the second section 102 in a closed state (see FIGURE 2).

[0005] Both the first section 101 and the second section 102 are provided with insets 109 (see FIGURE 3) to provide means for securing cutting surfaces 105, 106 to the base 100. The bottom portion of each of the cutting surfaces 105, 106 slide into the insets 109 in order to
30 secure the cutting surfaces 105, 106 to the base 100. The bottom portion 106A of cutting surface 106 is shown in FIGURE 3. This way, the cutting board can be folded for storage even with cutting surfaces 105, 106 installed.

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Document A: Client's Press Release (2/3)

[0006] The bottom of the base 100 is provided with non-skid pads which provide traction when the cutting board is placed on a table or work top.

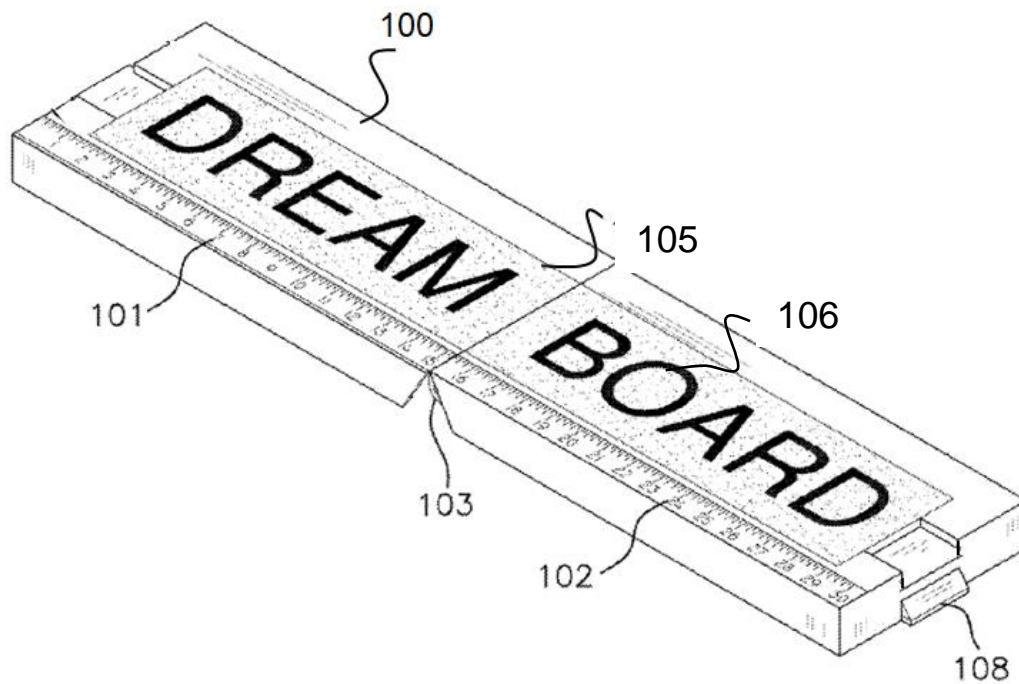


FIGURE 1

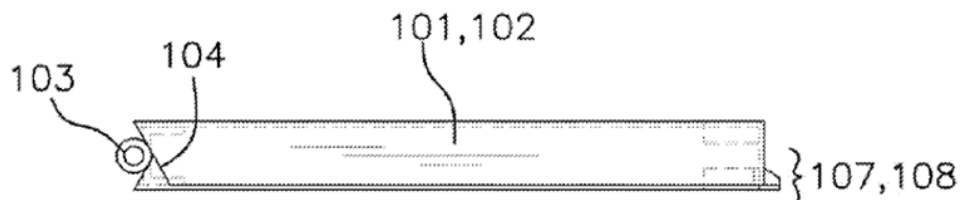


FIGURE 2

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Document A: Client's Press Release (3/3)

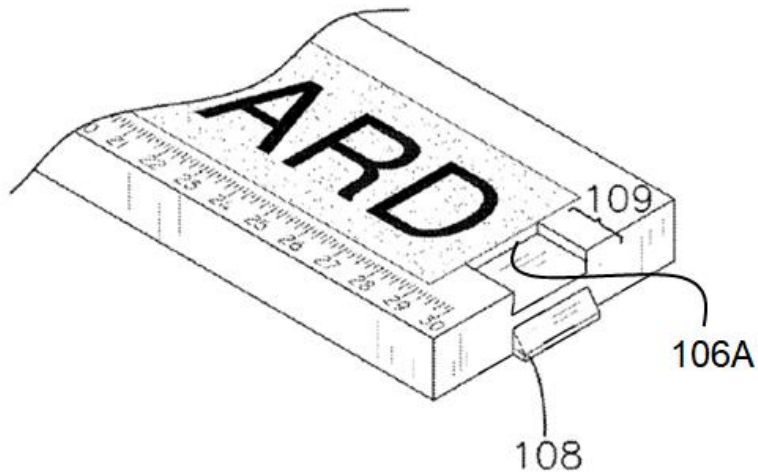


FIGURE 3

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Document B: SG Patent SG11 (1/6)

SG11 filed 16 March 2004; granted 12 December 2006

Proprietor: Mary Mary Pte Ltd

5

FOLDABLE TRAY

[0001] The foldable tray of the present invention includes two symmetrical halves joined by a spine that allows the foldable tray to close for portability. The foldable tray can include one or more inserted surfaces overlapping at least a portion of the two symmetrical halves on one side of the foldable tray. The inserted surfaces can be folded into the foldable tray in a folded state. The inserted surfaces can be removable.

10

DETAILED DESCRIPTION

[0002] The foldable tray according to the present invention may be used in any number of environments to guard against contaminating an item on the tray, or an item on which the tray rests. For example, the foldable tray may be used as a food tray, an alternative eating surface, or to prevent paint drips from staining a table where an article smaller than the foldable tray is being painted or drying.

15

[0003] FIG. 1 illustrates perspective views of a foldable tray **100** according to embodiments of the invention. Foldable tray **100** is shown folded in FIGS. 1A and 1B. When folded, internal surfaces of foldable tray **100** can be isolated from external contact and/or contamination. Foldable tray **100** can include foldable housing first half **110**, foldable housing second half **120**, center spine **130**, and optional soft discs **111** and **112**. The soft discs **111** and **112** prevent the foldable tray **100** from sliding or shifting when placed on a smooth surface. In some embodiments, foldable housing first half **110** and foldable housing second half **120** can be substantially symmetrical.

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Document B: SG Patent SG11 (2/6)

[0004] Foldable housing first half **110** and foldable housing second half **120** can be offset by the distance of center spine **130**. Center spine **130** can allow foldable housing first half **110** and foldable housing second half **120** (as well as materials overlapping, there between, or within) to fold neatly together. Center spine **130** can include two folds capable of permitting foldable housing first half **110** and foldable housing second half **120** to rotate at least 90 degrees each with respect to center spine **130** such that the two halves can meet or touch when foldable tray **100** is folded. In some embodiments, center spine **130** can include one or more hinges, pivots, or other alternatives to facilitate folding of foldable tray **100**.

[0005] In some embodiments, foldable tray **100** can include folding lock **131**. Folding lock **131** can be a means for maintaining foldable tray **100** in a folded position. In some embodiments, folding lock **131** can be a button, snap, clasp, magnet, hook-and-loop contact point, etc.

[0006] FIGS. 2A and 2B show an alternative embodiment of a foldable tray **200** in an unfolded state. FIG. 2A illustrates the inside/top of unfolded tray **200**, and FIG. 2B illustrates the outside/bottom of unfolded tray **200**.

[0007] Center spine **230** is visible centered between foldable housing first half **210** and foldable housing second half **220**. Folding lock **231** is shown mirrored by folding lock **231'**. Foldable tray **200** can include surface **250** (see FIG. 3A) that is isolated from contamination at least while foldable tray **200** is in a folded state. Surface **250** can be a hygienic internal surface and can be impermeable to fluids. Surface **250** can span across foldable housing first half **210**, center spine **230**, and foldable housing second half **220**.

[0008] Foldable tray **200** can further include surface fasteners **213**, **214**, **223**, and **224** which can be used to attach a hygienic surface (e.g., for eating, working, etc.) to an interior (when folded) or top (when unfolded and placed on a flat plane) portion of tray **200**, first half **210** and/or second half **220**. The surface fasteners **213**, **214**, **223**, and **224** can be one or more of ball-and-socket fasteners, snapping buttons, hook-and-loop arrangements, buckles, clasps, zippers, etc. A hygienic surface to be attached can include a mating portion that connects with surface fasteners **213**, **214**, **223**, and **224**. In alternative or complementary embodiments, surface fasteners **213**, **214**, **223**, and/or **224** can include components that retain the hygienic

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Document B: SG Patent SG11 (3/6)

surface without requiring a mating portion on the hygienic surface. For example, various layers to corners or sides, clips, clamps, slides, and other retainers can be employed. These fasteners can be reconfigurable (e.g., move slide, slide from under clip or fold, open clasp) to allow removal and/or replacement of retained objects.

[0009] FIG. 2B shows the outside/bottom of unfolded tray **200**, which may face away from a user when tray **200** is in use (e.g., open and placed). First half **210** and second half **220** can include texturing **217**, **227** to prevent movement of tray **200** when opened on smooth surfaces.

[0010] FIG. 3A illustrates tray **200** including surface **250** inserted. Surface **250** is a hygienic internal surface. Means for fastening surface **250** to first half **210** and second half **220** are obscured by overlap of surface **250** with other aspects of tray **200**. As shown, surface **250** can cover at least a portion of both first half **210** and second half **220**, and can fold in place when tray **200** is folded.

[0011] In some embodiments, surface **250** can include replaceable sheets **256**. Replaceable sheets **256** can be a plurality of clean sheets stacked, such that when one is removed, a new clean sheet is available immediately underneath. Surface **250** can be a retaining portion for replaceable sheets **256**. In support of using replaceable sheets **256**, surface **250** can include cutaway **255** to allow at least a portion of replaceable sheets **256** to be exposed and facilitate removal of a sheet among replaceable sheets **256**. In alternative embodiments, surface **250** needs not include replaceable sheets **256**, and may be a removable surface that can be cleaned or replaced singly.

[0012] Various alternative configurations to those illustrated can be utilized without departing from the disclosed innovation. For example, multiple surfaces can be included in a single foldable tray, and/or a foldable tray can unfold in multiple directions for multiple simultaneous uses (e.g., two persons eating from the same foldable tray but on different surfaces, different materials placed atop different surfaces, and others).

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Document B: SG Patent SG11 (4/6)

Claims:

The invention claimed is:

- 5 1. A portable foldable tray, comprising:
- a foldable housing comprising a first section and a second section;
- a spine connecting the first section and the second section at a spine width; and
- a hygienic surface that overlaps at least one portion of a first side of the first section
10 and at least one portion of a first side of the second section, wherein the hygienic surface is
removable from the at least one portion of the first side of the first section and the at least one
portion of the first side of the second section, the hygienic surface folds along a portion that
coincides with the spine, at least the hygienic surface is impermeable to fluids.
2. The portable foldable tray of claim 1, further comprising a fold closure that secures the
first section to the second section in a folded configuration.
- 15 3. The portable foldable tray of claim 1, further comprising a friction increasing component
on at least one external side of at least the first section and the second section.
4. The portable foldable tray of claim 1, wherein the hygienic surface is configured to be
isolated from contact with an available surface on which the portable foldable tray is placed.

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Document B: SG Patent SG11 (5/6)

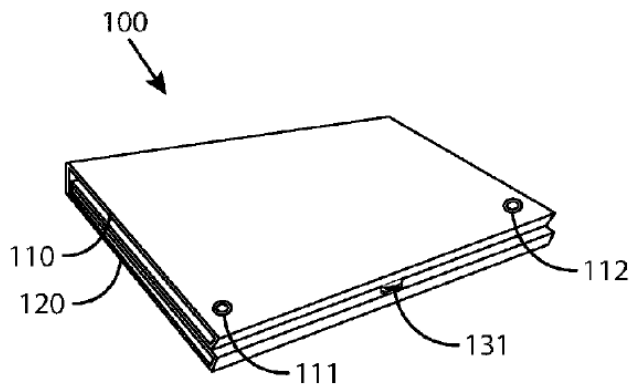


FIG. 1A

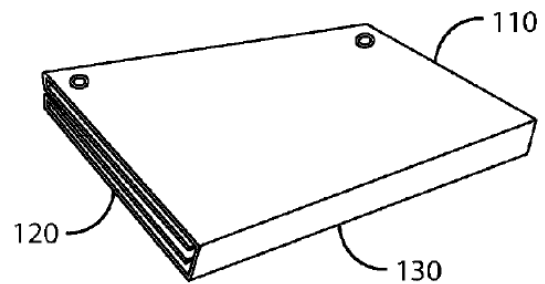


FIG. 1B

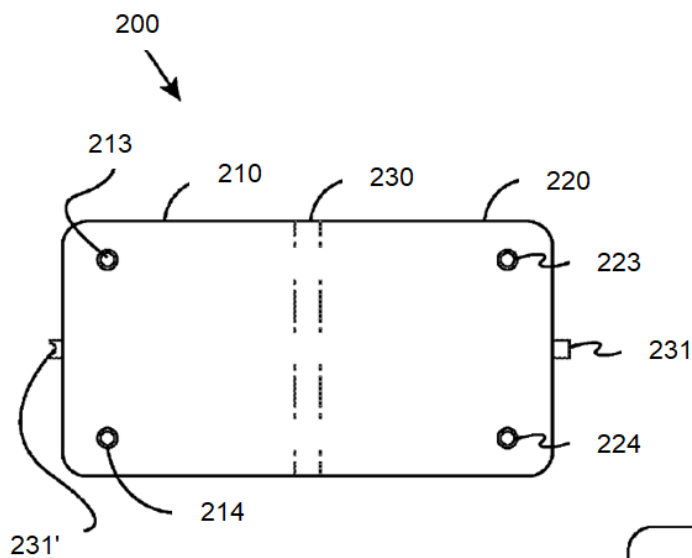


FIG. 2A

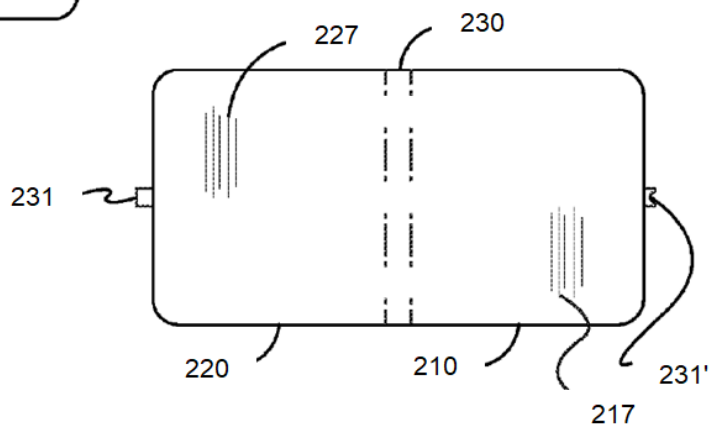


FIG. 2B

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Document B: SG Patent SG11 (6/6)

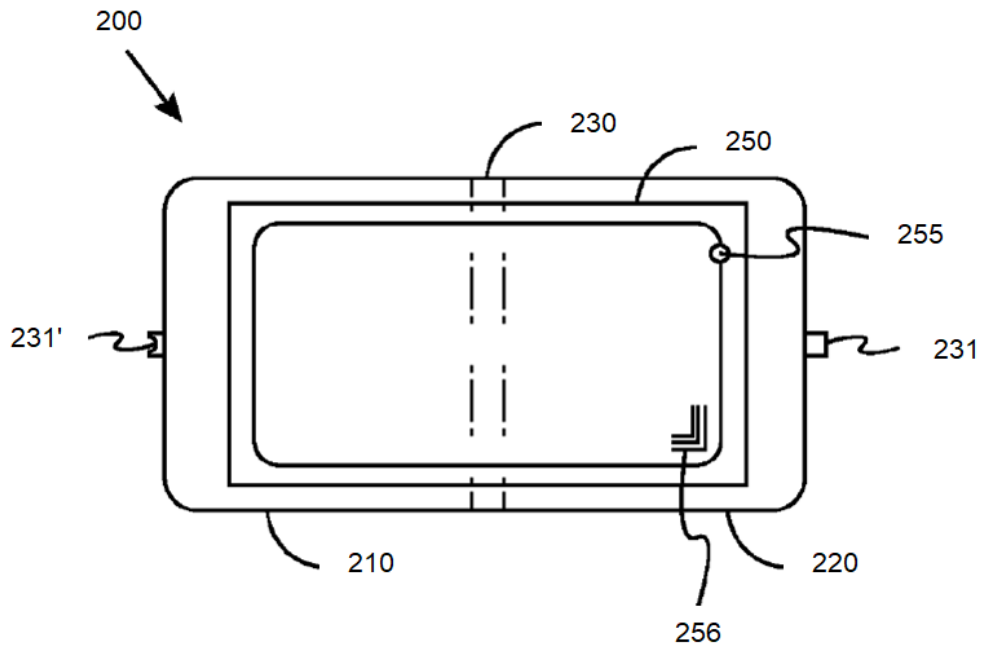


FIG. 3A

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Document C: US22 - US Patent No. 5,012,022 (1/3)

US22 - United States Patent No. 5,012,022

Publication date: 16 February 1999

5

CUTTING BOARD WITH REPLACEABLE CUTTING SURFACE

[0001] FIG. 1 shows a perspective view of the cutting board assembly of the present invention.

- 10 [0002] As shown in FIG. 1, the cutting board assembly includes a base board 10 having a substantially smooth, continuous top surface 18. A replaceable skin layer 14 is mounted on the top of the base board and includes a smooth continuous bottom surface that meets with the base board top surface 18 in a flat, smooth layered fashion. The replaceable skin layer that includes a cutting surface 20 can be adhered to the base board, for example, by a
- 15 pressure sensitive adhesive, mechanical locking member, or other means. Preferably, the replaceable skin layer can be placed on the base board without fixing the cutting surface to the board in any manner and the cutting surface will remain in place due to the configuration of the skin layer. In particular, a skirt member 22 extends downward from the skin layer cutting surface 20 to provide a fit over the base board sides 26, much like a box lid fits over a box.
- 20 The skirt prevents the skin layer from sliding side to side relative to the base board.

- [0003] With attention now to FIGS. 2 and 3, the base board 10 is shown to have a smooth top surface 18 as well as a smooth bottom. The base board is formed of a substantially rigid and durable material such as wood or plastic, or any other suitable material that is approved for
- 25 use in conjunction with food service. Preferably, the base board is formed of a plastic material such as stress relieved high density polyethylene.

- [0004] A continuous curb 38 extends upward from the face of the cutting surface 20 adjacent at least three sides thereof. The curb provides a stop for juices and food particles so that they
- 30 do not slip or flow from the skin layer. One edge 42 of the cutting surface does not have a curb to allow for ease of transferring food to and from the cutting board.

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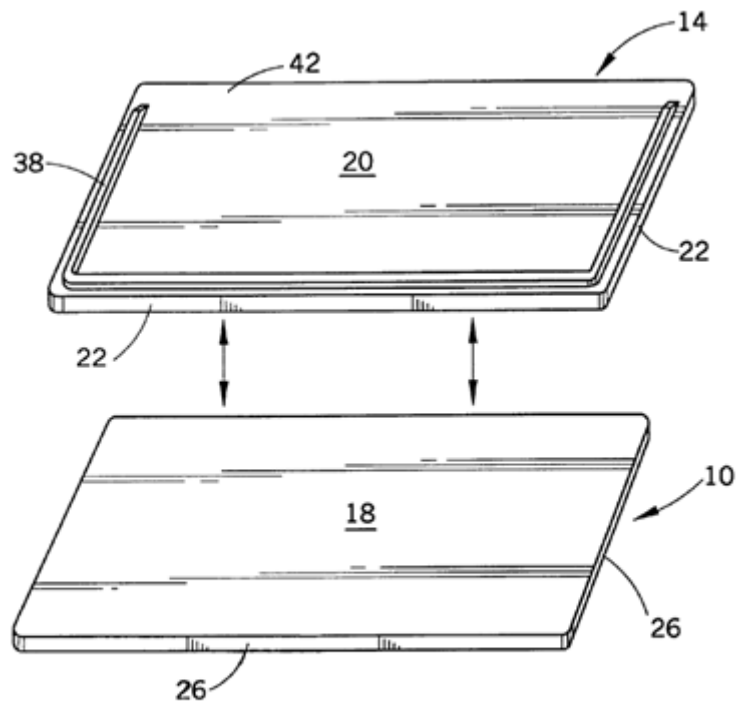
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Document C: US22 - US Patent No. 5,012,022 (2/3)

[0005] A means for providing traction can be included on the base board. Preferably, rubber feet 28 can be attached to a bottom of the base board to provide traction against sliding during cutting board use. Other forms of traction are contemplated, including the use of spaced rubber treads or a rubber grip.

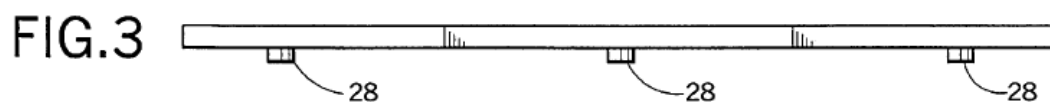
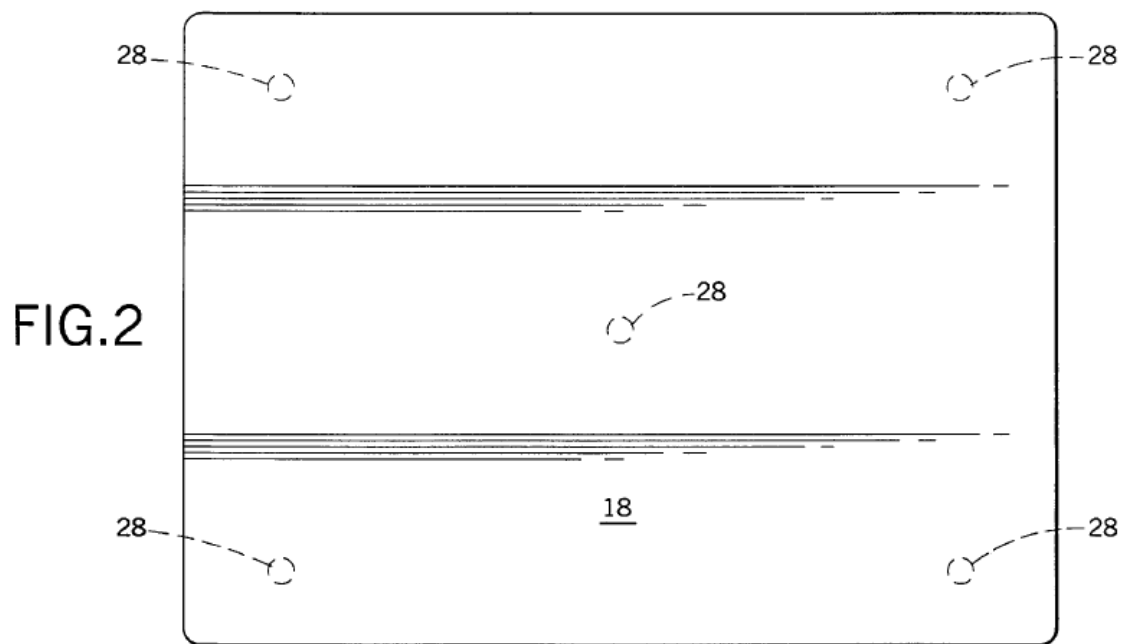


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Document C: US22 - US Patent No. 5,012,022 (3/3)



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Maximum Marks: 100

Document D: GB33 – GB Patent No. 112233 (1/4)

GB33 - GB 112233

Publication date: 22 March 1983

5

COLLAPSIBLE TRAY

10 [0001] A collapsible serving tray that is stiff and flat when open and reduced in size and compact when folded. The tray is designed to be folded up into a compact size that is about one-quarter of the fully deployed size of the tray. One embodiment of the tray includes a perimeter edge that is ninety degrees to the flat serving surface when the tray is fully deployed.

15 [0002] The preferred embodiment of the present invention is a small hand-carried tray of the sort used by servers to carry drinks and the like in restaurants and cocktail lounges. The tray's special feature is that it can be folded when not being used, and it can be carried by the waiter in its folded position. That is, it can be carried, when folded, in a pocket or in a special holster.

20 [0003] Referring to FIGS. 1A, 1B and 1C, the folding tray 2 according to the present invention is shown in orthogonal top view and side views respectively. FIG. 1C shows the tray 2 in an oblique view. As shown in FIG. 1A, the flat base portion 4 of the octagonal folding tray 2 comprises four quadrants that are labeled A, B, C and D in the figure, a labeling convention that has been chosen as an aid in describing the novel method by which the tray is folded to one quarter of its fully deployed, in-service size. In FIG. 1A, quadrant A of the base portion 4 is joined to the quadrant C by a hinge 8, and the quadrant B is the also joined by another
25 hinge, also denoted by 8, to the quadrant D. Quadrants C and D are also joined by a hinge. The edge portions 6 of the tray are visible in both the top and side views. In this embodiment, the edge portions 6 comprise a plurality of components, which are connected by hinges 12 (only representative hinges identified in the figure) to the base portion 4. A latch mechanism 16 is evident connecting the two edge portions 6' and 6" in FIG. 1A. As will be seen in this
30 embodiment, two pairs of the edge portions 6 are connected to one another by hinges and also by two spring-loaded and tension-bearing fiber or cord elements described below.

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Document D: GB33 – GB Patent No. 112233 (2/4)

[0004] The hinges can be of metal “piano hinge” type made of brass or brass-plated steel. Other hinge types may also be used. In one embodiment, the entire tray (including the quadrants and the perimeter edges) can be made as a single molded plastic unit having thin sections in the hinging locations as described.

[0005] As shown in FIG. 2, the edges 6 of the tray 2 can be folded downward, at the hinges 12 (only representative hinges identified in the figure), into the same plane as the base portion 4. The edges 6 are folded into the position shown in preparation to folding the entire tray. Two separate spring-loaded fibers or cords, both of which are enumerated as 14, are visible in eight places around the perimeter of the flattened edge portions 6. The two fiber or cord segments 14 reside in holes (not shown) inside the edges 6. The fiber or cord segments 14 are made of a high modulus material and are connected to springs (not shown) which maintain the fiber or cord segments 14 in a state of tension and to cause the edges 6 to tend to fold automatically into the fully deployed form shown in FIGS. 1A and 1B.

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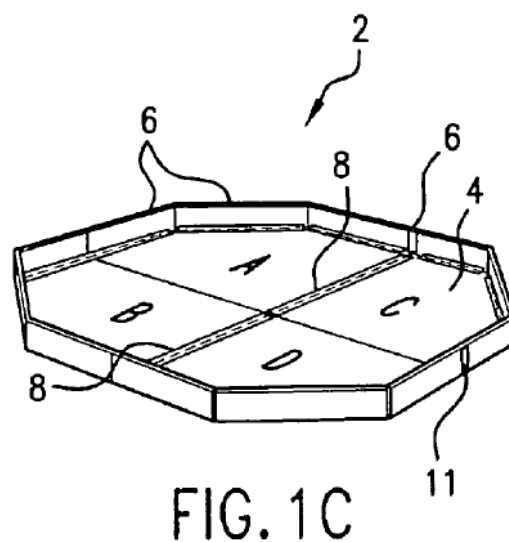
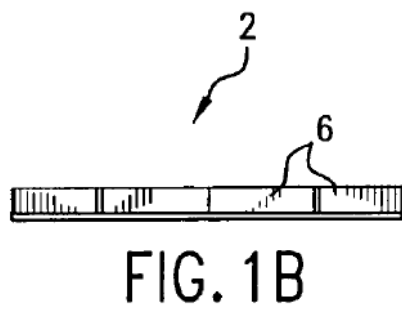
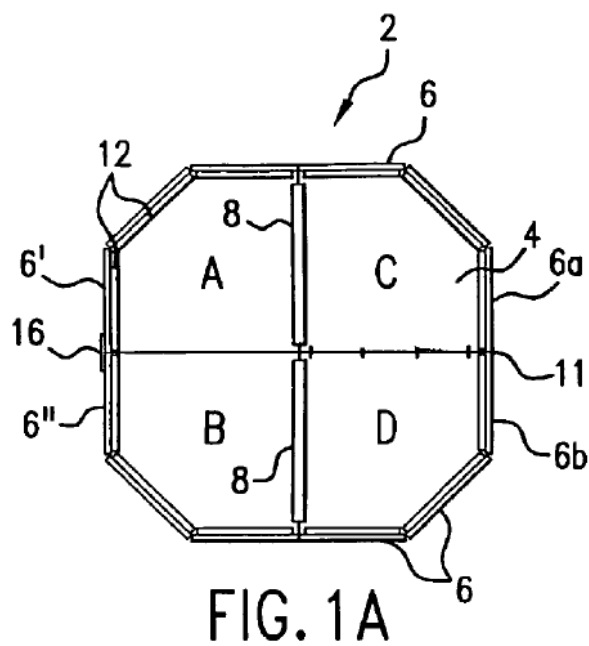
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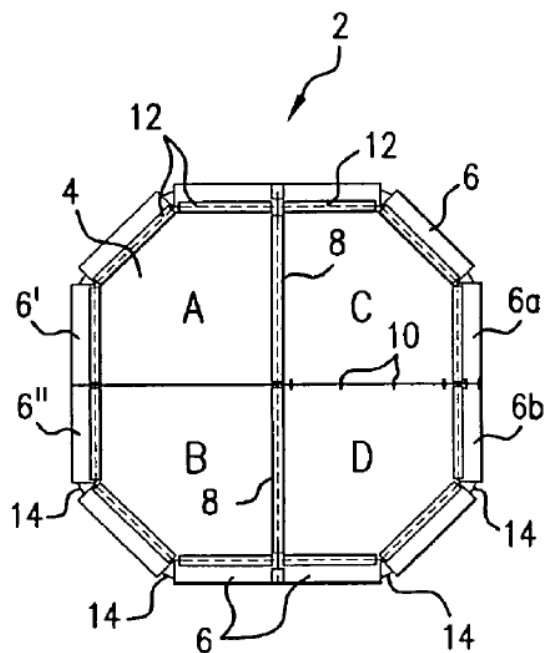


FIG. 2

END