

US 20150014311A1

(19) **United States**

(12) **Patent Application Publication**
FRANK et al.

(10) **Pub. No.: US 2015/0014311 A1**

(43) **Pub. Date: Jan. 15, 2015**

(54) **FLIP TRAY**

Publication Classification

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(51) **Int. Cl.**
B65D 43/12 (2006.01)

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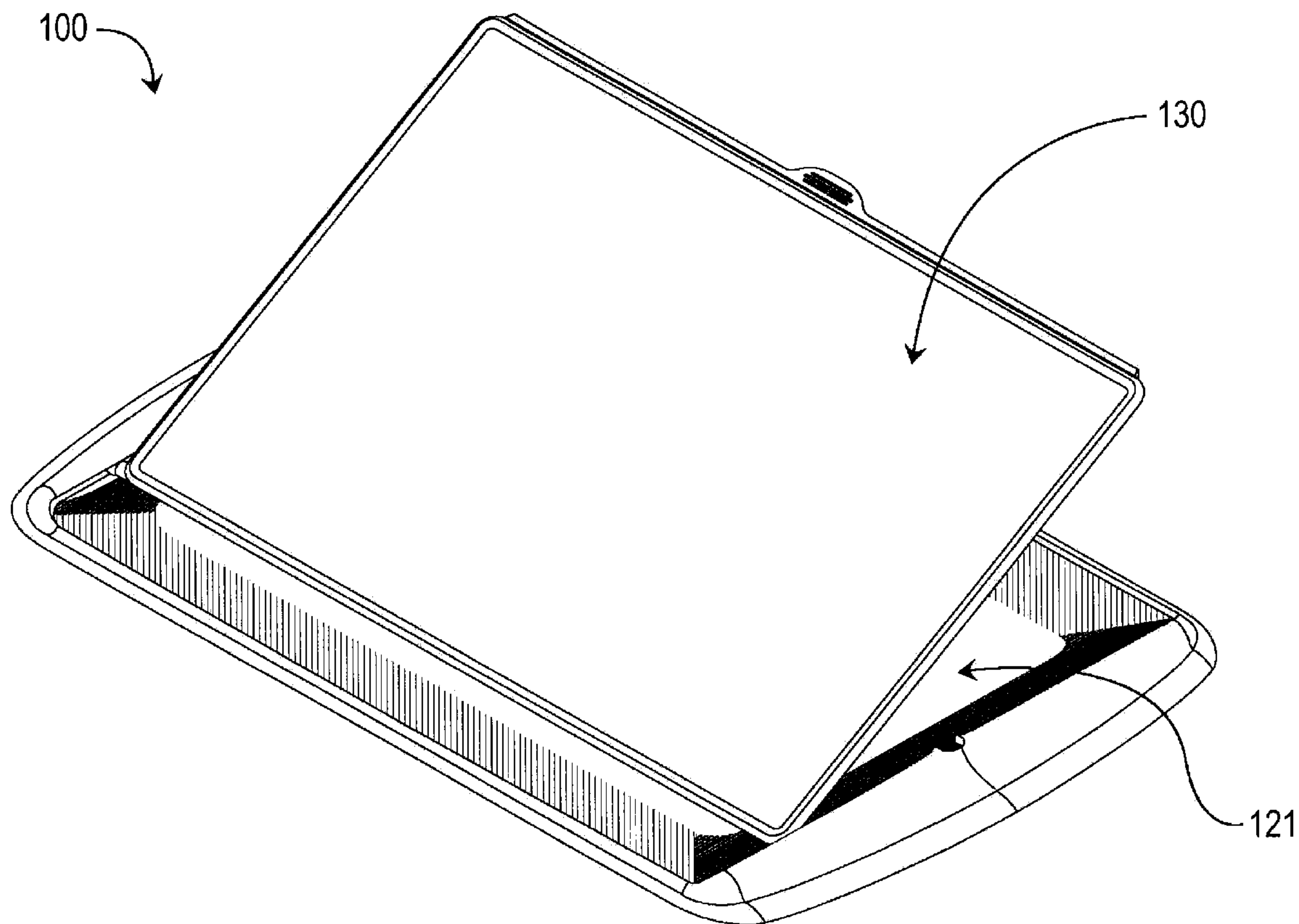
(52) **U.S. Cl.**
CPC **B65D 43/12** (2013.01)
USPC **220/23.83**

(21) Appl. No.: **13/940,667**

(57) **ABSTRACT**

(22) Filed: **Jul. 12, 2013**

A tray system used to prevent microbial pathogen contamination.



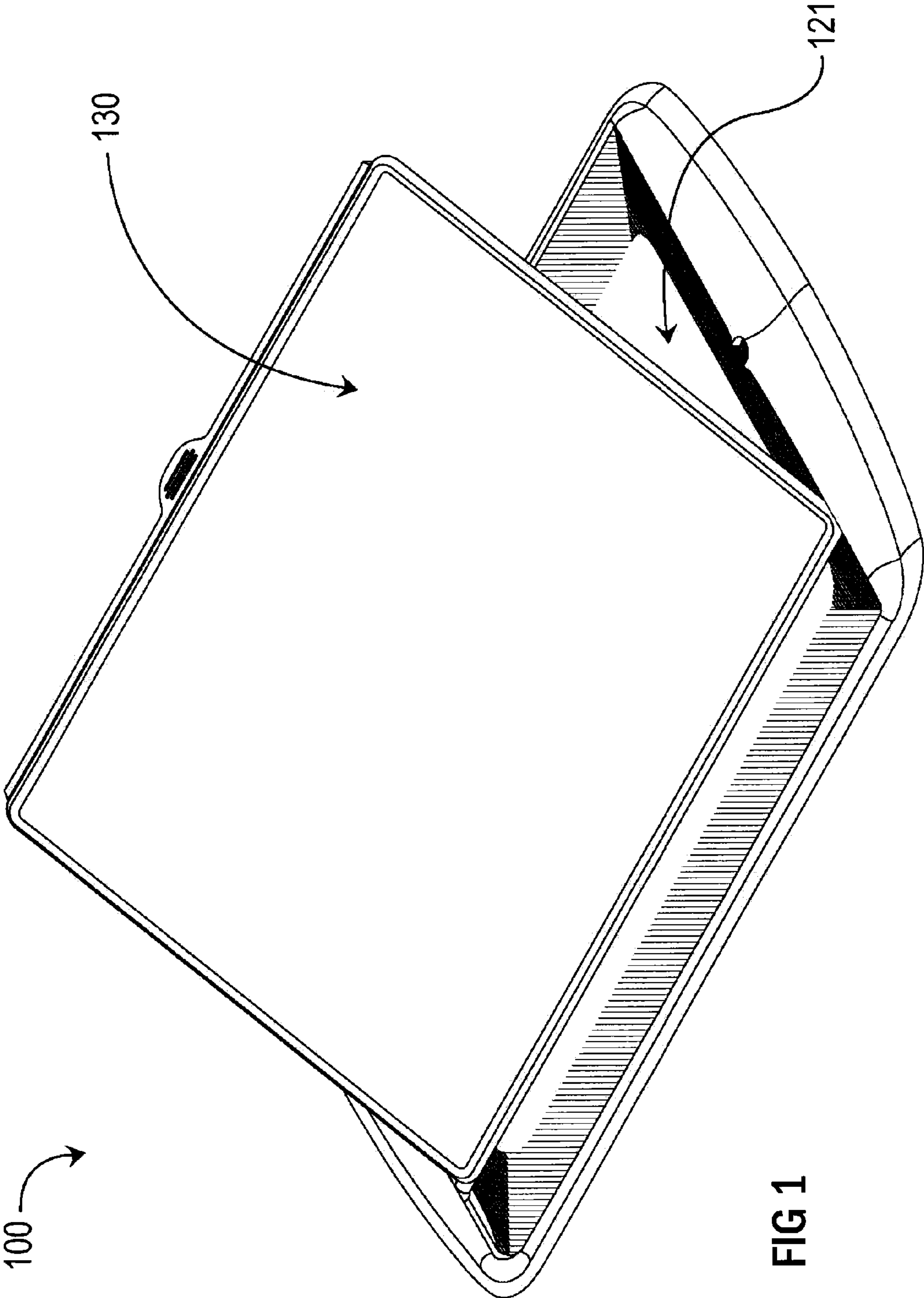


FIG 1

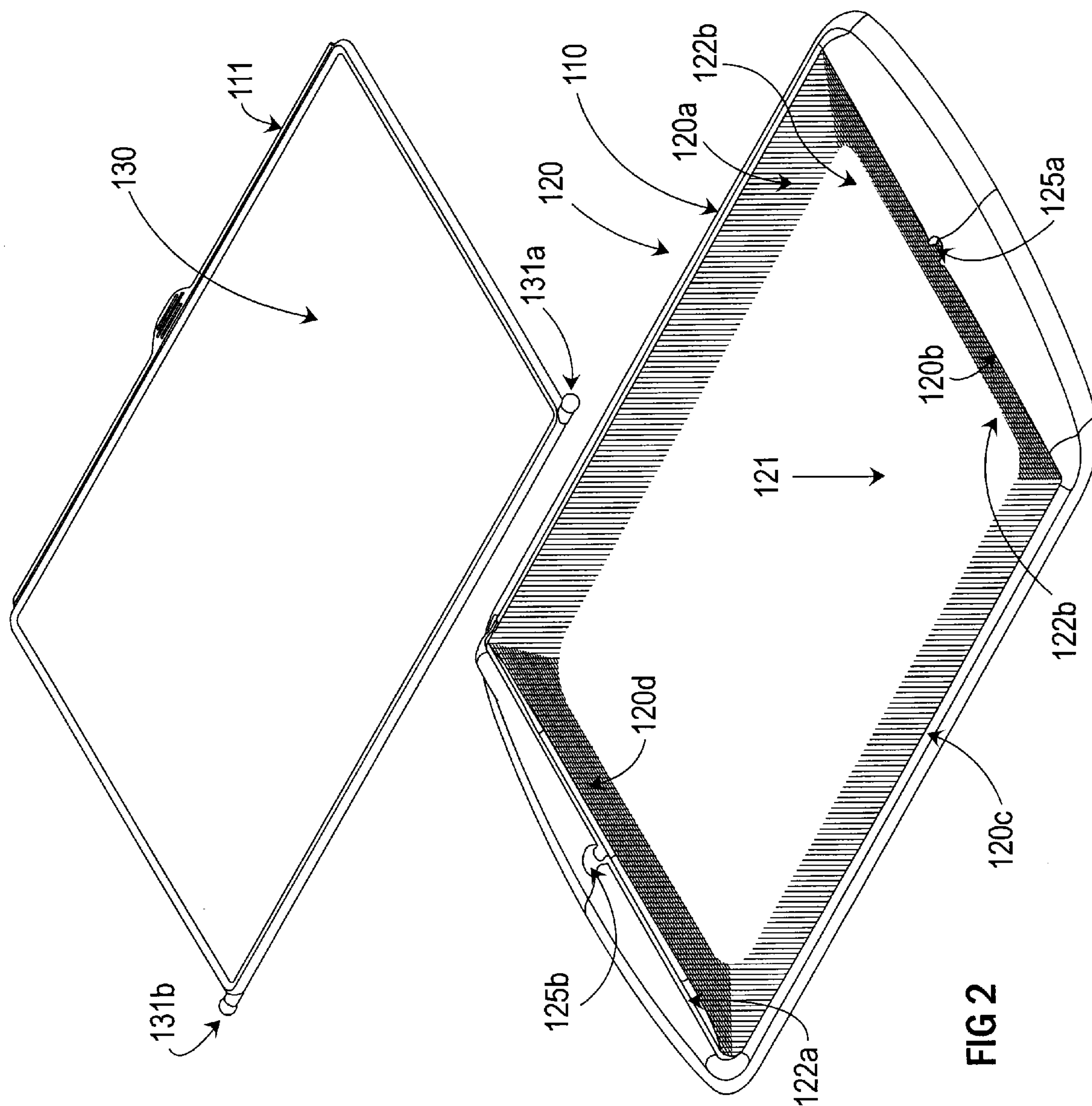


FIG 2

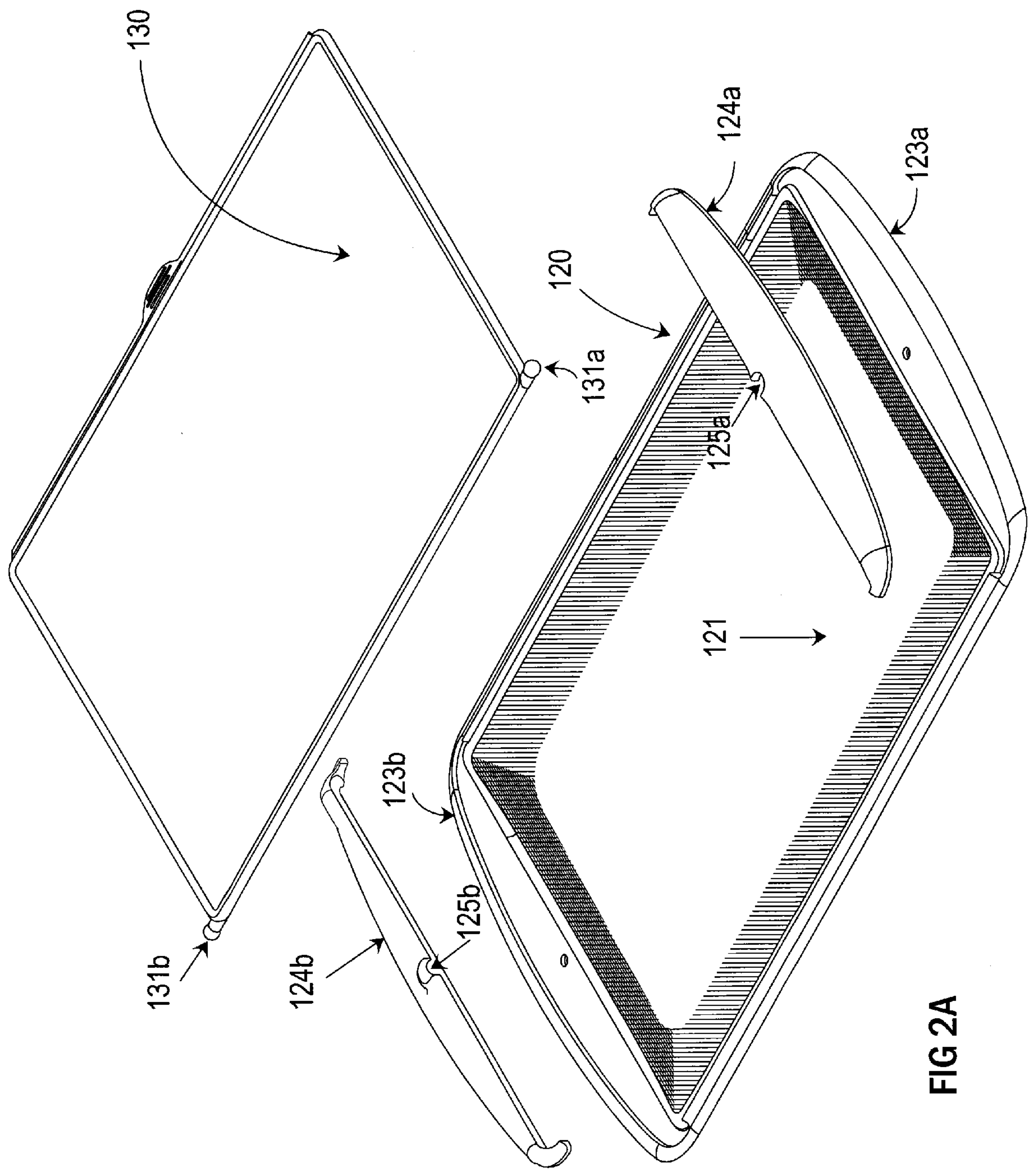


FIG 2A

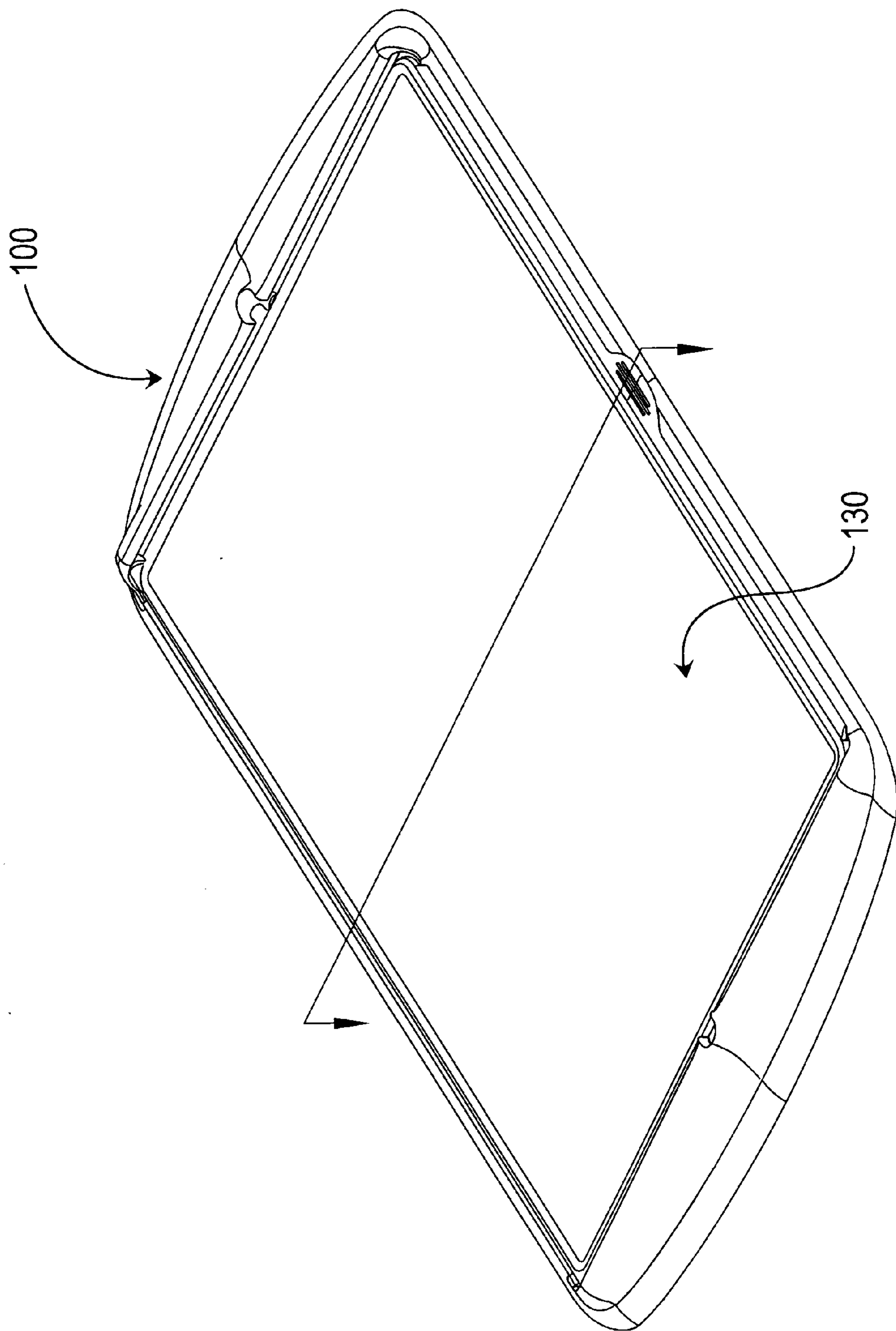


FIG 3

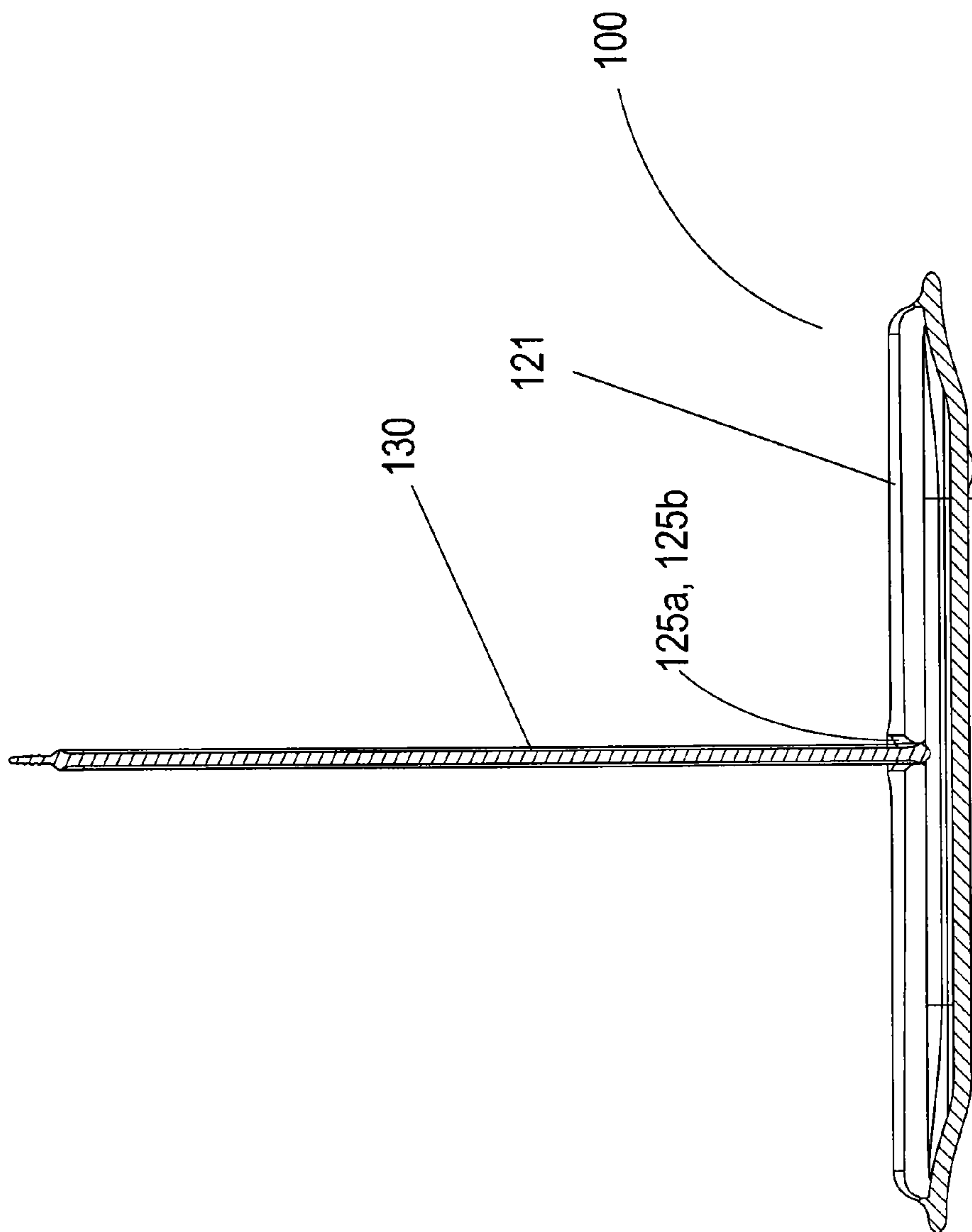


FIG 4

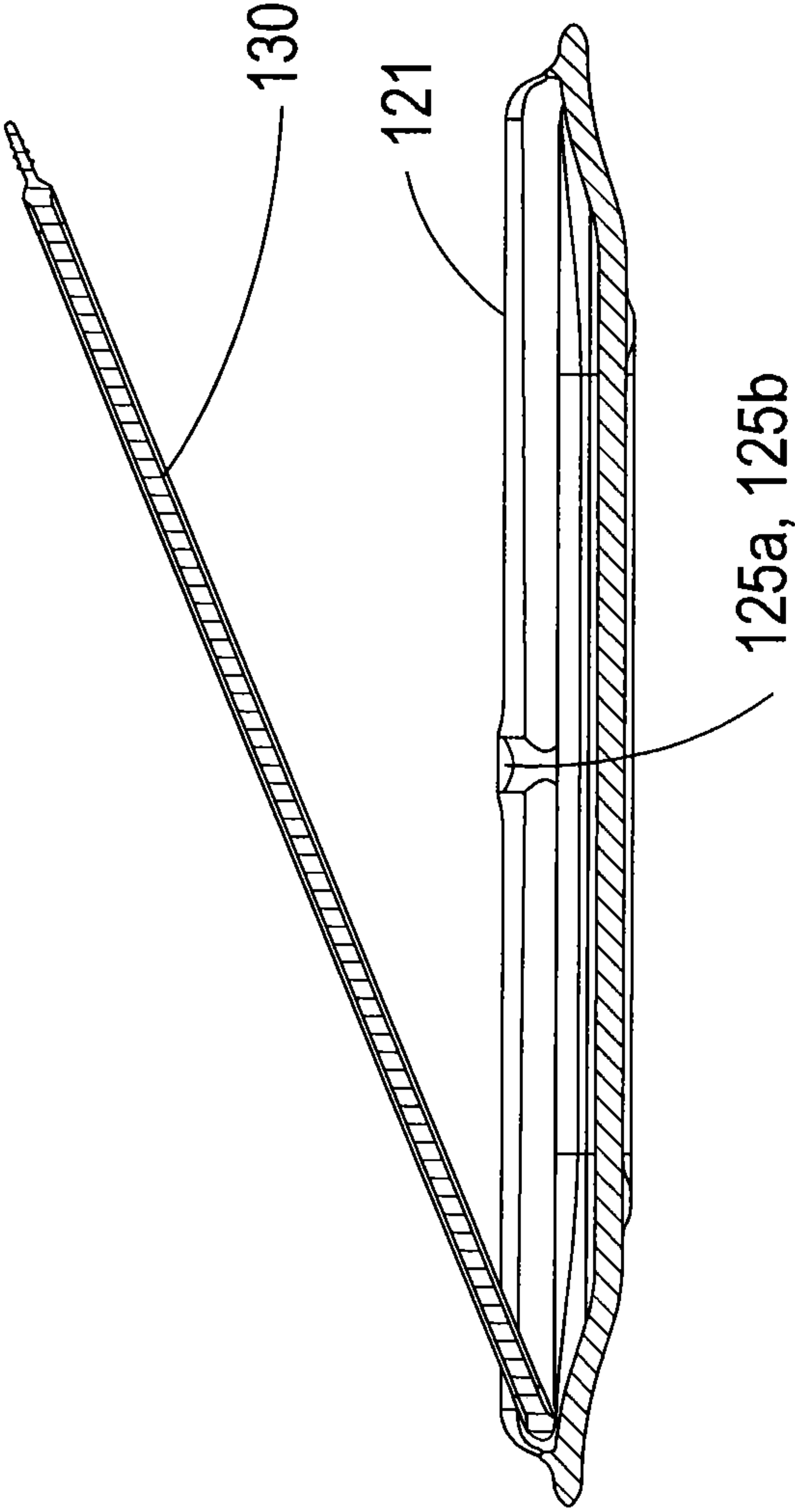


FIG 5

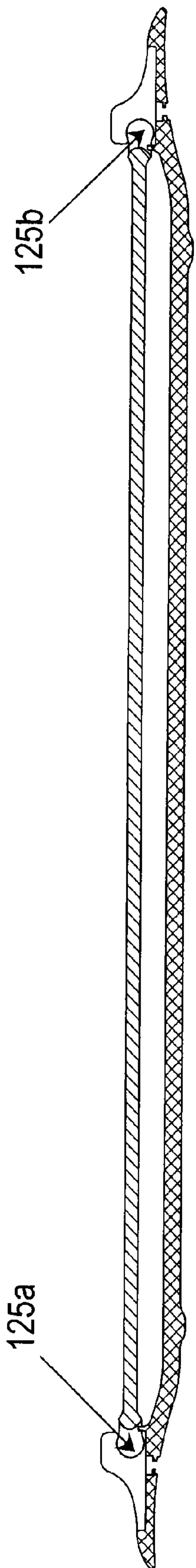


FIG 6A

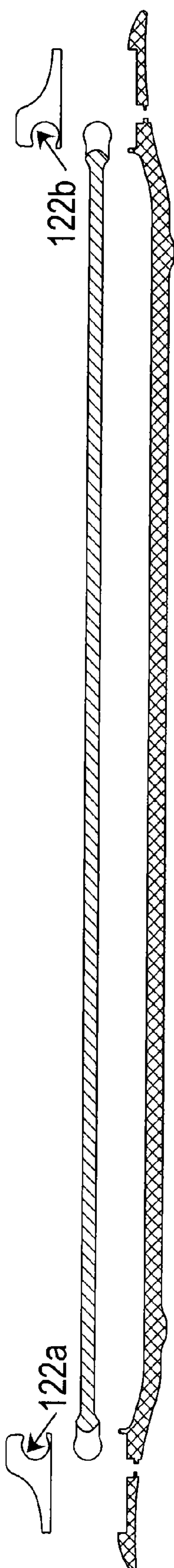


FIG 6B

FLIP TRAY**CROSS-REFERENCES TO RELATED APPLICATIONS**

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

[0003] Not Applicable

SUMMARY OF THE INVENTION

[0004] Every year, in the United States alone, 6.5 to 33 million people are diagnosed with illnesses caused by microbial pathogens. The illness leads to approximately 9000 deaths a year. According to the American Journal of Preventive Medicine, the annual cost of illnesses caused by microbial pathogens is anywhere from 9.3 to 12.0 billion dollars in medical and productivity issues. These micro pathogens are most often ingested by eating raw meat or food items that have been in contact with raw meat.

[0005] Cooks know that when they are transporting raw meats to a barbeque, for example, a second dish should be taken to store or transport the cooked meat to the kitchen or other location. The cook must also carefully transport juice produced by raw meat and contaminated marinates to a disposal site.

[0006] An object of the current invention, a tray system, is to provide a tray that can be used to transport raw meat. Another object of the tray system is to provide a second surface that can be used to transport cooked meat to the table or kitchen. A third object of the tray system is to secure raw meat blood and contaminated marinates so that other foods and objects are not contaminated by microbial pathogens.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Other features and advantages of the present invention will become apparent in the following detailed descriptions of the preferred embodiment with reference to the accompanying drawings, of which:

[0008] FIG. 1 is a side, perspective view of the tray system;

[0009] FIG. 2 is an exploded view of the tray system;

[0010] FIG. 2A is an exploded view of the tray system;

[0011] FIG. 3 is a perspective view showing the tray system in the closed position when the second substantially planar surface is mated with and caps the first substantially planar surface;

[0012] FIG. 4 is a cut away view, taken at A-A from FIG. 3, showing the second substantially planar surface at a 90° angle with the first substantially planar surface;

[0013] FIG. 5 is a cut away view, taken at A-A from FIG. 3, showing the second substantially planar surface in a position between the closed position and the 90° position.

[0014] FIG. 6a is a cut away view, taken from A-A from FIG. 3, showing the tray system in the closed position;

[0015] FIG. 6b is a cut away, exploded view, taken from A-A from FIG. 3, showing the tray system in the closed position.

DETAILED DESCRIPTION OF THE INVENTION

[0016] In the description of the invention above and in the detailed description of the invention, and the claims below, and in the accompanying drawings, reference is made to particular features of the invention. It is to be understood that the disclosure of the invention in this specification includes all possible combinations of such particular features. For example, where a particular feature is disclosed in the context of a particular aspect or embodiment of the invention, or a particular claim, that feature can also be used, to the extent possible, in combination with and/or in the context of other particular aspects and embodiments of the invention, and in the invention generally.

[0017] The invention is a tray system (100). For exemplary purposes, the tray system (100) is described and shown herein as a rectangular shape. However, a person having ordinary skill in the art will understand that the tray system (100) can be of any shape. The tray system (100) comprises a first tray (110) having a substantially planar surface (121) (“first substantially planar surface (121)”), where the first substantially planar surface (121) is surrounded by a sidewalls (120a, 120b, 120c, 120d), and a second tray (111) having a substantially planar surface (130) (“second substantially planar surface (130)”).

[0018] Two opposing sides of the second substantially planar surface (130) comprise extended arms (131a, 131b). The extended arms (131a, 131b) can be formed as an integral part of the two opposing sides or can be attached. Preferably, the extended arms (131a, 131b) are located at the same corners of the two opposing sides.

[0019] Each of two opposing sidewalls (120b, 120d or 120a, 120c) comprises a channel (122a, 122b). In one embodiment, the channels (122a, 122b) are integrally formed by opposing sidewalls (120b, 120d or 120a, 120c). The same two opposing sidewalls (120b, 120d or 120a, 120c) which form the channels (122a, 122b) also forms a notch (125a, 125b). Preferably, the two notches (125a, 125b) are located in the center of the two opposing sidewalls (120b, 120d or 120a, 120c).

[0020] In another embodiment, each of two opposing sidewalls (120b, 120d or 120a, 120c) are extended to form the base of handles (123a, 123b). The handles (123a, 123b) are canopied (124a, 124b) by a second material. Mating the canopy (124a, 125b) with the handles (123a, 123b) forms channels (122a, 122b). The canopy (124a, 125b) forms a notch (125a, 125b). Preferably, the two notches (125a, 125b) are located in the center of each canopy (124a, 124b).

[0021] The second substantially planar surface (130) is attached to the first substantially planar surface (121) by placing the extended arms (131a, 131b) in the channels (122a, 122b) via the notches (125a, 125b). The second substantially planar surface (130) sits at a position higher than the first substantially planar surface (121) and covers the first substantially planar surface (121). Preferably, the second substantially planar surface (130) lies at the level of the sidewalls (120a, 120b, 120c, 120d).

[0022] To use the tray system (100), raw meat, or other material, is placed on the second substantially planar surface (130). When raw meat is removed from the second substantially planar surface (130) it is reversed by, first, aligning the notches (125a, 125b) with the extended arms (131a, 131b). Then, the second substantially planar surface (130) is positioned so that it is at a 90° angle with the first substantially planar surface (121). In this position, all of the contaminated

liquids will stream into the first substantially planar surface (121) and will be captured by sidewalls (120a, 120b, 120c, 120d). The second substantially planar (130) surface is then reversed to reveal a clean surface. The clean surface can be used to hold cooked meat or other non-contaminated materials.

What is claimed is:

1. A tray system comprising:
 - a first substantially planar surface where, the first substantially planar surface is surrounded by sidewalls;
 - a second substantially planar surface where, the second substantially planar surface removably mates to the first substantially planar surface;
 - where, the second substantially planar surface sits on sidewalls to cap the first substantially planar surface.
2. The apparatus of claim 1 where at least two opposing sidewalls defines a channel.

3. The apparatus of claim 1 where two opposing sidewalls are extended to form two base handles; where, the base handles are canopied, where the canopies and the base handle form a channel.

4. The apparatus of claims 2 where each of the two opposing sidewalls define a notch.

5. The apparatus of claim 4 where two opposing sides of the second substantially planar surface defines extended arms.

6. The apparatus of claim 5 where the second substantially planar surface is mated to the first substantially planar surface by aligning the extended arms with the notches and sliding the extended arms into the channels so that the second substantially planar surface lies over the first substantially planar surface.

7. A method to use the tray system of claim 1 comprises aligning the notches with the extended arms.

8. The apparatus of claims 3 where each of the two opposing sidewalls define a notch.

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