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ABSTRACT

A container system for packing live lobsters and other crustaceans has two sidewall components, and optional intermediate wall components, with mating faces formed with
5 uniformly spaced vertical pockets. There may be a separable bottom component as well. The components may be separately molded for interchangeable fit, or cut out from a common core molding as a matched set. Together they form an open top box, with pockets aligned to form open top cells for holding lobsters, tail first. A top is used to contain the live lobsters under a cooling gel pack or layer of ice. The closed box may be further enclosed in a sleeve
10 and liner for additional security and protection against leakage. The box can be opened one component at a time, exposing only one layer of lobsters at a time, permitting easy inspection and removal of each lobster.

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LOBSTER PACKING BOX SYSTEM

BACKGROUND OF THE INVENTIONTECHNICAL FIELD OF THE INVENTION

10 This invention relates to containers for packing live lobsters and crustaceans for shipment by carriers of all types; and in particular to an insulated and compartmentalized container system for the orderly packing, shipping, and unpacking of live lobsters.

BACKGROUND ART

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 For many years there has been a large demand for live lobsters at areas distant from where the lobsters are harvested. To satisfy this demand, lobsters have been packaged and shipped great distances, including shipment by air transport.

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 Initially lobsters were shipped in wooden crates and boxes. This was changed to a less expensive means such as wax boxes or curtain coated boxes. Eventually, boxes were produced of foamed polymers such as polyst

accept the box in this fashion; others require or prefer that it be enclosed and sealed in an outer shipping carton, to reduce the likelihood of leakage in transit.

When unloading the box at the retail end, after removal of the cover, the refrigerator ice pack or ice and wet paper, and the intermediate section of the box, the lobster's claws and head and upper body are exposed. The user must carefully lift each lobster from its individual compartment. If not done carefully claws can break away, in part because even under the most careful removal technique, the sharp edges of the lobster's tail may rake, rip and hold onto the foam cell partition, resisting the tug on its claws. Even when successful, the raking action is likely to cause small beads to break away and fragment from the compartment partitioning structure. This foam debris clings to the lobster, causing a further problem when the lobster is put into a tank or container containing a filtration system. The foam beads float on top of the water and tend to clog filters and pumps.

The first Styrofoam boxes, intended mainly for their insulation value, were open boxes into which the lobster were stacked horizontally, as they had been in the earlier wooden crates. Lobsters were laid down one on top of the other by various standard weights. Examples are listed below:

<u>Box Name</u>	<u>Box Weight</u>
TP3 or TP30*	25 to 30 pound Styrofoam boxes
(*also known as the Canadian Shipper)	

It is another object of the invention that it be deconstructable during unloading so as to first remove the top, set the box on end, and then remove the upper sidewall so as to split open a first row of cells for inspection and removal of the first row lobsters, and then to remove subsequent layers of the box, exposing subsequent rows of lobsters for
5 inspection and removal.

Other objects and advantages of the present invention will become readily apparent to those skilled in this art from the following detailed description, wherein we have shown and described only a preferred embodiment of the invention, simply by way of illustration
10 of the best mode contemplated by us on carrying out our invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective, exploded view of a preferred embodiment of the invention, utilizing reversible, common sidewalls, three common cell partitions, and a top, to form a 16 cell
5 packing box.

FIG. 2 is a split, top view of a pair of reversible sidewalls of the invention, illustrating the alternating left side, right side tongue and groove feature that permits use of a common
10 sidewall.

FIG. 3 is a perspective view of a packing box sitting on one end, from which the top and the other sidewall have been removed, illustrating the unpacking order for exposing one row at a
time for easy removal.

15 FIG. 4 is a top view of another preferred embodiment box of the invention, illustrating a four by six array of cells.

FIG. 5 is a lengthwise cross section view of the box of Fig. 4, together with a matching top.

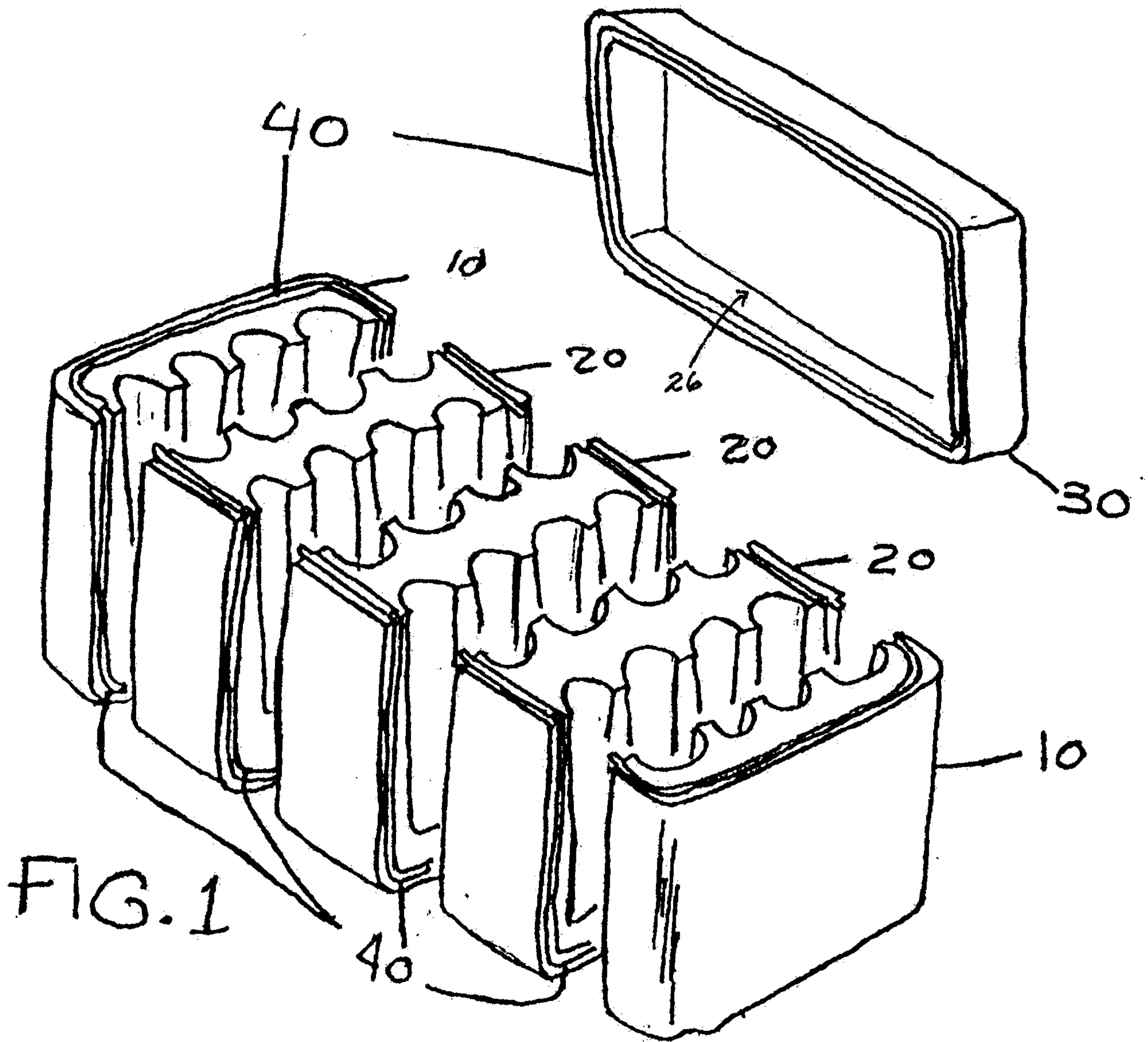
20 FIG. 6 is a spanwise cross section view of the box of Fig. 4, together with the matching top of Fig. 5.

mating faces on each part. Each vertical mating face has at least one vertically elongate open pocket, where the pocket is a portion of an open top vertical cell as it was divided by one of the vertical cut lines. The box parts are removably connectable at their vertical mating faces with their pockets aligned as to reform the open top vertical cells. And the top is removably closable on the box.

There may be a bottom part cut along a horizontal line from the common molded foam component so as to expose a horizontal mating face on the bottom part and an opposing bottom side mating face on each of the wall parts. The bottom part may contain the bottom surfaces of the cells, depending on where the horizontal cut line is drawn.

There may be a sealing flange around the topside perimeter of the box and a mating sealing flange around the underside perimeter of the top. The system may also include an outer plastic sealing bag and a corrugated box enclosure to fully secure the box.

Other embodiments and variations within the scope of the specification, figures and claims that follow, will be readily apparent to those skilled in the art.



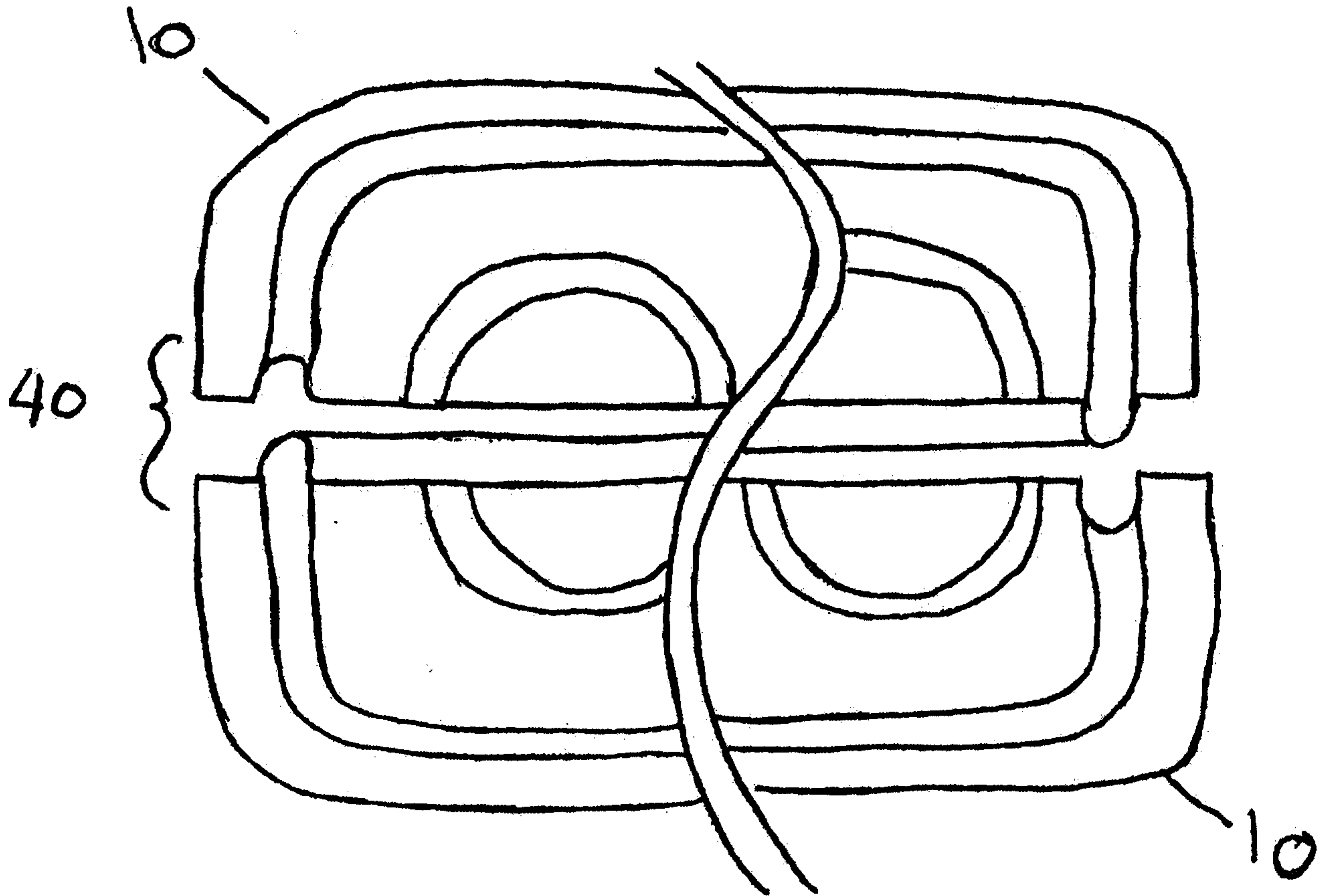


FIG. 2

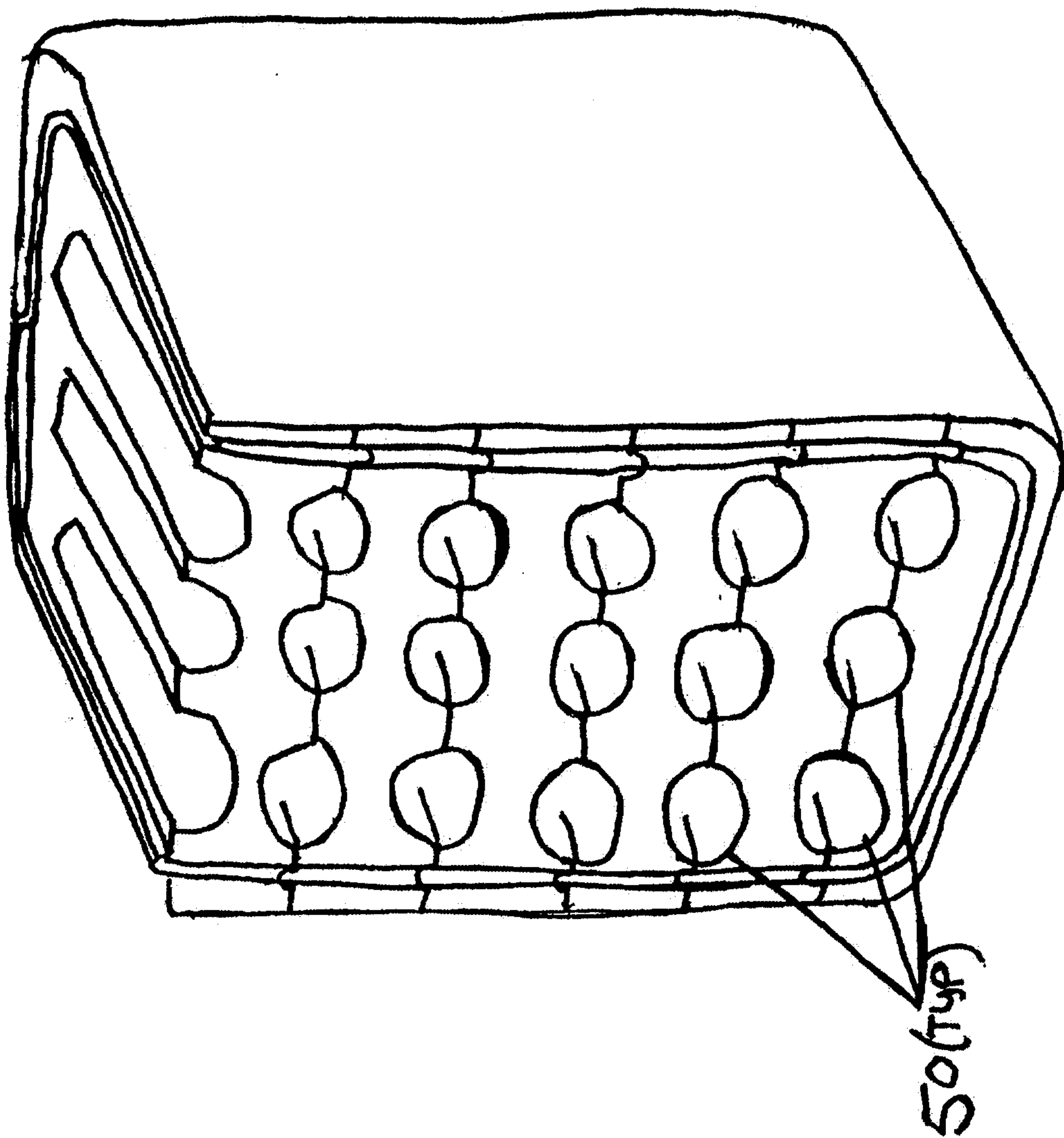


FIG. 3

