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(54) **Sausage tray**

(57) A packaging tray for sausage links includes a bottom (12) having side edges (14,16) joined by arcuate end edges (18,22). A side wall (24,26) extends upwardly from each of the side edges (14,16). An end wall (28,32)

extends upwardly from each of the arcuate end edges (14,16). One of the arcuate end walls is convex and the other of the arcuate end walls is concave. Advantageously, the arcuate end walls secure nested sausages on the tray from shifting and eliminates empty space on the tray.

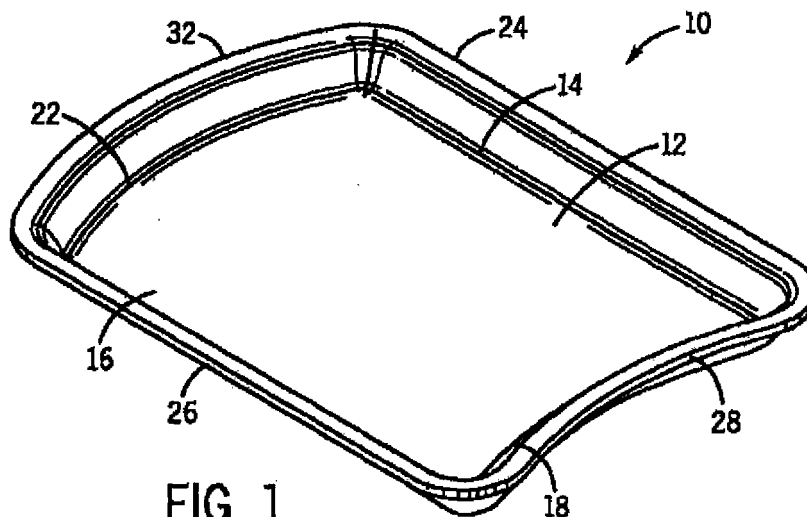


FIG. 1

Description**CROSS-REFERENCE TO RELATED APPLICATION**

[0001] This application claims the priority benefit of U.S. Provisional Patent Application No. 61/158,791, filed on March 10, 2009, the entirety of which is fully incorporated herein by reference.

STATEMENT CONCERNING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable.

FIELD OF THE INVENTION

[0003] The present invention generally relates to a packaging tray for a meat product, and particularly relates to tray for sausage links.

BACKGROUND OF THE INVENTION

[0004] Sausage meat is typically provided in bulk, patties, or links. Bulk sausage meat and patties fit neatly on rectangular foam trays that have a clear plastic covering over the sausage meat for viewing by a purchaser. Sausage links, such as bratwurst, Italian sausage, and the like, have a cylindrical arcuate shape that can shift or move on a rectangular tray. The shifted links can appear undesirable to a prospective purchaser causing the purchaser to bypass the package having shifted links and choose a package having links in an ordered or more regular appearance. The bypassed package may then sit on a store shelf past its expiration date requiring the vendor to discard the bypassed package resulting in waste. The sausage links also do not cover the entire tray bottom resulting in empty space beneath the clear plastic covering.

SUMMARY OF THE INVENTION

[0005] One embodiment of the present invention provides a packaging tray for sausage links. The tray includes a bottom having side edges joined by arcuate end edges. A side wall extends upwardly from each of the side edges. An end wall extends upwardly from each of the arcuate end edges. One of the arcuate end walls is convex and the other of the arcuate end walls is concave. Advantageously, the arcuate end walls secure nested sausages on the tray from shifting and eliminates empty space on the tray.

[0006] The foregoing and advantages of the invention will appear in the detailed description which follows. In the description, reference is made to the accompanying drawings which illustrate a preferred embodiment of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The invention will hereafter be described with reference to the accompanying drawings, wherein like reference numerals denote like elements, and:

[0008] Fig. 1 is a top, side perspective view of a sausage link tray incorporating the present invention;

[0009] Fig. 2 is a top view of the tray of Fig. 1;

[0010] Fig. 3 is a side view of the tray of Fig. 1;

[0011] Fig. 4 is a sectional view along line 4-4 of Fig. 2;

[0012] Fig. 5 is an end view of the tray of Fig. 1;

[0013] Fig. 6 is a sectional view along line 6-6 of Fig. 2;

[0014] Fig. 7 is a top, side perspective view of another sausage link tray incorporating the present invention;

[0015] Fig. 8 is a top view of the tray of Fig. 7;

[0016] Fig. 9 is a side view of the tray of Fig. 7;

[0017] Fig. 10 is a sectional view along line 10-10 of Fig. 8;

[0018] Fig. 11 is an end view of the tray of Fig. 7;

[0019] Fig. 12 is a sectional view along line 12-12 of Fig. 8.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0020] Referring to Figs. 1-6, a sausage link tray 10 incorporating the present invention includes a planar tray bottom 12 having side edges 14, 16 joined by end edges 18, 22. The side edges 14, 16 are substantially parallel to each other. The end edges 18, 22 are arcuate conforming to the general curvature of a sausage link 30, such as a bratwurst, Italian sausage, and the like. One of the end edges 18 is concave generally conforming to an inner diameter of an arcuate sausage link 30. Likewise, the other end edge 22 is convex generally conforming to an outer diameter of an arcuate sausage link 30.

[0021] Side walls 24, 26 extend upwardly from the side edges 14, 16, and are substantially parallel to each other for receiving sausage links 30 therebetween.

[0022] End walls 28, 32 extend upwardly from the end edges 18, 22. Each end wall 28, 32 follows the curvature of the end edge 18, 22 from which the end wall 28, 32 extends. A first end sausage link 30 carried in the tray 10 adjacent the concave end wall 28 extending from the concave end edge 18 nests with the concave end wall 28 along the entire length of the first sausage link 30 on the tray 10. Likewise, a second end sausage link 30 adjacent the convex end wall 32 extending from the convex end edge 22 nests with the convex end wall 32 along the entire length of the second sausage link 30 on the tray 10. Intermediate sausage links interposed between the first and second end sausages nest with each other or one of the first and second end sausage links 30. Advantageously, the nested sausage links are held securely in the tray 10 between the arcuate end walls 28, 32 to prevent shifting of the sausage links on the tray 10. Moreover, the tray end walls 28, 32 conform to the arcuate shape of the sausage links to avoid empty spaces on the

tray 10.

[0023] In a second embodiment of the present invention shown in Figs 7-12, the tray 10 has side walls 24, 26 including dividers 34, 36 extending inwardly toward the tray center. Each divider 34 extending from one side wall 24 is paired with a corresponding divider 36 extending from the facing side wall 26. Each pair of dividers 34, 36 separates ends of an individual sausage link 30 on the tray 10 from an adjacent sausage link on the tray 10 to more securely hold the sausage link 30 on the tray 10. Advantageously, the dividers 34, 36 further prevent the sausage links from shifting on the tray 10. Although dividers extending from the side walls are shown, arcuate dividers extending upwardly from the tray bottom 14 and substantially parallel to the end edges 18, 22 can be provided to prevent the sausage links from shifting without departing from the scope of the invention.

[0024] The sausage trays 10 incorporating the present invention are preferably formed from molded foamed plastic foam, also known as Expanded Polystyrene (EPS or foam), using methods known in the art. However, it is possible to form the present invention from the following materials: polyethylene (PE), high-density polyethylene (HDPE), low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE), polypropylene (PP), polypropylene copolymer, high impact polystyrene (HIPS), polyester, polyethylene terephthalate (PET), crystallized polyethylene terephthalate (CPET), polyvinyl chloride (PVC), paperboard, corrugate, and thermoformed corrugate.

[0025] Moreover, the radius of the end edges 18, 22 and arcuate end walls 28, 32 need only approximate the actual curvature of the sausage links if sausage links having a high degree of flexibility are placed on the tray 10. The length of the tray 10, i.e. the distance between the tray end walls 28, 32 depends upon the number of sausage links that will be placed on the tray bottom 12.

[0026] A preferred embodiment of the invention has been described in considerable detail. Many modifications and variations to the preferred embodiment described will be apparent to those of ordinary skill in the art. Therefore, the invention should not be limited to the embodiment described, but should be defined by the claims that follow.

Claims

1. A sausage tray comprising:

- a bottom having side edges joined by arcuate end edges;
- a side wall extending upwardly from each of said side edges; and
- an end wall extending upwardly from each of said arcuate end edges, wherein one of said arcuate end walls is convex and the other of said arcuate end walls is concave.

2. The sausage tray as in claim 1, including at least one first divider extending inwardly from at least one of said side walls.
3. The sausage tray as in claim 1 or 2, in which said arcuate end edges conform to a general curvature of a sausage link.
4. The sausage tray as in one of claims 1 to 3, in which said tray is formed from a plastic foam.
5. The sausage tray as in one of claims 1 to 4, including pairs of dividers, each of said pairs of dividers including one divider extending inwardly from one of said side walls and a corresponding divider extending inwardly from the other of said side walls, wherein ends of a sausage link are securely received between adjacent pairs of said dividers.
6. The sausage tray as in one of claims 1 to 5, in which a sausage link disposed in said tray nests with one of said arcuate end walls.

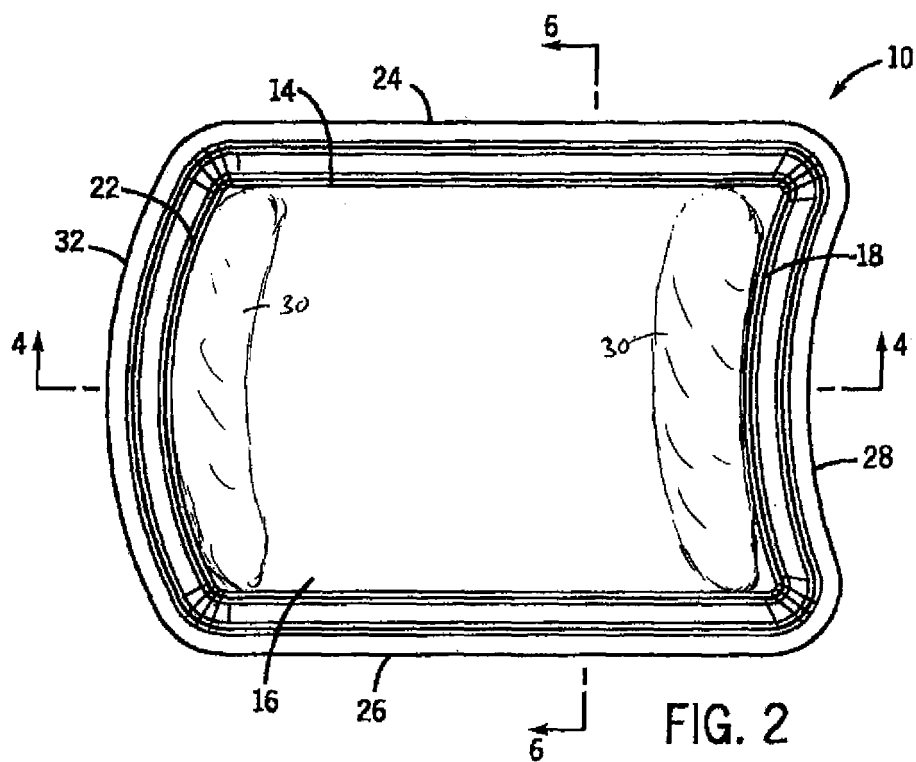
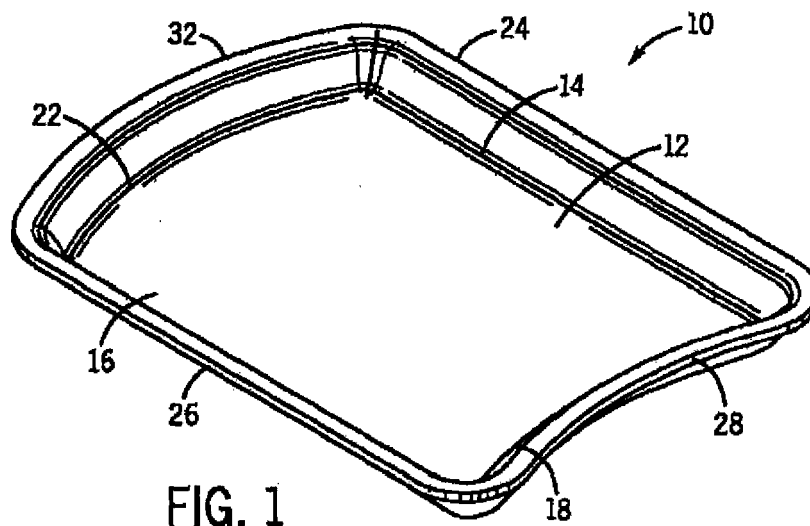




FIG. 3

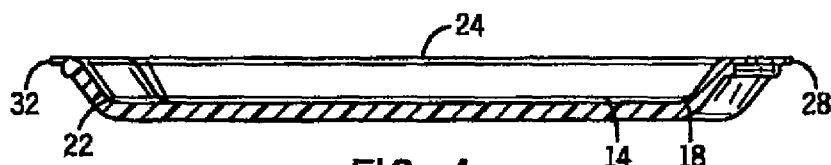


FIG. 4

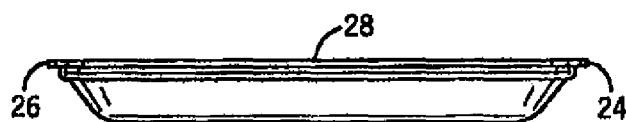


FIG. 5

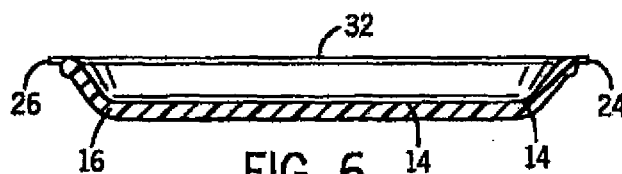
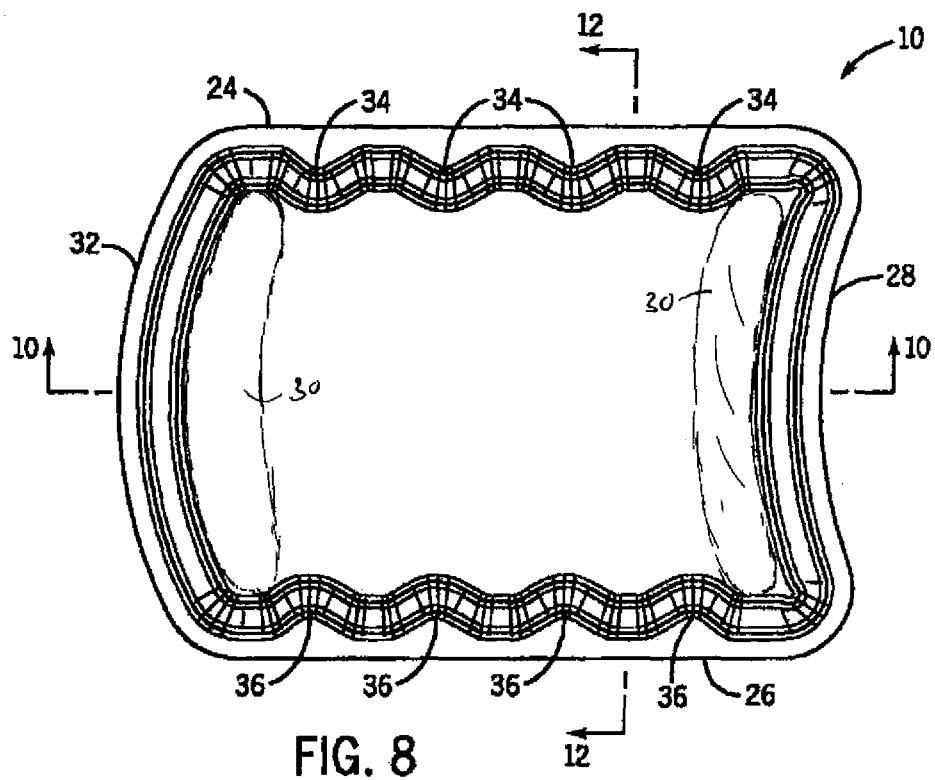
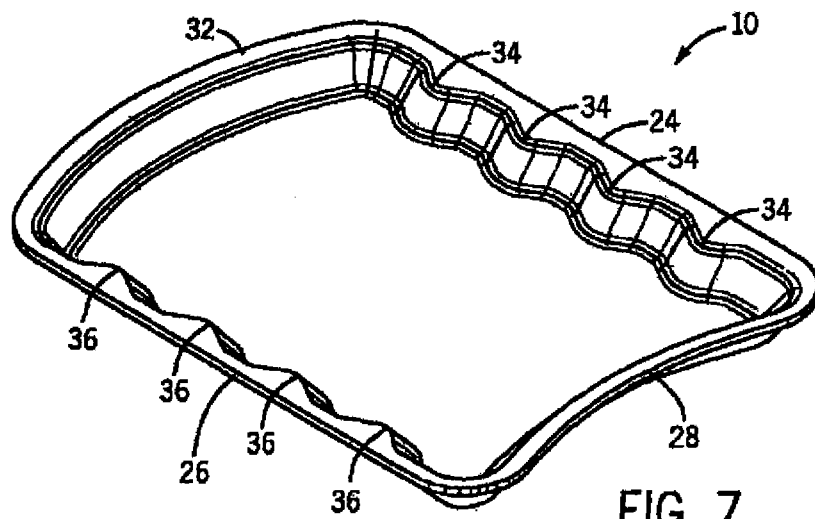


FIG. 6



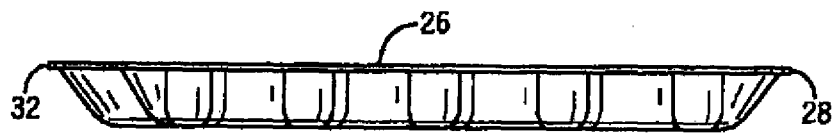


FIG. 9

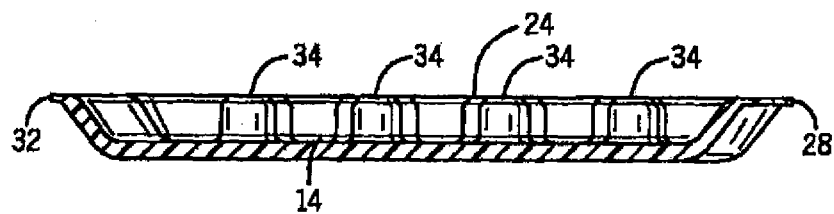


FIG. 10

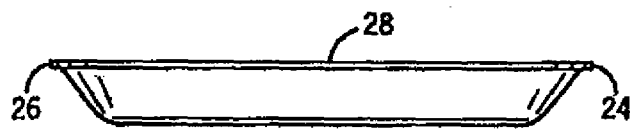


FIG. 11

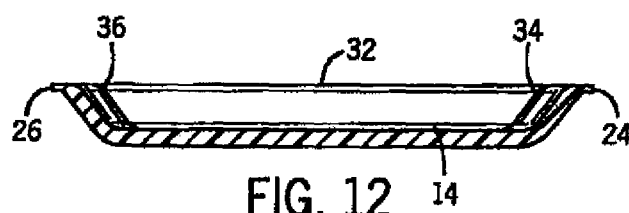


FIG. 12



EUROPEAN SEARCH REPORT

Application Number
EP 10 15 5987

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 820 904 A (MELLO FRANK C [US] ET AL) 13 October 1998 (1998-10-13) * the whole document *	1-6	INV. B65D1/34 B65D81/34
X	EP 1 779 733 A1 (RECLA SRL GMBH [IT]) 2 May 2007 (2007-05-02) * the whole document *	1-6	
A	DE 20 2006 018008 U1 (MEICA AMMERLAENDISCHE FLEISCHW [DE]) 10 April 2008 (2008-04-10) * the whole document *	1-6	
A	US 5 934 472 A (RAMIREZ RICHARD L [US] ET AL) 10 August 1999 (1999-08-10) * the whole document *	1-6	
A	EP 1 997 618 A2 (COOPBOX EUROP S P A [IT]) 3 December 2008 (2008-12-03) * the whole document *	1-6	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
Place of search		Date of completion of the search	Examiner
Munich		10 June 2010	Ngo Si Xuyen, G
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03-82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 15 5987

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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10-06-2010

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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