



(12) **DEMANDE DE BREVET CANADIEN  
CANADIAN PATENT APPLICATION**

(13) **A1**

(22) Date de dépôt/Filing Date: 2018/04/09  
(41) Mise à la disp. pub./Open to Public Insp.: 2018/10/10  
(30) Priorité/Priority: 2017/04/10 (LU100167)

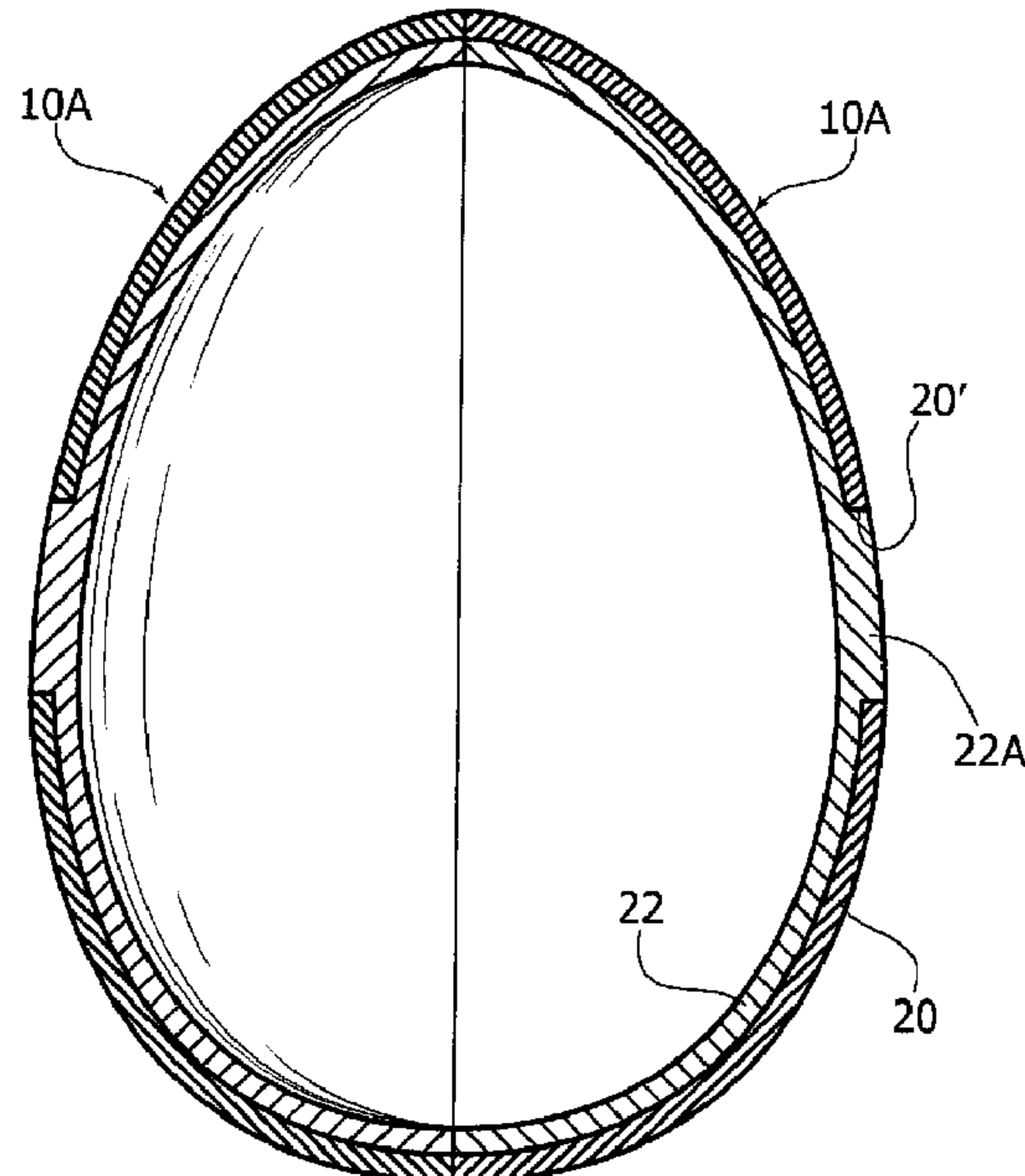
(51) Cl.Int./Int.Cl. *A23G 3/54* (2006.01),  
*A23G 3/50* (2006.01)

(71) Demandeur/Applicant:  
SOREMARTEC S.A., LU

(72) Inventeurs/Inventors:  
MAZZETTI, MARCO, LU;  
PAVESI, ENRICO, LU;  
MANSUINO, SERGIO, LU...

(74) Agent: BENNETT JONES LLP

(54) Titre : PRODUIT DE CONFISERIE CREUX  
(54) Title: HOLLOW CONFECTIONERY PRODUCT



(57) **Abrégé/Abstract:**

Described herein is a confectionery product (10) having a hollow body (10A) formed by at least one first material that defines an outer surface of said product, wherein present on the outer surface is a second material, different from said first material, which

(57) **Abrégé(suite)/Abstract(continued):**

reproduces a decorative element. The product is characterized in that said body comprises a first outer layer (20), formed by said first material, which comes to define a prevalent portion of said outer surface, and a second layer (22), formed by said second material, which is set internally, on said first layer, wherein said first layer (20) has an opening (20') that allows a portion (22A) of said second layer to emerge on said outer surface so as to form said decorative element.

**ABSTRACT**

Described herein is a confectionery product (10) having a hollow body (10A) formed by at least one first material that defines an outer surface of said product, wherein present on the outer surface is a second material, different from said first material, which reproduces a decorative element.

The product is characterized in that said body comprises a first outer layer (20), formed by said first material, which comes to define a prevalent portion of said outer surface, and a second layer (22), formed by said second material, which is set internally, on said first layer, wherein said first layer (20) has an opening (20') that allows a portion (22A) of said second layer to emerge on said outer surface so as to form said decorative element.

(Figure 2)

**"Hollow confectionery product"**

\*\*\*

Field of the invention

The present invention relates in general to hollow  
5 confectionery products, and more in particular to  
hollow confectionery products that present on their  
outer surface decorations formed by an additional  
material applied on the main body of the product.  
Usually, products of this type are made of chocolate,  
10 and the decorations are made with solidifiable doughs  
and pastes of various kinds, for example sugar paste,  
semi-finished products of a chocolate type with natural  
colorants (for example, for decorations on Easter  
eggs), coloured sugar-based compounds, etc.

15 Prior art

Figures 4A-4B and 5A-5B illustrate two known  
solutions for producing a product of the type in  
question.

The known solution illustrated in Figures 4A and  
20 4B is typically implemented in home-type bakeries and  
envisages a decorative element 102 that is applied on  
the outer surface of the hollow body 104 so as to be in  
relief with respect to the surface itself. The  
decorative element is anchored to the surface of the  
25 body 104 via a localized melting of the corresponding  
parts in mutual contact, or else via adhesive pastes  
commonly used in the sector.

The solution of Figures 5A and 5B differs from the  
one just described in that the decorative element 102'  
30 is recessed in the wall of the hollow body 104' so as  
to be flush with its outer surface. In this solution,  
the hollow body and the decorative element are both  
formed in one and the same moulding device, which  
carries out in succession two pouring steps, the first  
35 for the decorative element, and the second for the

hollow product, or vice versa. On account of the more complex production means that are required, this solution is prevalently used in the context of industrial processes.

5        It should now be noted that the solution of Figures 4A and 4B presents the drawback of arranging the decorative element 102 in a critical position as regards possible impact of the product with objects external to the product, since it is totally exposed, thus risking being chipped, fractured, or damaged in some other way. Given the brittleness of the product, this solution is hence far from suited for a production of an industrial type.

15       The solution of Figures 5A and 5B overcomes at least in part the aforesaid drawback thanks to the fact that the element 102 is inserted in the wall of the hollow body.

Summary and object of the invention

20       In any case, in the technical field here of interest there is a constant search for solutions that will improve the quality of the product and will also be able to preserve the integrity thereof up to the final moment when the product is consumed.

25       The above object is achieved by a confectionery product having the characteristics specified in Claim 1.

The claims form an integral part of the technical teaching provided herein in relation to the invention.

30       Brief description of the drawings and detailed description of one or more embodiments of the invention

35       Further characteristics and advantages of the invention will emerge clearly from the ensuing description with reference to the annexed drawings, which are provided purely by way of non-limiting example and in which:

- Figure 1 illustrates, according to an axonometric view, an example of the product described herein;

5 - Figure 2 is a cross-sectional view of the product of Figure 1 according to the plane of section II-II;

10 - Figures 3A and 3B illustrate a further example of the product described herein, according to an axonometric view and a cross-sectional view, respectively;

- Figures 4A and 4B illustrate a solution of the prior art, according to an axonometric view and a cross-sectional view, respectively;

15 - Figures 5A and 5B illustrate a further solution of the prior art, according to an axonometric view and a cross-sectional view, respectively.

20 In the ensuing description, various specific details are illustrated aimed at providing an in-depth understanding of the embodiments. The embodiments may be obtained without one or more of the specific details, or with other methods, components, or materials, etc. In other cases, known structures, materials, or operations are not illustrated or described in detail so that various aspects of the  
25 embodiments will not be obscured.

The references used herein are provided merely for convenience and hence do not define the sphere of protection or the scope of the embodiments.

30 First of all, it is to be noted that by the term "hollow product" as used herein is meant any product formed by a shell having a generic concave conformation, whether closed or open. This product may thus be, for example, an Easter egg, a chocolate bell, a hollow figure in the form of a squirrel, Santa Claus,  
35 a snowman, etc. On the other hand, as will be seen in

what follows, even though chocolate products are the main sphere of application envisaged by the present applicant for the solution presented herein, in effect this solution may advantageously be used also for other  
5 types of products, such as semi-finished products of similar type, sugar paste, wafer products, etc.

The hollow product described herein differs from the known solutions illustrated above in that the decorative element is obtained through a layer of  
10 material that is applied internally on the wall of the product and that emerges, with a portion thereof, on the outer surface, through an opening made in the wall itself.

In general, the product described herein has a  
15 hollow body comprising:

- an outer layer, formed by a first material, which comes to define a prevalent portion of the outer surface of the product; and

- a second layer, formed by a second material,  
20 which is set internally, on the first layer,

wherein the first layer has an opening that allows a portion of the second layer to emerge on the outer surface, this portion forming the decorative element of the product.

25 As will become evident in what follows, thanks to this configuration, the decorative element of the product described herein is firmly connected to the wall of the hollow body, i.e., to the aforesaid outer layer, not only, simply, by adhesion between materials,  
30 but also, and above all, through the coupling, which is, in effect, of a mechanical type, that is established between the outer wall and the inner layer on which the decorative element is obtained.

To facilitate understanding of the solution  
35 described herein, reference will now be made to Figures

1 and 2, which represent an example of product according to this solution.

The product illustrated, as a whole designated by the reference number 10, is a chocolate egg constituted by two half-shells 10A that both present on their outer surface the letter K. This letter will be clearly of a colour different from the remaining part of the outer surface of the product, so that it can be distinguished therefrom.

10 To reproduce the letter K referred to above, each of the two half-shells 10A has:

- an outer wall 20 made of chocolate, in which a through opening 20' is obtained that has a profile corresponding to the shape of the letter K reproduced;
- 15 - an inner layer 22 made of different material, which is applied on the inner side of the wall 20, coating it totally, and, moreover, comes to fill completely the cavity of the opening 20', with a portion 22A thereof that comes to be flush with the
- 20 outer surface of the wall 20.

With the aforesaid portion 22A the layer 22 reproduces the decorative element, represented, in the case in point, by the letter K.

25 The material of the inner layer 22 is different at least in colour from the chocolate material of which the wall 20 is made. This material may itself be chocolate or else material of some other type.

With particular reference now to Figure 2, it will be noted that the portion 22A contained within the opening 20' of the outer wall 20 is to all effects withheld in its seat from inside via the entire layer 22 that rests against the inner side of the wall 20.

The connection thus obtained between the decorative element and the hollow body of chocolate is practically indissoluble. Incidentally, it should be

35

noted that the inner layer 22 may also present a smaller extension than the inner surface of the wall 20 and hence coat only a portion of the aforesaid surface.

The present applicant has found, in general, that  
5 the above configuration not only prevents detachment of the decorative element from the outer shell, but in effect also strengthens the decorative element itself.

Among other things, the solution described herein also enables provision of different decorative elements  
10 arranged on top of one another, without any problem of detachment due to the incompatibility of the materials in regard to mutual adherence.

In this connection, Figures 3A and 3B illustrate a product similar to that of Figures 1 and 2 (the parts  
15 in common are designated by the same reference numbers), where on the layer 22, which forms the first decorative element 22A, a further layer 32 is applied that comes to define a second decorative element 32A, having the shape of a circle, according to the same  
20 modality described above. In particular, the layer 22 has itself a through opening 22', and the layer 32 applied thereon comes to fill completely the cavity of the opening with its portion 32a, thus remaining flush with the outer surface of the portion 22A (or else even  
25 projecting beyond the surface). The layer 32 will be made of a different material, at least as regards colour, both with respect to the layer 22 and with respect to the wall 20.

As may be seen in Figure 3B, in this case the  
30 layer 32 is applied on the inner side of the layer 22, coating it only partially.

In the final analysis, the product described herein presents, as compared to known solutions, as less subject to defects of production or to the risk of

breaking, and hence constitutes a product of higher quality.

As mentioned previously, the solution described herein may be used for any hollow product and not only  
5 for chocolate products. In general, this solution may be used with any mouldable material, i.e., one that can be formed in a mould. Some examples are represented by chocolate surrogates, sugar syrups, wafers or other materials for baking products. The product may also  
10 include a filling contained inside the product's shell. In some embodiments, the filling itself may constitute the disclosed inner layer that emerges on the product's outer surface and forms the decorative element.

With reference now to the method of production of  
15 the product described herein, it will be clear for the person skilled in the sector that it will envisage two distinct operations of moulding (or modelling), one for the outer wall and the other for the inner layer, as is already the case for the production of the known  
20 solutions referred to at the start. It is in particular preferable to obtain first the outer wall and its opening, and then form thereon the inner layer, which comes to fill the aforesaid opening as illustrated above.

25 For the production of the outer wall provided with an opening, it is possible to envisage a first operation of pouring into the mould the material constituting the outer shell, followed by a subsequent step of turning over the mould to enable dripping-off  
30 thereof, then making the opening with closed rim using a purposely designed punch when the chocolate has a structure that is still soft. Alternatively, there may be adopted techniques of moulding with use of an appropriately configured mould and counter-mould, which  
35 provide the outer half-shell having an opening with

closed rim. To obtain the inner wall connected to the  
decoration, the aforesaid conventional technology of  
pouring and dripping of the mould may be used, or else  
the technology that envisages the use of a mould and  
5 counter-mould.

The forming techniques referred to above are  
altogether conventional, so that a detailed treatment  
thereof is not necessary herein.

Of course, without prejudice to the principle of  
10 the invention, the details of construction and the  
embodiments may vary, even significantly, with respect  
to what has been illustrated herein purely by way of  
non-limiting example, without thereby departing from  
the scope of the invention, as is defined by the  
15 annexed claims.

# CLAIMS

1. A confectionery product (10) having a hollow body (10A) formed by at least one first material that defines an outer surface of said product, wherein,  
5 present on the outer surface itself of said product is a second material, different from said first material, which reproduces a decorative element,

said product being characterized in that said body comprises a first outer layer (20), formed by said  
10 first material, which comes to define a prevalent portion of said outer surface, and at least one second layer (22), formed by said second material, which is set internally, on said first layer, wherein said first layer (20) has an opening (20') that allows a portion  
15 (22A) of said second layer to emerge on said outer surface, so as to form said decorative element.

2. The product according to Claim 1, wherein said portion (22A) is housed within said opening (20'), and wherein said portion (22A) and said opening (20') have  
20 corresponding profiles, thus providing a mutual shape fit.

3. The product according to Claim 2, wherein the outer side of said portion (22A) is flush with the outer surface of said first layer (20).

25 4. The product according to any one of the preceding claims, wherein said second layer (22) coats the inner side of said first layer (20) totally.

5. The product according to any one of Claims 1 to 4, wherein said second layer (22) coats the inner side  
30 of said first layer (20) only partially.

6. The product according to any one of the preceding claims, comprising a further hollow body (10A) coupled to said first hollow body (10A), said first body and said further body forming together a  
35 closed shell.

7. The product according to any one of the preceding claims, wherein at least said first material is chocolate.

8. The product according to any one of the  
5 preceding claims, wherein said second material is a chocolate surrogate or else dried sugar syrup.

FIG. 1

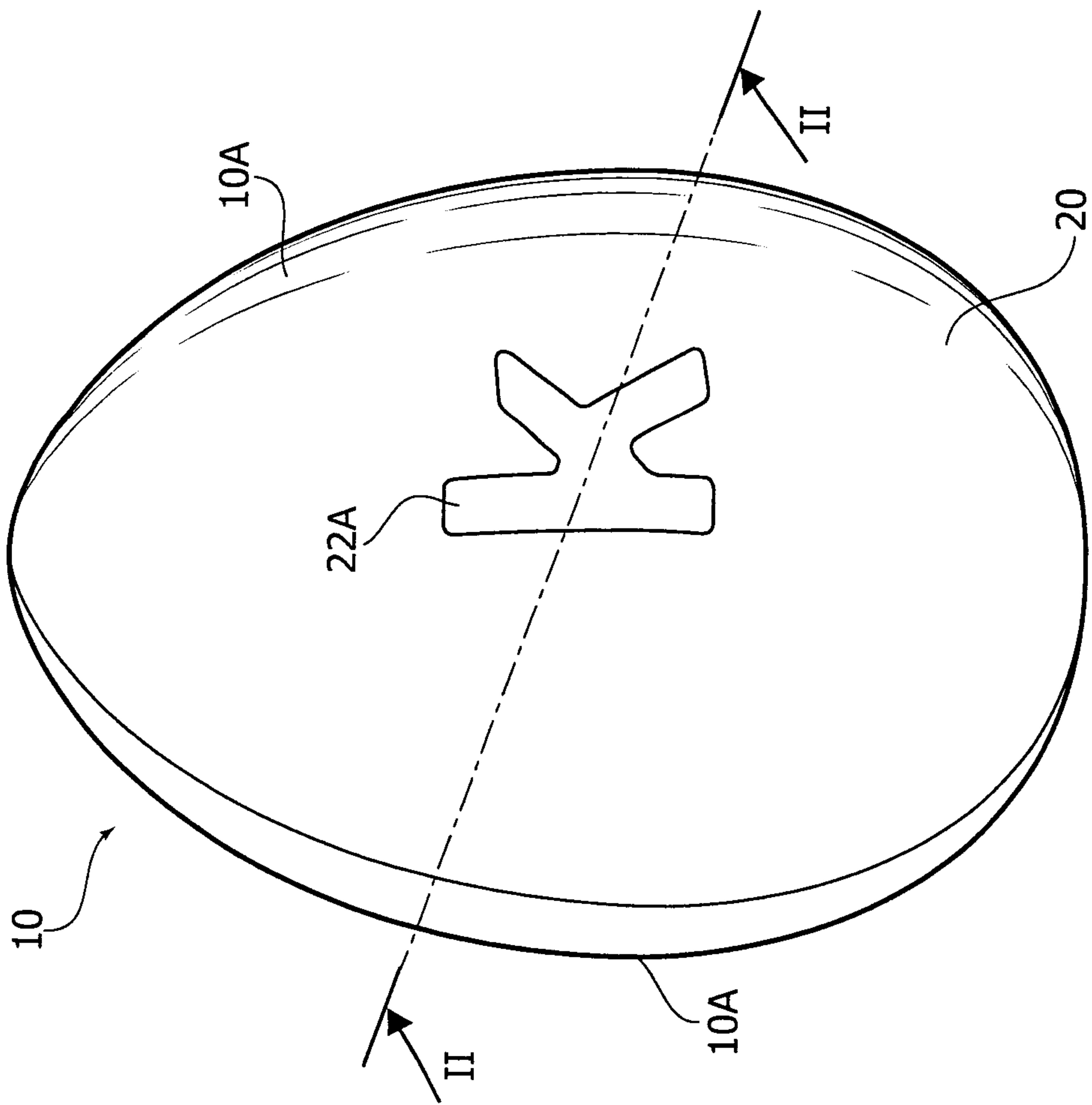


FIG. 2

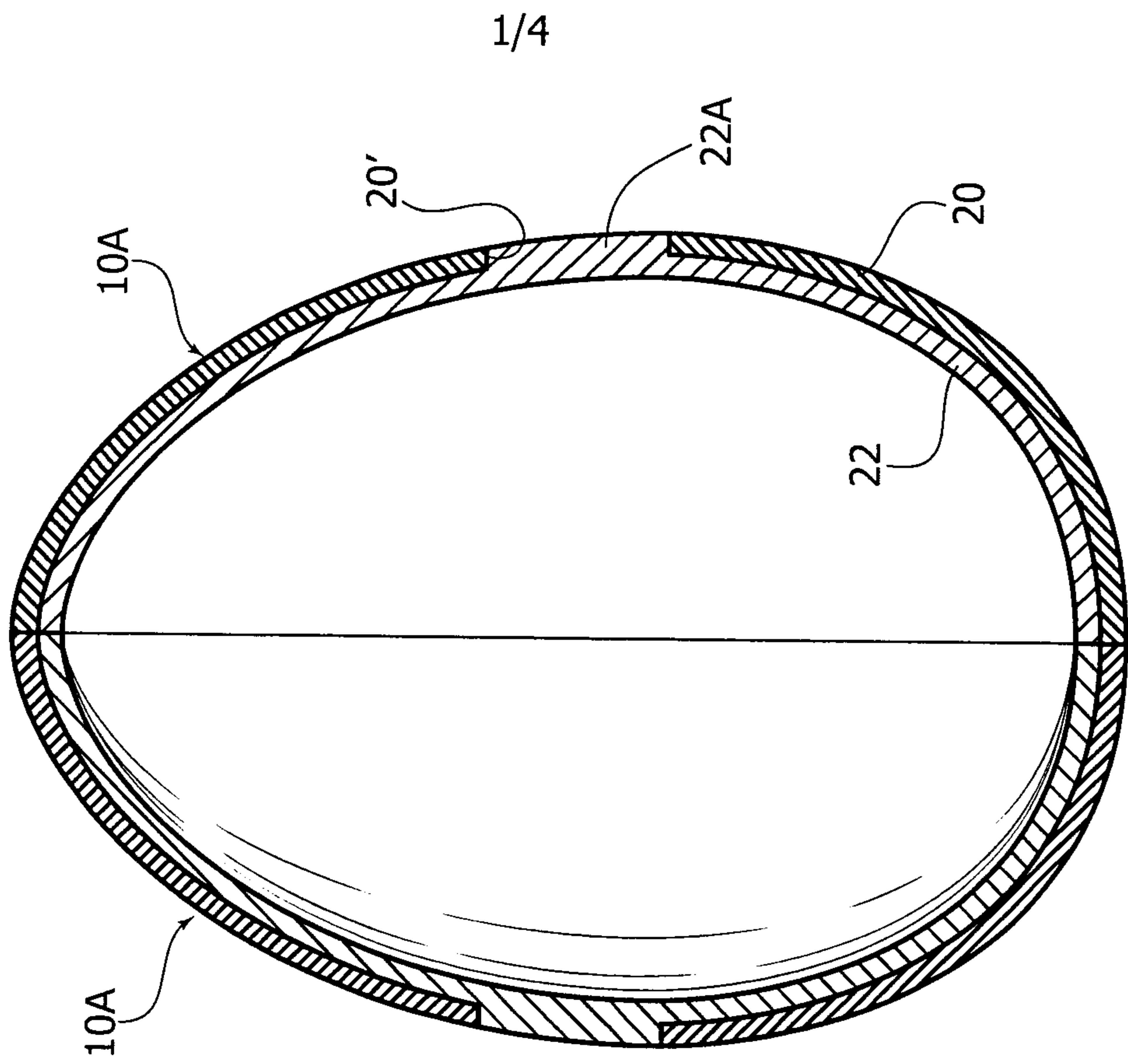


FIG. 3A

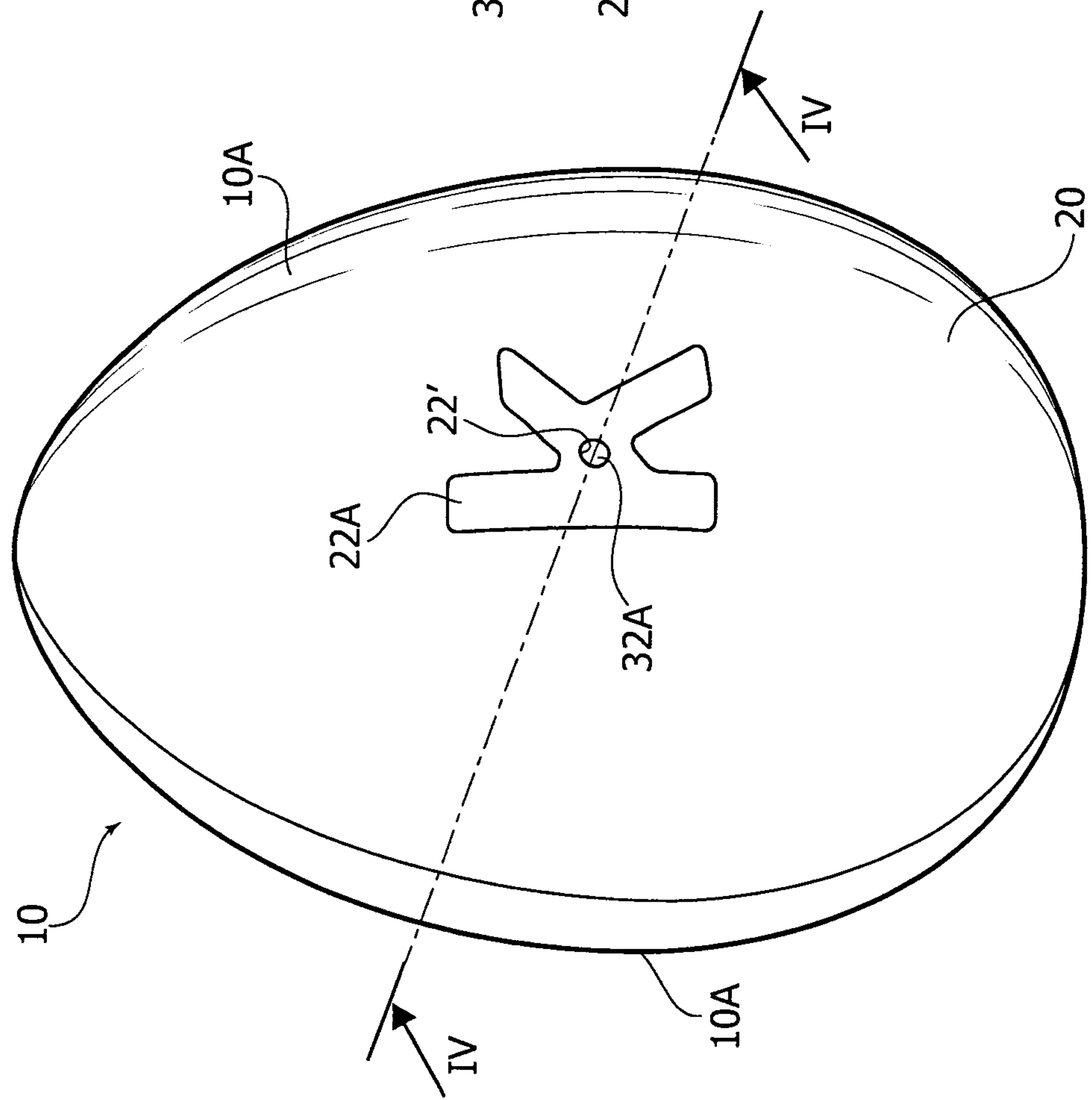


FIG. 3B

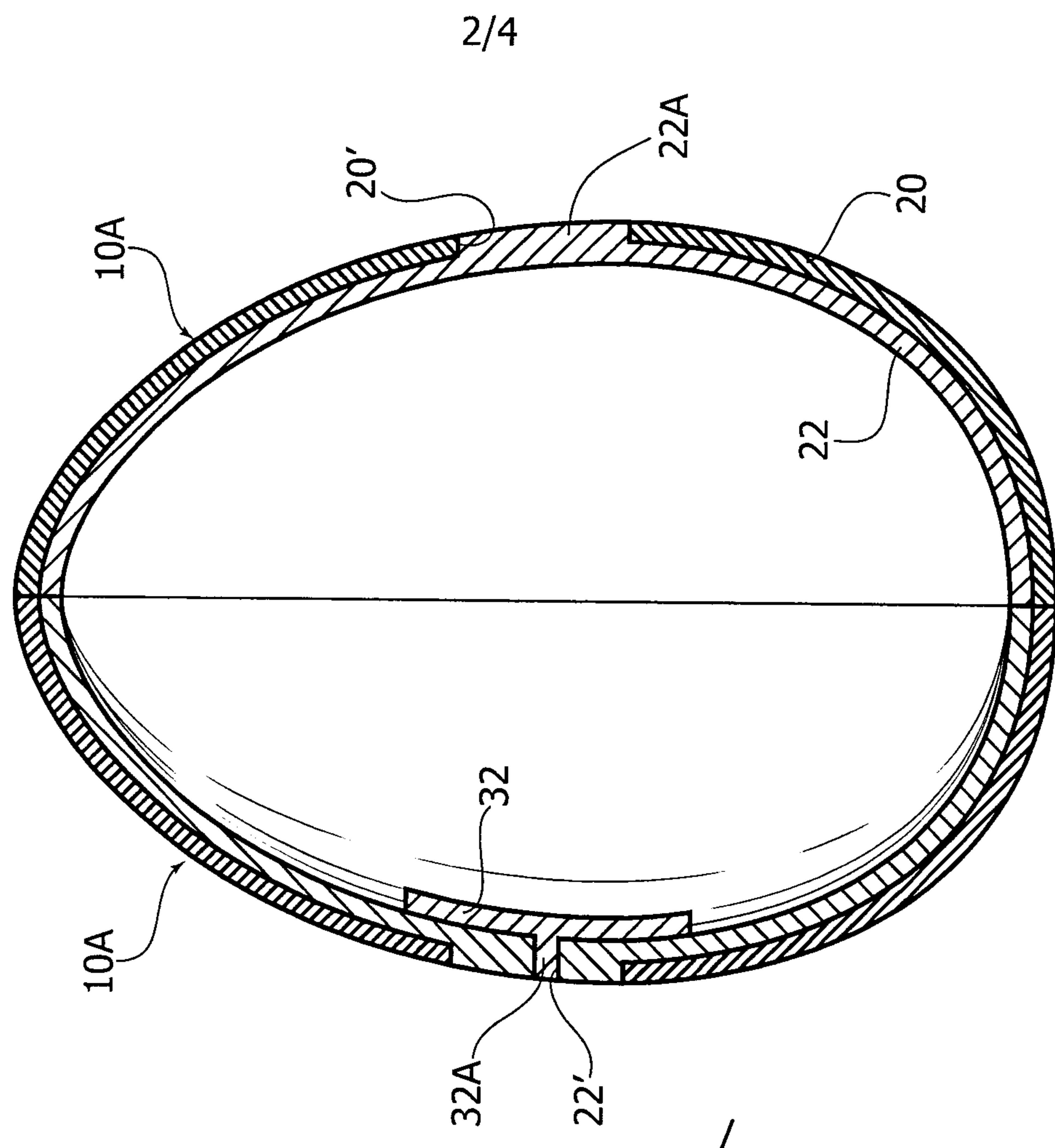


FIG. 4A

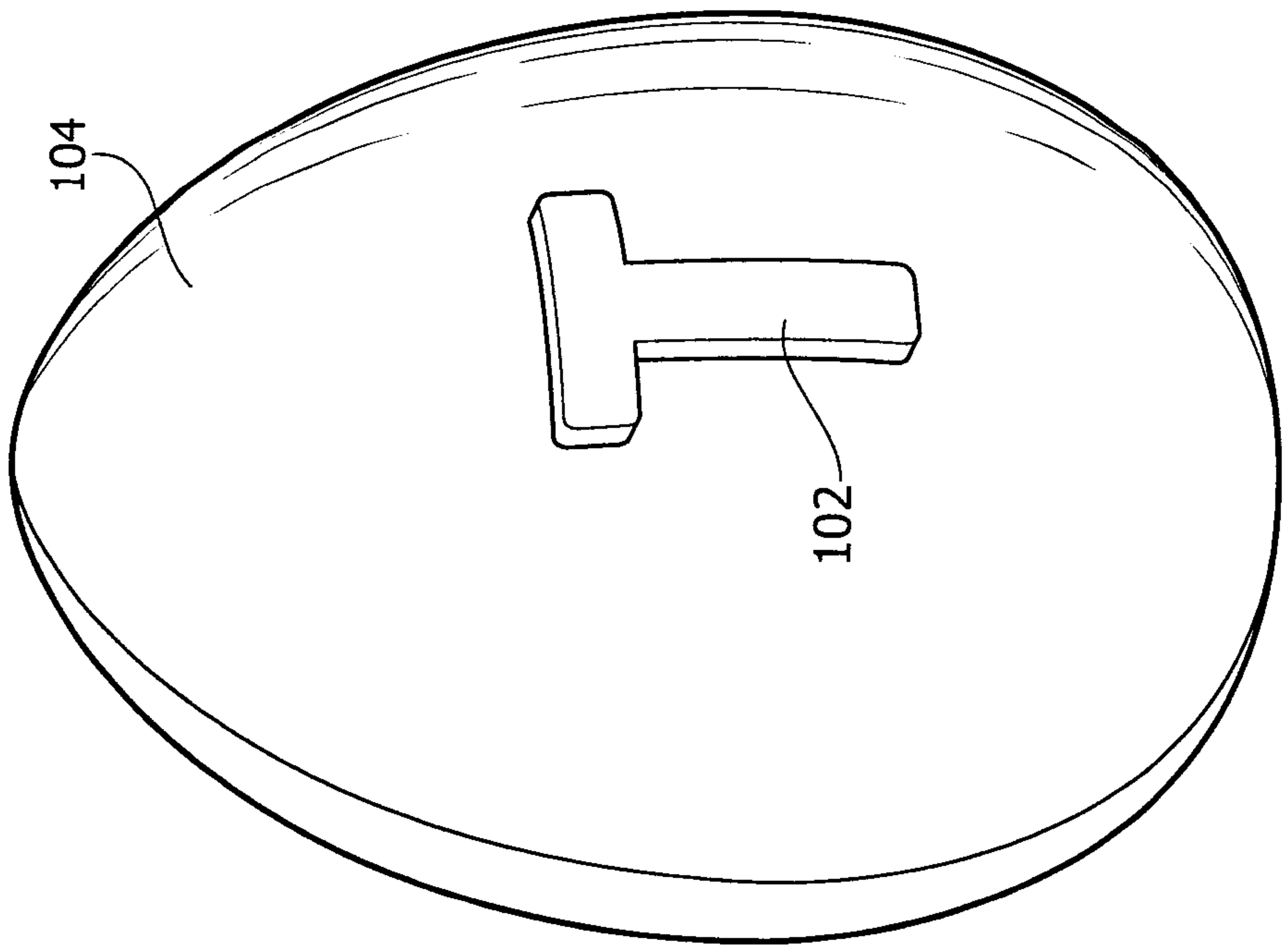


FIG. 4B

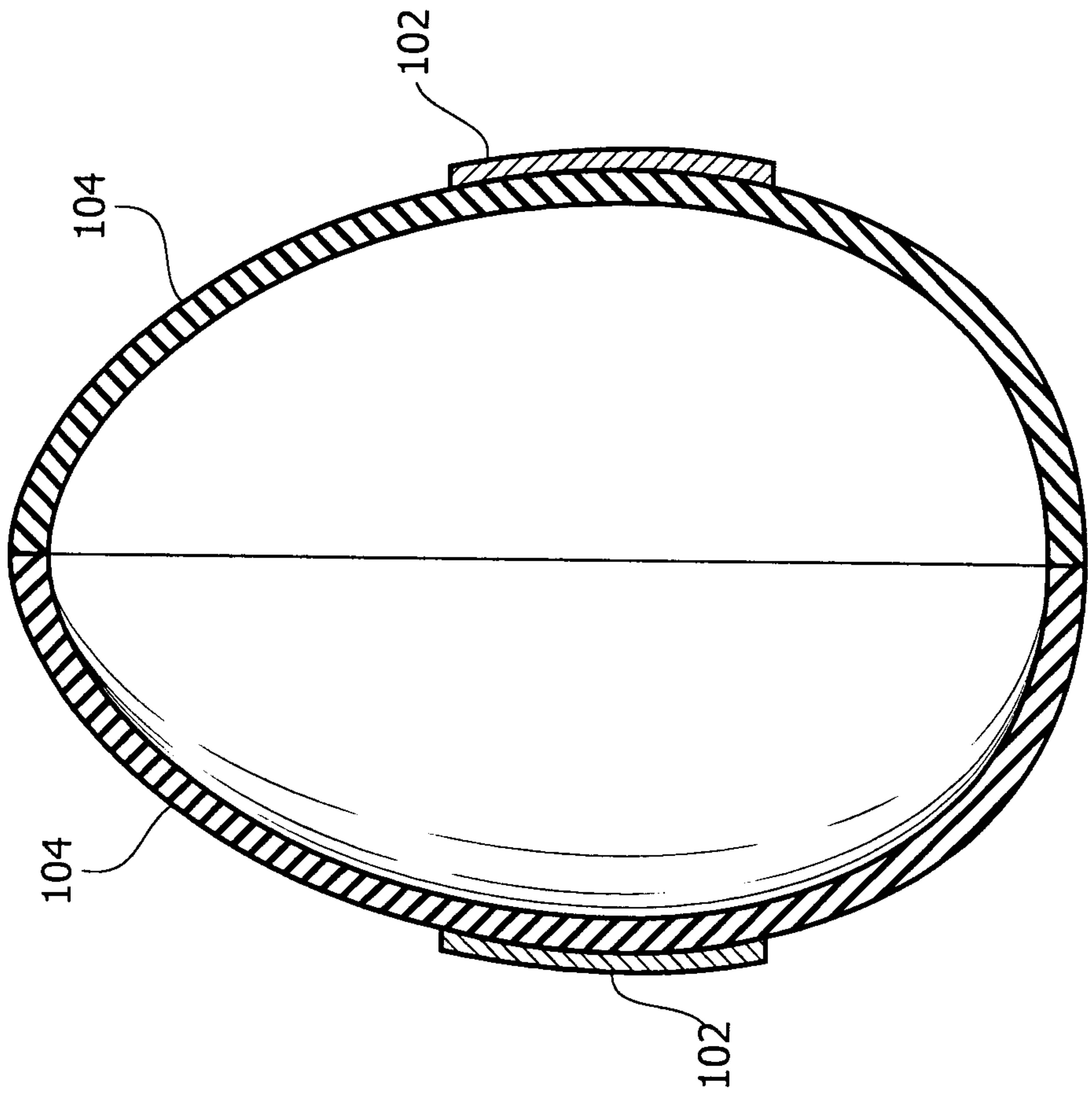


FIG. 5A

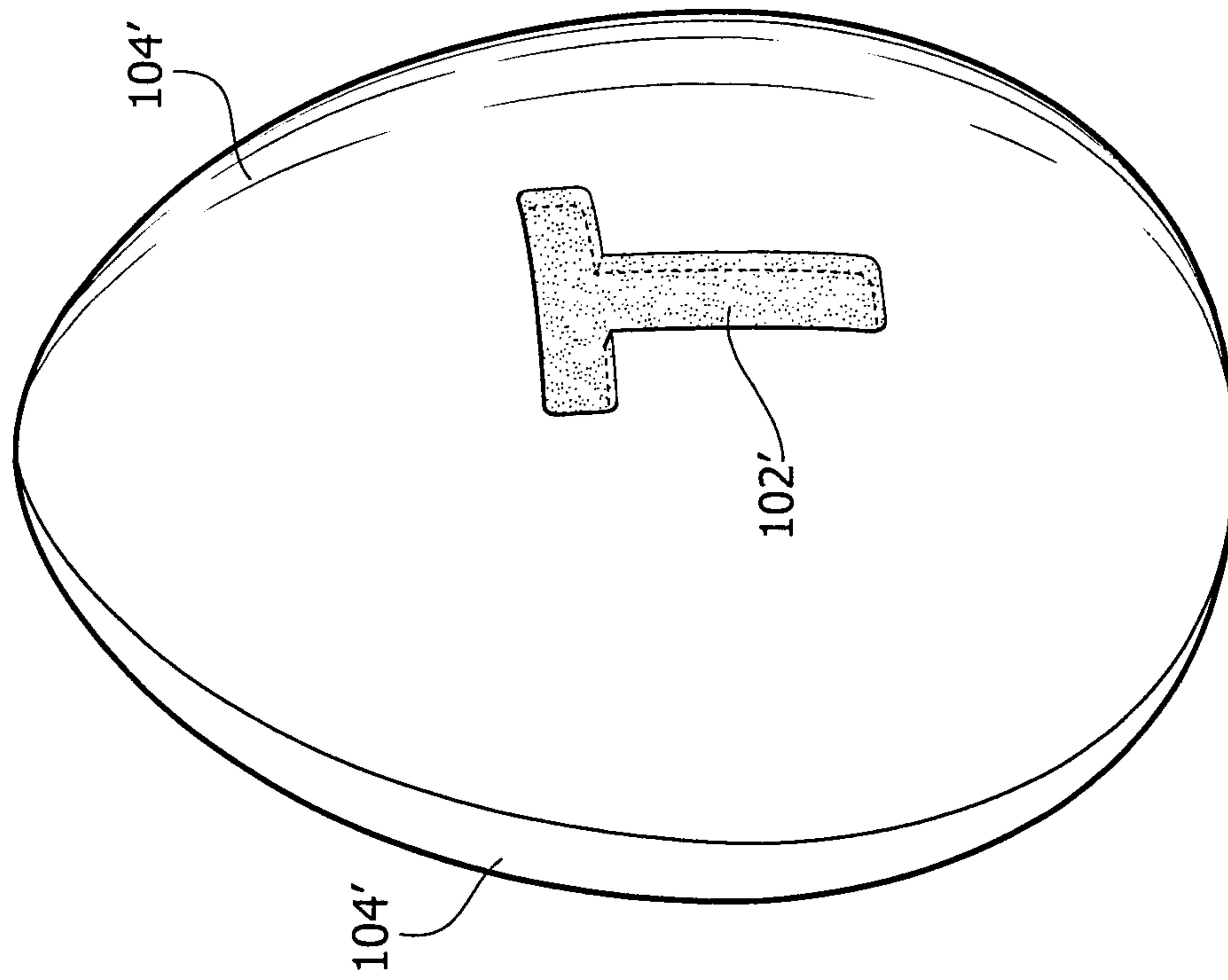


FIG. 5B

