



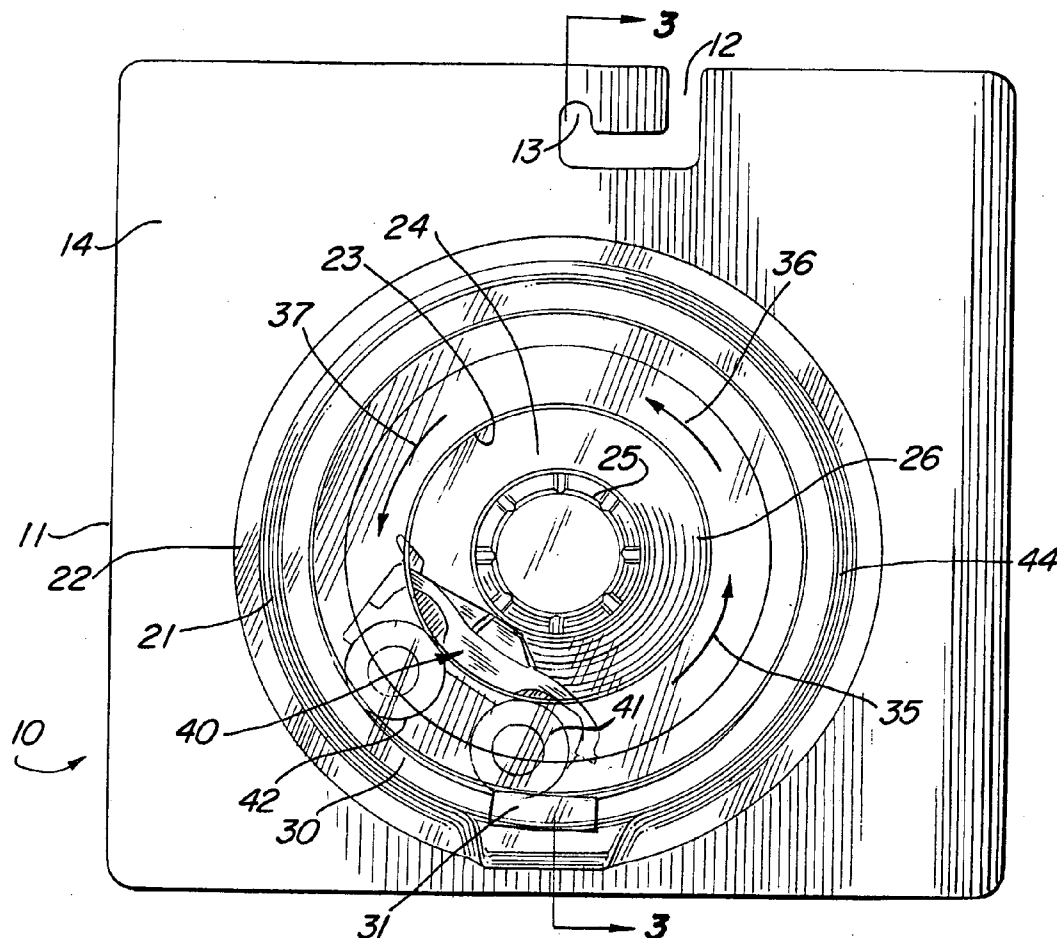
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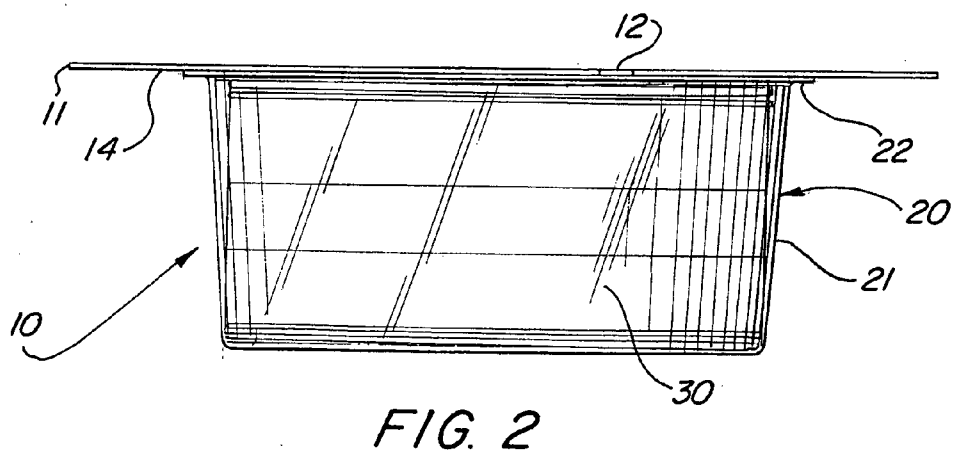
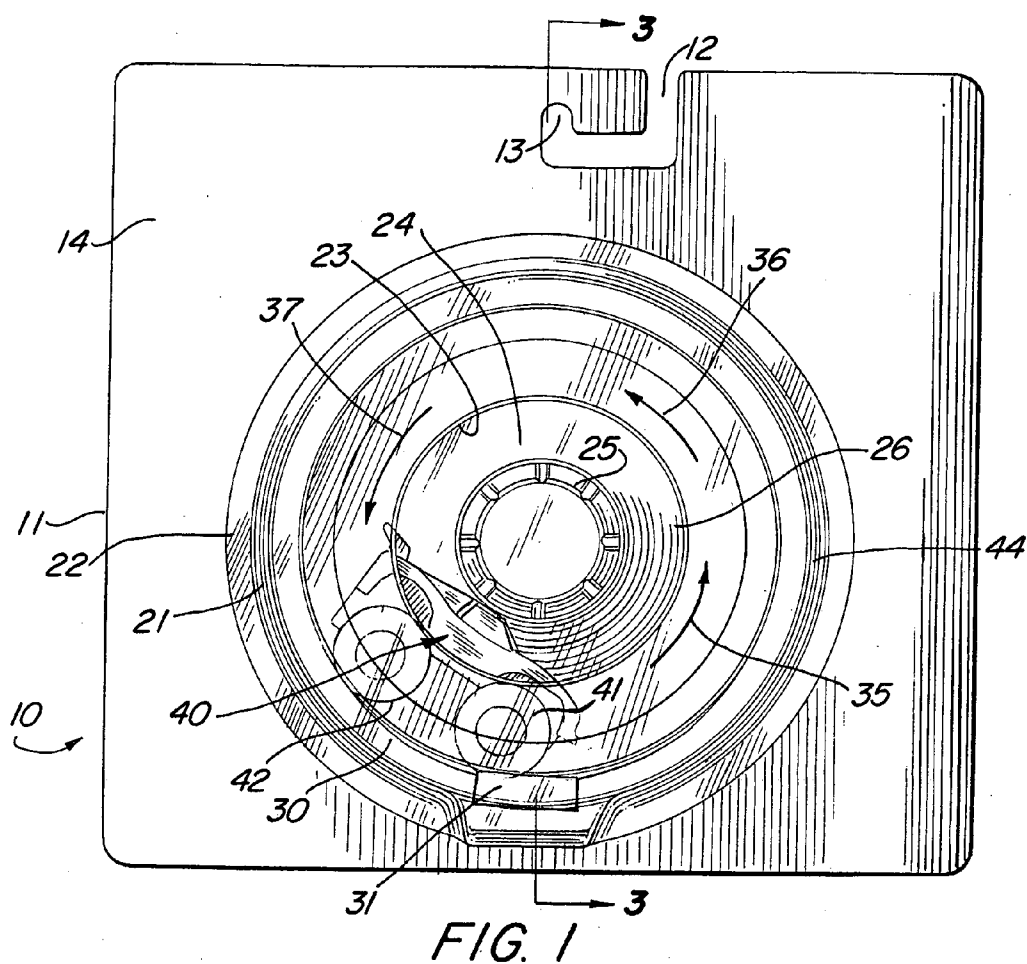
(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2005/0284788 A1****Elliott et al.**(43) **Pub. Date:****Dec. 29, 2005**(54) **TOY VEHICLE PACKAGE HAVING
DEMONSTRATION FEATURE**(52) **U.S. Cl. 206/461; 206/335**(76) **Inventors: James Elliott, La Crescenta, CA (US);
Jesse Flores, Moreno Valley, CA (US);
William O'Keefe, Redondo Beach, CA
(US)**(57) **ABSTRACT**

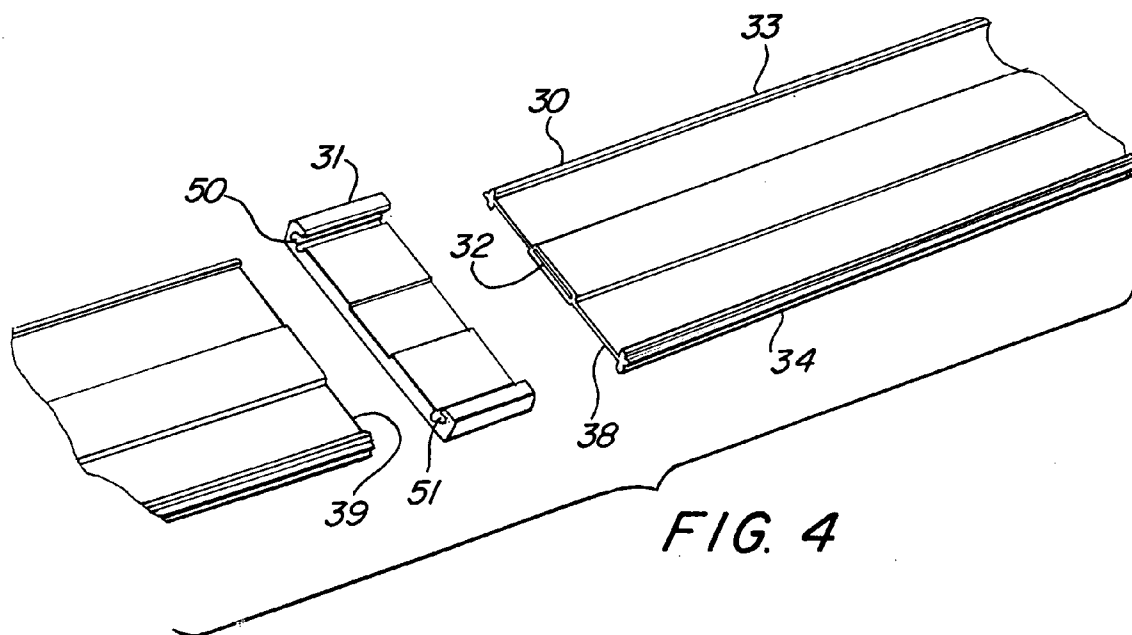
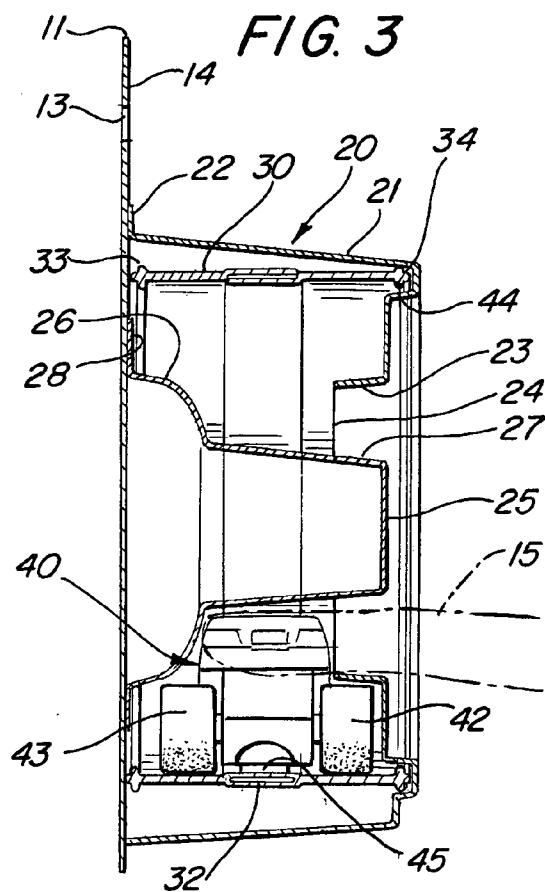
Correspondence Address:
Roy A. Ekstrand
Mattel, Inc
333 Continental Blvd.
El Segundo, CA 90245 (US)

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A toy vehicle package includes a generally planar backing board upon which a substantially cylindrical blister housing is secured. The blister housing defines a center opening and inwardly extending edge. A center hub also supported by the backing is centered within the blister housing opening and is substantially smaller than the opening. A flexible toy vehicle track and coupler are formed to provide a cylindrical trackway within the blister interior and a toy vehicle is captivated within the blister housing and movable upon the interior surface of the track. A space existing between the center hub and opening in the blister pack allows a user to insert a finger against the toy vehicle enclosed therein and push the toy vehicle about the circular path thus formed.







TOY VEHICLE PACKAGE HAVING DEMONSTRATION FEATURE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application discloses apparatus described and claimed in a co-pending application Ser. No. _____ (Attorney Docket 15178) filed _____ which is assigned to the assignee of the present application and which is entitled TOY VEHICLE TRACKSET HAVING MAGNETIC TRACK-TO-VEHICLE ATTRACTION.

FIELD OF THE INVENTION

[0002] This invention relates generally to toy packaging and particularly to packaging for toy vehicles.

BACKGROUND OF THE INVENTION

[0003] Toy vehicle packaging is directed toward accomplishing a number of objectives when the toy vehicle package is placed within a retail store or the like. These objectives include sufficient color and interest as well as graphic content and shape of the packaging to provide attraction of potential customer interest. In addition, toy vehicle packaging is directed toward favorably displaying the toy vehicle itself. Toward this end, many toy vehicle manufacturers have chosen to utilize so-called "blister" packaging. Blister packaging acquires its name from the use of a clear transparent plastic blister which defines a cavity within which the toy vehicle product is received and which defines a surrounding edge or flange. The blister is secured to a colorful particle board or cardboard backing by adhesive attachment along the flange. Finally, toy vehicle packaging is of necessity directed towards providing secure protective enclosure for the toy vehicle. Toward this end, practitioners in the art typically utilize blister material which is relatively strong and which is flexible enough to avoid cracking. In addition, relatively thick rigid backing boards are used together with a strong adhesive to maintain package security. Also, the blister is supportive within the interior of its cavity to maintain a resilient protective environment for the toy vehicles.

[0004] In a more recent innovation in toy product packaging, practitioners in the art have provided so-called "try-me" or demonstration type packages. Try-me packages are most advantageously utilized in combination with battery-powered toys. Access is afforded to the consumer through a package aperture allowing the consumer to activate the toy by pressing an exposed button or the like. The try-me features often include various sounds or movement in a demonstration type mode for the product.

[0005] Despite substantial improvement in toy packaging, there remains nonetheless a continuing need in the art for evermore improved, secure, attractive and cost effective packaging suitable for toy vehicles and the like.

SUMMARY OF THE INVENTION

[0006] Accordingly, it is a general object of the present invention to provide an improved toy package. It is a more particular object of the present invention to provide an improved toy package particularly useful in supporting a toy vehicle. It is a still more particular object of the present invention to provide an improved toy vehicle package which

facilitates a novel try-me feature while maintaining the security and integrity of the toy vehicle package.

[0007] In accordance with the present invention, there is provided a package for holding a toy vehicle and a track segment, the package comprising: a generally planar backing board; a blister housing defining a housing secured to the backing board and defining an opening therein; a center hub supported by the backing board generally centered in the opening; and means for supporting a track segment formed into a generally cylindrical path within the blister housing, the blister housing, the center hub and the means for supporting and cooperating to receive a toy vehicle and to allow a toy vehicle to move within the blister housing while remaining captivated therein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The features of the present invention, which are believed to be novel, are set forth with particularity in the appended claims. The invention, together with further objects and advantages thereof, may best be understood by reference to the following description taken in conjunction with the accompanying drawings, in the several figures of which like reference numerals identify like elements and in which:

[0009] **FIG. 1** sets forth a front elevation view of the a toy vehicle package constructed in accordance with the present invention and supporting a typical toy vehicle therein;

[0010] **FIG. 2** sets forth a top view of the present invention toy vehicle package;

[0011] **FIG. 3** sets forth a section view of the present invention toy vehicle package taken along section lines 3-3 in **FIG. 1**; and

[0012] **FIG. 4** sets forth a partial perspective view illustrating the assembly of a portion of the vehicle track utilized and supported within the present invention toy vehicle package.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] **FIG. 1** sets forth a front elevation view of a toy vehicle package constructed in accordance with the present invention and generally referenced by numeral **10**. Toy vehicle package **10** includes a backing board **11** preferably formed of a particle board or paper board material having a front surface **14** to which a clear plastic blister **20** is secured by adhesive attachment. Backing board **11** further defines a generally U-shaped slot **12** terminating in an upwardly extending notch **13**. Slot **12** and notch **13** are utilized in hanging toy vehicle package **10** from a display rack. Blister **20** is preferably formed of a somewhat resilient, stiff, clear plastic material and defines a generally cylindrical housing **21**. Housing **21** further defines a generally annular flange **22** which is secured to surface **14** of backing board **11** by conventional adhesive attachment or the like. Despite its generally cylindrical shape, housing **21** defines a slight inward taper and terminates in an annular raised rib **44**. Housing **21** further defines a circular opening **24** and a rearwardly extending edge **23**.

[0014] Package **10** further includes a center hub **25** generally centered within opening **24** and supported by a hub

base 26. As is better seen in FIG. 3, center hub 25 defines a tapered surface 27 and extends into and through opening 24 beyond edge 23. The importance of this aspect of the present invention package is described below in greater detail. However, suffice it to note here that opening 24, edge 23 and tapered surface 27 cooperate to facilitate the user's insertion of a finger such as shown in phantom line depiction in FIG. 3. Also better seen in FIG. 3, a hub flange 28 extends outwardly from hub base 26 and supports hub base 26 and center hub 25. Hub flange 28 is secured to front surface 14 of backing board 11 by conventional adhesive attachment or the like.

[0015] Returning to FIG. 1 and in accordance with an important aspect of the present invention, a flexible track segment 30, better seen in FIG. 4, is formed into a generally cylindrical shape and secured within housing 21. The end portions of flexible track segment 30 are joined by a track coupler 31 which is also shown below in FIG. 4 in greater detail. Suffice it to note here that the combination of flexible track segment 30 and track coupler 31 joining the opposite ends thereof form track segment 30 into a generally cylindrical form within housing 21 of blister 20.

[0016] In further accordance with the present invention, a toy vehicle 40 supported by a plurality of rolling wheels such as wheels 41 and 42 is received within housing 21 and rests upon the inside surface of track segment 30. In addition and in further accordance with the present invention, the upper portion of toy vehicle 40 is close to tapered surface 27 of center hub 25. Thus, in further accordance with an important aspect of the present invention, toy vehicle 40 may be moved upon the interior surface of track segment 30 in the circular travel path indicated by arrows 35, 36 and 37 while remaining within housing 21 of toy vehicle package 10. In this circular travel, the presence of center hub 25 having tapered surface 27 formed thereon positioned within opening 24 maintains the secure captivation of toy vehicle 40 within housing 21 of blister 20. In this manner, toy vehicle 40 remains secure within toy vehicle package 10 while toy vehicle 40 is freely movable about the small circular track formed within housing 21 upon track segment 30.

[0017] In the preferred fabrication of the present invention, the user is able to insert a finger through opening 24 as illustrated in FIG. 3 a sufficient distance to engage or touch the rear portion of toy vehicle 40. Thereafter, the user may urge toy vehicle 40 about the circular travel path indicated by arrows 35, 36 and 37. In this manner, the user is able to touch toy vehicle 40 and move it within housing 21 but is not able to withdraw toy vehicle 40 from its package. In addition, toy vehicle 40 remains secure within housing 21 due to the cooperation of center hub 25 within opening 24 and the inward extension of edge 23.

[0018] While a variety of toy vehicles may be used within package 10 in the manner illustrated by toy vehicle 40 in FIG. 1, in the preferred fabrication of the present invention toy vehicle 40 comprises an inertial motor drive mechanism which allows the user to initially push toy vehicle 40 in the direction indicated by arrow 35 and thereafter observe as the inertial motor now energized by the user's push continues to drive toy vehicle 40 about the circular path formed within housing 21 indicated by arrows 35, 36 and 37. In a further preferred embodiment of the present invention, toy vehicle

40 comprises a toy vehicle of the type described in the above-referenced application which utilizes an inertial motor together with a plurality of downwardly extending magnets on the under surface of the body utilized by toy vehicle 40. Such a downwardly extending magnet is illustrated in FIG. 3 as magnet 45. In further accordance with this preferred fabrication of the present invention, flexible track segment 30 includes a metal strip (seen in FIG. 4) to which the magnets on the under side of toy vehicle 40 are attracted with sufficient force to maintain toy vehicle 40 against the interior surface of flexible track segment 30 by magnetic attraction as it inverts within the circular travel path of housing 21.

[0019] As a result, the present invention toy vehicle package allows the user to observe and try the operation of toy vehicle 40 upon track segment 30 while maintaining the toy vehicle completely within the toy vehicle package. As a result, the security and safety of the packaged toy vehicle is maintained while a novel "try-me" feature is provided. The use of transparent plastic material for housing 21 facilitates this observation by allowing the user to observe the complete vehicle within the package enclosure.

[0020] FIG. 2 sets forth a top view of toy package 10. As described above, toy package 10 includes a generally planar backing board 11 preferably formed of a particle board or paper board material having a front surface 14 and a slot 12 formed thereon. As is also described above, package 10 includes a blister 20 formed of a clear and preferably transparent material. Blister 20 includes a generally cylindrical but slightly tapered housing 21 secured to surface 14 by adhesive attachment at a flange 22. A track segment 30 formed into a cylindrical shape is captivated within housing 21.

[0021] FIG. 3 sets forth a section view of toy vehicle package 10 taken along section lines 3-3 in FIG. 1. Package 10 includes a generally planar backing board 11 defining a front surface 14 and a notch 13. Package 10 further includes a blister 20 having a generally cylindrical housing 21 supported upon surface 14 by a flange 22. Flange 22 is secured by conventional adhesive attachment or the like. Housing 21 further defines a raised rib 44 and a rearwardly extending edge 23. An opening 24 is formed at the center of housing 21.

[0022] Package 10 further includes a center hub 25 defining a tapered surface 27 and a hub base 26. An annular flange 28 extends outwardly from hub base 26 and is secured to front surface 14 of backing board 11 by conventional adhesive attachment or the like. In the preferred fabrication of the present invention, center hub 25 and tapered surface 27 are generally centered within opening 24.

[0023] In further accordance with the preferred fabrication of the present invention, a track segment 30 having edges 34 and 33 is formed into a cylindrical loop and is received within housing 21. Edge 34 of track segment 30 is received within the interior of raised rib 44 which in turn fixes the centered position of track segment 30. As described above, track segment 30 further includes a metal strip formed at the center thereof and extending the length of track segment 30.

[0024] In accordance with the preferred fabrication of the present invention, a toy vehicle 40 having a toy vehicle body supported by a plurality of rolling wheels such as wheels 42

and 43 is received upon the interior surface of track segment 30 and is captivated between track segment 30 and tapered surface 27 of center hub 25. As is also described, toy vehicle 40 in its preferred fabrication is constructed in accordance with the toy vehicle described in the above-referenced related patent application. Suffice it to note here that toy vehicle 40 includes a plurality of downwardly extending magnets such as magnet 45 on the undersurface of the toy vehicle body. A magnetic attraction between magnet 45 and metal strip 32 draws toy vehicle 40 against the interior surface of track segment 30. As is also described in the above related patent application, toy vehicle 40 preferably includes an inertial motor allowing it to be energized by a short duration forward push by the user and thereafter run for an extended time utilizing the stored inertial energy within the push motor.

[0025] Accordingly and in accordance with the anticipated use of the present invention toy vehicle package, the user is able to try the operation of toy vehicle 40 and track segment 30 by inserting a finger shown in phantom line depiction and referenced by numeral 15 into opening 24 and against the rear portion of toy vehicle 40. The user is then able to urge toy vehicle 40 forwardly energizing the inertial motor. Thereafter, the user withdraws finger 15 and the inertial motor within toy vehicle 40 causes it to run in a circular travel path about center hub 25 upon track segment 30. This operation is viewed by the user through the transparent material of blister 20.

[0026] It will be noted by examination of FIG. 3 that the cooperation of track segment 30 secured within rib 44 and center hub 25 together with edge 23 maintains the captivation of toy vehicle 40 within toy vehicle 10 despite the availability of opening 24. As a result, toy vehicle 40 may be reached by a user for the try-me function while remaining securely packaged and captivated within the interior of the toy vehicle package.

[0027] FIG. 4 sets forth a perspective assembly view of a portion of track segment 30. As described above, track segment 30 is flexible and is preferably formed of a material such as plastic or the like. Track segment 30 includes track edges 33 and 34 together with end portions 28 and 29. A metal strip 32 is supported within the center portion of track segment 30. Ends 38 and 39 of track segment 30 are brought together and joined by a coupler 31. Coupler 31 defines grooves 50 and 51 which receive edges 33 and 34 respectively of ends 38 and 39 as track segment 30 is formed into the above-described cylindrical shape. Coupler 31 joins ends 38 and 39 to maintain this cylindrical shape. In addition, once removed from the present invention package, track segment 30 may be utilized together with couplers such as coupler 31 to form a combined trackway using a plurality of segments substantially identical to track segment 30. Thus, track segment 30 provides the above-described use within the try-me package of the present invention and is further capable of use when removed from the package as part of the track set in its play function.

[0028] What has been shown is a toy vehicle package which provides a convenient and amusing try-me function

while maintaining secure captivation and protection of the enclosed toy vehicle product. The package is manufactured for substantially the same cost as conventional blister packages while providing a substantial improvement in attraction and amusement for the user. The interest value of the present invention toy vehicle package greatly increases the likelihood of consumer interest in the packaged product.

[0029] While particular embodiments of the invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made without departing from the invention in its broader aspects. Therefore, the aim in the appended claims is to cover all such changes and modifications as fall within the true spirit and scope of the invention.

That which is claimed is:

1. A package for holding a toy vehicle and a track segment, said package comprising:

a generally planar backing board;

a blister housing defining a housing secured to said backing board and defining an opening therein;

a center hub supported by said backing board generally centered in said opening; and

means for supporting a track segment formed into a generally cylindrical path within said blister housing,

said blister housing, said center hub and said means for supporting and cooperating to receive a toy vehicle and to allow a toy vehicle to move within said blister housing while remaining captivated therein.

2. The package set forth in claim 1 wherein said blister housing is formed of a transparent material.

3. The package set forth in claim 2 wherein said means for supporting includes an annular rib for engaging a portion of a track segment to form a cylinder.

4. The package set forth in claim 3 wherein said center hub defines a tapered hub.

5. For use in combination with a toy vehicle and a toy vehicle track segment formed into a generally cylindrical shape, a toy vehicle package comprising:

a generally planar backing board having a front surface;

a generally cylindrical blister housing defining a support flange attached to said front surface, an annular rib and a center opening; and

a generally cylindrical post secured to said front surface, said post being substantially centered within and extending through said center opening;

said toy vehicle track segment being captivated by said annular rib within said blister housing such that said toy vehicle may be placed upon said track segment and moved in a circular travel path within said blister housing.

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