An apparatus and method for converting promotional CDs or the like into spinning toy tops, thereby effectuating an alternate, playful function to promotional CDs having an otherwise well-established and singularly-defined function as a method of promotion or advertisement.
APPARATUS AND METHOD FOR CONVERTING A COMPACT DISC INTO A SPINNING TOY TOP

TECHNICAL FIELD

[0001] The present invention relates generally to spinning toy tops, and more specifically to an apparatus and method for converting a compact disc into a spinning toy top. The present apparatus and method is particularly suitable for, although not strictly limited to, converting promotional compact discs (i.e., CDs received as mailings from Internet providers or the like) into spinning toy tops.

BACKGROUND OF THE INVENTION

[0002] Advances in the digital millennium have resulted in significant changes in our methods of communication and advertisement. In particular, promotional mailings in the form of compact discs appear to be as ubiquitous as postal addresses. Internet providers, merchandisers, game companies, and the like, utilize compact disc technology as an effective and relatively inexpensive means of product and/or service advertisement, mailing literally millions of such compact discs in an attempt to garner the business of prospective customers in receipt of same.

[0003] Although such promotional compact disc mailings may effectively contribute to the capture of a portion of the mailer’s intended market, many such compact discs, or CDs, are often received by an apathetic consumer market who view the promotional CDs as junk-mailings. Still others, view the products advertised thereby as unnecessary luxuries and/or incompatible with their current lifestyle.

[0004] In short, many such promotional CD mailings are often discarded, facially serving no other function than their intended promotional purposes.

[0005] Therefore, it is readily apparent that there is a need for an apparatus and method for converting promotional CDs or the like into spinning toy tops, thereby providing a playful function to otherwise trivial or “junk” promotional CD mailings.

[0006] Additionally, the present apparatus and method contributes to the longevity and repetition of exposure of such promotional CDs to target consumers/prospective customers, thereby providing distributors of such CDs with an ongoing vehicle of advertisement, as recipients of such CDs will continue to consider the availability of the CD product when the apparatus is in use as a spinning toy top, and may eventually install, use, and/or order the products and/or services promoted thereby.

BRIEF SUMMARY OF THE INVENTION

[0007] Briefly described, in a preferred embodiment, the present invention overcomes the above-mentioned disadvantages and meets the recognized need for such a device by providing an apparatus and method for converting promotional CDs or the like into spinning toy tops, thereby effectuating an alternate, playful function to promotional CDs having an otherwise well-established and singularly-defined function as a method of advertisement.

[0008] According to its major aspects and broadly stated, the present invention in its preferred form is an apparatus and method for converting a compact disc into a spinning toy top having, in general, a spinning head adapted to engage a conventional CD at an axially concentric position.

[0009] More specifically, the present invention is an apparatus and method for converting a compact disc into a spinning toy top having a shallow conical-shaped spinning head, wherein the spinning head possess a raised ridge or hub preferably dimensioned to be frictionally engaged within the central aperture formed in a conventional CD, and wherein the hub preferably possesses a spindle or shaft extending upwardly therefrom to facilitate spinning of the apparatus when the CD is engaged thereto. Advantageously, due to the inherently tightly tolerated circumference and balance of the CD, the fully assembled apparatus provides a stable, long-spinning top.

[0010] The apparatus and method is preferably utilized to convert promotional CDs (i.e., CDs received through the mail from Internet providers or other product/service providers) into spinning toy tops, thereby providing a playful function to otherwise trivial or “junk” mailings.

[0011] Additionally, the present apparatus and method contributes to the longevity and repetition of exposure of such promotional CDs to target consumers/prospective customers, thereby providing distributors of such CDs with an ongoing vehicle of advertisement, as recipients of such CDs will continue to consider the availability of the CD product when the apparatus is in use as a spinning toy top, and may eventually install, use, and/or order the products and/or services promoted thereby. Moreover, the present apparatus and method contributes to the reduction of unintentional consumer loss, misplacement, or disposal of such promotional CDs, as consumers utilizing the apparatus will less likely experience the “out-of-sight, out-of-mind” principle, and will therefore have the product CD readily available when needed for installation or product ordering purposes.

[0012] It will be recognized that other CDs may also be utilized within the scope and spirit of the present invention, such as blank recordable CDs, wherein labels or other adhesive indicia may be applied thereto to effectuate a visually stimulating or illusionary pattern during rotation of the apparatus.

[0013] Although the hub of the spinning head is preferably substantially solid and circular, it is contemplated in an alternate embodiment that other configurations could be utilized to frictionally grasp and retain the center aperture of the CD engaged therewith, wherein such alternate configurations may include tabs, prongs, clasps, resilient members, or other grasping protruberances. Additionally, and as more fully described below, the spinning head can alternatively be modified or adapted to grasp the periphery of the central aperture of the CD and/or the periphery of the CD body, yet still be retained in an axially concentric position relative to the CD and the CD’s axis of rotation.

[0014] Accordingly, a feature and advantage of the present invention is its ability to convert promotional CD mailings or the like into spinning toy tops, thereby providing a playful function to otherwise trivial or “junk” mailings.

[0015] A feature and advantage of the present invention is its ability to contribute to the longevity and repetition of exposure of such promotional CDs to target consumers/prospective customers, thereby providing distributors of such CDs with an ongoing vehicle of advertisement.
A feature and advantage of the present invention is its ability to contribute to the reduction of unintentional consumer loss, misplacement, or disposal of such promotional CDs.

A feature and advantage of the present invention is its simplicity of design.

A feature and advantage of the present invention is its ease of assembly.

A feature and advantage of the present invention is its stable, long-spinning characteristics.

These and other features and advantages of the present invention will become more apparent to one skilled in the art from the following description and claims when read in light of the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be better understood by reading the Detailed Description of the Preferred and Alternate Embodiments with reference to the accompanying drawings, in which like reference numerals denote similar structure and refer to like elements throughout, and in which:

FIG. 1 is a perspective view of a spinning head of an apparatus for converting a compact disc into a spinning toy top according to a preferred embodiment of the present invention;

FIG. 2 is a side view of a spinning head of an apparatus for converting a compact disc into a spinning toy top according to a preferred embodiment of the present invention;

FIG. 2A is a partial cross-sectional side view of a spinning head of an apparatus for converting a compact disc into a spinning toy top according to a preferred embodiment of the present invention;

FIG. 3 is a perspective view of an apparatus for converting a compact disc into a spinning toy top according to a preferred embodiment of the present invention;

FIG. 4 is a perspective view of an apparatus for converting a compact disc into a spinning toy top according to an alternate embodiment of the present invention;

FIG. 5 is a perspective view of a spinning head of an apparatus for converting a compact disc into a spinning toy top according to an alternate embodiment of the present invention;

FIG. 6 is a perspective view of a spinning head of an apparatus for converting a compact disc into a spinning toy top according to an alternate embodiment of the present invention; and,

FIG. 7 is a perspective view of an apparatus for converting a compact disc into a spinning toy top according to an alternate embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED AND ALTERNATIVE EMBODIMENTS

In describing the preferred and alternate embodiments of the present invention, as illustrated in FIGS. 1-7, specific terminology is employed for the sake of clarity. The invention, however, is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents that operate in a similar manner to accomplish similar functions.

Referring now to FIGS. 1-3, the present invention in a preferred embodiment is apparatus 10, wherein apparatus 10 is preferably a device for converting a compact disc into a spinning toy top, having, in general, spinning head 20 and compact disc 40. Preferably, spinning head 20 is formed from a suitable, durable plastic; however, other suitable materials could be utilized, such as for exemplary purposes only, metal, wood, and/or other materials of calculated weight to selectively and strategically manipulate the rotational characteristics of spinning head 20, and apparatus 10 in general. Additionally, and as more fully described below, compact disc 40 is preferably any conventional compact disc as known within the art.

Specifically, spinning head 20 preferably possesses integrally formed conical-shaped base portion 22, hub 24 and shaft 26. As best seen in FIG. 2, conical region 28 of conical-shaped base portion 22 is preferably substantially shallow for purposes of contributing to the overall low center of gravity and large rotational inertia experienced by apparatus 10 when in use, thereby resulting in stable, long-spinning characteristics of same. Although, conical region 28 is preferably substantially shallow, it is contemplated that conical region 28 could be of any height and/or diameter to strategically manipulate the rotational characteristics of spinning head 20, and apparatus 10 in general.

Preferably, hub 24 is centrally disposed on upper surface 22a of base portion 22, wherein hub 24 is preferably sufficiently dimensioned, and preferably downwardly tapered to a larger diameter, to facilitate frictional engagement of central aperture 42 of compact disc 40 therewith, as more fully described below. Although hub 24 of spinning head 20 is preferably substantially solid, circular-shaped and downwardly tapered, it is contemplated in an alternate embodiment that other configurations could be utilized to frictionally grasp and retain central aperture 42 of compact disc 40 engaged therewith, wherein such alternate configurations could include tabs, prongs, clasps, resilient members, o-rings, grommets, clamps, magnets, magnetic clamps, or other gripping protruberances.

As best illustrated in FIG. 2A, annular groove 25 is preferably formed around hub base 24b of hub 24 and concentrically positioned relative to the axis of rotation of apparatus 10, wherein formation of annular groove 25 results in hub base 24b sitting fractionally below upper surface 22a of base portion 22. As such, annular groove 25 preferably functions as a relief by eliminating any radius formed between hub base 24b and upper surface 22a that would otherwise interfere and/or obstruct with the flush and secure seating of compact disc 40 over upper surface 22a when compact disc 40 is engaged with hub 24.

Preferably, spindle or shaft 26 is centrally disposed on hub 24, and extends preferably upwardly therefrom to facilitate the grasping of same, and spinning of apparatus 10 when compact disc 40 is engaged with hub 26 of spinning head 20. Surface 26a of shaft 26 is at least partially knurled to facilitate gripping of same; alternatively, other frictional
surfaces could be employed, such as, for exemplary purposes only, foam-sponge, rubber, sandpaper, textured, or the like. Alternatively, surface 26a of shaft 26 could be smooth or non-frictional.

[0036] Referring now more specifically to FIG. 3, in use, hub 24 of spinning head 20 is preferably brought into frictional engagement with central aperture 42 of compact disc 40. Thereafter, spindle 26 of spinning head 20 is preferably grasped and spun, thereby resulting in the stable, long-spinning rotational momentum of apparatus 10, wherein the relative differing circumferences of compact disc 40 and base portion 22 preferably contributes to the extended rotational inertia and overall low center of gravity of spinning apparatus 10.

[0037] Preferably, and for purposes of implementing the essence of the present apparatus and method, compact disc 40 is preferably any promotional compact disc received through the mail, or otherwise, from Internet providers, merchandisers, game companies, and/or other product or service providers, thereby providing a playful function to otherwise trivial or “junk” mailings. However, it is contemplated that other compact discs could be utilized without departing from the essence and/or appreciative scope of the present apparatus and method, such as, for exemplary purposes only, music discs, software discs, data discs and the like, as such alternate compact discs are in full contemplation of the inventor in describing the preferred and/or alternate embodiments of the present invention herein. As best illustrated in FIG. 4, such an alternate embodiment could include blank recordable compact disc 140, wherein label 150 or other adhesive indica having a random or strategically designed pattern 152 printed thereon could be applied to the upper surface of compact disc 140 to effectuate a visually stimulating or illusionary pattern upon rotating apparatus 10. Alternatively, compact disc 140 could have such random or strategically designed patterns applied thereto, printed, or imprinted thereon.

[0038] Additionally, the present apparatus and method contributes to the longevity and repetition of exposure of compact disc 40 and/or other promotional CDs to target consumers/prospective customers, thereby providing distributors of such CDs with an ongoing vehicle of advertisement, as recipients of such CDs will continue to consider the availability of the CD product when apparatus 10 is in use as a spinning toy top, and may eventually install, use, and/or order the products and/or services promoted thereby. Moreover, the present apparatus and method contributes to the reduction of unintentional consumer loss, misplacement, or disposal of such promotional CDs, as consumers utilizing apparatus 10 will less likely experience the “out-of-sight, out-of-mind” principle, and will therefore have the product CD readily available when needed for installation or product ordering purposes. It is contemplated that product and/or service providers could distribute spinning head 20 in conjunction with a CD. It is further contemplated that product and/or service providers could distribute spinning head 20 in conjunction with an adhesive CD label, wherein the CD label could have printed advertisements or the like thereon, and wherein consumers could adhesively apply the CD label to any CD to effectuate a vehicle for product or service advertisement.

[0039] Referring now more specifically to FIG. 5, illustrated therein is an alternate embodiment of device 10, wherein the alternate embodiment of FIG. 5 is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in FIGS. 1-3 except as hereinafter specifically referenced. Specifically, the embodiment of FIG. 5 replaces hub 24 with hub 124, wherein hub 124 is in the form of a right cylinder and includes spaced-apart, downwardly sloping or tapered projections 124a, 124b, and 124c extending outwardly therefrom for providing an interference or frictional fit with central aperture 42 of compact disc 40 when engaged therewith. It is contemplated that any number of projections having any selected slope could be utilized to frictionally engage central aperture 42 of compact disc 40 therewith.

[0040] Referring now more specifically to FIG. 6, illustrated therein is an alternate embodiment of device 10, wherein the alternate embodiment of FIG. 6 is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in FIGS. 1-3 except as hereinafter specifically referenced. Specifically, the embodiment of FIG. 6 incorporates adhesive tape 200 annullingly disposed about hub 224 on upper surface 22a of base portion 22 of spinning head 20, wherein the periphery or region surrounding central aperture 42 of compact disc 40 is securely adhered or affixed to adhesive tape 200, and wherein release paper 202 is preferably removed from adhesive tape 200 prior to application of compact disc 40 thereto. Hub 224 is in the form of a right cylinder to facilitate slip-fit engagement of compact disc 40 thereover. Such an embodiment still permits spinning head 20 to be retained in an axially concentric position relative to compact disc 40 and compact disc’s 40 axis of rotation. It is contemplated that other adhesives could be utilized instead of or in addition to adhesive tape 200, such as, for exemplary purposes only, epoxies, resins, glues, and the like.

[0041] Referring now more specifically to FIG. 7, illustrated therein is an alternate embodiment of device 10, wherein the alternate embodiment of FIG. 7 is substantially equivalent in form and function to that of the preferred embodiment detailed and illustrated in FIGS. 1-3 except as hereinafter specifically referenced. Specifically, the embodiment of FIG. 7 replaces hub 24 with elongated support arms 300 diametrically opposed on, and extending outwardly from, base portion 22, wherein each arm 300 possesses a retaining clip 302 formed on the distal ends thereof for retaining the outer periphery of compact disc 40. Such a configuration still permits spinning head 20 to be retained in an axially concentric position relative to compact disc 40 and compact disc’s 40 axis of rotation. It is contemplated that any number of support arms arranged in any suitable manner and possessing any number and/or configuration of retaining clips could be utilized to effectuate the present alternate embodiment, such as, for exemplary purposes only, three support arms, four support arms, web-configuration, a plurality of radially outwardly extending support arms, or the like.

[0042] It is contemplated in an alternate embodiment that spinning head 20 and/or compact disc 40 of the preferred and/or alternate embodiments of the present apparatus and method could be selectively formed from materials of varying weight to strategically manipulate the rotational characteristics of apparatus 10.
It is contemplated in an alternate embodiment that apparatus 10 of the preferred and/or alternate embodiments of the present invention could be utilized to facilitated educational demonstrations of gyroscopic principles, gyroscopic procession, and/or the principles of physics.

It is contemplated in an alternate embodiment that spinning head 20 and/or compact disc 40 of the preferred and/or alternate embodiments of the present apparatus and method could utilize compact discs of varying size and/or shape, such as, for exemplary purposes only, mini-disc, or truncated-discs (i.e., business card discs).

Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and that various other alternatives, adaptations, and modifications may be made within the scope of the present invention. Accordingly, the present invention is not limited to the specific embodiments illustrated herein, but is limited only by the following claims.

What is claimed is:

1. A spinning top, comprising:
   a compact disc; and
   a spinning head comprising means for engaging a compact disc at an axially concentric position.

2. The spinning top of claim 1, wherein said compact disc is selected from the group consisting of promotional CDs, music CDs, Internet CDs, marketing CDs, software CD, gaming CDs, blank CDs, and data CDs.

3. The spinning top of claim 1, wherein said spinning head comprises a shallow conical-shaped base.

4. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is a hub.

5. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is a hub, wherein said hub is dimensioned, and downwardly tapered to a larger diameter, to facilitate frictional engagement of said hub with a central aperture of said compact disc.

6. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is a hub, said hub having an annular groove formed therearound for functioning as a relief to facilitate flush and secure seating of said compact disc over an upper surface of said spinning head when said compact disc is engaged with said hub.

7. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is a hub, said hub having an annular groove formed therearound for functioning as a relief to facilitate flush and secure seating of said compact disc over an upper surface of said spinning head when said compact disc is engaged with said hub.

8. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is an adhesive selected from the group consisting of tapes, epoxies, resins, glues, and combinations thereof.

9. The spinning top of claim 1, wherein said means for engaging said compact disc at an axially concentric position is selected from the group consisting of tabs, prongs, clasps, resilient members, o-rings, grommets, clamps, magnets, magnetic clamps, grasping protuberances, elongated support arms, retaining clips, and combinations thereof.

10. The spinning top of claim 1, wherein said spinning head comprises a shaft for spinning said spinning head.

11. A spinning top, comprising:
   a compact disc comprising a central aperture; and
   a spinning head comprising a hub dimensioned, and downwardly tapered to a larger diameter, to facilitate frictional engagement of said central aperture of said compact disc therewith.

12. The spinning top of claim 11, wherein said compact disc is selected from the group consisting of promotional CDs, music CDs, Internet CDs, marketing CDs, software CD, gaming CDs, blank CDs, and data CDs.

13. The spinning top of claim 11, wherein said spinning head comprises a shallow conical-shaped base.

14. The spinning top of claim 11, wherein said spinning head comprises a shaft for spinning said spinning head.

15. The spinning top of claim 11, further comprising an annular groove formed around said hub for functioning as a relief to facilitate flush and secure seating of said compact disc over an upper surface of said spinning head when said compact disc is engaged with said hub.

16. A method of converting a compact disc into a spinning top, said method comprising the steps of:
   a. obtaining a spinning head comprising means for engaging a compact disc at an axially concentric position;
   b. engaging the compact disc with said means for engaging; and,
   c. spinning said spinning head with the compact disc engaged therewith.

17. The method of claim 16, wherein said spinning head comprises a shallow conical-shaped base.

18. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is a hub.

19. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is a hub, wherein said hub is dimensioned, and downwardly tapered to a larger diameter, to facilitate frictional engagement of said hub with a central aperture of the compact disc.

20. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is a hub, wherein said hub is in the form of a right cylinder and comprises spaced-apart, downwardly tapered projections extending outwardly therefrom for providing an interference or frictional fit with a central aperture of said hub.

21. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is a hub, said hub having an annular groove formed therearound for functioning as a relief to facilitate flush and secure seating of the compact disc over an upper surface of said spinning head when the compact disc is engaged with said hub.
22. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is an adhesive selected from the group consisting of tapes, epoxies, resins, glues, and combinations thereof.

23. The method of claim 16, wherein said means for engaging the compact disc at an axially concentric position is selected from the group consisting of tabs, prongs, clasps, resilient members, o-rings, grommets, clamps, magnets, magnetic clamps, grasping protuberances, elongated support arms, retaining clips, and combinations thereof.

24. The method of claim 16, wherein said spinning head comprises a shaft for spinning said spinning head.

25. An apparatus for converting a compact disc into a spinning top, said apparatus comprising:
   a. a spinning head comprising a hub dimensioned to frictionally engage a compact disc at an axially concentric position.

26. A method of advertising, comprising the step of:
   a. supplying a consumer with a spinning head adapted to retain a compact disc in an axially concentric position therewith, said compact disc comprising promotional material thereon.

27. The method of claim 26, further comprising the step of:
   b. distributing said spinning head in combination with said compact disc.

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