United States Patent

Toppel

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[54] SMOKING DETERRENT

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[52] **U.S. Cl.** .....**274/14,** 131/4 R, 131/170, 206/38 A, 206/41 C, 274/1 R, 274/1 A

[51] **Int. Cl.** **G11b 17/06**

[58] **Field of Search** .....274/1 A, 14; 131/4 R, 170; 40/28.1, 28.3; 35/8 A; 206/38 A, 41 C, 41 H, 41.2 B

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[57] **ABSTRACT**

A pseudo-cigarette package that produces simulated coughing sounds when the package is picked up by a potential user to remove the cigarette therefrom. The simulated coughing noises are reproduced from a battery-driven disk recording played through a miniature loudspeaker in the package. A unique actuating lever arrangement enables the almost instantaneous replaying of the record each time the package is moved.

10 Claims, 7 Drawing Figures

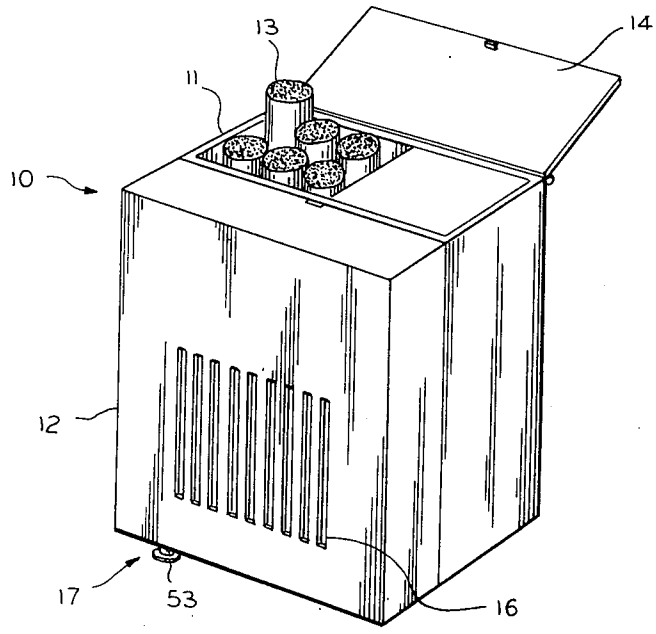
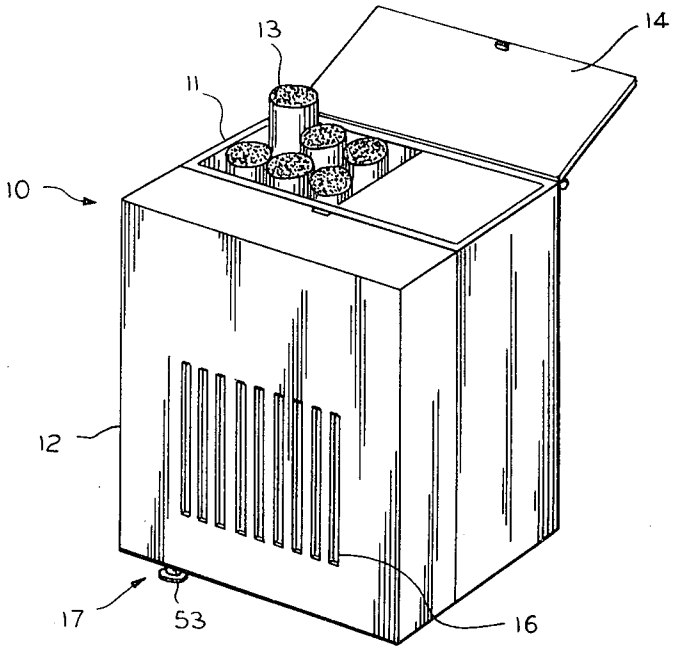


FIG. 1



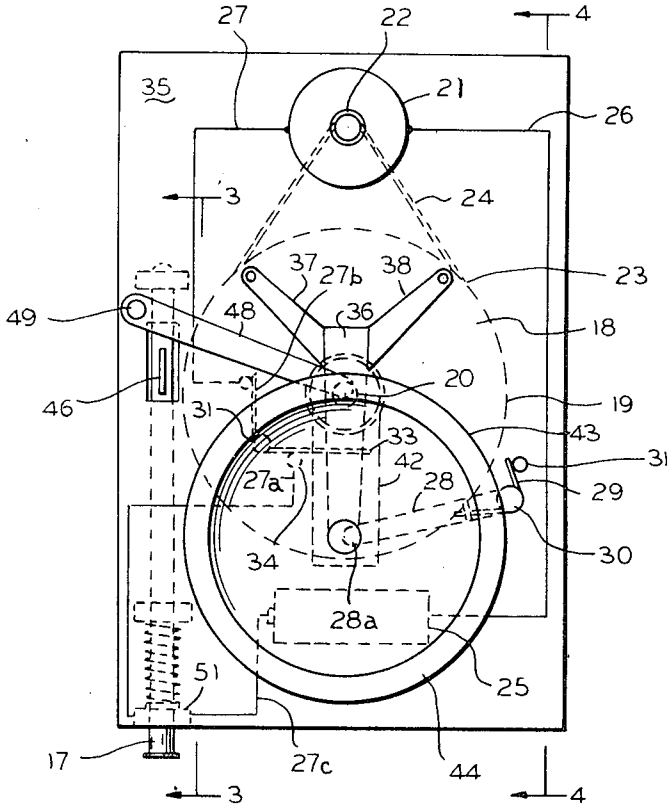


FIG. 2

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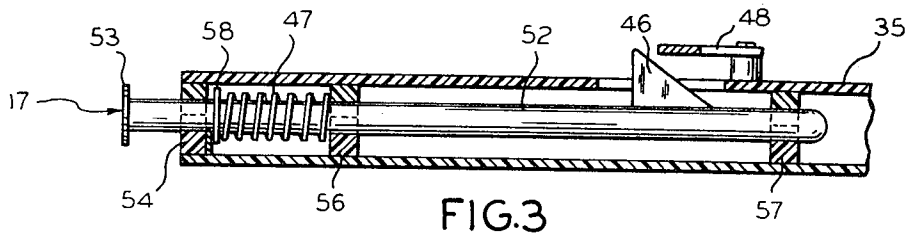

FIG.3

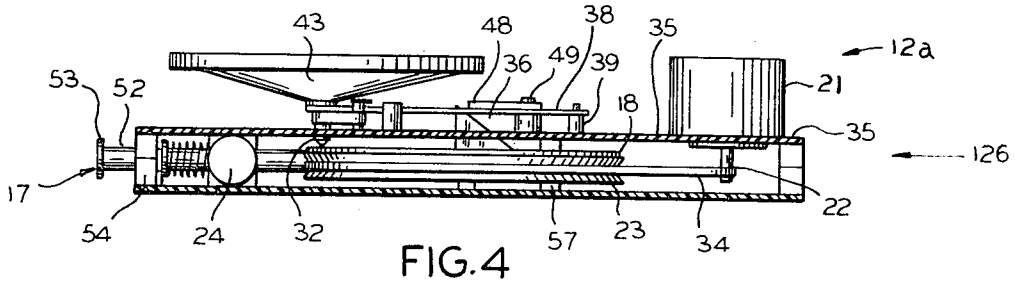

FIG.4

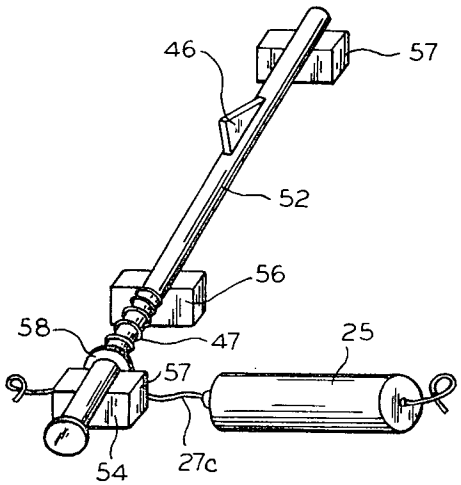

FIG.6

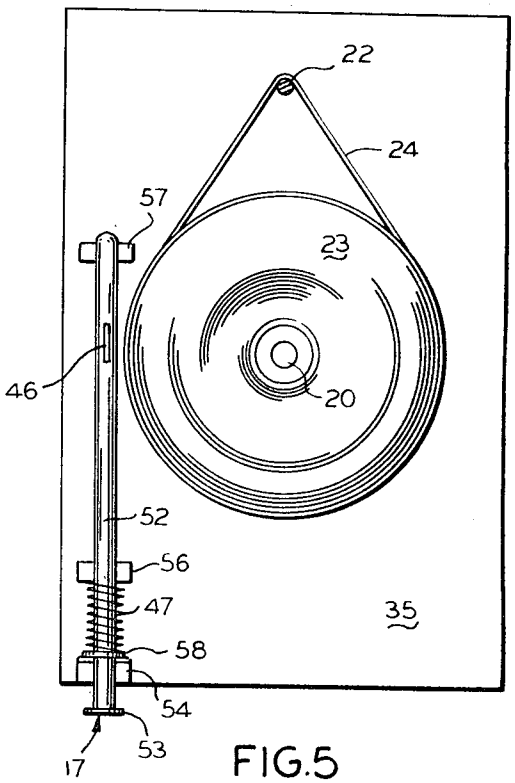

FIG.5

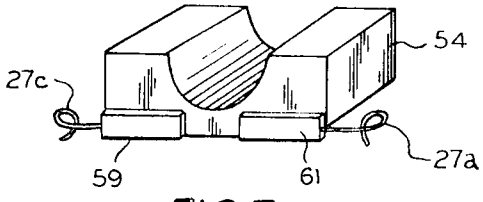

FIG.7

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SMOKING DETERRENT

This invention relates to smoking deterrents and more particularly to cigarette containers and pseudo-cigarette packages than emit coughing sounds when handled.

Since the publication of the information regarding the relationship between smoking and the contraction of cancer, many methods and articles have been produced to assist the habitual smoker in giving up smoking. For example, chemical means are used, such as pills which are designed to dampen the smoker's desire for cigarettes. Pills, however, often have deleterious side effects.

Other means utilized are devices which are designed to cause the smoker to think before smoking. Such devices include packages of such pills, which are attached to the cigarette packages by means such as rubber bands. The smoker is forced to decide each time he reaches for his package whether to take a pill or a cigarette. In this way, the "rubber-band" device is designed to make it easier for the smoker to give up smoking cigarettes. There are many other devices which are on the market today to assist the smoker in breaking himself of the harmful habit of smoking.

An object of the present invention is to provide a device for deterring smokers from smoking cigarettes.

A related object of the present invention is to provide a novelty device, which can be used as an advertising novelty.

A more particular object of the present invention is to provide a device which will audibly remind the potential smoker of the hazards of smoking.

A preferred embodiment of the invention comprises a cigarette case or a pseudo-cigarette package having a push-button type lever attachment at the bottom thereof. When the pseudo-package is resting on the push-button lever, nothing occurs. When the package is lifted up, then an audible simulated coughing is clearly heard.

Within the package is a miniaturized record player. A recorded coughing message is on the disk recorder. The disk recorder is on a turntable, rubber band coupled to a battery operated electric motor. The motor starts when the push-button type lever is actuated by lifting the package to rotate the disk. The tone arm resting at the edge of the disk is activated to vibrate as it traverses the grooves on the record. The tone arm is contiguous to the bottom of a rocking Y-shaped yoke. The yoke has the top of one end affixed to the bottom of a miniature speaker. The other end of the yoke is slidingly attached to the container. The speaker is mechanically actuated by the tone arm through the rocking yoke arrangement. Thus, the vibrations originating at the record are transferred through the tone arm and through the yoke where they are mechanically amplified to the loudspeaker which converts the vibrations to sound.

When the tone arm comes to the end of the message, it operates a switch opening the circuit to the motor to automatically stop the motor. Pressing the push-button type lever either manually or by placing the package on a level surface, such as a table, causes the tone arm to be returned to the starting position, and closes a preparatory portion of the motor operating circuit, so that the device is ready to operate again. The inward displacement of lever arm also opens to the circuit to the electric motor so that the actual operation begins only when the lever is extended again.

The above mentioned and other objects and features of our invention will be more readily understood from the following description when read with reference to the accompanying drawings in which:

FIG. 1 pictorially shows a cigarette case including the audible cough producing portion;

FIG. 2 is a front view of the case with the cover removed showing the component parts of the audible cough producing portion of the case of FIG. 1;

FIG. 3 is a sectional view, taken at line 3—3, showing the lever arrangement;

FIG. 4 is a sectional view taken at line 4—4 of FIG. 2 and looking in the direction of the arrows;

FIG. 5 is a bottom view of the record playing portion of the case of FIG. 1;

FIG. 6 is a pictorial view of the lever arrangement; and

FIG. 7 is a pictorial view of a lever rod bearing block and lever actuating switching arrangement.

While FIG. 1 shows a cigarette package container including an audible cough producing portion, it should be clearly understood that the invention encompasses a pseudo-cigarette package. The pseudo-cigarette package comprises the simulated cough producing portion disguised to look like a package of cigarettes.

FIG. 1 shows a cigarette case **10**, having a cigarette containing portion **11** and an audible sound producing portion **12**. The cigarette case portion is shown as containing cigarettes such as cigarette **13** normally covered with hinged cover **14**. The sound producing portion **12** has a loudspeaker grill portion **16** at the front thereof.

Means are provided for actuating the sound producing portion. More particularly, a push-button type lever rod **17** is shown in its inserted position with the package resting thereon to keep it in the inserted position. When the button type lever **17** is in the inserted position, the sound producing portion is prevented from playing. When the package is picked up, the lever **17** goes to its normally extended position and actuates the sound producing portion.

As shown in FIG. 2, the sound producing portion contains a miniature record player. More particularly, means for mounting and causing a small record **18** to rotate, such as turn table **19** are provided. The turntable rotates around axis **20** under the force of motor **21**. Motor **21** turns drive wheel **22**, which is coupled to a wheel **23** fixedly attached to the bottom of turntable **19**. Means such as rubber band **24** are used to couple the drive wheel **22** to the fixed wheel **23**.

Means are provided for supplying power to the electric motor **21**. More particularly, a battery **25** is provided. It is connected to the electric motor through lead wires, such as leads **26** and **27**.

Means are provided for converting the mechanical vibrations embodied in the plastic record **18** into audible vibrations. More particularly, tone arm means **28** are provided. The normal position of the tone arm is at the outermost engraved groove on the record **18**. It is held in this position by resilient means, such as spring **29**. When tone arm **28** revolves around pivot point **30** as record **18** spins, spring **29** is forced against post **31**. Thus, spring **29** continually exerts a force on the tone arm tending to drive it back to its point of origin. The force, however, is counteracted as will be explained hereinafter.

The tone arm as best seen in FIG. **4** terminates in a needle **32**, which rests in the engraved grooves of the record **18**. As the record revolves, the tone arm is caused to move by the pressure of the grooves against the needle forcing the needle to follow along the groove and move the tone arm against the force of spring **29**.

Switch means are provided to turn off the motor driven turn table when the tone arm reaches the end of the recorded grooves. More particularly, a spring wire **33** joins portion **27***a* to portion **27***b* of wire **27**. Portion **27***a* terminates in terminal **34**, and portion **27***b* terminates in terminal **36**. The spring wire **33** is attached to terminal **36** and normally is juxtaposed to terminal **34** to complete the electrical circuit to motor **20**. However, when the end of arm **28** reaches spring wire **33**, it forces spring **33** from its position abutting terminal **34** to open the circuit to the motor and to thereby stop the rotation of the record **18**.

The sound producing portion **12** of the illustrated cigarette package has two separate levels **12***a* and **12***b* as shown in FIG. **4**. The front or top level is divided from the rear or lower level by a panel **35** which may be fabricated of transparent plastic.

Means are provided for converting the engravings in the grooves of record **18** into audible vibrations. More particularly, a rockable yoke **36** is provided. Means are provided for affixing one end of the yoke **36** to panel **35**. In greater detail, one end of yoke **36** is Y-shaped, having arms **37** and **38** each affixed to legs such as peg leg **39**. The legs, in turn, are attached to panel **35** which encloses the record and turn table portion of the sound producing mechanism. A slot **42** in the

panel enables the top 28*a* of the needle portion of the tone arm 28 to abut the bottom of the end stem portion 36*a* of the Y-shaped rockable yoke 36. The end 36*a* of the yoke 36 abuts the vertex of the conical loudspeaker 43.

The loudspeaker 43 is shown as having a flat horizontal ridge section 44, which is juxtaposed to the grid portion 16 of sound producing portion case 12.

As the end 28*a* of the tone arm 28 moves along the recorded disk in an arc extending from the starting point at the outer peripheral grooves to spring or spring contact 33, the stem section 36*a* of rockable yoke 36 is always in contact with the vertex of the cone shaped loudspeaker and is also always in contact with the tone arm. Thus, the vibrations originating in the grooves of the record are transmitted mechanically through the needle of the tone arm, the rockable yoke to the loud speaker. The rockable yoke and loudspeaker mechanically amplify the vibrations to provide audible sounds simulating a person coughing.

Means are provided for returning the tone arm 28 to its original position. When the tone arm 28 reaches the spring contact 33, it remains there due to the force exerted upon it by the rockable yoke 36. Therefore, means are necessary to enable the spring 29 to return the tone arm 28 to its original starting position. The means are included in push-button type lever 17.

Lever 17 has an upraised saw tooth portion thereon shown as saw tooth 46. When lever 17 is pressed into the case against the force of coil spring 47, the saw tooth portion acts to raise leaf spring 48 which ordinarily acts to maintain the abutting relationship between the yoke and the tone arm. The leaf spring extends in a cantilever-like fashion from one end which is affixed to post 49 on cover 35 to a point 51 on rockable yoke 36 to enable the contiguous end of spring 48 to apply a force against the yoke. Thus, when lever 17 is pushed against the force of spring 47, leaf spring 48 is raised enabling rockable yoke 36 to lift up sufficiently to release tone arm 28, thereby enabling spring 29 associated with tone arm 28 to force the tone arm back to its starting position. When the tone arm returns to its starting position, switching means such as spring contact 33 returns to its normally closed position. The circuit, however, is not completed, since a lever switching means 51 is provided.

The details of the switching arrangement of switch 51 are shown more clearly in FIGS. 6 and 7. As can be seen from the drawings, lever 17 is shown comprising a rod 52 having a flattened handle portion at one end thereof 53. The rod slides in bearing blocks 54, 56, and 57. Bearing 56 also acts to entrap coil spring 47. One end of spring 47 abutts against bearing block 56. The other end butts against a crimped metal ring 58 fixedly attached to rod 52. Thus, when rod 52 is pressed into block 54, spring 47 is compressed against block 56.

Ring 58 also acts as the armature portion of switching means 51. As best shown in FIG. 7, block 54 has fixedly attached thereto terminals 59 and 61. Terminal 59 is connected directly to lead 27*c* coming from battery 25. The terminal 61 is connected to lead 27*a*. The circuit to motor 21 therefor is completed through ring 58 when the rod 52 is in its extended position. When the rod is pushed in, for example, when the cigarette case or the pseudo-cigarette package is placed on a flat surface resting against lever 17, then the rod 52 is pushed in and the circuit is broken, and no sound is emitted. If the package is lifted, the force of spring 47 causes the rod to extend from the package and circuit of lead 27 is completed through ring 58. At that time, power is supplied to the motor, and the record player is activated to emit the hacking, coughing noise. The record continues to play until tone arm 28 reaches spring contact 33 to open the circuit to the motor. The rod is preferably of a non-conducting material. In addition, an insulating washer (not shown) separates ring 58 from spring 47.

If lever 17 is pushed in again, the tone arm is enabled to return to its normal starting position, and the switch means 33 is returned to its normally closed position preparing the circuitry for the return of ring 58 into contact with terminals 59 and 61.

In operation, then the device acts to either simulate a cigarette package so that when a would-be smoker picks up the package, a loud coughing noise is emitted, or else it can act as a cigarette holder to actually deter a potential smoker from smoking by audibly drawing to his attention the ill effects of smoking.

Having thus described my invention, what I claim and desire to secure by letters patent in the United States is:

1. A cigarette case including a smoking deterrent recording, said case comprising:
   - a receiving means for receiving said recording, said receiving means having simulated coughing sound prerecorded thereon;
   - player means for playing said coughing sounds recorded on said receiving means;
   - control means extending through a wall of said box for the operation of said player means, said control means having extended and non-extended positions, said control means being positioned into said non-extended position when supported by a support surface in engagement with said control means;
   - biasing means engaged with said control means for biasing said control means from said retracted position to said extended position when said box is lifted from said support surface, said player means being operated when said box is lifted from said support surface, said player means being operated when said box is lifted from said support surface;
   - and switch means opened at the end of play for stopping the player means, said switch means being closed and said player means being conditioned for replay when said control means is again positioned into said non-extended position.

2. The cigarette case of claim 1 wherein said receiving means comprises a disk having the coughing sounds recorded thereon;
   - wherein said player means comprises turntable means having said disk mounted thereon;
   - electric motor means for causing said turntable to rotate, a power circuit for energizing said electric motor,
   - tone arm means for riding in the grooves on said disk to detect the vibrations recorded on said disk,
   - loudspeaker means for converting said vibrations to audible sound, and
   - coupling means for coupling the tone arm to said loudspeaker.

3. The cigarette case of claim 2 wherein said coupling means comprises mechanical coupling means.

4. The cigarette case of claim 2 wherein said coupling means comprises rockable yoke,
   - means for removably attaching one end of said yoke means to said package means,
   - means for permanently affixing said loudspeaker to the other end of said yoke,
   - and means for maintaining said yoke contiguous to said tone arm means as said tone arm rides in said grooves,
   - whereby said tone arm means is coupled to said loud speaker.

5. The cigarette case of claim 4 wherein said means for maintaining said yoke contiguous to said tone arm means comprises leaf-spring means attached to said package means at one end thereof,
   - the other end of said leaf-spring means cantilevered from said attached end to abut said yoke means to apply pressure thereto for maintaining said yoke means contiguous to said tone arm means.

6. The cigarette case of claim 5 wherein tone arm spring means are provided for forcing said tone arm to return to the starting position at the peripheral groove of said disk,
   - and wherein the pressure of said leaf-spring means prevents the return of said tone arm means to said starting position.

7. The cigarette cases of claim **6** wherein said switch means comprises tone arm switch means operated responsive to said tone arm means moving to the end of the recording grooves in said disk for opening the power circuit to said motor means to thereby stop said player means.

8. The cigarette cases of claim **7** wherein said control means is a lever means for lifting said leaf-spring means to enable said tone arm means to return to said starting position,

means on said lever means for lifting said leaf-spring when said lever means is in the non-extended position.

9. The cigarette cases of claim **8** wherein lever switch means are provided,

said lever switch means operated to complete the circuit to said motor when the lever means is in the extended position and to open said circuit when the lever means is in the non-extended position.

10. The cigarette cases of claim **9** wherein said lever means includes a rod, and

saw tooth means located on said rod and extended therefrom to abut said leaf-spring when said lever is in the non-extended position to remove pressure from said tone arm and enable the return thereof to the starting position; and wherein said biasing means is a rod spring.

* * * * *