The invention relates to a container (17) with an interior adapted to substantially receive in a lit cigarette or cigarillo packs provided with a hinge lid element. The container further comprises a lid (19) that is swiveled about a swivel axis integrated into the container and that is adapted to the corresponding lid element of the cigarette or cigarillo pack. A spring element (23) supports the unfolding (opening) of the lid and a closing element (21) for the lid element is adapted to be repeatedly released and locked. At least one catch (20) is disposed on the lid interior of the container and forcibly swivels the lid element or the cigarette or cigarillo pack together with the lid (19) when the latter is opened. The spring element (23) is motion-dampened.
CONTAINER FOR CIGARETTE AND CIGARILLO PACKS

[0001] The invention relates to a case having an interior that snugly receives a complementary flip-top cigarette or cigarillo pack and having a cover secured by an integral hinge and fitting with the flip top of the cigarette or cigarillo pack, a spring assisting outward pivoting (opening) of the cover, and a reusable, releasable and lockable latch element for the cover.

[0002] Cigarettes are often packaged in flip-top packs made of cardboard and comprised of a main pack part and with a top pivotally mounted on a rear wall of the main pack part. Embodiments of such a flip-top pack are seen for example in German 43 42 523 and 198 14 255. The top here is provided on a narrow side so that after it is opened up the ends of the cigarettes are exposed and they can be pulled out lengthwise.

[0003] Cigarillo packs have a back wall with four narrow side walls and a top that is secured to one side wall. After swinging up the top the cigarillos inside are exposed along their full lengths.

[0004] Both cigarette and cigarillo packs are made very simple both for convenience and to hold down cost. The advantage of the cigarette or cigarillo pack, that it provides a certain level of protection for the contents and is also easy to stack, is weighed against the disadvantage that the pack looks cheap, is only moderately durable, and gets dirty to look even worse. In addition the advertising logo of the manufacturer and other material printed on the pack are considered unattractive.

[0005] A partial solution to this is provided by a cigarette or cigarillo case having a metal body that can carry on its outer surface decoration, an engraved name, or the like. The disadvantage of such a case is that the cigarettes or cigarillos must be transferred to it, which seems like a bother to the smoker. In addition the holding capacity of such a case often does not correspond to the number of cigarettes or cigarillos in the original pack. The extra cigarettes or cigarillos from the original pack must be carried separately.

[0006] Leather cigarette cases are also known which hold a cigarette pack and have a flap on their upper side that can be opened and lifted to expose the top of the cigarette pack. Such leather cases have however the disadvantage that the steps to get to a cigarette are relatively complex since first the flap has to be opened and then the cigarette-pack top must be raised. In addition cigarette packs are not of uniform dimensions so that such a case can only be used for packs of a certain size.

[0007] U.S. Pat. No. 2,897,958 describes a case for holding a cigarette pack and having a cover hinged on the case back wall. In addition inside the back wall there is a leaf spring 24 coacting with a pin secured inside the case such that the leaf spring 24 retains the cover in the closed position. In order to open the cover, this spring force must be overcome.

[0008] In addition inside the cover at the front there is a hook that presses against the top of the cigarette pack and ensures that when the case cover is pivoted up the pack top is entrained. The disadvantage of this hook is that the front wall of the top of the cigarette pack is pushed inward with some force which can damage the cigarettes therein or partially crush them. The inward deformation of the top of the cigarette pack also makes it hard to open with a full pack.

[0009] U.S. Pat. No. 2,954,867 describes a case formed of two parts. The first part is an upwardly open pack and the second part is a cover having at a lower edge of its back wall a full-width and downwardly projecting flexible tongue. The cigarette pack is slipped into the first part and then the tongue is inserted between the inner face of the first-part back wall and the inserted cigarette pack. In order that opening of the cover entrains the top of the cigarette pack, the inner face of the front side of the cover has a sticky surface coating. The disadvantage with this case is the relatively complex procedure of loading it with a pack of cigarettes and of opening the cover.

[0010] French 950,517 shows a forwardly open case whose cover is urged by a spring 6 to swing up automatically when a latching pawl that normally holds it closed is swung inward by pushing on a button. The disadvantage of this case is that when the spring force is sufficiently strong the case cover moves rapidly backward and does not entrain the pack top or even, with enough spring force, damages it. When a weaker spring is used on the other hand the case cover “hangs” so that it is necessary to operate it manually.

[0011] It is an object of the present invention so to improve the above-described cases such that they are easier to use and sure in function without increasing the danger of damaging the cigarette pack.

[0012] This object is attained by the case of claim 1. According to the invention an inner surface of the case is provided with at least one entrainment element which engages and entrains the top of the cigarette- or cigarillo-pack top on opening of the cover. The advantage of this case is that after opening the cover the entrainment element forces open the cover of the cigarette or cigarillo pack. The case according to the invention has an interior that can fit the standard cigarette or cigarillo packs. Longer or wider cigarette or cigarillo packs can also be accommodated since the entrainment element for the original pack top maintains the pack in position in the case. Only the depth of the container, that is the distance between the back wall and the front wall has to be generally equal to or bigger than the pack being held so that the hinge of the case cover and the bend line between the pack top and the pack body of the original pack are close together or, preferably, coaxial. The case according to the invention is loaded by sliding the entire cigarette or cigarillo pack, after removing the foil and breaking the seal, into the case and closing the cover. The entrainment element or elements thus engage the top of the cigarette or cigarillo pack so that when first opened the case cover forcibly pivots up the top. In this manner one-handed use of the case according to the invention is possible.

[0013] Preferably the entrainment element is an undercut forming a groove in which fits a lower edge of the top. Alternately it can be one or more pins that engage through the cover. The entrainment element can also be an adhesive surface adhering the front inner face of the cover on the front outer face of the cigarette or cigarillo top. The entrainment element or elements can also be formed by springs which slide on downward pivoting of the cover on the front face of the cigarette-pack top and then engage underneath a lower edge of the cigarette-pack top.
[0014] The pivot axis of the case is formed by a hinge with a spiral spring or a torsion bar as spring element. As already mentioned, the pivot axis of the case and the joint line between the top part and the base part of the cigarette or cigarillo pack are immediately adjacent, that is as close as possible. The height and preferably also the depth of the cover and/or of the base of the case are greater than the height and/or the depth of the pack to be held so that the pack does not slide and/or tip on opening of the cover so as to avoid a kinematic blocking caused by the different positions of the pivot axis and the joint line of the pack. Preferably, in particular for a cigarillo pack, the spring element for opening the cover is damped.

[0015] The movement damper can either be a spring element that is imbedded in an elastically deformable plastic mass, preferably of silicone as damping material or a spring element that engages an inner surface of the cover and the base of the case.

[0016] The latch is preferably formed of a repeatedly releasable latch or snap closure in that one embodiement the invention is provided on the center axis of a front face of the case. The latch or snap closure is comprised in a concrete embodiment of the invention of a tongue provided on the cover with a bump that in the closed position engages in a recess on a front face of the case body.

[0017] The case interior can have at least one and preferably two spring-loaded faces as space limiters that are spring loaded so as to bear on outer faces of the pack. Such spring-loaded faces make it possible to use the case according to the invention also for different pack sizes.

[0018] The cover and the case body can be made of any stable material, e.g. steel, stainless steel, or light metal (e.g. aluminum), including types having a silver-plated, nickel-coated, platinum-coated, or engraved surface. Particular advantages are obtained with respect to the construction and the surface detailing when the container is made of injection-molded plastic, with the surface preferably having carbon fibers that give a decorative effect. Injection-molded plastics make for inexpensive manufacturing and considerable color selection so that cases can be made in striking colors. In addition to fibers in the surface, color pigments or reflecting elements can be imbedded.

[0019] Embodiments of the invention are shown in the drawing. Therein:

[0020] FIG. 1 is a perspective view of a cigarillo case with an opened cover;

[0021] FIG. 2 is a view of a detail of the cover; and

[0022] FIG. 3 is a case for holding a cigarette pack in a partly broken-away perspective view.

[0023] FIG. 1 shows a standard cigarillo pack with a base part 11 and a top 12 and that is held in a case according to the invention that itself has a base part 13 and a cover part 14 hinged on it. The base part has four upright short side walls for snugly holding the cigarillo-pack base; similarly the cover part 14 of the case according to the invention is provided with side walls that snugly fit around the cigarillo-pack top 12. In order to ensure that, on opening of the cover part, the cigarillo-pack top is entrained, the cover part 14 has corner lips 14 at both the right- and left-hand edges that form undercut.

[0024] The hinge between the base part and the cover part is provided with a torsion spring that is imbedded in an elastically deformable plastic silicone mass serving as damper. This torsion bar is actuated by buttons 16 provided on both sides of the base part 13. In the closed condition of the case according to the invention a push on the buttons 16 releases a latch and the prestressed spring element, that is the torsion bar, is released to pivot up the cover part. The buttons 16 can be pushed at the same time by two fingers of one hand so that holding and opening the case according to the invention and the subsequent extending to offer the cigarillos in the cigarillo pack can be done with one hand. Preferably the rotation or hinge axis of the cigarillo pack and that of the case according to the invention are in a common plane.

[0025] The case according to the invention is loaded by setting the cigarillo pack 11, 12, after breaking the seal, in the base part and closing the case according to the invention by pivoting down the cover part 14. This pushes on the top so the cigarillo pack, unless this has already occurred, is pressed into the base part and inwardly projecting lips 15 on its side walls, which also form undercut, engage over the front of the side wall edges of the cigarillo pack. Simultaneously the lips 15 of the cover part 14 engage over the cover side-wall edges of the cigarillo pack. When the case according to the invention is opened for the first time by actuation of the buttons 16, the cover part 14 pivots up through at least 90°, preferably 135°, whereupon the cigarillo-pack top 12 is entrained by the lips 15 in the cover part 14. The pivoting is not abrupt, as would be the case with an unbraked spring, but is damped. A kinematic blocking of the cigarillo pack and the case according to the invention, which both have hinges, is thus avoided because these hinges are immediately adjacent each other and the cigarillo pack can deform slightly and the cover part 14 can thus pivot in the joint region between the base part 13 and the cover part 14. Instead of the lips 15 there can be a spring, a pin that sticks into the pack, or adhesive surfaces on which the side walls of the base and top of the cigarillo pack can adhere. The case according to the invention is made to be a complementary fit in its base and cover parts although limited play can be provided to allow the cigarillo pack to slide in the case according to the invention so as to avoid a kinematic blocking of the cover during opening created by the offset of the pivot axes of the cigarillo pack and the case according to the invention. The case according to the invention is preferably made of a high-quality but very light and stable material, e.g. very thin steel, stainless steel, light metal, or even of fiber-reinforced plastic. Carbon fibers in a fiber-reinforced plastic can provide a very nice appearance. If the case is made of injection-molded parts, the hinge is preferably formed as a membrane hinge without being a separate part. Even when of injection-molded plastic construction, decorative metallic elements can be imbedded in it, e.g. as a logo or other decoration.

[0026] The case according to FIG. 3 is intended to hold a standard cigarette pack. The case 17 has a floor, a front wall, a back wall, and left- and right-hand side walls, the front and rear walls being of different height and the side walls connecting them having angled upper edges as is standard for a cigarette pack. The upper edge of the rear wall is connected via a hinge 18 to a cover 19 that is about the same size and shape of a top of a standard cigarette pack and the fits snugly thereover. In order to entrain the top of the
cigarette pack there are projecting tabs 20 that form undercuts and engage under the lower edge of a cigarette-pack top when the cover part 19 is closed to engage and entrain it. A front edge of the cover is provided with a hook 21 that can engage in a complementary undercut seat 22 so that the hook and the seat 22 form a latch. In the illustrated embodiment the case 17 and the cover 19 are made of limitedly deformable plastic so that a light push on the front wall releases the hook 21 from the seat 22. The hinge 18 is formed by a spring 23 that also forms the pivot axis and that is prestressed such that when the latch 21, 22 is released the cover 19 pivots up.

[0027] The height, width, and depth of the case and of the top 19 correspond closely to the cigarette pack to be held, but the height of the case 17 as well as the height of the cover 19 can be greater than the actual heights of the cigarette packs, since after fitting the top of the cigarette pack into the cover part 19 the pivot axes of the cigarette pack and between the case 17 and its cover 19 are at the same level and the tabs effectively prevent sliding of the cigarette pack on closing of the cover 19. The same is true for the width of the cigarette pack relative to the width of the case 17 and of the cover 19 so long as both tabs 20 can engage under the cigarette-pack cover edge.

[0028] To use the case, the cigarette pack, after breaking the seal and removing the foil wrap, is slipped into the case 17 and the cigarette-pack top is fitted into the cover 19 such that the lower edges of the cigarette pack can be held by the tabs 20. When the latch 21, 22 is opened, the cover 19 pivots as shown in FIG. 3 toward the rear whereupon the top of the cigarette pack is entrained.

[0029] With respect to material selection, there are the same options as for the case for holding cigarillo packs.

1-12. (canceled)

13. A case for a cigarette or cigarillo pack having a base and a flip top, the case comprising:

- a body shaped to snugly hold the pack base and having a front wall, a rear wall, and a side wall bridging the front and rear walls;

- a cover shaped to fit over the flip top and provided with an entrainment element that locks the flip top in the cover; and

- hinge means connecting the cover to the rear wall for pivoting between a closed position engaged over the body and closing the flip top over the pack base and an open position pivoted away from the body with the flip top pulled off the pack base;

- spring means urging the cover into the open position;

- a reusable latch normally securing the cover in the closed position and operable to release the cover and allow it to pivot into the open position.

14. The cigarette/cigarillo case defined in claim 13 wherein the spring means includes a torsion bar in the hinge means.

15. The cigarette/cigarillo case defined in claim 13 wherein the spring means includes a torsion spring in the hinge means.

16. The cigarette/cigarillo case defined in claim 13 wherein the hinge means defines a hinge axis and the flip top pivots on the base about a pack axis, the axes being generally coaxial.

17. The cigarette/cigarillo case defined in claim 16 wherein the cover and the base have case dimensions measured radially of the hinge axis and the top and base have pack dimensions measured radially of the pack axis, at least one of the base dimensions being greater than the respective pack dimension, whereby kinematic blocking of pivoting of the cover on opening and closing is avoided.

18. The cigarette/cigarillo case defined in claim 13 wherein the latch is provided near a centerline of the front wall.

19. The cigarette/cigarillo case defined in claim 18 wherein the latch includes a tongue provided on the cover and having a bump and a seat on the front wall in which the bump is receivable.

20. The cigarette/cigarillo case defined in claim 13 wherein the cover and body are injection molded.

21. The cigarette/cigarillo case defined in claim 20 wherein the cover and body have outer surfaces in which carbon fibers are imbedded.

22. The cigarette/cigarillo case defined in claim 13 wherein the entrainment element is a lip formed on the cover and projecting inward into the case, the lip engaging under a lower edge of the flip top of the pack in the case.

23. The cigarette/cigarillo case defined in claim 13 wherein the cover has front corners and the entrainment element includes a pair of lips projecting inward into the case from the—corners, the lips engaging under a lower edge of the flip top of the pack in the case.

24. The cigarette/cigarillo case defined in claim 13, further comprising

- a retaining tab projecting inward from an upper edge of the front wall, the tab engaging over an upper edge of the pack base in the body.

25. The cigarette/cigarillo case defined in claim 13 wherein the base and cover are substantially parallelepiped.

26. The cigarette/cigarillo case defined in claim 13, further comprising

- a damper in the spring means for damping pivoting of the cover on the body.