

Oct. 17, 1967

CHIEN-HSHUING CHANG

3,347,231

IMITATION CIGARETTE

Filed April 14, 1964

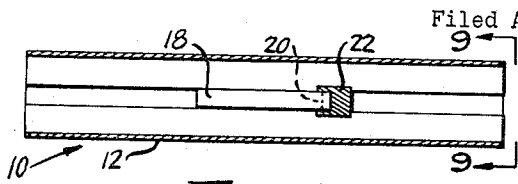


FIG. 1

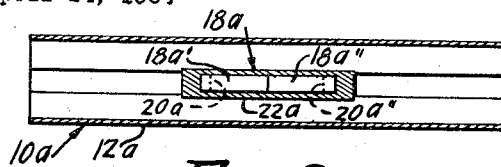


FIG. 2

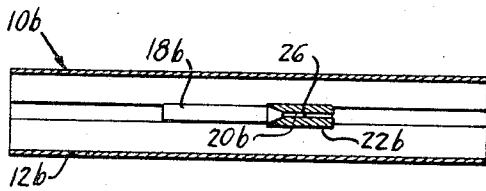


FIG. 3

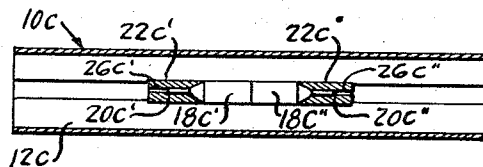


FIG. 4

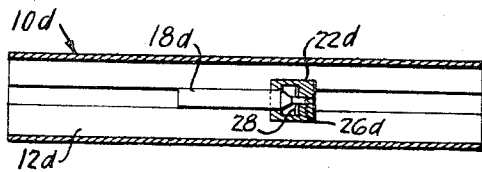


FIG. 5

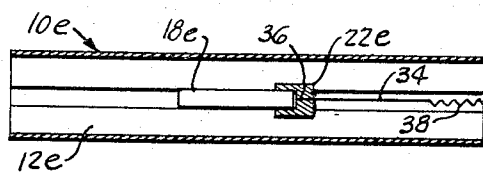


FIG. 7

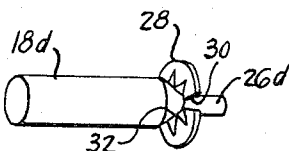


FIG. 6

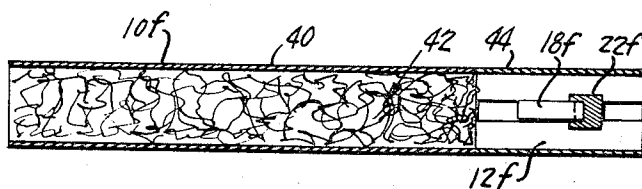


FIG. 8

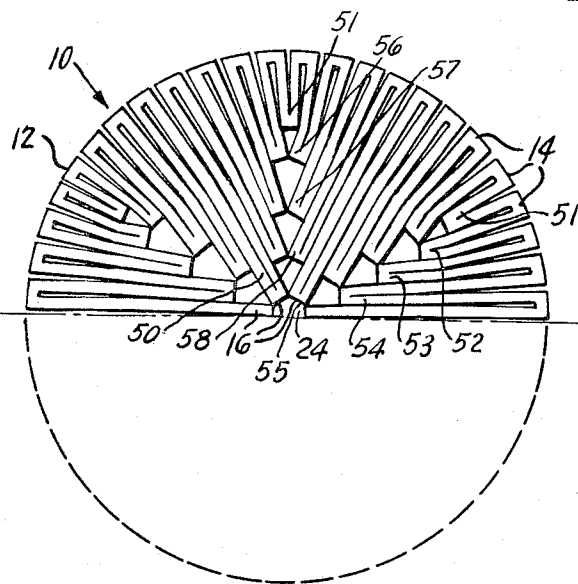


FIG. 9

INVENTOR.
CHIEN-HSHUING, CHANG
BY
Kimmel & Howell
ATTORNEYS.

1

3,347,231

IMITATION CIGARETTE

Chien-Hshuing Chang 152 Ho-Pen St. N.,

San-Tsuong, Taipei-Hsien, Taiwan

Filed Apr. 14, 1964, Ser. No. 359,595

Claims priority, application Japan, Apr. 17, 1963,
38/28,441

4 Claims. (Cl. 128—201)

This invention relates to an imitation cigarette and more particularly to an article which will simulate a cigarette in form and in sensation to the user without being deleterious to the health of the user.

Recent medical research confirms that the smoking of cigarettes is a major cause of lung cancer and many other diseases. While the basic causes of the diseases are still uncertain, it is clear that the tars and nicotine in the cigarette tobacco and certain substances in the cigarette paper when burned or heated to a high temperature are harmful to the health of the smoker.

It is a primary object of this invention to provide an imitation cigarette which will provide pleasure to the user similar to that of an ordinary cigarette without subjecting him to a health hazard.

A further object of this invention is the provision of a simulated cigarette which does not need to be lit and which may be sucked on as in the smoking of a conventional cigarette to provide an aromatic or medicinal vapor.

A still further object of the instant invention is the provision of an imitation cigarette containing therewithin a frangible ampoule or the like holding a vaporizable liquid material which may be stored for an extended period of time and which may be readily broken for use.

Another object of this invention is to provide an article of the type described having various means to facilitate breaking of the liquid material container means.

Yet another object of the instant invention is the provision of a simulated cigarette having a substantially cylindrical element comprised of folded paper or the like with a maximum number of folded layers adjacent the circumference of the same to better imitate the form of a conventional cigarette and a minimum number of folded layers adjacent its longitudinal axis to decrease the material cost and to facilitate receiving the liquid material container means therewith.

Other and further objects reside in the combination of elements, arrangement of parts, and features of construction.

Still other objects will in part be obvious and in part be pointed out as the description of the invention proceeds and as shown on the accompanying drawing wherein:

FIGURE 1 is a longitudinal cross-sectional view through one form of imitation cigarette in accordance with the instant inventive concept;

FIGURE 2 is a view similar to FIGURE 1 of a modified article;

FIGURE 3 is a longitudinal sectional view of another embodiment of the imitation cigarette of this invention;

FIGURE 4 illustrates still another embodiment;

FIGURE 5 is a still further modified embodiment;

FIGURE 6 is a perspective view of the liquid material container means of FIG. 5 showing one means to facilitate breaking the same.

FIGURE 7 is a longitudinal sectional view of a further modified form of an imitation cigarette;

FIGURE 8 is a similar view through another embodiment wherein the front portion of the same contains tobacco as in a conventional cigarette; and

FIGURE 9 is an enlarged immediate end elevational view taken substantially on line 9—9 of FIG. 1.

Similar reference characters refer to similar parts throughout the several views of the drawing.

2

Referring now to the drawing in general and more particularly to FIGS. 1 and 9, one form of imitation cigarette in accordance with the instant inventive concept is designated generally by the reference numeral 10 and comprises basically a substantially cylindrical element 12 simulating the configuration of a conventional cigarette and preferably formed of an air permeable material such as paper or other fibrous material folded as shown in FIG. 9 and secured in any conventional manner as by adhesive means or the like to provide a maximum number of folded layers 14 adjacent the circumference and a relatively few folded layers 16 adjacent the longitudinal axis to decrease cost and to limit the amount of paper in contact with a vaporizable liquid material such as any conventional aromatic or medicinal material within a container means 18 supported substantially centrally of the cylindrical element 12. In the embodiment of FIG. 1 the container means is in the form of a cylinder having a score line 20 to weaken the same and render it frangible whereby it may be readily broken by pressure on, or bending of, the cylindrical element 12 to free the liquid material therewithin. At least the score line 20 is surrounded by an absorbent material 22 to limit the amount of the liquid material passing to the paper of the cylindrical element 12 thereby avoiding wasting the same. The center 24 of the cylindrical element 12 is substantially hollow whereby the vapors from the liquid material may be sucked therethrough in the manner of smoking a conventional cigarette.

Cylindrical element 12 is comprised of a single sheet of paper folded as best shown in FIG. 9 to provide a plurality of long folds 50 of a length substantially equal to the radius of the artificial cigarette, a short fold 51 of a length materially less than the radius disposed equidistantly between adjacent long folds 50 and a plurality of intermediate folds 52, 53 and 54 of progressively increasing length between each short fold 51 and the adjacent long fold 50 on each side thereof. The sheet is rolled to circular form to provide a progressively increasing number of folds from the center towards the periphery thereof, with the ends of the long folds abutting each other as at 55, at substantially the center of the article and the ends of the adjacent intermediate folds on opposite sides of each short fold abutting each other at intermediate radial points as at 56, 57 and 58.

The embodiment of FIG. 2 has parts similar to the embodiment of FIG. 1 designated by similar reference numerals followed by the suffix *a* and includes a cylindrical container means 18*a* having a pair of chambers 18*a*' and 18*a*'' with score lines 20*a*' and 20*a*'' whereby more than one vaporizable liquid material may be incorporated. The absorbent material 22*a* is shown as surrounding the entire container means 18*a*. The imitation cigarette 10*a* may be sucked on from either, or both, ends.

Parts similar to elements of the first embodiment in FIG. 3 are designated by like reference characters with the suffix *b*. The container means 18*b* in this embodiment is shown as an ampoule having an elongated end portion 26 with a score line 20*b*, if desired, at least the end portion 26 being surrounded by the absorbent material 22*b*.

In FIG. 4 parts similar to those in FIGS. 1 and 3 have similar reference characters followed by a suffix *c*, this embodiment including a pair of ampoules 18*c*' and 18*c*'' having oppositely disposed elongated end portions 26*c*' and 26*c*'' with score lines 20*c*' and 20*c*'' surrounded by absorbent material 22*c*' and 22*c*''.

FIGS. 5 and 6 show another modification having similar reference characters followed by the suffix *d* and including a means to facilitate breaking the container means 18*d* in the form of a disc member 28 having a portion of its periphery 30 removed to allow the disc member to

3

circumscribingly engage the elongated end portion 26d for compression from without the cylindrical element 12d. The interior portions of the disc member 28 preferably define cutting teeth 32 to facilitate the breaking operation.

The embodiment of FIG. 7 illustrates a different means to facilitate breaking the container means and has parts similar to the other embodiments designated by like reference characters followed by the suffix *e*. In this embodiment an elongated flexible member 34 in the form of a thread or the like has one end 36 secured within the container means 18e, its other end 38 being bent to normally maintain the same within the cylindrical element 12e. By squeezing the cylindrical element 12e the end 38 of the flexible member 34 can be extended exteriorly thereof whereby pulling on same will readily break the container means 18e.

FIG. 8 has parts similar to the embodiment of FIG. 1 designated by the same reference characters followed by the suffix *f* and includes a forward portion 40 in the form of a conventional cigarette containing tobacco 42, and a rearward or filter portion 44 formed of folded paper and carrying the container means 18f.

The use of the articles of the instant invention is apparent.

It will now be seen that there is herein provided an improved imitation cigarette which will help a user in breaking the smoking habit and which satisfies all of the objects of the instant invention, and others, including many advantages of great practical utility and commercial importance.

Since many embodiments may be made of the instant inventive concept, and since many modifications may be made of the embodiments hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative, and not in a limiting sense.

I claim:

1. An artificial cigarette, characterized by the absence of tobacco, which comprises:
 - an elongate cylindrical member of substantially the same size, shape and appearance of a conventional tobacco cigarette, said member comprising,
 - a plurality of radially disposed porous sheets, so disposed and arranged to provide substantial longitudinal gas flow therethrough when a pressure differential exists between the ends thereof;
 - an ampule disposed generally centrally of the cylindrical member, said ampule including,
 - a weakened portion for being easily broken preferentially to the remainder of the ampule;
 - a flavor liquid in the ampule, said flavor liquid including,

4

at least one aromatic material which is highly volatile at ambient room temperature and which possesses a pleasing aromatic flavor; and

- a highly liquid absorbent member substantially surrounding the weakened portion of the ampule for preferentially absorbing the liquid therein when said portion is broken and limiting the rate of flow of liquid from said ampule, such that when the ampule is broken air passing through the cylindrical member will carry the vaporized aromatic material to the users mouth for producing flavor and other physiological reactions therein.

2. The cigarette of claim 1 further comprising:

- a second ampule disposed adjacent the first ampule, said second ampule being provided with a weakened portion and being filled with a second flavor liquid; and

- a second highly liquid absorbent member substantially surrounding the weakened portion of the second ampule;

whereby either of two aromatic vapors or a mixture of two aromatic vapors may selectively be drawn into a users mouth.

3. The cigarette of claim 1 further comprising:

- means positioned adjacent the weakened portion for selectively breaking the ampule by pressure exerted from exteriorly of the cigarette.

4. The cigarette of claim 3 wherein the means for breaking the ampule comprises:

- an elongate flexible member secured within said container means, a portion of said flexible member being extendable exteriorly of said substantially cylindrical element whereby pulling on said portion of said flexible member breaks said ampule.

References Cited

UNITED STATES PATENTS

1,023,499	4/1912	Bell.	
2,164,702	7/1939	Davidson.	
2,479,002	8/1949	Ceperly	128—201
2,597,124	5/1952	Nohr	131—200
2,705,007	5/1955	Gerber	128—200
2,755,206	7/1956	Statia	131—10
2,766,755	10/1956	Greene	128—272
2,863,461	12/1958	Frost	131—10
2,977,014	3/1961	Kock	215—32 X

FOREIGN PATENTS

437,599	10/1935	Great Britain.
---------	---------	----------------

RICHARD A. GAUDET, *Primary Examiner*.

W. E. KAMM, *Assistant Examiner*.