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(54) **CIGARETTE CAPABLE OF LOWERING SMOKE TEMPERATURE AND MANUFACTURING METHOD THEREFOR**

(57) The present application proposes a cigarette capable of lowering smoke temperature, which includes a cigarette rod having an accommodating chamber, a filter, and a first blocking portion, wherein the filter and the first blocking portion divide the accommodating chamber into a first accommodating portion, a second accommodating portion, and a third accommodating portion in this order when viewed from left to right; the first accommodating portion is provided with tobacco particles, the second accommodating portion is provided with cooling particles,

and the third accommodating portion is provided with a first connection tube; and the smoke generated by the tobacco particles passes through the cooling particles via the filter and is finally transmitted to the first connection tube. The cigarette capable of lowering smoke temperature according to the present application can effectively lower smoke temperature without affecting the quality of the smoke, offers a pleasant taste and provides an excellent experience.

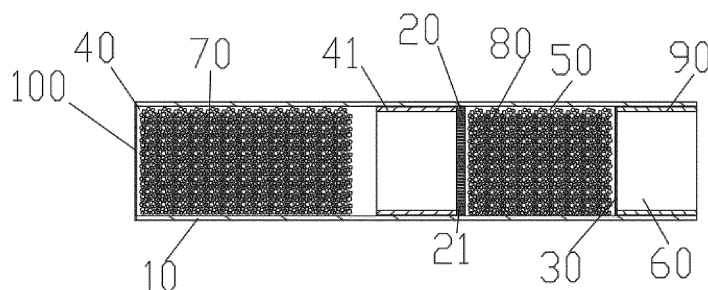


Fig. 1

Description

[0001] The present application is based on and claims the priority to the Chinese Patent Application Serial No. 201810897679.7 filed on August 8, 2018, which is incorporated by reference herein in its entirety.

FIELD OF INVENTION

[0002] The present application relates to the field of cigarettes, and in particular, to a cigarette capable of lowering smoke temperature and a manufacturing method thereof.

BACKGROUND OF INVENTION

[0003] Most conventional cigarette filter tips only have the function of filtering impurities but do not have the function of lowering temperature. However, the burning of tobacco produces extremely high-temperature heat, which will then be transmitted to the filter tip, and people will feel a burning on their mouths when the oral cavity contacting the filter tip. That causes personal security issues and leaves the users very poor experience.

SUMMARY OF THE INVENTION

[0004] In order to solve the above-mentioned problem, the present application proposes a cigarette capable of lowering smoke temperature, which can effectively lower smoke temperature without affecting the quality of the smoke.

[0005] The present application is implemented through the following technical solution:

The present application proposes a cigarette capable of lowering smoke temperature, which includes a cigarette rod having an accommodating chamber, a filter, and a first blocking portion, wherein the filter and the first blocking portion divide the accommodating chamber into a first accommodating portion, a second accommodating portion, and a third accommodating portion in this order when viewed from left to right; the first accommodating portion is provided with tobacco particles, the second accommodating portion is provided with cooling particles, and the third accommodating portion is provided with a first connection tube; and the smoke generated by the tobacco particles passes through the cooling particles via the filter and is finally transmitted to the first connection tube.

[0006] Furthermore, the first accommodating portion is further provided with a second connection tube, and the second connection tube is sandwiched between the tobacco particles and the filter.

[0007] Furthermore, the filter is provided with a plurality of through-holes for conducting the smoke generated by the tobacco particles.

[0008] Furthermore, the cigarette capable of lowering smoke temperature further includes a second blocking

portion provided at an end of the cigarette rod, and the second blocking portion seals and covers the first accommodating portion.

[0009] The present application also provides a manufacturing method of the above-mentioned cigarette capable of lowering smoke temperature, the manufacturing method of the cigarette capable of lowering smoke temperature including the following steps:

Step 1: selecting a hollow tube product and cutting it into a suitable size to make a cigarette rod;

Step 2: adhering and fixing a second blocking portion onto one end of the cigarette rod for sealing the end;

Step 3: filling the cigarette rod with tobacco particles, and then pushing a second connection tube into the cigarette rod;

Step 4: placing a filter into the cigarette rod, so that the filter abuts against the second connection tube;

Step 5: filling the cigarette rod with cooling particles;

Step 6: adhering and fixing a first blocking portion onto one end of a first connection tube for sealing the end; and

Step 7: pushing the first connection portion sealed with the first blocking portion adhered thereto into the cigarette rod, so that the end of the first connection portion is just flush with the end of the cigarette rod, wherein the end having the first blocking portion enters the cigarette rod first.

[0010] Preferably, in the process of manufacturing, in the case that step 1 is unchanged, the manufacturing may also be performed from step 7 to step 2.

[0011] Preferably, the cigarette rod is a paper tube, or may be other tube materials suitable for cigarette preparation.

[0012] Preferably, the first connection tube is a hollow cylinder, or may be a cotton rod core.

[0013] The present application has the following advantageous effects:

[0014] The cigarette capable of lowering smoke temperature according to the present application includes a cigarette rod having an accommodating chamber, a filter, and a first blocking portion, wherein the filter and the first blocking portion divide the accommodating chamber into a first accommodating portion, a second accommodating portion, and a third accommodating portion in this order when viewed from left to right; the first accommodating portion is provided with tobacco particles, the second accommodating portion is provided with cooling particles, and the third accommodating portion is provided with a first connection tube; and the smoke generated by the tobacco particles passes through the cooling particles via the filter and is finally transmitted to the first connection tube. The cigarette capable of lowering smoke temperature according to the present application can effectively lower smoke temperature without affecting the quality of the smoke, offers a pleasant taste and provides an excellent experience.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015]

Fig. 1 is an exploded view of the cigarette capable of lowering smoke temperature of the present application;

Fig. 2 is a schematic structural cross-sectional view of the cigarette capable of lowering smoke temperature of the present application;

Fig. 3 is a schematic structural cross-sectional view of another embodiment of Fig. 1.

DESCRIPTION OF THE EMBODIMENTS

[0016] The technical solutions of the present application will become more apparent and complete from the further description of the present application below with reference to the drawings.

[0017] Referring to Figs. 1 to 3, the present application proposes a cigarette capable of lowering smoke temperature, which includes a cigarette rod 10 having an accommodating chamber 11, a filter 20, and a first blocking portion 30, wherein the filter 20 and the first blocking portion 30 divide the accommodating chamber 11 into a first accommodating portion 40, a second accommodating portion 50, and a third accommodating portion 60 in this order when viewed from left to right; the first accommodating portion 40 is provided with tobacco particles 70, the second accommodating portion 50 is provided with cooling particles 80, and the third accommodating portion 60 is provided with a first connection tube 90; and the smoke generated by the tobacco particles 70 passes through the cooling particles 80 via the filter 20 and is finally transmitted to the first connection tube 90.

[0018] In this embodiment, the first blocking portion 30 is an aluminum foil, which may be perforated in advance or may not be perforated. In other embodiments, the first blocking portion 30 may be made of other materials, as long as they have the function of sealing.

[0019] In this embodiment, the tobacco particles 70 can generate smoke. In other embodiments, tobacco flakes or shreds may also be used, as long as they can generate smoke.

[0020] In this embodiment, through the structural arrangement and design of the cigarette capable of lowering smoke temperature of the present application, heat is absorbed by the multiple layers of barriers, which can effectively lower smoke temperature without affecting the quality of the smoke, a pleasant taste is offered and an excellent experience is provided.

[0021] Furthermore, the first accommodating portion 40 is further provided with a second connection tube 41, and the second connection tube 41 is sandwiched between the tobacco particles 70 and the filter 20.

[0022] In this embodiment, the second connection tube 41 is provided for separating the tobacco particles 70 from the filter 20 to prevent the tobacco particles 70 from

blocking the filter 20, and the second connection tube 41 is a hollow cylinder of various materials.

[0023] Furthermore, the filter 20 is provided with a plurality of through-holes 21 for conducting the smoke generated by the tobacco particles 70.

[0024] In this embodiment, there are a plurality of through-holes 21, and the filter 20 is perpendicular to the cigarette rod 10 to ensure a maximum area for conducting the smoke generated by the tobacco particles 70; and the outer diameter of the filter 20 is the same as the inner diameter of the cigarette rod 10.

[0025] Furthermore, the cigarette capable of lowering smoke temperature further includes a second blocking portion 100 provided at an end of the cigarette rod 10, and the second blocking portion 100 seals and covers the first accommodating portion 40.

[0026] In this embodiment, the structure of the second blocking portion 100 and that of the first blocking portion 30 are the same; in other embodiments, when the first accommodating portion 40 contains tobacco shreds or flakes, the second blocking portion 100 may not be provided for sealing and covering.

[0027] The present application also provides a manufacturing method of the above-mentioned cigarette capable of lowering smoke temperature, the manufacturing method of the cigarette capable of lowering smoke temperature including the following steps:

Step 1: selecting a hollow tube product and cutting it into a suitable size to make a cigarette rod 10;

Step 2: adhering and fixing a second blocking portion 100 onto one end of the cigarette rod 10 for sealing the end;

Step 3: filling the cigarette rod 10 with tobacco particles 70, and then pushing a second connection tube 41 into the cigarette rod 10;

Step 4: placing a filter 20 into the cigarette rod 10, so that the filter 20 abuts against the second connection tube 41;

Step 5: filling the cigarette rod 10 with cooling particles 80;

Step 6: adhering and fixing a first blocking portion 30 onto one end of a first connection tube 90 for sealing the end; and

Step 7: pushing the first connection portion sealed with the first blocking portion 30 adhered thereto into the cigarette rod 10, so that the end of the first connection portion is just flush with the end of the cigarette rod 10, wherein the end having the first blocking portion 30 enters the cigarette rod 10 first.

[0028] Preferably, in the process of manufacturing, in the case that step 1 is unchanged, the manufacturing may also be performed from step 7 to step 2, and manufacturing personnel in the industry can make a choice according to actual conditions.

[0029] Preferably, the cigarette rod 10 is a paper tube, or may be other tube materials suitable for cigarette prep-

aration.

[0030] Preferably, the first connection tube is a hollow cylinder, or may be a cotton rod core, which plays a supporting role and also has a filtering effect.

[0031] In this embodiment, the manufacturing method of a cigarette capable of lowering smoke temperature provided by the present application is divided into multiple steps, wherein one step is one process, which is conducive to realizing industrial production, streamlining processes, reducing labor costs, protecting environment and saving energy.

[0032] Certainly, the present application may be embodied in many other forms, but all other embodiments obtained by persons of ordinary skill in the art based on the present embodiments without any creative efforts shall fall within the protection scope claimed by the present application.

Claims

1. A cigarette capable of lowering smoke temperature, wherein:

it includes a cigarette rod having an accommodating chamber, a filter, and a first blocking portion;

the filter and the first blocking portion divide the accommodating chamber into a first accommodating portion, a second accommodating portion, and a third accommodating portion in this order when viewed from left to right;

the first accommodating portion is provided with tobacco particles, the second accommodating portion is provided with cooling particles, and the third accommodating portion is provided with a first connection tube; and

the smoke generated by the tobacco particles passes through the cooling particles via the filter and is finally transmitted to the first connection tube.

2. The cigarette capable of lowering smoke temperature according to claim 1, wherein:

the first accommodating portion is further provided with a second connection tube, and the second connection tube is sandwiched between the tobacco particles and the filter.

3. The cigarette capable of lowering smoke temperature according to claim 1, wherein:

the filter is provided with a plurality of through-holes for conducting the smoke generated by the tobacco particles.

4. The cigarette capable of lowering smoke temperature according to claim 1, wherein:

the cigarette capable of lowering smoke temperature

further includes a second blocking portion provided at an end of the cigarette rod, and the second blocking portion seals and covers the first accommodating portion.

5. A manufacturing method of a cigarette capable of lowering smoke temperature, wherein the manufacturing method of a cigarette capable of lowering smoke temperature including the following steps:

Step 1: selecting a hollow tube product and cutting it into a suitable size to make a cigarette rod;

Step 2: adhering and fixing a second blocking portion onto one end of the cigarette rod for sealing the end;

Step 3: filling the cigarette rod with tobacco particles, and then pushing a second connection tube into the cigarette rod;

Step 4: placing a filter into the cigarette rod, so that the filter abuts against the second connection tube;

Step 5: filling the cigarette rod with cooling particles;

Step 6: adhering and fixing a first blocking portion onto one end of a first connection tube for sealing the end; and

Step 7: pushing the first connection portion sealed with the first blocking portion adhered thereto into the cigarette rod, so that the end of the first connection portion is just flush with the end of the cigarette rod, wherein the end having the first blocking portion enters the cigarette rod first.

6. The manufacturing method of a cigarette capable of lowering smoke temperature according to claim 5, wherein:

in the process of manufacturing, in the case that step 1 is unchanged, the manufacturing may also be performed from step 7 to step 2.

7. The manufacturing method of a cigarette capable of lowering smoke temperature according to claim 5, wherein:

the cigarette rod is a paper tube, or may be other tube materials suitable for cigarette preparation.

8. The manufacturing method of a cigarette capable of lowering smoke temperature according to claim 5, wherein:

the first connection tube is a hollow cylinder, or may be a cotton rod core.

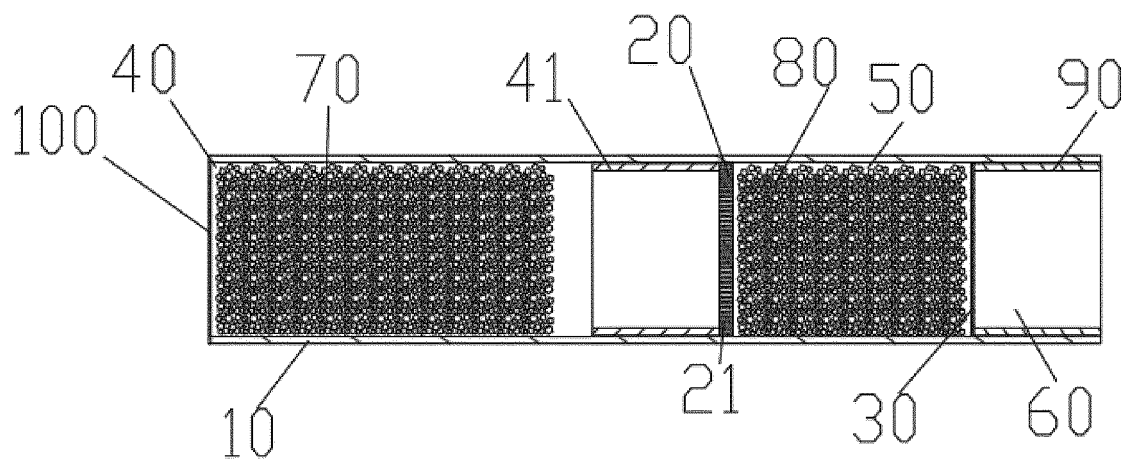


Fig. 1

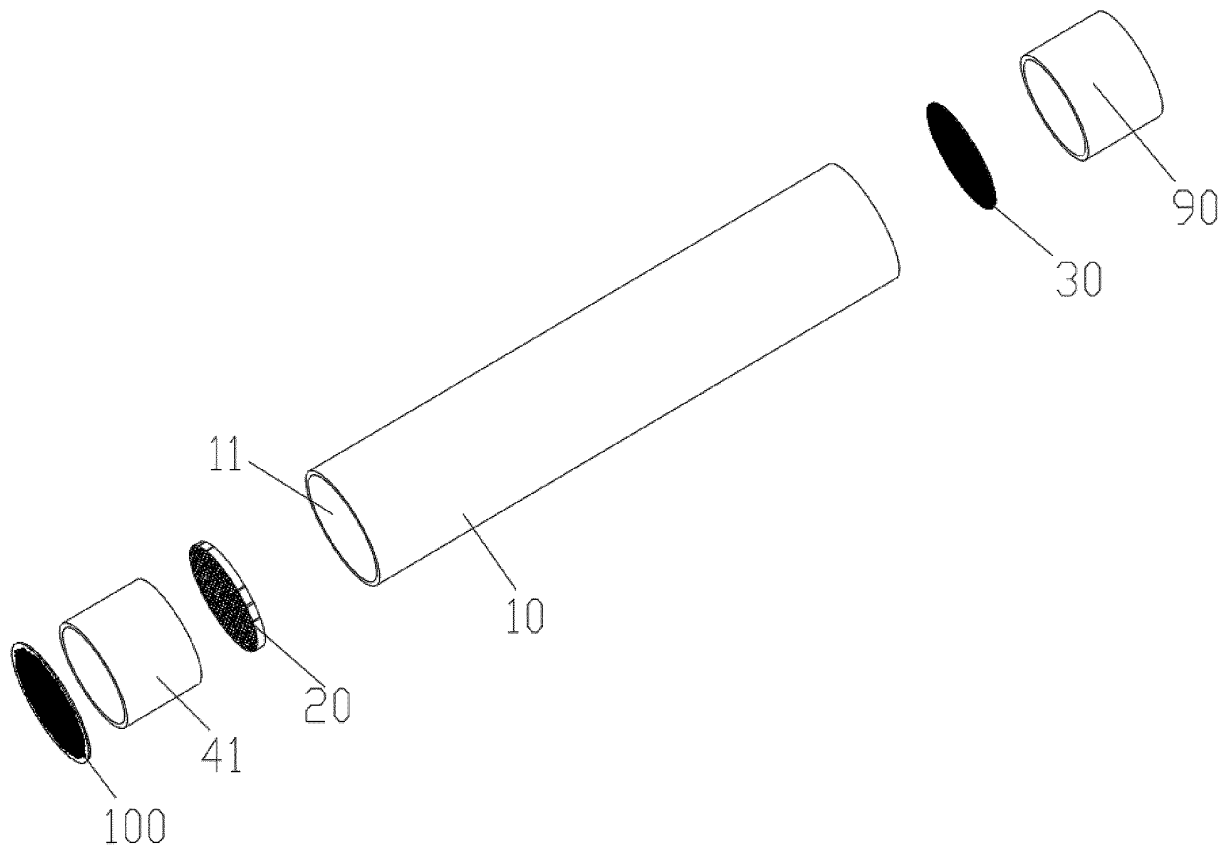


Fig. 2

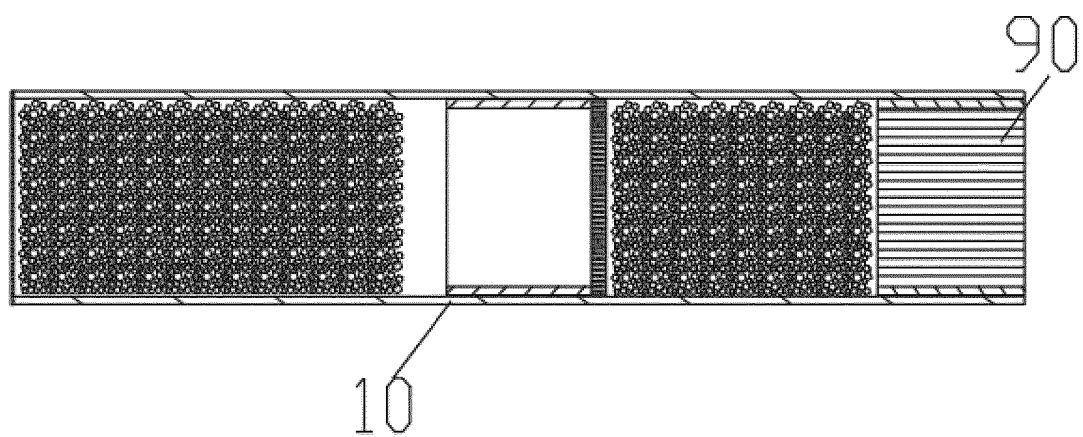


Fig. 3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2019/094575

A. CLASSIFICATION OF SUBJECT MATTER

A24D 1/04(2006.01)i; A24D 3/04(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNTXT&CNABS&VEN&EPODOC, 滤嘴, 滤片, 箔, 中空管, 降温, 颗粒, filter, rod, tube, pipe, hollow, passage, temperature, particle, particulate, foil

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	CN 2300267 Y (KE, YONGQI) 16 December 1998 (1998-12-16) description, pages 1 and 2, and figures 1 and 2	1-8
Y	CN 2087881 U (LI, LIN; LI, BING) 06 November 1991 (1991-11-06) description, page 4, the last paragraph but one, and figures 1-5	1-8
A	TW 230040 B (REEMTSMA CIGAREETTENFABRIKEN GMBH) 01 April 2005 (2005-04-01) entire document	1-8
A	GB 2549803 A (BRITISH AMERICAN TOBACCO (INVESTMENTS) LIMITED) 01 November 2017 (2017-11-01) entire document	1-8
A	US 5685323 A (R. J. REYNOLDS TOBACCO COMPANY) 11 November 1997 (1997-11-11) entire document	1-8

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

“E” earlier application or patent but published on or after the international filing date

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“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority date claimed

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search

28 August 2019

Date of mailing of the international search report

04 September 2019

Name and mailing address of the ISA/CN

China National Intellectual Property Administration (ISA/
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Facsimile No. (86-10)62019451

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2019/094575

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REFERENCES CITED IN THE DESCRIPTION

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