PTO/SB/05 (08-08)
Approved for use through 09/30/2010. OMB 0651-0032
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	JANLEA-001-DIV
First Inventor	Li HAN
Title	AEROSOL ELECTRONIC CIGARETTE
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☐ **Fee Transmittal Form** (e.g., PTO/SB/17)
2. ☑ **Applicant claims small entity status.** See 37 CFR 1.27.
3. ☑ **Specification** [*Total Pages* 27]
   Both the claims and abstract must start on a new page
   (For information on the preferred arrangement, see MPEP 608.01(a))
4. ☑ **Drawing(s)** (*35 U.S.C. 113*) [*Total Sheets* 8]
5. **Oath or Declaration** [*Total Sheets* 3]
   a. ☐ Newly executed (original or copy)
   b. ☑ A copy from a prior application (37 CFR 1.63(d))
   (for continuation/divisional with Box 18 completed)
   i. ☐ DELETION OF INVENTOR(S)
   Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☑ **Application Data Sheet.** See 37 CFR 1.76
7. ☐ **CD-ROM or CD-R** in duplicate, large table or Computer Program *(Appendix)*
   ☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission**
   (if applicable, items a. – c. are required)
   a. ☐ Computer Readable Form (CRF)
   b. Specification Sequence Listing on:
      i. ☐ CD-ROM or CD-R (2 copies); or
      ii. ☐ Paper
   c. ☐ Statements verifying identity of above copies

ADDRESS TO: **Commissioner for Patents**
P.O. Box 1450
Alexandria VA 22313-1450

ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers** (cover sheet & document(s))
   Name of Assignee _____
10. ☐ **37 CFR 3.73(b) Statement** *(when there is an assignee)* ☐ **Power of Attorney**
11. ☐ **English Translation Document** *(if applicable)*
12. ☑ **Information Disclosure Statement** (PTO/SB/08 or PTO-1449)
    ☑ Copies of citations attached
13. ☑ **Preliminary Amendment**
14. ☐ **Return Receipt Postcard** (MPEP 503)
    (Should be specifically itemized)
15. ☐ **Certified Copy of Priority Document(s)**
    (if foreign priority is claimed)
16. ☐ **Nonpublication Request** under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ Other: _____

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:*

☐ Continuation ☑ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 12/226,818

Prior application information: *Examiner* Dionne Walls Mayes *Art Unit:* 1747

19. CORRESPONDENCE ADDRESS

☑ The address associated with Customer Number: 62008 ***OR*** ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	/Timothy J. Maier/	Date	April 5, 2011
Name (Print/Type)	Timothy J. Maier	Registration No. (Attorney/Agent)	51986

PTO/SB/14 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JANLEA-001-DIV
	Application Number	
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Applicant Information:

Applicant 1

Applicant Authority ◉ Inventor ○ Legal Representative under 35 U.S.C. 117 ○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	Li		HAN	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Hong Kong	Country Of Residence	CN
Citizenship under 37 CFR 1.41(b)	CN		

Mailing Address of Applicant:

Address 1	1010-12 Room, West Tower, Shun Centre		
Address 2	168 Connaught Road, Mid-Gannuo		
City	Hong Kong	State/Province	
Postal Code		Country	CN

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	62008		
Email Address	info@maierandmaier.com	Add Email	Remove Email

Application Information:

Title of the Invention	AEROSOL ELECTRONIC CIGARETTE		
Attorney Docket Number	JANLEA-001-DIV	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	8	Suggested Figure for Publication (if any)	1

PTO/SB/14 (07-07)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JANLEA-001-DIV
	Application Number	
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

Publication Information:

☐	Request Early Publication (Fee required at time of Request 37 CFR 1.219)
☐	**Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S. C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	62008		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Division of	12/226818	2008-10-29
Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
12/226818	a 371 of international	PCT/CN2007/001575	2007-05-15

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove

Application Number	Country[1]	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
200620090805.0	CN	2006-05-16	◉ Yes ○ No

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

PTO/SB/14 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JANLEA-001-DIV
	Application Number	
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.

Assignee 1

If the Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information:

Address 1			
Address 2			
City		**State/Province**	
Country		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee Data may be generated within this form by selecting the **Add** button.

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.

Signature	/Timothy J. Maier/			Date (YYYY-MM-DD)	2011-04-05
First Name	Timothy	Last Name	Maier	Registration Number	51986

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

12/226,818

Declaration and Power of Attorney for Patent Application

IAP05Rec'd PCT 29 OCT 2005

專利申請聲明及委託書

Chinese Language Declaration

中文聲明

作為下述發明者，我在此宣告：

As a below named inventor, I hereby declare that:

我的住址、郵局地址和國籍均列在我名下，

My residence, post office address and citizenship are as stated next to my name.

我相信我是首創的、第一個和唯一的發明者(如只列出一人姓名)或是首創的、首位共同發明者(如列出數人姓名)，我提出作為專利申請權利要求的題目如下

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

HAN Li

如不在下面小方格中打叉則須將說明書附此：

the specification of which is attached hereto unless the following box is checked:

☐ 以美國申請號碼或PCT國際申請號碼 _____
立案于 _____
修正于(如適用) _____

☐ was filed on _____ as United States Application Number or PCT International Application Number _____ and was amended on _____ (if applicable).

我在此聲明我已閱畢并理解上述說明書的內容，包括上述任何修正案所修正的權利要求。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

按照聯邦法規第三十七節第一．五六條，我有責任提供支持專利權的實質性資料。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

Chinese Language Declaration

我申請享受按照美國法規第三十五節第一百一十九條(a)-(d)項或第365條(b)項列出的以下任何外國專利申請書或發明者證書或第365條(a)項列出任何PCT國際申請指定至少在美國以外的任何一個國家的外國優先權，並確認下列方格內打記號，具有優先權申請前立案日期的、任何外國專利申請書或發明者證書或是PCT國際申請書。

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

不要求優先權
Priority Not Claimed

國外優先申請書

(號碼) (Number)	(國名) (Country)	(申請日/月/年) (Day/Month/Year Filed)	☐
(號碼) (Number)	(國名) (Country)	(申請日/月/年) (Day/Month/Year Filed)	☐
(號碼) (Number)	(國名) (Country)	(申請日/月/年) (Day/Month/Year Filed)	☐

我申請享受被美國法規第35節119(e)列出的以下任何美國臨時申請書的利益。

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

(申請順序號碼) (Application No.)	(Filing Date)	(申請順序號碼) (Application No.)	(申請日期) (Filing Date)

我申請享受按照美國法規第三十五節一百二十條或365條(c)項列出任何PCT國際申請所指定的美國列出的以下任何美國申請書的利益，如果此申請書中提出的每項權利要求的題目未按美國法規或是PCT國際申請第三十五節第一百二十條第一段的要求在以前的美國申請書中披露，則我有責任按照聯邦法規第三十七節第一．五六(甲)條提供支持專利權的實質性資料，這一法規條文生效于以前申請的立案日期之後，但在美國或PCT國際申請立案日期之前。

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(申請順序號碼) (Application No.)	(申請日期) (Filing Date)	(狀況) (已頒專利權、申請中、取消)	(Status) (patented, pending, abandoned)
(申請順序號碼) (Application No.)	(申請日期) (Filing Date)	(狀況) (已頒專利權、申請中、取消)	(Status) (patented, pending, abandoned)

我在此聲明根據我所知而作的所有聲明都真實無誤，所有有關資料和信息的聲明也真實無誤；我還知道，按照美國法規第十八節第一千零一項，任何蓄意偽造的聲明都將受到罰款或監禁，或同時受到兩種懲罰。這類蓄意偽造的聲明將危及此申請書或任何已頒發專利的效力。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issued thereon.

Chinese Language Declaration

委託書：

以列名發明者的身份，我在此指定下列律師和/或代理人執行此申請並從事與專利商標公署有關的所有業務(列出姓名和註冊號碼)：I hereby grant power of attorney to the attorneys associated with Maier & Maier, PLLC's customer number 62008.

Maier & Maier, PLLC
1000 Duke St
Alexandria, VA 22314 USPTO Customer №62008
通訊地址

Timothy J. Maier 703-740-8322
直撥電話(姓名及電話號碼)

I authorize Maier & Maier, PLLC to add at any time their attorney docket number to this declaration.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: *(list name and registration number)* I hereby grant power of attorney to the attorneys associated with Maier & Maier, PLLC's customer number 62008.

Maier & Maier, PLLC
1000 Duke St
Alexandria, VA 22314 USPTO Customer №62008
Send Correspondence to:

Timothy J. Maier 703-740-8322
Direct Telephone Calls to: *(name and telephone number)*

I authorize Maier & Maier, PLLC to add at any time their attorney docket number to this declaration.

第一個或唯一的發明者全名	Full name of sole or first inventor
發明者簽字 日期	Inventor's signature HAN LI Date
地址	Residence
國籍	Citizenship
郵局地址	Post Office Address
第二個共同發明者全名(如有)	Full name of second joint inventor, if any
第二個發明者簽字 日期	Second Inventor's signature Date
住址	Residence
國籍	Citizenship
郵局地址	Post Office Address

(第三個和其他共同發明者需提供同樣資料和簽字。) (Supply information and signature for third and subsequent joint inventors.)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Li HAN	Confirmation No.: TBD
U.S. Patent Application No.: TBD *Divisional of U.S. Patent Application 12/226,818, filed on October 29, 2008*	Art Unit: TBD
Filed: Concurrent Herewith	Examiner: TBD
Title: AEROSOL ELECTRONIC CIGARETTE	Attorney Docket No.: JANLEA-001-DIV

PRELIMINARY AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 5, 2011

Dear Sir:

Prior to examination on the merits please amend the following:

Amendments to the Specification begin on page 2.

Amendments to the Claims begin on page 3.

Remarks follow the above-mentioned amendments.

Amendments to the Specification:

Please add the following paragraph before the first paragraph of the Specification as follows:

RELATED APPLICATIONS

This application is divisional of U.S. Patent Application No. 12/226,818, filed October 29, 2008, which is the U.S. national stage application to International Patent Application No. PCT/CN2007/001575, filed on May 15, 2007, which claims priority, under 35 U.S.C. § 119, to Chinese Patent Application No.: 200620090805.0, filed on May 16, 2006, the disclosures of which are incorporated by reference herein in their entireties.

Amendment to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1-29. (canceled).

30. (new) An aerosol electronic cigarette, comprising:

a battery assembly, an atomizer assembly and a cigarette bottle assembly, and features a shell that is hollow and integrally formed:

the said battery assembly connects with the said atomizer assembly, and both are located in the said shell;

the said cigarette bottle assembly is detachably located in one end of the shell, and fits with the said atomizer assembly inside it;

the said shell has through-air-inlets;

the atomizer assembly is an atomizer, which includes a porous component and a heating body;

the said heating body is heating wire;

the said atomizer includes a frame;

the said porous component is set on the said frame;

the heating wire is wound on the said porous component;

the said frame has a run-through hole on it;

the said porous component is wound with heating wire in the part that is on the side in the axial direction of the run-through hole;

and one end of the said porous component fits with the said cigarette bottle assembly.

REMARKS

The present application is a divisional of U.S. Patent Application 12/226,818, filed October 29, 2008, which was subject to a restriction requirement, which issued February 2, 2011. Applicants responded on February 2, 2011, to elect Group I, consisting of Claims 33-36, and 38-59, directed towards an aerosol electronic cigarette, as embodied by Figure 5. Please note that, in the parent application, Claims 1-32 were cancelled in a Second Preliminary Amendment, filed on April 20, 2009.

The present Preliminary Amendment cancels original Claims 1-29 and adds new Claim 30. Claim 30 represents the non-elected Group II of the parent application, which consists of Claim 37, as embodied by Figure 17.

Moreover, the Applicants submit that no new matter has been introduced by the foregoing amendments.

Applicants believe that Claim 30 is ready to be examined on the merits.

MAIER & MAIER, PLLC
1000 Duke Street
Alexandria, VA 22314
(703) 740-8322
Customer No. 62008
April 5, 2011

Respectfully submitted,

/Timothy J. Maier/
Timothy J. Maier
Reg. No. 51,986

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Li HAN	Confirmation No.: TBD
U.S. Patent Application No.: TBD *Divisional of U.S. Patent Application 12/226,818, filed on October 29, 2008*	Art Unit: TBD
Filed: Concurrent Herewith	Examiner: TBD
Title: AEROSOL ELECTRONIC CIGARETTE	Attorney Docket No.: JANLEA-001-DIV

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 5, 2011

Dear Sir:

This Information Disclosure Statement is submitted:

_X_ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)

___ under 37 CFR 1.97(c) together with either a:
___ Statement under 37 CFR 1.97(e), **or**
___ a $180.00 fee under 37 CFR 1.17(p),
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

___ under 37 CFR 1.97(d) together with a:
___ Statement under 37 CFR 1.97(e), **and**
___ a $180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

X The patents, publications, or other information submitted for consideration by the Office are listed on the SB/08a Form, attached hereto.

II. COPIES (check at least one box)

a. X Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

b. X Some or all of the documents listed on the SB/08a Form are not enclosed because they are either U.S. Patents or Published Applications or were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a.___ DOCUMENTS IN THE ENGLISH LANGUAGE
The attached patents, publications, or other information in the English language do not require a statement of relevancy.

b.___ DOCUMENTS NOT IN THE ENGLISH LANGUAGE
A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

c. X ENGLISH LANGUAGE SEARCH REPORT
An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

It is requested that the information disclosed herein be made of record in this application.

MAIER AND MAIER, PLLC
1000 Duke Street
Alexandria, VA 22314
(703) 740-8322
Customer No. 62008
April 5, 2011

Respectfully submitted,

/Timothy J. Maier/
Timothy J. Maier
Attorney for Applicant
Reg. No. 51,986

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2011-04-05
First Named Inventor	Li HAN
Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	JANLEA-001-DIV

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4945929	A	1990-08-07	Nazli EGILMEX	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2719043	CN	Y	2005-08-24	Li HAN	English abstract only	☐
	2	1252961	CN	A	2000-05-17	Guoqiang SONG	English abstract only	☐
	3	1575673	CN	A	2005-02-09	Seiko Epson Cor	English abstract only	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	
	First Named Inventor	Li HAN
	Art Unit	TBD
	Examiner Name	TBD
	Attorney Docket Number	JANLEA-001-DIV

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NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	International Search Report issued August 16, 2007 in corresponding PCT Application No. PCT/CN2007/001575 filed May 15, 2007, and English translation thereto, 6 pages	☐

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Examiner Signature		Date Considered	

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[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	2011-04-05
	First Named Inventor	Li HAN
	Art Unit	TBD
	Examiner Name	TBD
	Attorney Docket Number	JANLEA-001-DIV

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Timothy J. Maier/	Date (YYYY-MM-DD)	2011-04-05
Name/Print	Timothy J. Maier	Registration Number	51986

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

国际检索报告

国际申请号 PCT/CN2007/001575

A. 主题的分类

参见附加页

按照国际专利分类表(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC: A24D, A24F

包含在检索领域中的除最低限度文献以外的检索文献

在国际检索时查阅的电子数据库(数据库的名称，和使用的检索词（如使用））

WPI&EPODOC&PAJ 中国专利文献（1985～）

Electronic, pipe, cigarette 电子、烟斗、烟

C. 相关文件

类 型*	引用文件，必要时，指明相关段落	相关的权利要求
X	CN2719043Y(韩力)24. 8 月 2005(24.8.2005) 说明书第 3 页第 5 行－第 4 页 27 行；图 1－5	1－10
A	CN1252961A(宋国强)17. 5 月 2000(17.5.2000) 全文	1－29
A	US4945929A (BRITISH-AMERICAN TOBACCO CO., LTD.）07. 8 月 1990(07.08.1990) 全文	1－29
A	CN1575673A（精工爱普生株式会社）09. 2 月 2005(09.02.2005) 全文	1－29

☐ 其余文件在 C 栏的续页中列出。 ☒ 见同族专利附件。

* 引用文件的具体类型：

"A" 认为不特别相关的表示了现有技术一般状态的文件

"E" 在国际申请日的当天或之后公布的在先申请或专利

"L" 可能对优先权要求构成怀疑的文件，或为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件

"O" 涉及口头公开、使用、展览或其他方式公开的文件

"P" 公布日先于国际申请日但迟于所要求的优先权日的文件

"T" 在申请日或优先权日之后公布，与申请不相抵触，但为了理解发明之理论或原理的在后文件

"X" 特别相关的文件，单独考虑该文件，认定要求保护的发明不是新颖的或不具有创造性

"Y" 特别相关的文件，当该文件与另一篇或者多篇该类文件结合并且这种结合对于本领域技术人员为显而易见时，要求保护的发明不具有创造性

"&" 同族专利的文件

国际检索实际完成的日期	国际检索报告邮寄日期
20.7 月 2007(20.07.2007)	16.8 月 2007 (16.08.2007)
中华人民共和国国家知识产权局(ISA/CN) 中国北京市海淀区蓟门桥西土城路 6 号 100088 传真号： (86-10)62019451	受权官员 赵晓宇 电话号码：(86-10) 62085853

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2007/001575

检索报告中引用的专利文件	公布日期	同族专利	公布日期
CN2719043Y	24. 8 月 2005	AU2005232354A	27.10 月 2005
		WO2005099494A	27.10 月 2005
		CA2562581A	27.10 月 2005
		EP1736065A	27.12 月 2006
		CN1942114A	04.4 月 2007
		BRPI0506780A	22.5 月 2007
CN1252961A	17. 5 月 2000	无	
US4945929A	07. 8 月 1990	GB2191718A	23.12 月 1987
		DE3719718A	23.12 月 1987
		GB2191718B	05.9 月 1990
CN1575673A	09. 2 月 2005	US2005016550A1	27.1 月 2005
		JP2005034021A	10.2 月 2005
		CN1284493C	15.11 月 2006

按照国际专利分类表(IPC)或者同时按照国家分类和 IPC 两种分类：

A24D1/18(2006.01) i

A24F47/00(2006.01) i

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2007/001575

A. CLASSIFICATION OF SUBJECT MATTER

See extra sheet

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)

IPC: A24D, A24F

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)

WPI&EPODOC&PAJ Chinese Patent Document (1985~)

Electronic, pipe, cigarette

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN2719043Y(HAN Li)24 Aug. 2005(24.8.2005) Page 3 lines 5- page 4 lines 27;figures 1-5	1-10
A	CN1252961A(SONG Guoqiang)17 May 2000(17.05.2000) the whole document	1-29
A	US4945929A (BRITISH-AMERICAN TOBACCO CO., LTD.) 07 Aug. 1990(07.08.1990) the whole document	1-29
A	CN1575673A (SEIKO EPSON COR) 09 Feb.2005(09.02.2005) the whole document	1-29

☐ 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

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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	Date of mailing of the international search report
20 Jul. 2007(20.07.2007)	**16 Aug. 2007 (16.08.2007)**
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer ZHAO,Xiaoyu Telephone No. (86-10)62085853

Form PCT/ISA /210 (second sheet) (April 2007)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2007/001575

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN2719043Y	24 Aug.2005	AU2005232354A	27 Oct. 2005
		WO2005099494A	27 Oct. 2005
		CA2562581A	27 Oct. 2005
		EP1736065A	27 Dec. 2006
		CN1942114A	04 Apr.2007
		BRPI0506780A	22 May 2007
CN1252961A	17 May 2000	None	
US4945929A	07 Aug. 1990	GB2191718A	23 Dec. 1987
		DE3719718A	23 Dec. 1987
		GB2191718B	05 Sep. 1990
CN1575673A	09. Feb.2005	US2005016550A1	27 Jan. 2005
		JP2005034021A	10 Feb. 2005
		CN1284493C	15 Nov. 2006

Form PCT/ISA /210 (patent family annex) (April 2007)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2007/001575

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

A24D1/18(2006.01) i

A24F47/00(2006.01) i

Form PCT/ISA /210 (extra sheet) (April 2007)

AEROSOL ELECTRONIC CIGARETTE

TECHNICAL FIELD

[0001]The present invention relates to an electronic cigarette, in particular, an aerosol electronic cigarette that doesn't contain tar but nicotine.

BACKGROUND ART

[0002]Today when "smoking is harmful to your health" has become a common sense, there are one billion people smoking cigarettes, and this figure is still rising. On Mar. 1, 2003, the World Health Organization (WHO) issued the first international smoking ban--Framework Convention on Tobacco Control. According to WHO's data, smoking causes 4,900,000 deaths each year. Smoking causes serious respiratory system diseases and cancers, though it is a hard job to persuade the smokers to completely quit smoking.

[0003]Nicotine is the effective ingredient of cigarette, which produces a lot of tar mist as the cigarette bums. The tar mist accesses the pulmonary alveolus and is quickly absorbed into the blood. Nicotine thus acts on the receptor of the central nervous system, bringing the euphoria like stimulant drugs to the smokers, who feel light in the head and on wings as well.

[0004]Nicotine is a micromolecular alkaloid, which is basically harmless to human bodies with a small dosage. Plus, its half life period is extremely short in blood. Tar is the major harmful substance in tobacco. Tobacco tar comprises of several thousands of ingredients, dozens of which are carcinogenic substances. It has now been proved that second hand smoking is even more harmful to those who don't smoke.

[0005]To seek the cigarette substitutes that don't contain harmful tar but nicotine, many inventors have used the relatively pure nicotine to create such products as "Cigarette Patch", "Nicotine Gargle", "Aerosol Packed in the High Pressure Tank with Propellant", "Nicotine Chewing Gum", and "Nicotine Beverage". These products are not as harmful as tar, but are absorbed very slowly. As a result, its peak concentration can't be effectively established in blood, and the smokers can't be satisfied to the full. In addition, the smokers are deprived of the "smoking" habit. Therefore, the substituting products are not real cigarette substitutes or products helping to quit smoking.

[0006]The electronic cigarettes currently available on the market may resolve the above-mentioned issue, though they are complicated in structure. Their cigarette bodies can be roughly divided into three sections, which have to be connected through via plugging or thread coupling before use. Also, their batteries have to be changed frequently, making it inconvenient for the users. What's worse, the electronic cigarettes don't provide the ideal aerosol effects, and their atomizing efficiency is not high.

CONTENTS OF INVENTION

[0007]To overcome the above-mentioned disadvantages, this invention has been designed to provide an aerosol electronic cigarette that substitutes for cigarettes and helps the smokers to quit smoking.

[0008]The purpose of this invention is fulfilled with the following technical solution: an aerosol electronic cigarette includes a battery assembly, an atomizer assembly and a cigarette bottle assembly, and also includes a shell, which is hollow and integrally formed. The said battery assembly connects with the said atomizer assembly and both are located in the said shell. The said cigarette bottle assembly is located in one end of the shell, which is detachable. The said cigarette bottle assembly fits with the said atomizer assembly. The said shell has through-air-inlets.

[0009]The additional features of this invention are as follows: the said battery assembly includes the battery, and the operating indicator, electronic circuit board, and airflow sensor, which are connected with the said battery; the signal output of the said airflow sensor is connected with the said electronic circuit board.

[0010]It also includes a check valve. The said battery is a rechargeable battery, which has a flexibly connected charging plug. The blades of the said plug come out of the other end of the said shell.

[0011]Between the said charging plug and rechargeable battery is a spring, which lies against the body of the said rechargeable battery on one end, and its free end lies against the said charging plug.

[0012]The said battery is a rechargeable battery, which has a charging slot on it. The said operating indicator is a LED.

[0013]The said airflow sensor may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor.

[0014]The said electronic circuit board includes an electronic switch circuit.

[0015]The said airflow sensor has a silica gel corrugated membrane, which connects with magnetic steel with a reed relay on one of its ends. Both ends of the said reed relay correspond to the relay electrodes.

[0016]The said airflow sensor has a silica gel corrugated membrane, which connects with magnetic steel with a Hall element or a magneto-diode or a magneto-triode on one of its ends.

[0017]The said atomizer assembly is an atomizer, which includes a porous component and a heating body.

[0018]The said atomizer also includes an electric heating rod. The body of the said porous component has a run-through atomizing chamber. The diameter of the said electric heating rod is less than the diameter of the said atomizing chamber. The said electric heating rod enters into the said atomizing chamber, and there is a clearance between the said electric heating rod and interior wall of the atomizing chamber. The said clearance forms a negative pressure cavity. One end of the said porous component fits with the said cigarette bottle assembly.

[0019]The said electric heating rod includes a cylinder. The said heating body is heating wire, which is wound on the wall of the said cylinder. The said porous component has a protuberance on one end, and the said protuberance fits with the said cigarette bottle assembly. The said protuberance is a half sphere, on the side of which there is a run-through hole connecting to the said atomizing chamber.

[0020]The said electric heating rod includes a cylinder. The said heating body is made of electrically conductive ceramic PTC material. The said heating body is set on the wall of the said cylinder. On the wall of both ends of the said cylinder, there are mandrils respectively. The said porous component has a protuberance on one end, and the said protuberance fits with the said cigarette bottle assembly. The said protuberance is a half sphere, on the side of which there is a run-through hole connecting to the said atomizing chamber.

[0021]The said heating body is heating wire. The said atomizer assembly includes a frame. The said porous component is set on the said frame. The said porous component is wound with heating wire. The said frame has a run-through hole on it. The said porous component is wound

with heating wire in the part that is on the side in the axial direction of the said run-through hole. One end of the said porous component fits with the said cigarette bottle assembly.

[0022]The said porous component is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

[0023]The said heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked.

[0024]A restriction component, which is detachable, is set on one end of the said porous component. There is a restriction hole on the body of the said restriction component. The said restriction hole corresponds to the said atomizing chamber. The pore diameter of the said restriction hole is less than the inner diameter of the atomizing chamber.

[0025]The said cigarette bottle assembly includes a hollow cigarette holder shell, and a perforated component for liquid storage inside the said cigarette holder shell. One end of the said cigarette holder shell plugs into the said shell, and the outer peripheral surface of the said cigarette holder shell has an inward ventilating groove. On one end surface of the said cigarette holder shell, there is an air channel extending inward.

[0026]The said air channel is located in the center on one end surface of the said cigarette holder shell.

[0027]One end of the said porous component lies against one end surface of the said perforated component for liquid storage, and contacts the said perforated component for liquid storage.

[0028]The said perforated component for liquid storage is made of such materials as PLA fiber, terylene fiber or nylon fiber.

[0029]The said perforated component for liquid storage is plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polycarbonate.

[0030]The said electronic cigarette is held in a charging device.

[0031]The said charging device includes a case, which contains an auxiliary charging storage battery inside it, and holds the electronic cigarette and the charger for the rechargeable battery embedded in the electronic cigarette, as well as the power supply circuit. The power inputs of the said auxiliary charging storage battery and charger are connected with the power supply circuit respectively.

[0032]The said case has a spare liquid supply bottle in it.

[0033]The power output of the said auxiliary charging storage battery is connected with the power input of the said charger.

[0034]The power output of the said charger is a charging slot, which fits with the charging plug of the rechargeable battery inside the said electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

[0035]The said charger is a constant voltage & current charger.

[0036]On the body of the said shell, there is a pair of slide ways corresponding to the position of the said electronic cigarette, and on the slide ways, there is a slide cover.

[0037]This invention will bring the following benefits: (1) For this invention, the perforated component for liquid storage of the cigarette bottle assembly stores the nicotine liquid only, which doesn't contain cigarette tar, considerably reducing the carcinogenic risks of smoking. At the same time, the smokers can still enjoy the feel and excitement of smoking, and there is no fire hazard since there is no need for igniting. (2) For this invention, the battery assembly and atomizer assembly are directly installed inside the shell, and then connected with the cigarette bottle assembly. That is, there is just one connection between two parts, resulting in a very simple structure. For use or change, you just need to plug the cigarette holder into the shell, providing great convenience. When the nicotine liquid in the cigarette bottle assembly is used up or the cigarette bottle assembly is damaged and needs to be changed, the operation will be extremely easy. (3) For this invention, the rechargeable battery inside the battery assembly has a charging plug, whose blades come out of the shell. When the rechargeable battery inside the electronic cigarette runs out of power, it may be directly plugged into the charger for charging, with no need to remove the rechargeable battery, resulting in very easy use. (4) For this

invention, the charging device includes the charger and the auxiliary charging storage battery. The electronic cigarette is put inside the charger when not in use, and then the charging device may be electrified to charge the electronic cigarette and the auxiliary charging storage battery as well. In the event that power supply is not available for the charging device, the auxiliary charging storage battery may be used to charge the electronic cigarette. Therefore, the electronic cigarette can be charged anywhere you go, and it is very suitable for use when you are on a business or tourist trip. Further, the charging device includes a spare liquid supply bottle, which contains nicotine liquid for spare use when you are on a business or tourist trip. (5) For this invention, on one end of the shell of the cigarette bottle assembly, there is an air channel extending inward. The electronic cigarette works to produce mist, which flows to the shell, generating some fine drips; the fine drips are condensed into bigger drips, which fall along the exterior wall of the air channel into the cavity of the shell of the cigarette bottle assembly, so that they are not inhaled by the smoker out of the air channel. (6) In addition, with a little bit modification to the liquid storage, the unit and its connecting structure of this invention may also be loaded with drugs for delivery to the lung.

DESCRIPTION OF DRAWINGS

[0038]FIG. 1 is the side section view of the electronic cigarette of this invention.

[0039]FIG. 2 is the section view of the shell (a) separated from the cigarette bottle assembly of the electronic cigarette of this invention, illustrating the structure of the cigarette bottle assembly that is detachably plug in the shell (a).

[0040]FIG. 3 is the diagram of the axial structure of the cigarette bottle assembly of this invention, illustrating the ventilating groove on the peripheral surface of the cigarette holder shell.

[0041]FIG. 4 is the side section view of the cigarette bottle assembly of this invention, illustrating the structure of the air channel.

[0042]FIG. 5 is the side section view of the porous component of the atomizer of this invention, illustrating the atomizing chamber, a protruding half sphere structure.

[0043]FIG. 6 is the diagram of the structure of the electric heating rod of the atomizer of this invention.

[0044]FIG. 7 is the side section of the atomizer of this invention, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0045]FIG. 8 is the diagram of the cubic structure of the atomizer of this invention, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0046]FIG. 9 is the section view of the check valve of this invention.

[0047]FIG. 10 is the front section view of the restriction component in the second preferred embodiment of this invention, illustrating the structure of the restriction component.

[0048]FIG. 11 is the diagram of the axial structure of the cigarette bottle assembly in the third preferred embodiment of this invention.

[0049]FIG. 12 is the A-A section view of FIG. 11.

[0050]FIG. 13 is the diagram of the structure of the electric heating rod of the atomizer in the fourth preferred embodiment of this invention.

[0051]FIG. 14 is the section view of the porous component of the atomizer in the fourth preferred embodiment of this invention.

[0052]FIG. 15 is the diagram of the axial structure of FIG. 14.

[0053]FIG. 16 is the side section view of the atomizer in the fourth preferred embodiment of this invention, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0054]FIG. 17 is the diagram of the axial structure of the atomizer in the fifth preferred embodiment of this invention.

[0055]FIG. 18 is the side section view of the atomizer in the fifth preferred embodiment of this invention.

[0056]FIG. 19 is the side section view of the electronic cigarette in the sixth preferred embodiment of this invention, illustrating the diagram of the structure of the airflow sensor adopting Hall element.

[0057]FIG. 20 is the electric circuit diagram of the electronic cigarette of this invention, with the airflow sensor adopting a reed relay structure.

[0058]FIG. 21 is the electric circuit diagram of the electronic cigarette of this invention, with the airflow sensor adopting Hall element.

[0059]FIG. 22 is the diagram of the cubic structure of the charging device of this invention, illustrating the locations of and connection relation of various internal parts.

[0060]FIG. 23 is the side section view of the charging device of this invention, illustrating the structure of slide way and cover.

[0061]FIG. 24 is the diagram of the front structure of the charging device of this invention, illustrating the structure of the sliding cover.

SPECIFIC MODE FOR CARRYING OUT THE INVENTION

[0062]This invention is further described as follows on the basis of the drawings.

[0063]As shown in FIG. 1-10, this utility model provides an aerosol electronic cigarette, which includes a battery assembly, an atomizer assembly and a cigarette bottle assembly, and also includes a shell (a), which is hollow and integrally formed. The battery assembly connects with the atomizer assembly and both are located in the shell. The cigarette bottle assembly is located in one end of the shell, which is detachable. The cigarette bottle assembly fits with the atomizer assembly. The shell has through-air-inlets (a1).

[0064]In this specific embodiment, the battery assembly includes the battery, and the operating indicator (1), electronic circuit board (4), and airflow sensor (5), which are connected with the battery. It also includes a check valve (7). The signal output of the airflow sensor (5) is connected with the said electronic circuit board (4). The battery is a rechargeable battery (3), which may be either a rechargeable polymer lithium ion battery or a rechargeable lithium ion battery. The airflow sensor (5) may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor. The rechargeable battery (3) has a flexibly connected charging plug (2). The blades (21) of the charging plug (2) come out of the other end of the shell (a). Between the charging plug (2) and rechargeable battery (3) is a spring (6), which lies against the body of the rechargeable battery (3) on one end, while its free end lies against the charging plug (2), forming a flexible structure, which buffers the charging plug (2) when plugged for charging, thus protecting the rechargeable battery against any damage. Of course, the

rechargeable battery (3) in this embodiment has a charging slot on it, which replaces the structure of charging plug (2) to perform the charging function and protect the rechargeable battery (3) against any damage. The operating indicator (1) is a LED. In this embodiment, there are two LEDs. The electronic circuit board (4) includes an electronic switch circuit, which controls the electric circuit according to the input signals, so that the rechargeable battery (3) electrifies the electric heating rod (82) inside the atomizer (8) and the LEDs as well.

[0065]As shown in FIGS. 1 and 2, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a reed relay (52) on one of its ends. Both ends of the said reed relay (52) correspond to the relay electrodes (51) respectively.

[0066]As shown in FIG. 5-8, the atomizer assembly is an atomizer (8), which includes a porous component (81) and a heating rod (82). The body of the porous component (82) has a run-through atomizing chamber (811). The diameter of the electric heating rod (82) is less than the diameter of the atomizing chamber (811). The electric heating rod (82) enters into the atomizing chamber (811), and there is a clearance between the electric heating rod (82) and interior wall of the atomizing chamber (811), which forms a negative pressure cavity (83). One end of the said porous component (81) fits with the said cigarette bottle assembly. As FIGS. 5, 7 and 8 show, the porous component (81) has a protuberance (812) on the other end, and the protuberance (812) fits with the cigarette bottle assembly. The protuberance (812) is a protruding half sphere, on the side of which there is a run-through hole (813) connecting to the atomizing chamber (811). Of course, the protuberance (812) may also be a taper, rectangle or any other shape. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer

foam or foamed ceramics, providing the remarkable capabilities in liquid absorption and diffusion, and the ability to absorb the liquid stored in the cigarette bottle assembly.

[0067]As shown in FIG. 6, the electric heating rod (82) includes a cylinder (821). The heating wire (822) is wound on the wall of the cylinder (821). On the wall of both ends of the cylinder (821), there are mandrils (823) respectively, which lie against the interior wall of the atomizing chamber (811) of the porous component (81). There is a negative pressure cavity (83) between the electric heating rod and interior wall of the atomizing chamber.

[0068]The heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked. The electric heating rod (82) may alternatively have on its peripheral wall the heating layer made of electrically conductive ceramic PTC material, to replace the heating wire.

[0069]Of this embodiment, the battery assembly and atomizer assembly are mutually connected and then installed inside the integrally formed shell (a) to form a one-piece part. The rechargeable battery (3) may be charged without frequent change of battery. The user just needs to plug the cigarette bottle assembly into the open end of the shell (a), for easy use and very easy change.

[0070]As shown in 3 and 4, the cigarette bottle assembly includes a hollow cigarette holder shell (b), and a perforated component for liquid storage (9) inside the shell (b). The perforated component for liquid storage (9) is made of such materials as PLA fiber, terylene fiber or nylon

fiber, which are suitable for liquid storage. Alternatively, it may be plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polycarbonate. One end of the cigarette holder shell (b) plugs into the shell (a), and the outer peripheral surface of the cigarette holder shell (b) has an inward ventilating groove (b2). On one end surface of the cigarette holder shell (b), there is an air channel (b1) extending inward. The air channel (b1) is located in the center on the surface of one end of shell (b).

[0071]As shown in FIG. 1-9, one end of the porous component (81) lies against one end surface of the said perforated component for liquid storage (9), and contacts the perforated component for liquid storage (9). It absorbs the cigarette liquid from the perforated component for liquid storage (9). When the smoker smokes, the cavity of the cigarette holder shell (b) is in the negative pressure state. In the shell (b), one end of the airflow sensor (5) forms a normal pressure cavity, while the other end forms a negative pressure cavity. The air pressure difference between the normal pressure cavity and negative pressure cavity or the high-speed airflow enables the magnetic steel (54) of the airflow sensor (5) to drive the reed relay(52) to contact the relay electrode (51). As shown in FIG. 20, the electric circuit is electrified, and the electronic switch circuit on the electronic circuit board (4) is electrified. Thus, the rechargeable battery (3) starts to electrify the electric heating rod (82) inside the atomizer (8), and at the same time, the LEDs, which are electrified by the rechargeable battery (3), emit light. The air enters the normal pressure cavity through the air inlet (a1), passes the check valve (7) via the airflow passage in the airflow sensor (5), and flows to the negative pressure cavity (83) in the atomizer (8). Since the negative pressure cavity (83) provides the negative pressure compared with the outside, the air

flow sprays into it, bringing the cigarette liquid from the porous component (81) to spray into the negative pressure cavity (83) in the form of fine drips. In the meantime, the electric heating rod (82) is electrified by the rechargeable battery (3) under the control of electronic circuit board (4), to heat the fine drips for atomization. After atomization, the big-diameter fine drips are re-absorbed by the porous component (81) under the action of vortex, while the small-diameter fine drips are suspended in the airflow to form gasoloid, which is discharged through the negative pressure cavity (83) and run-through hole (813), flows into the cigarette holder shell (b) of the cigarette bottle assembly, and is absorbed by the air channel (b1). When the gasoloid enters the cigarette holder shell (b), multiple small liquid drips are condensed into bigger ones, which fall into the clearance between the cigarette holder shell (b) and air channel (b1) without being absorbed by the air channel (b1). The perforated component for liquid storage (9) of the cigarette bottle assembly and the porous component (81) of the atomizer (8) contact each other to achieve the capillary impregnation for liquid supply.

[0072]The unit and its connecting structure of this invention may also be loaded with drugs for delivery to the lung.

[0073]As shown in FIGS. 22, 23 and 24, the electronic cigarette (5) is held in a charging device. The charging device includes a case (1), which contains an auxiliary charging storage battery (2) inside it, and holds the electronic cigarette (5) and the charger (3) for the rechargeable battery embedded in the electronic cigarette (5), as well as the power supply circuit. The power inputs of the auxiliary charging storage battery (2) and charger (3) are connected with the power supply respectively. The charger (3) in this embodiment is a constant voltage & current charger. It may

be a GY5210 charger, or any other constant voltage & current charger. The case (1) has a spare liquid supply bottle (4) in it. The power output of the auxiliary charging storage battery (2) is connected with the power input of the charger (3). The power output of the charger (3) is a charging slot (31), which fits with the charging plug of the rechargeable battery inside the electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

[0074]As shown in FIGS. 23 and 24, on the body of the shell (1), there is a pair of slide ways (12) corresponding to the position of the electronic cigarette, and on the slide ways, there is a slide cover (11).

[0075]In the second preferred embodiment of this utility model, a restriction component (10), which is detachable, is set on one end of the said porous component (81). There is a restriction hole (101) on the body of the restriction component (10). The restriction hole (101) corresponds to the atomizing chamber (811). The pore diameter of the restriction hole is less than the inner diameter of the atomizing chamber (811) to the extent that the size of the restriction component (10) installed on the porous component (81) varies, for the purpose of airflow capacity control. On the basis of different applications, the restriction component of different sizes and pore diameters may be used.

[0076]In the third preferred embodiment of this utility model, as shown in 11 and 12, on the outer peripheral wall of the cigarette shell (b), there is a protruding rib (b2) that is evenly partitioned. The perforated component for liquid storage (9) enters the cigarette holder shell (b)

and lies against the protruding rib (b2). Thus, there appears a clearance between the outer peripheral surface of the perforated component for liquid storage (9) and the interior wall of the shell (b). The clearance is for connection the shell (a) and cigarette holder shell (b). When the user smokes, the air channel (b1) absorbs the air to cause airflow inside the shell (a), thus triggering the airflow sensor (5) and eventually starting the electronic cigarette. Also, the atomizer (8) works to atomize the cigarette liquid and produce gas flow, which enters the cigarette holder shell (b).

[0077]In the fourth preferred embodiment of this utility model, as shown in FIGS. 13, 14, 15 and 16, on one end of the cylinder (821), there is a fixed plate (84), whose outer peripheral wall has partitioned supports (841). The outer ends of the supports (841) lie against the interior wall of the shell (a), thus suspending the cylinder (821), which is connected with the fixed plate (84), in the cavity of the shell (a). On the surface of the fixed plate (84), there is a mandril (842), whose front end lies against one end of the porous component (81), so that the fixed plate (84) is separated from the atomizing chamber (811) of the porous component (81). As a result, the run-through hole on one end of the atomizing chamber (811) won't be blocked, and the mist generated in the atomizing chamber (811) can be dispersed. One end of the porous component (81) has two protuberances (812) at the outlet of the atomizing chamber (811). Between the two protuberances (812) is a clearance. The two protuberances (812) lie against the perforated component for liquid storage (9).

[0078]In the fifth preferred embodiment of this utility model, as shown in FIGS. 17 and 18, the atomizer assembly is an atomizer (8), which includes a frame (82), the porous component (81)

set on the frame (82), and the heating wire (83) wound on the porous component (81). The frame (82) has a run-through hole (821) on it. The porous component (81) is wound with heating wire (83) in the part that is on the side in the axial direction of the run-through hole (821). One end of the porous component (81) fits with the cigarette bottle assembly. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

[0079]In the sixth preferred embodiment of this utility model, as shown in FIG. 19, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a Hall element (52), or a magneto-diode or a magneto-triode on one of its ends. FIG. 21 shows the electric circuit of the electronic cigarette of this solution.

Claims

What is claimed is:

1. An aerosol electronic cigarette includes a battery assembly, an atomizer assembly and a cigarette bottle assembly, wherein further including a shell (a) that is hollow and integrally formed; the said battery assembly connects with the said atomizer assembly and both are located in the said shell (a); the said cigarette bottle assembly is located in one end of the shell (a), which is detachable; the said cigarette bottle assembly fits with the said atomizer assembly; the said shell (a) has through-air-inlets (a1).

2. The aerosol electronic cigarette of claim 1, wherein the said battery assembly includes the battery, and the operating indicator (1), electronic circuit board (4), and airflow sensor (5), which are connected with the said battery; the signal output of the said airflow sensor (5) is connected with the said electronic circuit board (4).

3. The aerosol electronic cigarette of claim 2, further including a check valve (7); the said battery is a rechargeable battery (3), which has a flexibly connected charging plug (2); the blades (21) of the said charging plug (2) come out of the other end of the said shell (a).

4. The aerosol electronic cigarette of claim 3, wherein a spring (6) between the said charging plug (2) and rechargeable battery (3), which lies against the body of the said rechargeable battery (3) on one end, and its free end lies against the said charging plug (2).

5. The aerosol electronic cigarette of claim 2, wherein the said battery is a rechargeable battery (3), which has a charging slot on it; the said operating indicator (1) is a LED.

6. The aerosol electronic cigarette of claim 2, wherein the said airflow sensor (5) may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor.

7. The aerosol electronic cigarette of claim 2, wherein the said electronic circuit board (4) includes an electronic switch circuit.

8. The aerosol electronic cigarette of claim 2, wherein the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a reed relay (52) on one of its ends, both ends of the said reed relay (52) correspond to the relay electrodes (51) respectively.

9. The aerosol electronic cigarette of claim 2, wherein the said airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a Hall element (52) or a magneto-diode or a magneto-triode on one of its ends.

10. The aerosol electronic cigarette of claim 3, wherein the atomizer assembly is an atomizer (8), which includes a porous component (81) and a heating body.

11. The aerosol electronic cigarette of claim 10, wherein the said atomizer (8) includes an electric heating rod (82); the body of the said porous component (81) has a run-through

atomizing chamber (811); the diameter of the said electric heating rod (82) is less than the diameter of the said atomizing chamber (811); the said electric heating rod (82) enters into the said atomizing chamber (811), and there is a clearance between the said electric heating rod (82) and interior wall of the atomizing chamber (811); the said clearance forms a negative pressure cavity (83); one end of the said porous component (81) fits with the said cigarette bottle assembly.

12. The aerosol electronic cigarette of claim 11, wherein the said electric heating rod (82) includes a cylinder (821); the said heating body is heating wire (822), which is wound on the wall of the cylinder (821); on the wall of both ends of the cylinder (821), there are mandrils (823) respectively; the said porous component (81) has a protuberance (812) on one end, and the protuberance (812) fits with the cigarette bottle assembly; the said protuberance (812) is a protruding half sphere, on the side of which there is a run-through hole (813) connecting to the atomizing chamber (811).

13. The aerosol electronic cigarette of claim 11, wherein the said electric heating rod (82) includes a cylinder (821); the said heating body is made of electrically conductive ceramic PTC material; the said heating body is set on the wall of the said cylinder (821); on the wall of both ends of the said cylinder (821), there are mandrils (823) respectively; the said porous component (81) has a protuberance (812) on one end, and the said protuberance (812) fits with the said cigarette bottle assembly; the said protuberance (812) is a protruding half sphere, on the side of which there is a run-through hole (813) connecting to the said atomizing chamber (811).

14. The aerosol electronic cigarette of claim 10, wherein the said heating body is heating wire; the said atomizer (8) includes a frame (82); the said porous component (81) is set on the frame (82); the heating wire (83) is wound on the porous component (81); the frame (82) has a run-through hole (821) on it; the porous component (81) is wound with heating wire (83) in the part that is on the side in the axial direction of the run-through hole (821); one end of the porous component (81) fits with the cigarette bottle assembly.

15. The aerosol electronic cigarette of claim 10, wherein the said porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

16. The aerosol electronic cigarette of claim 10, wherein the said heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked.

17. The aerosol electronic cigarette described in claim 11 features that a restriction component, which is detachable, is set on one end of the said porous component (81); there is a restriction hole on the body of the said restriction component; the said restriction hole corresponds to the said atomizing chamber (811); the pore diameter of the said restriction hole is less than the inner diameter of the atomizing chamber (811).

18. The aerosol electronic cigarette of claim 12, wherein the said cigarette bottle assembly includes a hollow cigarette holder shell (b), and a perforated component for liquid storage (9) inside the shell (b); one end of the said cigarette holder shell (b) plugs into the shell (a), and the

outer peripheral surface of the said cigarette holder shell (b) has an inward ventilating groove (b2); on one end surface of the cigarette holder shell (b), there is an air channel (b1) extending inward.

19. The aerosol electronic cigarette of claim 18, wherein the said air channel (b1) is located in the center on one end surface of the said cigarette holder shell (b).

20. The aerosol electronic cigarette of claim 18, wherein one end of the porous component (81) lies against one end surface of the said perforated component for liquid storage (9), and contacts the perforated component for liquid storage (9).

21. The aerosol electronic cigarette of claim 18, wherein the said perforated component for liquid storage (9) is made of such materials as PLA fiber, terylene fiber or nylon fiber.

22. The aerosol electronic cigarette of claim 18, wherein the said perforated component for liquid storage (9) is plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polycarbonate.

23. The aerosol electronic cigarette of claim 11, wherein the said aerosol electronic cigarette (5) is located in a charging device.

24. The aerosol electronic cigarette of claim 23, wherein the said charging device includes a case (1), which contains an auxiliary charging storage battery (2) inside it, and holds the electronic

cigarette (5) and the charger (3) for the rechargeable battery embedded in the electronic cigarette (5); the power inputs of the auxiliary charging storage battery (2) and charger (3) are connected with the power supply respectively.

25. The aerosol electronic cigarette of claim 24, wherein the said case (1) has a spare liquid supply bottle in it.

26. The aerosol electronic cigarette of claim 24, wherein the said power output of the auxiliary charging storage battery (2) is connected with the power input of the charger (3).

27. The aerosol electronic cigarette of claim 24, wherein the power output of the said charger (3) is a charging slot (31), which fits with the charging plug of the rechargeable battery inside the electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

28. The aerosol electronic cigarette of claim 26, wherein the said charger (3) is a constant voltage & current charger.

29. The aerosol electronic cigarette of claim 24, wherein, on the body of the said shell (1), there is a pair of slide ways (12) corresponding to the position of the said electronic cigarette, and on the slide ways (12), there is a slide cover (11).

ABSTRACT

An aerosol electronic cigarette includes a battery assembly, an atomizer assembly and a cigarette bottle assembly and also includes a shell (a) which is hollow and integrally formed. Said battery assembly connects with said atomizer assembly and both are located in said shell (a). Said cigarette bottle assembly is located in one end of the shell (a), which is detachable. Said cigarette bottle assembly fits with said atomizer assembly. Said shell (a) has through-air-inlets (a1).

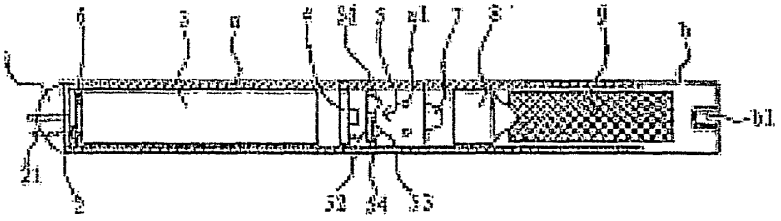

Figure 1

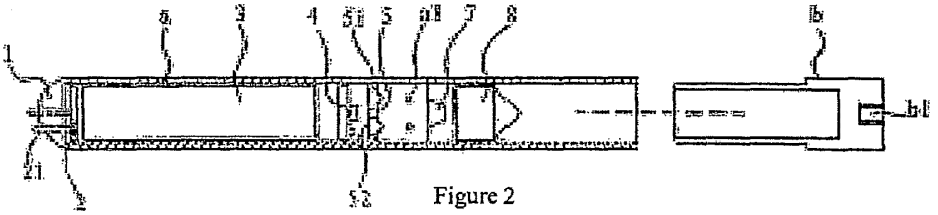

Figure 2

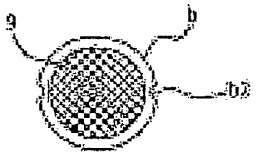

Figure 3

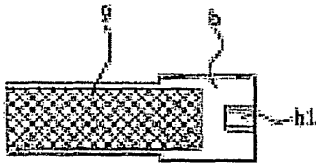

Figure 4

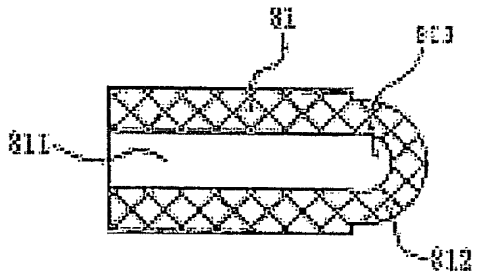

Figure 5

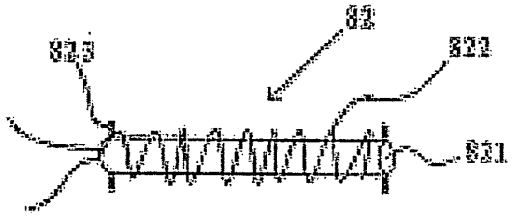

Figure 6

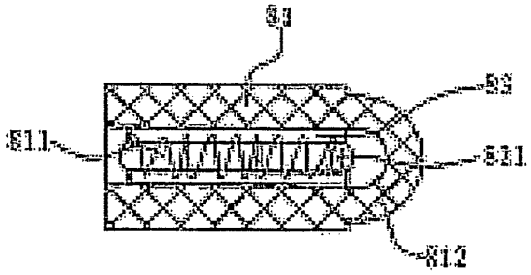

Figure 7

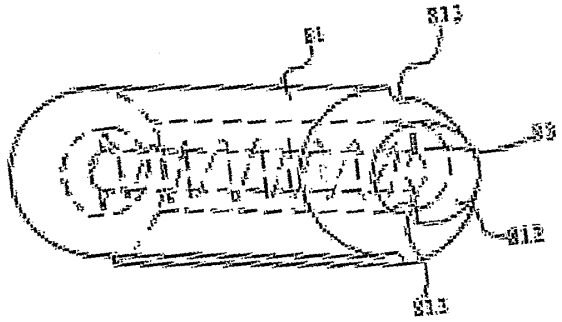

Figure 8

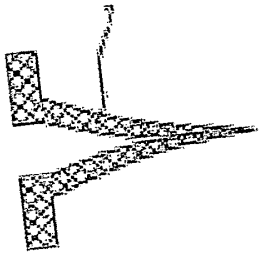

Figure 9

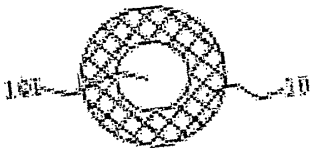

Figure 10

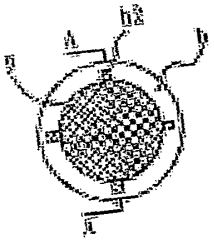

Figure 11

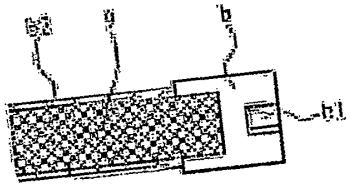

Figure 12

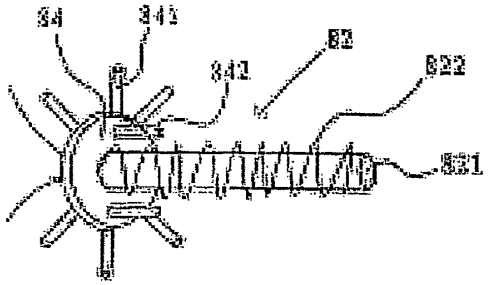

Figure 13

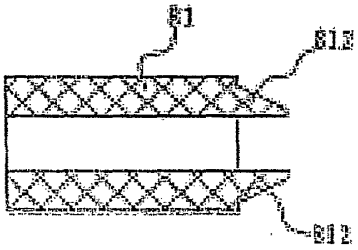

Figure 14

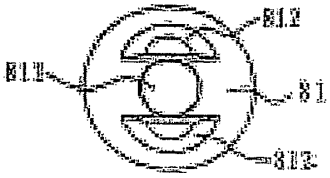

Figure 15

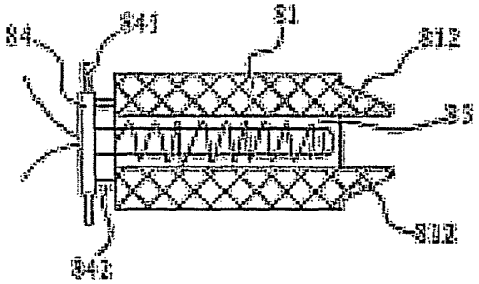

Figure 16

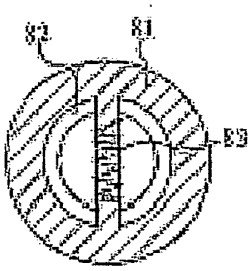

Figure 17

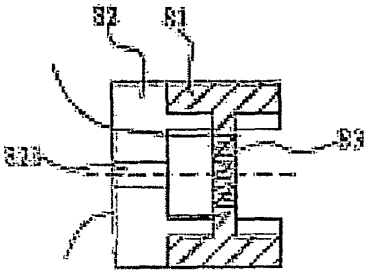

Figure 18

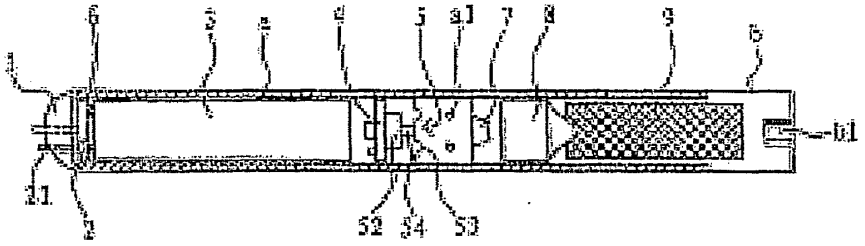

Figure 19

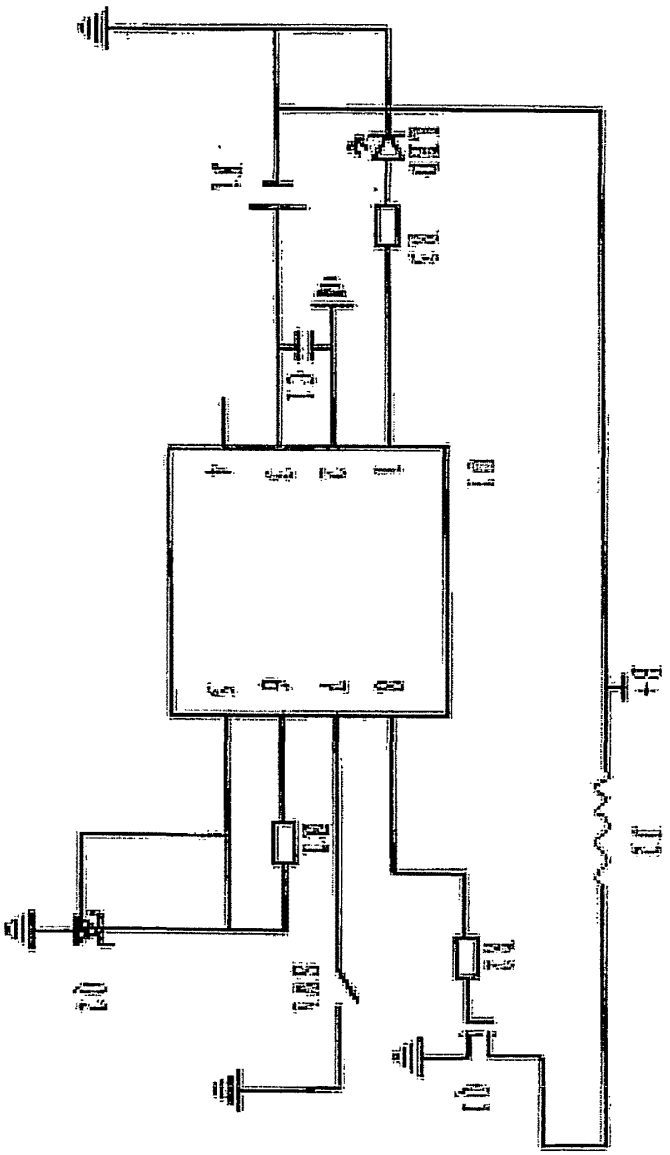

Figure 20

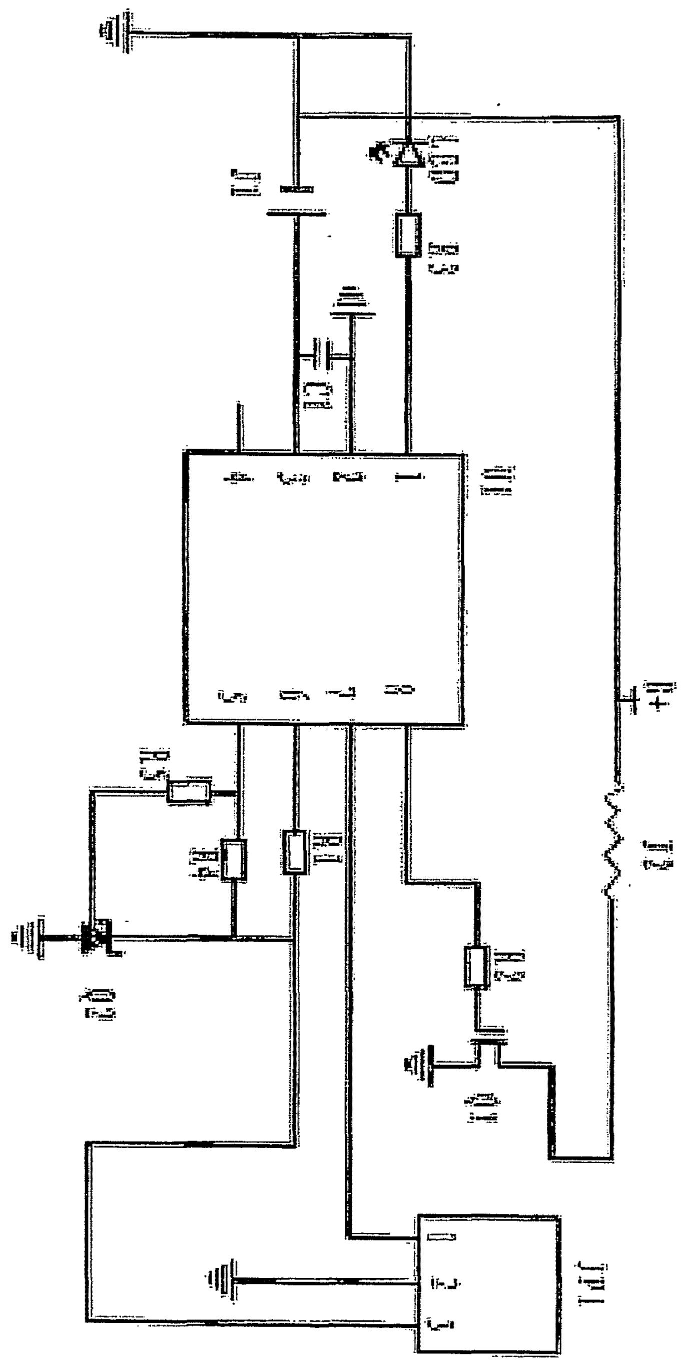

Figure 21

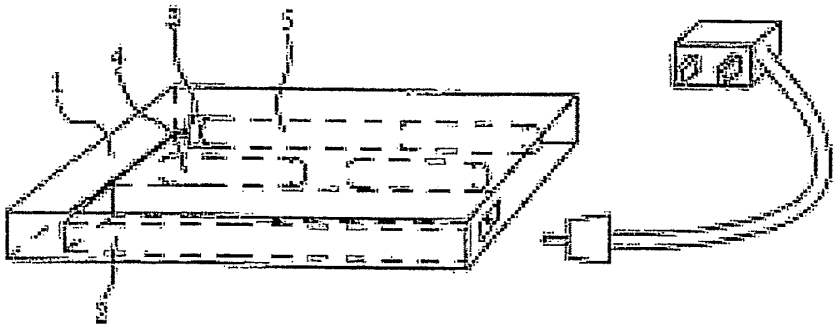

Figure 22

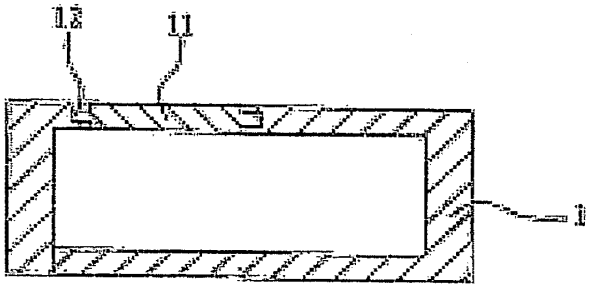

Figure 23

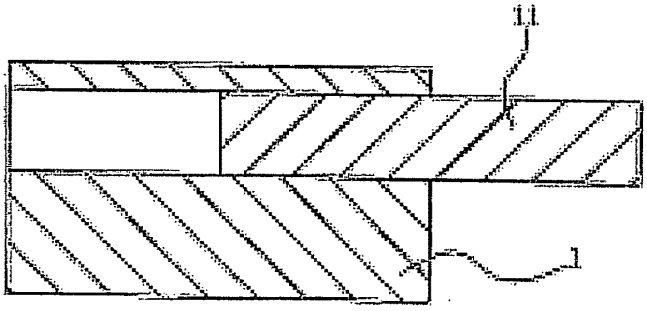

Figure 24

Electronic Patent Application Fee Transmittal	
Application Number:	
Filing Date:	
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Timothy Joseph Maier
Attorney Docket Number:	JANLEA-001-DIV
Filed as Small Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	82	82
Utility Search Fee	2111	1	270	270
Utility Examination Fee	2311	1	110	110
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		462

Electronic Acknowledgement Receipt	
EFS ID:	9810496
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	62008
Filer:	Timothy Joseph Maier
Filer Authorized By:	
Attorney Docket Number:	JANLEA-001-DIV
Receipt Date:	05-APR-2011
Filing Date:	
Time Stamp:	12:48:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$462
RAM confirmation Number	9410
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1		JANLEA-001-DIV-ApplicationAsFiled-4-5-11.pdf	2151527 906bf06cc7fb0dce37622a7bc8315d7c814ee558	yes	60

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Transmittal of New Application	1	1
Application Data Sheet	2	4
Oath or Declaration filed	5	7
Preliminary Amendment	8	11
Transmittal Letter	12	13
Information Disclosure Statement (IDS) Filed (SB/08)	14	16
Foreign Reference	17	17
Foreign Reference	18	18
Foreign Reference	19	19
NPL Documents	20	25
Specification	26	45
Claims	46	51
Abstract	52	52
Drawings-only black and white line drawings	53	60

Warnings:					
Information:					
2	Fee Worksheet (PTO-875)	fee-info.pdf	32748 2d8c6650c46878b8e274dd1241f63ad659378b43	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2184275		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/079,937	Filing Date 04/05/2011	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☒ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☒ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☒ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
	04/05/2011	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 1	Minus	** 20	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	* 1	Minus	***3	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/ROBERT SHERMAN/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/079,937

APPLICATION AS FILED - PART I

	(Column 1)	(Column 2)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE($)	FEE($)		RATE($)	FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	82		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	270		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	110		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	1 minus 20 =	*	x 26 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 110 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $270 ($135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	462		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1)		(Column 2)	(Column 3)					
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/079,937	04/05/2011	Li HAN	JANLEA-001-DIV

CONFIRMATION NO. 1784

62008
MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

FORMALITIES LETTER

OC000000047139610

Date Mailed: 04/14/2011

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to this application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) are required. The drawings submitted are not acceptable because:
  - The drawings submitted to the Office are not electronically reproducible because portions of figures All are missing and/or blurry.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

/sduong/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/079,937	04/05/2011	2858	462	JANLEA-001-DIV	1	1

CONFIRMATION NO. 1784

62008
MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

FILING RECEIPT

OC000000047139609

Date Mailed: 04/14/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Li HAN, Hong Kong, CHINA;

Power of Attorney: The patent practitioners associated with Customer Number 62008

Domestic Priority data as claimed by applicant

This application is a DIV of 12/226,818 10/29/2008
which is a 371 of PCT/CN2007/001575 05/15/2007

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
CHINA 200620090805.0 05/16/2006

If Required, Foreign Filing License Granted: 04/13/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/079,937**

Projected Publication Date: To Be Determined - pending completion of Corrected Papers

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****

Title

AEROSOL ELECTRONIC CIGARETTE

Preliminary Class

320

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

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set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Li HAN	Confirmation No.: 1784
U. S. Patent Application No: 13/079,937	Art Unit: 2858
Filed: April 5, 2011	Examiner: TBD
Title: AEROSOL ELECTRONIC CIGARETTE	Attorney Docket No.: JANLEA-001-DIV

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

May 19, 2011

Dear Sir:

In response to the Notice to File Corrected Application Papers dated April 14, 2011, Applicant hereby submits replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) in connection with above-identified application.

More specifically, the previously submitted drawings were deemed to be blurry so Applicant hereby submits clearer versions of the same drawings. No new matter has been added to correct the aforementioned deficiencies. Therefore, Applicant believes that the application is now ready for examination on the merits.

Respectfully Submitted,
Maier & Maier, PLLC

/Timothy J. Maier/
Timothy J. Maier
Attorney of Record
Reg. No. 51,986

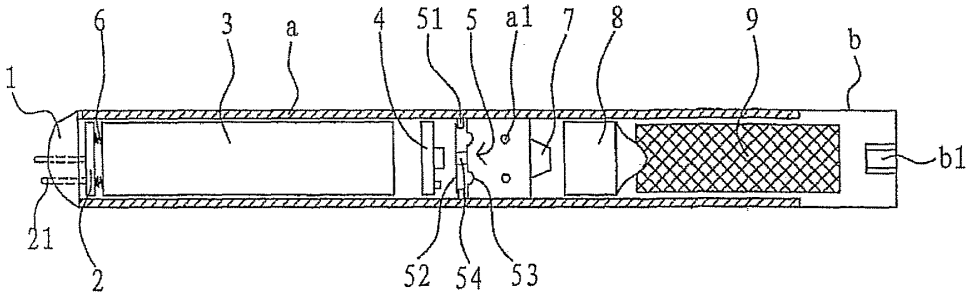


Figure 1

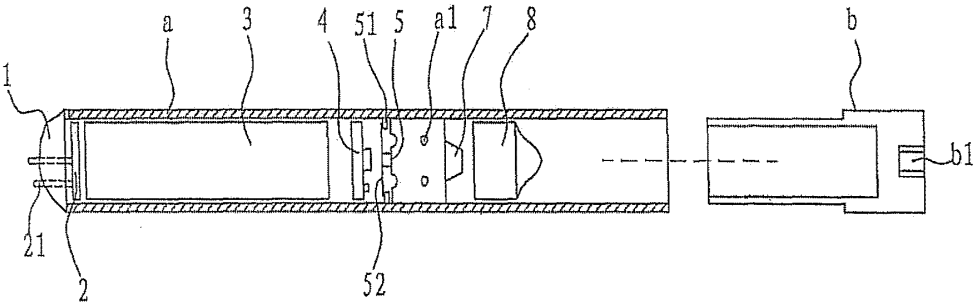


Figure 2

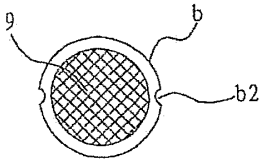


Figure 3

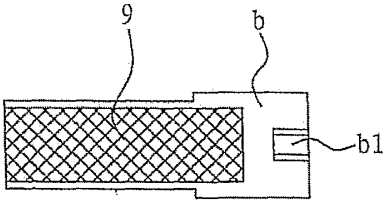


Figure 4

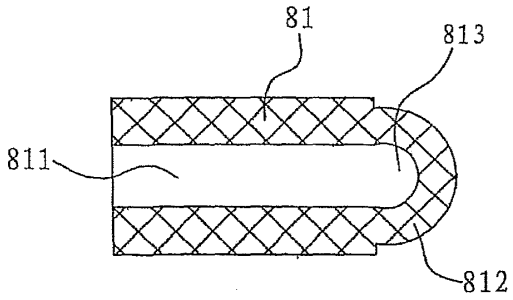


Figure 5

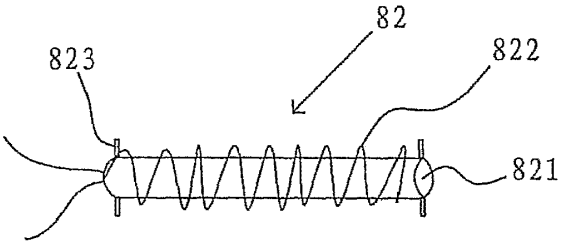


Figure 6

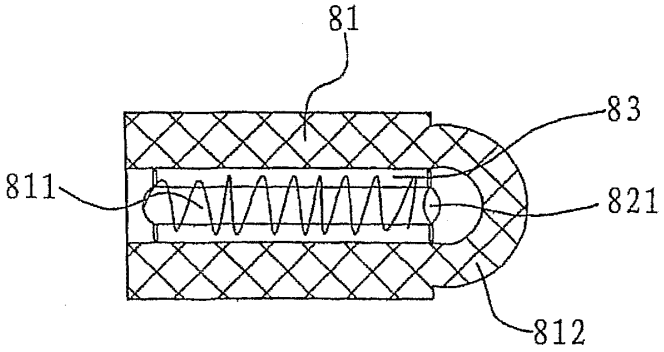
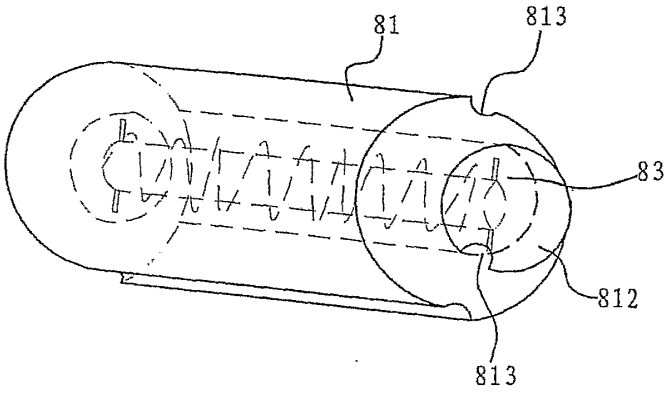


Figure 7



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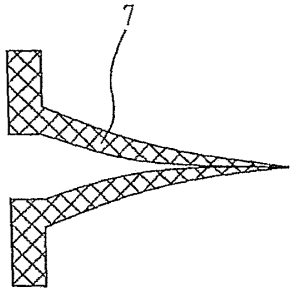


Figure 9

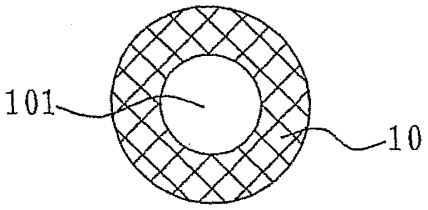


Figure 10

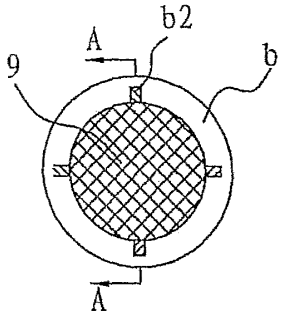
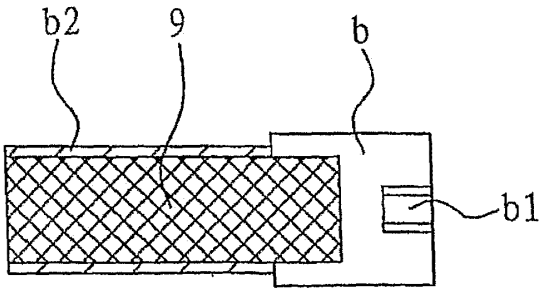


Figure 11



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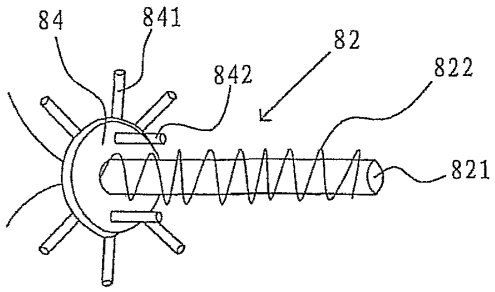

Figure 13

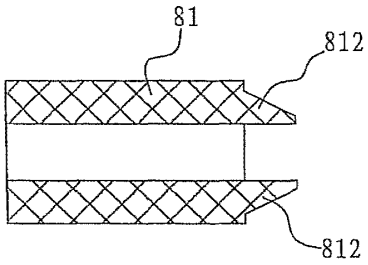

Figure 14

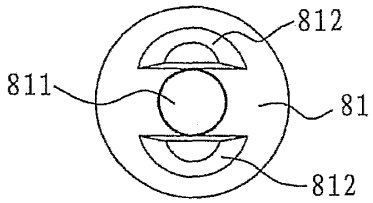

Figure 15

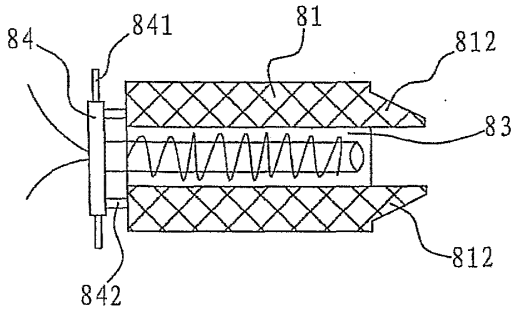

Figure 16

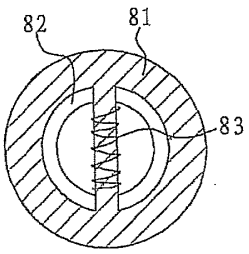

Figure 17

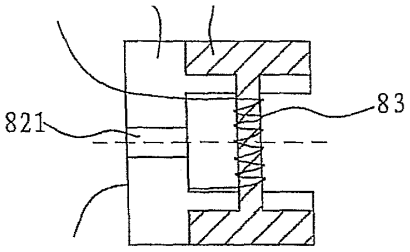

Figure 18

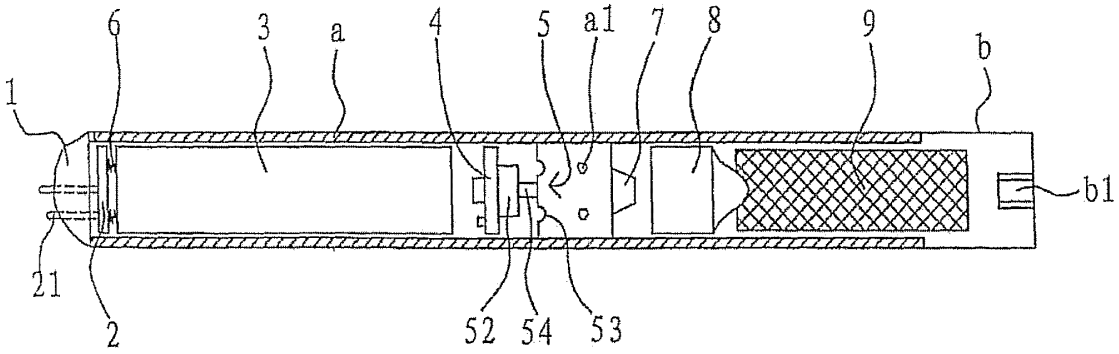

Figure 19

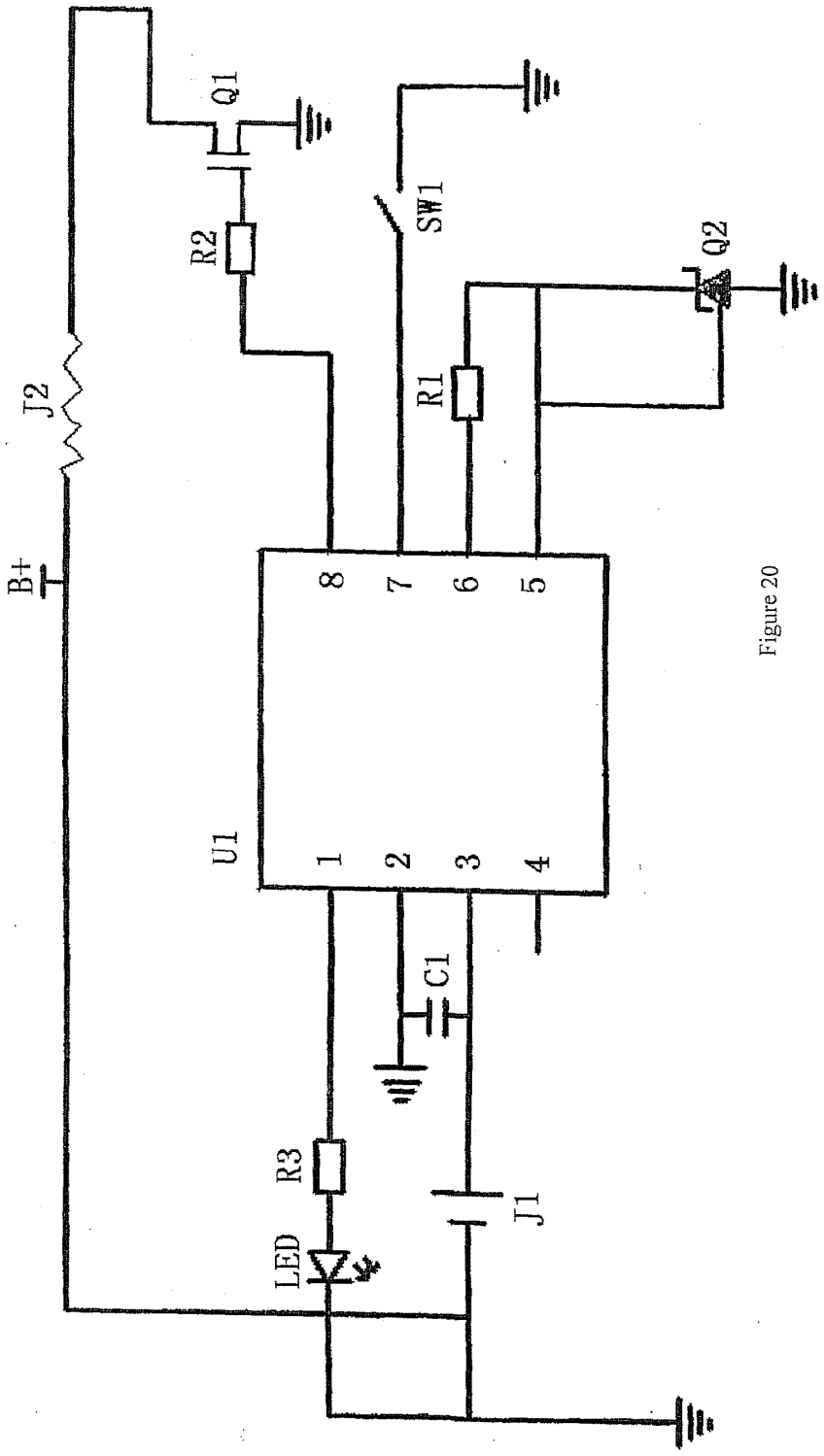

Figure 20

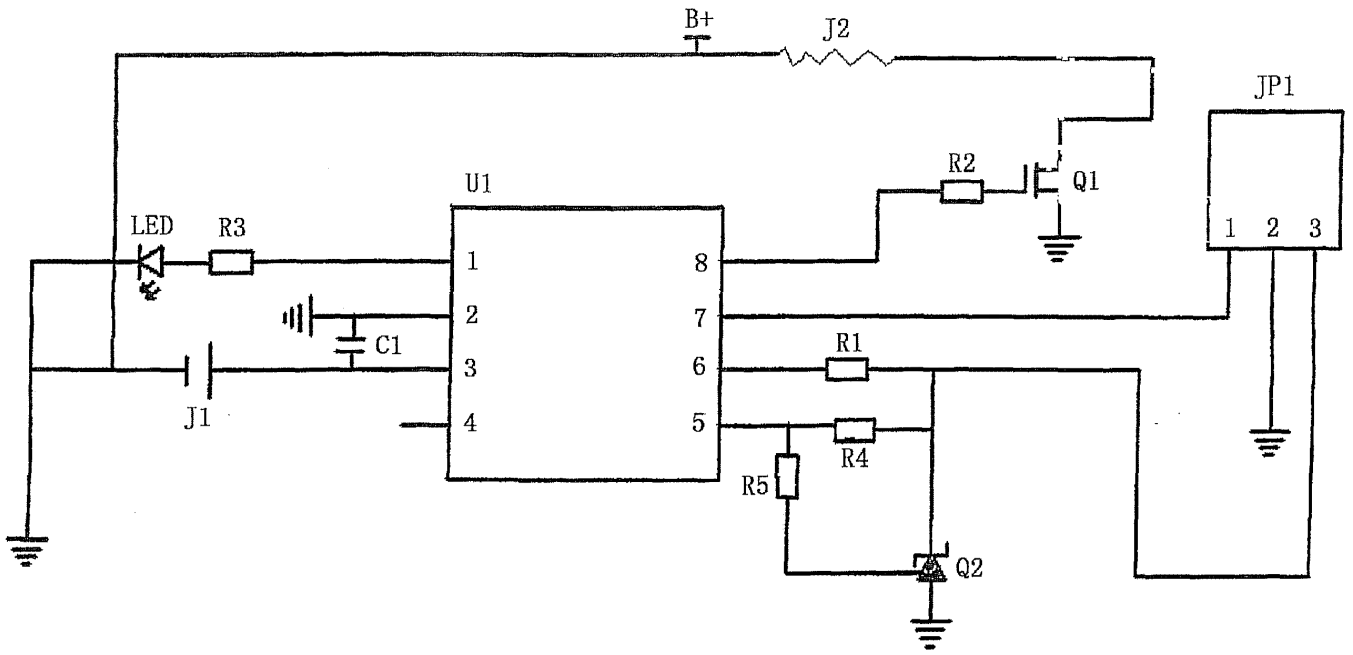

Figure 21

REPLACEMENT SHEET

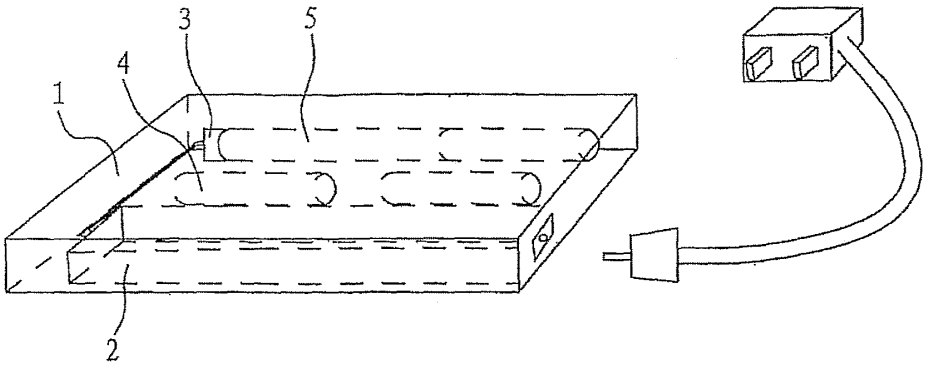

Figure 22

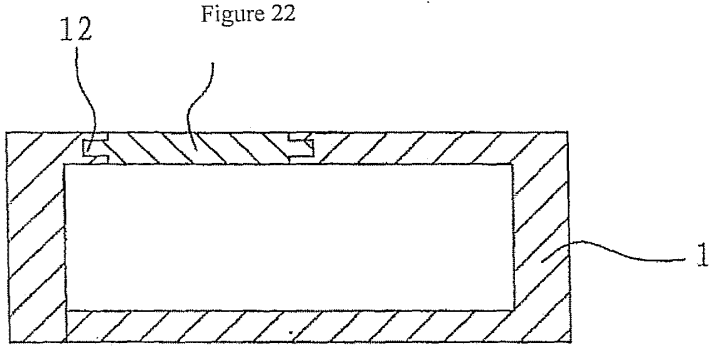

Figure 23

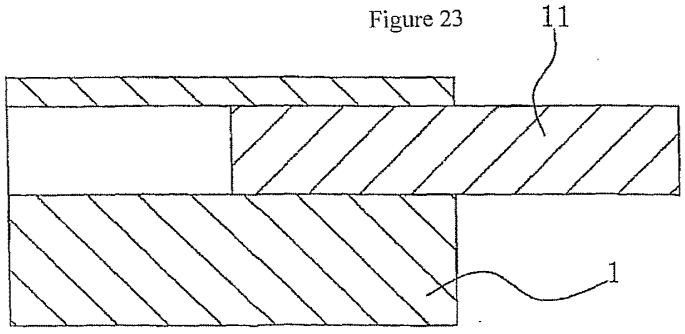

Figure 24

Electronic Acknowledgement Receipt	
EFS ID:	10129025
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	62008
Filer:	Timothy Joseph Maier
Filer Authorized By:	
Attorney Docket Number:	JANLEA-001-DIV
Receipt Date:	19-MAY-2011
Filing Date:	05-APR-2011
Time Stamp:	15:57:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		JANLEA-001-DIV-ResponsetoNFCAPAsFiled-5-19-11.pdf	189556 b07da3cb4ef5b81a30a624f7b6a67741093a9153	yes	9

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Response to Pre-Exam Formalities Notice	1	1
	Drawings-only black and white line drawings	2	9
Warnings:			
Information:			
	Total Files Size (in bytes):	189556	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 13/079,937

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	82		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	270		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	110		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	1 minus 20 =	*	x 26 =	0.00	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 =	*	x 110 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $270 ($135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	462		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)	OR	RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/079,937	04/05/2011	2858	462	JANLEA-001-DIV	1	1

CONFIRMATION NO. 1784

62008
MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

UPDATED FILING RECEIPT

OC000000047858374

Date Mailed: 05/26/2011

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Li HAN, Hong Kong, CHINA;

Power of Attorney: The patent practitioners associated with Customer Number 62008

Domestic Priority data as claimed by applicant

This application is a DIV of 12/226,818 10/29/2008
which is a 371 of PCT/CN2007/001575 05/15/2007

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
CHINA 200620090805.0 05/16/2006

If Required, Foreign Filing License Granted: 04/13/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/079,937**

Projected Publication Date: 09/01/2011

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****

Title

AEROSOL ELECTRONIC CIGARETTE

Preliminary Class

320

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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NOT GRANTED

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/079,937	04/05/2011	Li HAN	RUYAN-001-DOA

CONFIRMATION NO. 1784

62008
MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

PUBLICATION NOTICE

Title:AEROSOL ELECTRONIC CIGARETTE

Publication No.US-2011-0209717-A1
Publication Date:09/01/2011

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Li HAN	RUYAN-001-DOA	1784

62008 7590 07/19/2012

MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
MAYES, DIONNE WALLS	
ART UNIT	**PAPER NUMBER**
1747	

MAIL DATE	DELIVERY MODE
07/19/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	13/079,937	HAN, LI	
	Examiner	Art Unit	
	DIONNE WALLS MAYES	1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *30* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *30* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *19 May 2011* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 12/226,818.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In claim 30, lines 16-17, Applicant has recited “the said porous component is wound with heating wire in the part that is on the side in the axial direction of the run-through hole”; however, it is unclear which “part” and “side” Applicant is referring to, particularly because the phrases “the part” and “the side” lack antecedent bases. Clarification is requested.

Allowable Subject Matter

4. Claim 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The following is an Examiner's statement of reasons for allowance: The Examiner believes that the closest prior art of record, namely the CN 2719043 reference, neither teaches nor reasonably suggests an aerosol electronic cigarette having the claimed combination of structural features, including "an atomizer, which

includes a porous component and a heating body; the said heating body is heating wire…the heating wire is wound on the said porous component". Hence, the claim is allowable over the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE WALLS MAYES whose telephone number is (571)272-5836. The examiner can normally be reached on Monday thru Friday, 8:30A - 5:00P EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DIONNE WALLS MAYES/
Examiner, Art Unit 1747

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	
	Filing Date	2011-04-05
	First Named Inventor	Li HAN
	Art Unit	TBD
	Examiner Name	TBD
	Attorney Docket Number	JANLEA-001-DIV

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4945929	A	1990-08-07	Nazli EGILMEX	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2719043	CN	Y	2005-08-24	Li HAN	English abstract only	☐
	2	1252961	CN	A	2000-05-17	Guoqiang SONG	English abstract only	☐
	3	1575673	CN	A	2005-02-09	Seiko Epson Cor	English abstract only	☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	
	First Named Inventor	Li HAN
	Art Unit	TBD
	Examiner Name	TBD
	Attorney Docket Number	JANLEA-001-DIV

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	International Search Report issued August 16, 2007 in corresponding PCT Application No. PCT/CN2007/001575 filed May 15, 2007, and English translation thereto, 6 pages	☐

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EXAMINER SIGNATURE

Examiner Signature	/Dionne Walls Mayes/	Date Considered	07/17/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	10	((lik near3 hon) or (han near3 li)).in. and cigarette and wire	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:00
L2	3	((lik near3 hon) or (han near3 li)).in. and cigarette and (wire and (wind$3 or wound)).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:00
L3	3	((lik near3 hon) or (han near3 li)).in. and (wire and (wind$3 or wound)).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:01
L4	3	((lik near3 hon) or (han near3 li)).in. and (wire and (wind$3 or wound) and porous).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:15
S1	1	("8156944").PN.	US-PGPUB; USPAT	OR	OFF	2012/07/17 10:02
S2	940	((131/273) or (131/360) or (131/194) or (128/202.21)).CCLS.	US-PGPUB; USPAT	OR	OFF	2012/07/17 10:08
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		"20100200008" | "20100242974" | "20100307518" | "20110005535" | "20110036346" | "4228925" | "4641053" | "4848374" | "4945929" | "4945931" | "5042470" | "5060671" | "5080114" | "5095921" | "5159940" | "5190060" | "5249586" | "5261424" | "5285798" | "5322075" | "5666978" | "5743251" | "5746251" | "5878752" | "5894841" | "6040560" | "6041789" | "6164287" | "6178969" | "6196218" | "6357671" | "6443146" | "6532965" | "6772756" | "6803545" | "6854461" | "7131599" | "7845359").PN. OR ("8156944").URPN.) and wire				
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S7	1	("7832410").PN.	US-PGPUB; USPAT	OR	OFF	2012/07/17 12:05
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S9	6	((lik near3 hon) or (han near3 li)).in. and cigarette	USPAT	ADJ	ON	2012/07/17 12:11

EAST Search History (Interference)

< This search history is empty>

7/ 17/ 2012 3:51:58 PM
C:\ Users\ dmayes\ Documents\ EAST\ Workspaces\ 13079937.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13079937	HAN, LI
	Examiner	Art Unit
	DIONNE W MAYES	1747

SEARCHED			
Class	Subclass	Date	Examiner
131	360, 194, 273,	7/17/2012	DWM
128	202.21	7/17/2012	DWM

SEARCH NOTES		
Search Notes	Date	Examiner
EAST search conducted (see attached search strategy)	7/17/2012	DWM
Inventor search conducted	7/17/2012	DWM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: LI HAN	EXAMINER: DIONNE WALLS MAYES
APPLICATION NO.: 13/079,937	ART UNIT: 1747
FILED: APRIL 5, 2011	CONF. NO: 1784
FOR: **AEROSOL ELECTRONIC CIGARETTE**	

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

In response to the Office Action dated 07/19/2012, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

[Continued on Next Page.]

Certificate of Electronic Filing

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically filed with the U.S. Patent and Trademark Office on the date entered below.

Date of Electronic Submission

Signature

Printed Name

Amendment to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1-29. (Canceled)

30. (Currently Amended) An aerosol electronic cigarette, comprising:

a battery assembly, an atomizer assembly and a cigarette bottle assembly, and [[features]] a shell that is hollow and integrally formed [[:]];

the [[said]] battery assembly electrically connected [[connects]] with the [[said]] atomizer assembly, and both are located in the [[said]] shell;

the [[said]] cigarette bottle assembly is detachably located in one end of the shell, and fits with the [[said]] atomizer assembly inside it;

the [[said]] shell has through-air-inlets;

the atomizer assembly is an atomizer, which includes a porous component and a heating body;

the [[said]] heating body is heating wire;

the [[said]] atomizer includes a frame;

the [[said]] porous component is supported by the ~~set on the said~~ frame;

the heating wire is wound on the [[said]] porous component;

the [[said]] frame has a run-through hole [[on it]];

~~the said porous component is wound with~~ a heating wire wound ~~in the on the side in the axial direction of~~ on a part of the porous component that is substantially aligned with the run-through hole; and with the porous component also positioned

substantially within the ~~one end of the said porous component fits in with the said~~ cigarette bottle assembly.

31. (New) An electronic cigarette, comprising:

a battery assembly and an atomizer assembly within a housing with the battery assembly electrically connected to the atomizer assembly;

a liquid storage component in the housing;

with the housing having one or more through-air-inlets;

the atomizer assembly including a porous component supported by a frame having a run-through hole;

a heating wire wound on a part of the porous component in the path of air flowing through the run-through hole; and

the porous component substantially surrounded by the liquid storage component.

32. (New) An electronic cigarette, comprising:

a battery assembly and an atomizer assembly within a housing with the battery assembly electrically connected to the atomizer assembly;

with the housing having one or more through-air-inlets and an outlet;

the atomizer assembly includes a frame having a run through hole, and a porous component between the frame and the outlet;

a heating wire wound on a part of the porous component which is substantially aligned with the run-through hole; and

with the porous component in contact with a liquid supply in the housing.

REMARKS

Claim 30 has been amended to overcome the section 112 rejection at paragraph 3 of the Office Action. Lines 16-17 of original claim 30 are directed to Fig. 18, as shown below.

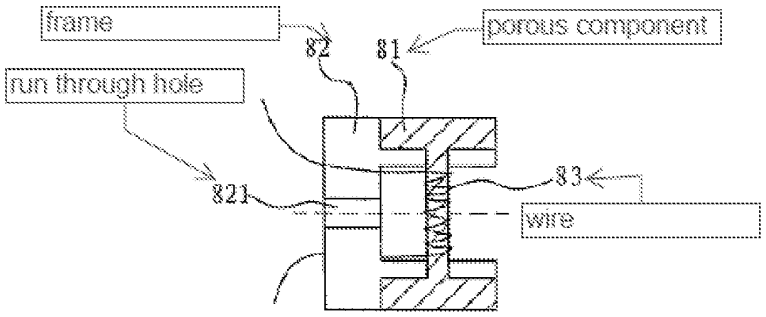

图 18

Claim 30 is accordingly amended to replace "…porous component is wound with heating wire in the on the side in the axial direction of the run-through hole" with "the heating wire is would on a part of the porous component that is substantially aligned with the run-through hole".

New claim 31 is similar to claim 30 and includes the elements of claim 30, but written with more common English usage. New claim 32 is similar to claims 30 and 31 but describes a heating wire wound on a part of the porous component substantially aligned with the run-through hole, as shown in Fig. 18 above; and with the porous component in contact with a liquid supply in the housing, rather than the removable bottle assembly of claim 30.

New claims 31 and 32 are believed to be allowable for the same reason that claim 30 is indicated to be allowable at paragraph 4 of the Office Action.

In view of the changes to the claims, the Application is in condition for allowance, and a Notice of Allowance is requested.

Dated: August 3, 2012

Customer No. 34055
Perkins Coie LLP
Patent - LA
P.O. Box 1208
Seattle, WA 98111-1208
Phone: (310) 788-3267
Fax: (206) 332-7198

Respectfully submitted,

PERKINS COIE LLP

By:KennethHOhriner/
Kenneth H. Ohriner
Reg. No. 31,646

Electronic Acknowledgement Receipt	
EFS ID:	13419040
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	62008
Filer:	Kenneth H. Ohriner
Filer Authorized By:	
Attorney Docket Number:	RUYAN-001-DOA
Receipt Date:	03-AUG-2012
Filing Date:	05-APR-2011
Time Stamp:	19:17:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		RuyonS8012US01Amendment.pdf	49492 f2a85adbf0cd3fc3e1d30da6e87fecb5503b1b4d	yes	5

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	3
	Amendment/Req. Reconsideration-After Non-Final Reject	4	5
Warnings:			
Information:			
	Total Files Size (in bytes):	49492	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/80 (11-08)
Approved for use through 11/30/2011. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☑ Practitioners associated with the Customer Number: 34055

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☑ The address associated with Customer Number: 34055

OR

☐ Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address:
BUYAN INVESTMENT (HOLDINGS) LIMITED
Room 1101, 11/F, China United Center
28 Marble Road, North Point, Hong Kong

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	[signature]	Date	2 MAR 2012
Name	GARY DREW DOUGLAS	Telephone	+852 92652850
Title	PRESIDENT		

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PTO/SB/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Han Li

Application No./Patent No.: 13/079,937 Filed/Issue Date: April 5, 2011

Titled: AEROSOL ELECTRONIC CIGARETTE

RUYAN INVESTMENT (HOLDINGS) LIMITED , a Corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;

2. ☐ an assignee of less than the entire right, title, and interest in
(The extent (by percentage) of its ownership interest is _____ %); or

3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 027776, Frame 0722, or for which a copy therefore is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Kenneth H. Ohriner/ August 3, 2012

Signature Date

Kenneth H. Ohriner Attorney

Printed or Typed Name Title

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	13419449
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	62008
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	RUYAN-001-DOA
Receipt Date:	03-AUG-2012
Filing Date:	05-APR-2011
Time Stamp:	20:32:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Examination support document	2012-08-03_Statement_763208012US1.pdf	20009 5ed3845aad0d72f460e66cf7b27186d186917af9	no	3
Warnings:					
Information:					

2	Power of Attorney	2012-08-03_POA_763208012US1.PDF	94378 78d9170ecb7243739317a2ca91dd4514c23cefee	no	2
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
3	Assignee showing of ownership per 37 CFR 3.73(b).	2012-08-03_373_763208012US1.pdf	422862 d93fd25abbf43b577776a4780f4e9d9f1fcaeace	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	537249		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: HON, LIK	EXAMINER: DIONNE WALLS MAYES
APPLICATION NO.: 13/079,937	ART UNIT: 1747
FILED: 04/05/2011	CONF. 1784
FOR: **AEROSOL ELECTRONIC CIGARETTE**	

STATEMENT OF RELATED APPLICATIONS

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

Applicant advises that the following may be material to the examination of the present Application. The applications or patents identified below include certain elements in common with the claims of the present application.

I. Family 2 Applications Based on PCT/CN04/00182

1. In Application10/547,244 claims were rejected by Examiner Mayes, AU 1747 over Voges U.S. Patent No. 6,196,218 in view of Anderson et al U.S. Pat. Appl. 2004/0184203; and over Voges in view of Katase U.S. Pat. Appl. 2005/0016550.

2. In Application 13/088,276 claims were rejected by Examiner Mayes over Voges in view of Robinson U.S. Patent No. 1,775,947.

3. Application 13/548,659 was filed on July 13, 2012 and has not yet been examined.

II. Family 3 Applications Based on PCT/CN05/00337

1. In 10/587,707, now U.S. Patent No. 7,832,410, claims were rejected as obvious by Examiner Calandra, AU 1791 over Voges, Chard U.S. Patent No. 4,484,374 and Kanesaka U.S. Patent No. 5,042,470.

2. In 12/944,123 claims were rejected by Examiner Mayes for double patenting over U.S. Patent No. 7,832,410 in view of Voges in view of Kanesaka, and as obvious over Voges in view of Kanesaka and Cewers U.S. Patent No. 6,357,671.

3. Application 13/560,789 was filed on July 27, 2012 and has not yet been examined.

III. Family 4A Applications Based on PCT/CN2007/001575

1. In 12/226,818, now U.S. Patent No. 8,156,944, Examiner Mayes rejected claims over Hon '043 U.S. Pat. App. 2007/0267031 (the Family 3 Application listed above) in view of Hon U.S. Pat. App. 2006/0196518 (the Family 2 Application listed above).

IV. Family 4B Applications Based on PCT/CN2007/001576

1. In 12/226,819 Examiner Mayes rejected claims over CN 2719043 (the Family 3 Application listed above) with U.S. Pat. App. 2006/01965518 (the Family 2 Application listed above) and Katase considered to be pertinent.

V. Family 6 Applications Based on PCT/CN2010/000125

1. Application 13/208,257 was filed 8/11/2011 and has not yet been examined.

2. Application 13/426,817 was filed 3/22/2012 and has not yet been examined.

VI. Family 8 Applications Based on PCT/CN2010/073613

1. Application 13/330,499 12/19/2011 and has not yet been examined.

Dated: August 3, 2012

Respectfully submitted,

PERKINS COIE LLP

Customer No. 34055
Perkins Coie LLP
Patent - LA
P.O. Box 1208
Seattle, WA 98111-1208
Phone: (310) 788-9900
Fax: (206) 332-7198

By: /KennethHOhriner/
Kenneth H. Ohriner
Registration No. 31,646

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/079,937	Filing Date 04/05/2011	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	08/03/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 3	Minus	** 20	= 0	X $30 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0	X $125 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)	OR	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/HALLEY MASSEY/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: LI HAN	EXAMINER: DIONNE WALLS MAYES
APPLICATION NO.: 13/079,937	ART UNIT: 1747
FILED: APRIL 5, 2011	CONF. NO: 1784
FOR: AEROSOL ELECTRONIC CIGARETTE	

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated 07/19/2012, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks begin on page 5 of this paper.

[Continued on Next Page.]

Certificate of Electronic Filing

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically filed with the U.S. Patent and Trademark Office on the date entered below.

August 7, 2012
Date of Electronic Submission

Debbie Gilbert
Signature

Debbie Gilbert
Printed Name

Please amend the Specification as follows:

Please replace the Specification as filed with the enclosed substitute specification filed under 37 CFR 1.125. The enclosed substitute specification corrects various grammatical and punctuation errors; divides the text into paragraphs; deletes extraneous and redundant content; and adds paragraph numbers for reference.

The Title of the Application is changed to "Electronic Cigarette" to provide a better idiomatic English description of claimed device.

Also enclosed is a copy of the original specification with handwritten markings showing the changes made in preparing the substitute specification.

Statement Under 37 CFR 1.125

The substitute specification contains no new matter.

Amendment to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1-29. (Canceled)

30. (Currently Amended) An aerosol electronic cigarette, comprising:

a battery assembly, an atomizer assembly and a cigarette bottle assembly, and ~~features~~ a shell that is hollow and integrally formed **[[:]]**;

the **[[**said**]]** battery assembly electrically connected ~~connects~~ with the **[[**said**]]** atomizer assembly, and both are located in the **[[**said**]]** shell;

the **[[**said**]]** cigarette bottle assembly is detachably located in one end of the shell, and fits with the **[[**said**]]** atomizer assembly inside it;

the **[[**said**]]** shell has through-air-inlets;

the atomizer assembly is an atomizer, which includes a porous component and a heating body;

the **[[**said**]]** heating body is heating wire;

the **[[**said**]]** atomizer includes a frame;

the **[[**said**]]** porous component is supported by the ~~set on the said~~ frame;

the heating wire is wound on the **[[**said**]]** porous component;

the **[[**said**]]** frame has a run-through hole **[[**on it**]]**;

~~the said porous component is wound with~~ a heating wire wound ~~in the on the side in the axial direction of~~ on a part of the porous component that is substantially aligned with the run-through hole; and with the porous component also positioned substantially within the ~~one end of the said porous component fits in with the said~~ cigarette bottle assembly.

31. (New) An electronic cigarette, comprising:

a battery assembly and an atomizer assembly within a housing with the battery assembly electrically connected to the atomizer assembly;

a liquid storage component in the housing;

with the housing having one or more through-air-inlets;

the atomizer assembly including a porous component supported by a frame having a run-through hole;

a heating wire wound on a part of the porous component in the path of air flowing through the run-through hole; and

the porous component substantially surrounded by the liquid storage component.

32. (New) An electronic cigarette, comprising:

a battery assembly and an atomizer assembly within a housing with the battery assembly electrically connected to the atomizer assembly;

with the housing having one or more through-air-inlets and an outlet;

the atomizer assembly includes a frame having a run through hole, and a porous component between the frame and the outlet;

a heating wire wound on a part of the porous component which is substantially aligned with the run-through hole; and

with the porous component in contact with a liquid supply in the housing.

REMARKS

A substitute specification is filed with this Amendment to correct various errors in the original specification.

Claim 30 has been amended to overcome the section 112 rejection at paragraph 3 of the Office Action. Lines 16-17 of original claim 30 are directed to Fig. 18, as shown below.

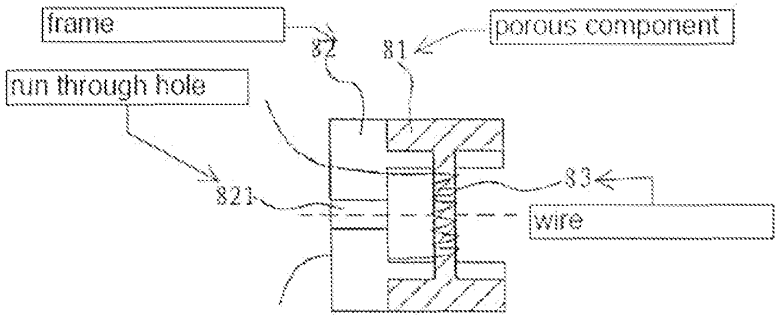

图18

Claim 30 is accordingly amended to replace "...porous component is wound with heating wire in the on the side in the axial direction of the run-through hole" with "the heating wire is would on a part of the porous component that is substantially aligned with the run-through hole".

New claim 31 is similar to claim 30 and includes the elements of claim 30, but written with more common English usage. New claim 32 is similar to claims 30 and 31 but describes a heating wire wound on a part of the porous component substantially aligned with the run-through hole, as shown in Fig. 18 above; and with the porous

component in contact with a liquid supply in the housing, rather than the removable bottle assembly of claim 30.

New claims 31 and 32 are believed to be allowable for the same reason that claim 30 is indicated to be allowable at paragraph 4 of the Office Action.

In view of the changes to the claims, the Application is in condition for allowance, and a Notice of Allowance is requested.

Dated: August 7, 2012

Customer No. 34055
Perkins Coie LLP
Patent - LA
P.O. Box 1208
Seattle, WA 98111-1208
Phone: (310) 788-3267
Fax: (206) 332-7198

Respectfully submitted,

PERKINS COIE LLP

By: /Kenneth H. Ohriner/
Kenneth H. Ohriner
Reg. No. 31,646

AEROSOL ELECTRONIC CIGARETTE

TECHNICAL FIELD

[0001]The present invention relates to an electronic cigarette, in particular, an aerosol electronic cigarette that doesn't contain tar but nicotine.

BACKGROUND ART

[0002]Today when "smoking is harmful to your health" has become a common sense, there are one billion people smoking cigarettes, and this figure is still rising. On Mar. 1, 2003, the World Health Organization (WHO) issued the first international smoking ban--Framework Convention on Tobacco Control. According to WHO's data, smoking causes 4,900,000 deaths each year. Smoking causes serious respiratory system diseases and cancers, though it is a hard job to persuade the smokers to completely quit smoking.

[0003]Nicotine is the effective ingredient of cigarette, which produces a lot of tar mist as they burn. cigarette burns. The tar mist accesses the pulmonary alveolus and is quickly absorbed into the blood. Nicotine thus acts on the receptor of the central nervous system, bringing the euphoria like stimulant drugs to the smokers, who feel light in the head and on wings as well.

[0004]Nicotine is a micromolecular alkaloid, which is basically harmless to human bodies ~~with~~ at a small dosage. Plus, its half life period is extremely short in blood. Tar is the major harmful substance in tobacco. Tobacco tar comprises ~~of~~ several thousands of ingredients, dozens of which are carcinogenic substances. ~~It has now been proved that second hand smoking is even more harmful to those who don't smoke.~~

[0005]To ~~seek the~~ provide cigarette substitutes that ~~don't~~ contain harmful tar ~~but nicotine~~ nicotine but not, many ~~inventors have used the relatively pure nicotine to create such~~ have been used. products as ~~"Cigarette Patch", "Nicotine Gargle", "Aerosol Packed in the High Pressure Tank with Propellant", "Nicotine Chewing Gum", and "Nicotine Beverage"~~. These products are not as harmful as tar, but are absorbed very slowly. As a result, ~~its peak concentration can't be effectively established in blood, and the~~ smokers can't be satisfied ~~to the~~ in full. In addition, the smokers are deprived of the "smoking" habit. ~~Therefore, the substituting products are not real cigarette substitutes or products helping to quit smoking.~~

[0006]The electronic cigarettes currently available on the market may resolve the above-mentioned issue, though they are complicated in structure, ~~Their cigarette bodies can be roughly divided into three sections, which have to be connected through via plugging or thread coupling before use. Also, their batteries have to be changed frequently, making it inconvenient for the users. What's worse, the electronic cigarettes~~ and they don't provide the ideal aerosol effects, and their atomizing efficiency is not high.

Summary

~~CONTENTS~~ OF INVENTION

[0007]To overcome the above-mentioned disadvantages, ~~this invention has been designed to provide~~ an aerosol electronic cigarette ~~that substitutes for cigarettes and helps the smokers to quit smoking.~~

~~[0008]The purpose of this invention is fulfilled with the following technical solution: an aerosol electronic cigarette~~ includes a battery assembly, an atomizer assembly and a ~~cigarette~~ bottle assembly, ~~and also includes a shell, which is hollow and integrally formed.~~ The ~~said~~ battery assembly connects with the ~~said~~ atomizer assembly and both are located in ~~the said shell~~. The ~~said cigarette~~ bottle assembly is located in one end of the ~~shell, which is detachable. The said cigarette bottle assembly~~ fits with the ~~said~~ atomizer assembly. ~~The said shell has through air inlets.~~

~~[0009]The additional features of this invention are as follows:~~ The ~~said~~ battery assembly includes the battery, ~~and the~~ operating indicator, electronic circuit board, and airflow sensor, which are connected with the ~~said~~ battery; the signal output of the ~~said~~ airflow sensor ~~is~~ connected ~~with~~ the ~~said~~ electronic circuit board.

~~[0010]It also includes a check valve. The said~~ battery is a rechargeable battery, ~~which has a flexibly connected charging plug. The blades of the said plug come out of the other end of the said shell.~~

[0011]Between the said charging plug and rechargeable battery is a spring, which lies against the body of the said rechargeable battery on one end, and its free end lies against the said charging plug.

[0012]The said battery is a rechargeable battery, which has a charging slot on it. The said operating indicator is a LED.

[0013]The said airflow sensor may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor.

[0014]The said electronic circuit board includes an electronic switch circuit.

[0015]The said airflow sensor has a silica gel corrugated membrane, which connects with magnetic steel with a reed relay on one of its ends. Both ends of the said reed relay correspond to the relay electrodes.

[0016]The said airflow sensor has a silica gel corrugated membrane, which connects with magnetic steel with a Hall element or a magneto-diode or a magneto-triode on one of its ends.

[0017]The said atomizer assembly is an atomizer, which includes a porous component and a heating body.

[0018]The said atomizer also includes an electric heating rod. The body of the said porous component has a run-through atomizing chamber. The diameter of the said electric heating rod is less than the diameter of the said atomizing chamber. The said electric heating rod enters into the said atomizing chamber, and there is a clearance between the said electric heating rod and interior wall of the atomizing chamber. The said clearance forms a negative pressure cavity. One end of the said porous component fits with the said cigarette bottle assembly.

[0019]The said electric heating rod includes a cylinder. The said heating body is heating wire, which is wound on the wall of the said cylinder. The said porous component has a protuberance on one end, and the said protuberance fits with the said cigarette bottle assembly. The said protuberance is a half sphere, on the side of which there is a run-through hole connecting to the said atomizing chamber.

[0020]The said electric heating rod includes a cylinder. The said heating body is made of electrically conductive ceramic PTC material. The said heating body is set on the wall of the said cylinder. On the wall of both ends of the said cylinder, there are mandrils respectively. The said porous component has a protuberance on one end, and the said protuberance fits with the said cigarette bottle assembly. The said protuberance is a half sphere, on the side of which there is a run-through hole connecting to the said atomizing chamber.

[0021]The said heating body is heating wire. The said atomizer assembly includes a frame. The said porous component is set on the said frame. The said porous component is wound with heating wire. The said frame has a run-through hole on it. The said porous component is wound

with heating wire in the part that is on the side in the axial direction of the said run-through hole. One end of the said porous component fits with the said cigarette bottle assembly.

[0022]The said porous component is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

[0023]The said heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked.

[0024]A restriction component, which is detachable, is set on one end of the said porous component. There is a restriction hole on the body of the said restriction component. The said restriction hole corresponds to the said atomizing chamber. The pore diameter of the said restriction hole is less than the inner diameter of the atomizing chamber.

[0025]The said cigarette bottle assembly includes a hollow cigarette holder shell, and a perforated component for liquid storage inside the said cigarette holder shell. One end of the said cigarette holder shell plugs into the said shell, and the outer peripheral surface of the said cigarette holder shell has an inward ventilating groove. On one end surface of the said cigarette holder shell, there is an air channel extending inward.

[0026]The said air channel is located in the center on one end surface of the said cigarette holder shell.

[0027]One end of the said porous component lies against one end surface of the said perforated component for liquid storage, and contacts the said perforated component for liquid storage.

[0028]The said perforated component for liquid storage is made of such materials as PLA fiber, terylene fiber or nylon fiber.

[0029]The said perforated component for liquid storage is plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polyearbonate.

[0030]The said electronic cigarette is held in a charging device.

[0031]The said charging device includes a case, which contains an auxiliary charging storage battery inside it, and holds the electronic cigarette and the charger for the rechargeable battery embedded in the electronic cigarette, as well as the power supply circuit. The power inputs of the said auxiliary charging storage battery and charger are connected with the power supply circuit respectively.

[0032]The said case has a spare liquid supply bottle in it.

[0033]The power output of the said auxiliary charging storage battery is connected with the power input of the said charger.

[0034]The power output of the said charger is a charging slot, which fits with the charging plug of the rechargeable battery inside the said electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

[0035]The said charger is a constant voltage & current charger.

[0036]On the body of the said shell, there is a pair of slide ways corresponding to the position of the said electronic cigarette, and on the slide ways, there is a slide cover.

[0037]This invention will bring the following benefits: (1) For this invention, the perforated component for liquid storage of the cigarette bottle assembly stores the nicotine liquid only, which doesn't contain cigarette tar, considerably reducing the carcinogenic risks of smoking. At the same time, the smokers can still enjoy the feel and excitement of smoking, and there is no fire hazard since there is no need for igniting. (2) For this invention, the battery assembly and atomizer assembly are directly installed inside the shell, and then connected with the cigarette bottle assembly. That is, there is just one connection between two parts, resulting in a very simple structure. For use or change, you just need to plug the cigarette holder into the shell, providing great convenience. When the nicotine liquid in the cigarette bottle assembly is used up or the cigarette bottle assembly is damaged and needs to be changed, the operation will be extremely easy. (3) For this invention, the rechargeable battery inside the battery assembly has a charging plug, whose blades come out of the shell. When the rechargeable battery inside the electronic cigarette runs out of power, it may be directly plugged into the charger for charging, with no need to remove the rechargeable battery, resulting in very easy use. (4) For this

~~invention, the charging device includes the charger and the auxiliary charging storage battery. The electronic cigarette is put inside the charger when not in use, and then the charging device may be electrified to charge the electronic cigarette and the auxiliary charging storage battery as well. In the event that power supply is not available for the charging device, the auxiliary charging storage battery may be used to charge the electronic cigarette. Therefore, the electronic cigarette can be charged anywhere you go, and it is very suitable for use when you are on a business or tourist trip. Further, the charging device includes a spare liquid supply bottle, which contains nicotine liquid for spare use when you are on a business or tourist trip. (5) For this invention, on one end of the shell of the cigarette bottle assembly, there is an air channel extending inward. The electronic cigarette works to produce mist, which flows to the shell, generating some fine drips; the fine drips are condensed into bigger drips, which fall along the exterior wall of the air channel into the cavity of the shell of the cigarette bottle assembly, so that they are not inhaled by the smoker out of the air channel. (6) In addition, with a little bit modification to the liquid storage, the unit and its connecting structure of this invention may also be loaded with drugs for delivery to the lung.~~

DESCRIPTION OF DRAWINGS

[0038]FIG. 1 is the side section view of ~~the~~ an electronic cigarette ~~of this invention~~.

[0039]FIG. 2 is the section view of the ~~shell~~ housing (a) separated from the cigarette bottle assembly ~~of the electronic cigarette of this invention, illustrating the structure of the cigarette bottle assembly that is detachably plug in the shell (a).~~

[0040]FIG. 3 is the diagram of the axial structure of the cigarette bottle assembly ~~of this invention~~, illustrating the ventilating groove on the peripheral surface of the cigarette holder ~~shell~~. housing

[0041]FIG. 4 is the side section view of the cigarette bottle assembly ~~of this invention~~, illustrating the structure of the air channel.

[0042]FIG. 5 is the side section view of ~~the~~ a porous component of the atomizer ~~of this invention, illustrating the atomizing chamber, a protruding half-sphere structure.~~

[0043]FIG. 6 is the diagram of the structure of ~~the~~ an electric heating rod of the atomizer ~~of this invention~~.

[0044]FIG. 7 is the side section of the atomizer ~~of this invention~~, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0045]FIG. 8 is the diagram of the ~~cubic structure of the~~ atomizer ~~of this invention~~, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0046]FIG. 9 is the section view of ~~the~~ a check valve ~~of this invention~~.

[0047]FIG. 10 is the front section view of ~~the~~ a restriction component in ~~the~~ a second ~~preferred~~ embodiment ~~of this invention, illustrating the structure of the restriction component.~~

[0048]FIG. 11 is ~~the~~ a diagram of the axial structure of the cigarette bottle assembly in ~~the third preferred~~ another embodiment ~~of this invention.~~

[0049]FIG. 12 is ~~the~~ a section view taken along line A-A ~~section view~~ of FIG. 11.

[0050]FIG. 13 is ~~the~~ a diagram of the structure of the electric heating rod of the atomizer in ~~the fourth preferred~~ another embodiment ~~of this invention~~.

[0051]FIG. 14 is ~~the~~ a section view of the porous component of the atomizer in the ~~fourth preferred~~ shown in Fig. 13 embodiment ~~of this invention.~~

[0052]FIG. 15 is ~~the~~ a diagram of the axial structure of FIG. 14.

[0053]FIG. 16 is ~~the~~ a side section view of the atomizer in the ~~fourth preferred~~ FIG. Fig. 13 embodiment of ~~this invention~~, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0054]FIG. 17 is ~~the~~ a diagram of the axial structure of the atomizer in ~~the fifth preferred~~ another embodiment ~~of this invention.~~

[0055]FIG. 18 is the side section view of the atomizer ~~in the fifth preferred embodiment of this invention.~~ shown in Fig. 17

[0056]FIG. 19 is the side section view of ~~the~~ another electronic cigarette ~~in the sixth preferred~~ embodiment ~~of this invention, illustrating the diagram of the structure of the airflow sensor adopting Hall element~~.

[0057]FIG. 20 is the electric circuit diagram of ~~the~~ an electronic cigarette ~~of this invention, with the airflow sensor adopting a reed relay structure.~~

[0058]FIG. 21 is ~~the~~ another electric circuit diagram of ~~the~~ an electronic cigarette ~~of this invention, with the airflow sensor adopting Hall element.~~

[0059]FIG. 22 is ~~the~~ a diagram ~~of the cubic structure of the~~ close charging device ~~of this invention,~~ illustrating the locations of and connection relation of various internal parts.

[0060]FIG. 23 is the side section view of the charging device ~~of this invention, illustrating the structure of slide way and cover.~~

[0061]FIG. 24 is the diagram of the front structure of the charging device ~~of this invention, illustrating the structure of the sliding cover.~~

SPECIFIC MODE FOR CARRYING OUT THE INVENTION

~~[0062]This invention is further described as follows on the basis of the drawings:~~

[0063]As shown in FIG. 1-10, ~~this utility model provides~~ an aerosol electronic cigarette, ~~which~~ includes a battery assembly, an atomizer assembly and a cigarette bottle assembly, and also includes a shell or housing (a), which is hollow and integrally formed. The battery assembly connects with the atomizer assembly and both are located in the shell. The cigarette bottle assembly is located in one end of the shell, which is detachable. The cigarette bottle assembly fits with the atomizer assembly. The shell has through-air-inlets (a1).

[0064]In this specific embodiment, the battery assembly includes the battery, and the operating indicator (1), electronic circuit board (4), and airflow sensor (5), which are connected with the battery. It also includes a check valve (7). The signal output of the airflow sensor (5) is connected with the said electronic circuit board (4). The battery is a rechargeable battery (3), which may be either a rechargeable polymer lithium ion battery or a rechargeable lithium ion battery. The airflow sensor (5) may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor. The rechargeable battery (3) has a flexibly connected charging plug (2). The blades (21) of the charging plug (2) come out of the other end of the shell (a). Between the charging plug (2) and rechargeable battery (3) is a spring (6), which lies against the body of the rechargeable battery (3) on one end, while its free end lies against the charging plug (2), forming a flexible structure, which buffers the charging plug (2) when plugged for charging, thus protecting the rechargeable battery against any damage. Of course, the

rechargeable battery (3) in this embodiment has a charging slot on it, which replaces the structure of charging plug (2) to perform the charging function and protect the rechargeable battery (3) against any damage. The operating indicator (1) is a LED. In this embodiment, there are two LEDs. The electronic circuit board (4) includes an electronic switch circuit, which controls the electric circuit according to the input signals, so that the rechargeable battery (3) electrifies the electric heating rod (82) inside the atomizer (8) and the LEDs as well.

[0065]As shown in FIGS. 1 and 2, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a reed relay (52) on one of its ends. Both ends of the said reed relay (52) correspond to the relay electrodes (51) respectively.

[0066]As shown in FIG. 5-8, the atomizer assembly is an atomizer (8), which includes a porous component (81) and a heating rod (82). The body of the porous component (82) has a run-through atomizing chamber (811). The diameter of the electric heating rod (82) is less than the diameter of the atomizing chamber (811). The electric heating rod (82) enters into the atomizing chamber (811), and there is a clearance between the electric heating rod (82) and interior wall of the atomizing chamber (811), which forms a negative pressure cavity (83). One end of the ~~said~~ porous component (81) fits with the ~~said~~ cigarette bottle assembly. As FIGS. 5, 7 and 8 show, the porous component (81) has a protuberance (812) on the other end, and the protuberance (812) fits with the cigarette bottle assembly. The protuberance (812) is a protruding half sphere, on the side of which there is a run-through hole (813) connecting to the atomizing chamber (811). Of course, the protuberance (812) may also be a taper, rectangle or any other shape. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer

foam or foamed ceramics, providing the remarkable capabilities in liquid absorption and diffusion, and the ability to absorb the liquid stored in the cigarette bottle assembly.

[0067]As shown in FIG. 6, the electric heating rod (82) includes a cylinder (821). The heating wire (822) is wound on the wall of the cylinder (821). On the wall of both ends of the cylinder (821), there are mandrils (823) respectively, which lie against the interior wall of the atomizing chamber (811) of the porous component (81). There is a negative pressure cavity (83) between the electric heating rod and interior wall of the atomizing chamber.

[0068]The heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked. The electric heating rod (82) may alternatively have on its peripheral wall the heating layer made of electrically conductive ceramic PTC material, to replace the heating wire.

[0069]~~Of~~ In this embodiment, the battery assembly and atomizer assembly are mutually connected and then installed inside the integrally formed shell (a) to form a one-piece part. The rechargeable battery (3) may be charged without frequent change of battery. The user just needs to plug the cigarette bottle assembly into the open end of the shell (a), for easy use and very easy change.

[0070]As shown in 3 and 4, the cigarette bottle assembly includes a hollow cigarette holder shell (b), and a perforated component for liquid storage (9) inside the shell (b). The perforated component for liquid storage (9) is made of such materials as PLA fiber, terylene fiber or nylon

fiber, which are suitable for liquid storage. Alternatively, it may be plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polycarbonate. One end of the cigarette holder shell (b) plugs into the shell (a), and the outer peripheral surface of the cigarette holder shell (b) has an inward ventilating groove (b2). On one end surface of the cigarette holder shell (b), there is an air channel (b1) extending inward. The air channel (b1) is located in the center on the surface of one end of shell (b).

[0071]As shown in FIG. 1-9, one end of the porous component (81) lies against one end surface of the ~~said~~ perforated component for liquid storage (9), and contacts the perforated component for liquid storage (9). It absorbs the cigarette liquid from the perforated component for liquid storage (9). When the smoker smokes, the cavity of the cigarette holder shell (b) is in the negative pressure state. In the shell (b), one end of the airflow sensor (5) forms a normal pressure cavity, while the other end forms a negative pressure cavity. The air pressure difference between the normal pressure cavity and negative pressure cavity or the high-speed airflow enables the magnetic steel (54) of the airflow sensor (5) to drive the reed relay(52) to contact the relay electrode (51). As shown in FIG. 20, the electric circuit is electrified, and the electronic switch circuit on the electronic circuit board (4) is electrified. Thus, the rechargeable battery (3) starts to electrify the electric heating rod (82) inside the atomizer (8), and at the same time, the LEDs, which are electrified by the rechargeable battery (3), emit light. The air enters the normal pressure cavity through the air inlet (a1), passes the check valve (7) via the airflow passage in the airflow sensor (5), and flows to the negative pressure cavity (83) in the atomizer (8). Since the negative pressure cavity (83) provides the negative pressure compared with the outside, the air

flow sprays into it, bringing the cigarette liquid from the porous component (81) to spray into the negative pressure cavity (83) in the form of fine ~~drips~~ drops. In the meantime, the electric heating rod (82) is electrified by the rechargeable battery (3) under the control of electronic circuit board (4), to heat the fine drips for atomization. After atomization, the big-diameter fine drips are re-absorbed by the porous component (81) under the action of vortex, while the small-diameter fine drips are suspended in the airflow to form ~~gasoloid~~ aerosol, which is discharged through the negative pressure cavity (83) and run-through hole (813), flows into the cigarette holder shell (b) of the cigarette bottle assembly, and is absorbed by the air channel (b1). When the ~~gasoloid~~ aerosol enters the cigarette holder shell (b), multiple small liquid ~~drips~~ drops are condensed into bigger ones, which fall into the clearance between the cigarette holder shell (b) and air channel (b1) without being absorbed by the air channel (b1). The perforated component for liquid storage (9) of the cigarette bottle assembly and the porous component (81) of the atomizer (8) contact each other to achieve the capillary impregnation for liquid supply.

[0072]The unit and its connecting structure of this invention may also be loaded with drugs for delivery to the lung.

[0073]As shown in FIGS. 22, 23 and 24, the electronic cigarette (5) is held in a charging device. The charging device includes a case (1), which contains an auxiliary charging storage battery (2) inside it, and holds the electronic cigarette (5) and the charger (3) for the rechargeable battery embedded in the electronic cigarette (5), as well as the power supply circuit. The power inputs of the auxiliary charging storage battery (2) and charger (3) are connected with the power supply respectively. The charger (3) in this embodiment is a constant voltage & current charger. It may

be a GY5210 charger, or any other constant voltage & current charger. The case (1) has a spare liquid supply bottle (4) in it. The power output of the auxiliary charging storage battery (2) is connected with the power input of the charger (3). The power output of the charger (3) is a charging slot (31), which fits with the charging plug of the rechargeable battery inside the electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

[0074]As shown in FIGS. 23 and 24, on the body of the shell (1), there is a pair of slide ways (12) corresponding to the position of the electronic cigarette, and on the slide ways, there is a slide cover (11).

[0075]In the second preferred embodiment ~~of this utility model~~, a restriction component (10), which is detachable, is set on one end of the ~~said~~ porous component (81). There is a restriction hole (101) on the body of the restriction component (10). The restriction hole (101) corresponds to the atomizing chamber (811). The pore diameter of the restriction hole is less than the inner diameter of the atomizing chamber (811) to the extent that the size of the restriction component (10) installed on the porous component (81) varies, for the purpose of airflow capacity control. On the basis of different applications, the restriction component of different sizes and pore diameters may be used.

[0076]In the third preferred embodiment of this utility model, as shown in 11 and 12, on the outer peripheral wall of the cigarette shell (b), there is a protruding rib (b2) that is evenly partitioned. The perforated component for liquid storage (9) enters the cigarette holder shell (b)

and lies against the protruding rib (b2). Thus, there appears a clearance between the outer peripheral surface of the perforated component for liquid storage (9) and the interior wall of the shell (b). The clearance is for connection the shell (a) and cigarette holder shell (b). When the user smokes, the air channel (b1) absorbs the air to cause airflow inside the shell (a), thus triggering the airflow sensor (5) and eventually starting the electronic cigarette. Also, the atomizer (8) works to atomize the cigarette liquid and produce gas flow, which enters the cigarette holder shell (b).

[0077]In the fourth preferred embodiment ~~of this utility model~~, as shown in FIGS. 13, 14, 15 and 16, on one end of the cylinder (821), there is a fixed plate (84), whose outer peripheral wall has partitioned supports (841). The outer ends of the supports (841) lie against the interior wall of the shell (a), thus suspending the cylinder (821), which is connected with the fixed plate (84), in the cavity of the shell (a). On the surface of the fixed plate (84), there is a mandril (842), whose front end lies against one end of the porous component (81), so that the fixed plate (84) is separated from the atomizing chamber (811) of the porous component (81). As a result, the run-through hole on one end of the atomizing chamber (811) won't be blocked, and the mist generated in the atomizing chamber (811) can be dispersed. One end of the porous component (81) has two protuberances (812) at the outlet of the atomizing chamber (811). Between the two protuberances (812) is a clearance. The two protuberances (812) lie against the perforated component for liquid storage (9).

[0078]In the fifth preferred embodiment ~~of this utility model~~, as shown in FIGS. 17 and 18, the atomizer assembly is an atomizer (8), which includes a frame (82), the porous component (81)

set on the frame (82), and the heating wire (83) wound on the porous component (81). The frame (82) has a run-through hole (821) on it. The porous component (81) is wound with heating wire (83) in the part that is on the side in the axial direction of the run-through hole (821). One end of the porous component (81) fits with the cigarette bottle assembly. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

[0079]In the sixth preferred embodiment ~~of this utility model,~~ as shown in FIG. 19, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a Hall element (52), or a magneto-diode or a magneto-triode on one of its ends. FIG. 21 shows the electric circuit of the electronic cigarette of this solution.

SUBSTITUTE SPECIFICATION

ELECTRONIC CIGARETTE

BACKGROUND ART

[0001] Smoking causes serious respiratory system diseases and cancer, though it is hard to persuade the smokers to completely quit smoking.

[0002] Nicotine is the effective ingredient in cigarettes. Nicotine acts on the receptor of the central nervous system.

[0003] Nicotine is a micromolecular alkaloid, which is basically harmless to human bodies at a small dosage. Plus, its half life period is extremely short in blood. Tar is the major harmful substance in tobacco. Tobacco tar comprises several thousands of ingredients, dozens of which are carcinogenic substances.

[0004] To provide cigarette substitutes that contain nicotine but not harmful tar, many products have been used. These products are not as harmful as tar, but are absorbed very slowly. As a result, smokers can't be satisfied in full. In addition, the smokers are deprived of the "smoking" habit.

[0005] The electronic cigarettes currently available on the market may resolve the above-mentioned issue, though they are complicated in structure. They don't provide the ideal aerosol effects, and their atomizing efficiency is not high.

SUMMARY OF INVENTION

[0006] To overcome the above-mentioned disadvantages, an aerosol electronic cigarette includes a battery assembly, an atomizer assembly and a bottle assembly.

The battery assembly connects with the atomizer assembly and both are located in a housing. The bottle assembly is located in one end of the housing and fits with the atomizer assembly.

[0007] The battery assembly may include the battery, an operating indicator, electronic circuit board, and airflow sensor, which are connected with the battery, and with the signal output of the airflow sensor connected the electronic circuit board.

[0008] A component for liquid storage of the cigarette bottle assembly stores the nicotine liquid. Smokers can enjoy the feel of smoking, with no fire hazard since there is no need for igniting.

DESCRIPTION OF DRAWINGS

[0009] FIG. 1 is the side section view of an electronic cigarette.

[0010] FIG. 2 is the section view of the housing (a) separated from the cigarette bottle assembly.

[0011] FIG. 3 is the diagram of the axial structure of the cigarette bottle assembly, illustrating the ventilating groove on the peripheral surface of the cigarette holder housing.

[0012] FIG. 4 is the side section view of the cigarette bottle assembly, illustrating the structure of the air channel.

[0013] FIG. 5 is the side section view of a porous component of the atomizer.

[0014] FIG. 6 is the diagram of the structure of an electric heating rod of the atomizer.

[0015] FIG. 7 is the side section of the atomizer, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0016] FIG. 8 is the diagram of the atomizer, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0017] FIG. 9 is the section view of a check valve.

[0018] FIG. 10 is the front section view of a restriction component in a second embodiment.

[0019] FIG. 11 is a diagram of the axial structure of the cigarette bottle assembly in another embodiment.

[0020] FIG. 12 is a sectional view taken along line A-A of FIG. 11.

[0021] FIG. 13 is a diagram of the structure of the electric heating rod of the atomizer in another embodiment.

[0022] FIG. 14 is a section view of the porous component of the atomizer in the embodiment shown in Fig. 13.

[0023] FIG. 15 is a diagram of the axial structure of FIG. 14.

[0024] FIG. 16 is a side section view of the atomizer in the embodiment of FIG. 13, illustrating the locations of and connection relation between the electric heating rod and porous component.

[0025] FIG. 17 is a diagram of the axial structure of the atomizer in another embodiment.

[0026] FIG. 18 is the side section view of the atomizer shown in FIG. 17.

[0027] FIG. 19 is the side section view of another electronic cigarette embodiment.

[0028] FIG. 20 is the electric circuit diagram of an electronic cigarette.

[0029] FIG. 21 is another electric circuit diagram of an electronic cigarette.

[0030] FIG. 22 is a diagram of a charging device, illustrating the locations of and connection relation of various internal parts.

[0031] FIG. 23 is the side section view of the charging device.

[0032] FIG. 24 is the diagram of the front structure of the charging device.

SPECIFIC MODE FOR CARRYING OUT THE INVENTION

[0033] As shown in FIGS. 1-10, an aerosol electronic cigarette includes a battery assembly, an atomizer assembly and a cigarette bottle assembly, and also includes a shell or housing (a), which is hollow and integrally formed. The battery assembly connects with the atomizer assembly and both are located in the shell. The cigarette bottle assembly is located in one end of the shell, which is detachable. The cigarette bottle assembly fits with the atomizer assembly. The shell has through-air-inlets (a1).

[0034] In this specific embodiment, the battery assembly includes the battery, and the operating indicator (1), electronic circuit board (4), and airflow sensor (5), which are connected with the battery. It also includes a check valve (7). The signal output of the airflow sensor (5) is connected with the said electronic circuit board (4). The battery is a rechargeable battery (3), which may be either a rechargeable polymer lithium ion battery or a rechargeable lithium ion battery. The airflow sensor (5) may be alternatively a semiconductor force-sensitive chip capacitance sensor or an inductance sensor.

[0035] The rechargeable battery (3) has a flexibly connected charging plug (2). The blades (21) of the charging plug (2) come out of the other end of the shell (a). Between the charging plug (2) and rechargeable battery (3) is a spring (6), which lies against the body of the rechargeable battery (3) on one end, while its free end lies against the charging plug (2), forming a flexible structure, which buffers the charging

plug (2) when plugged for charging, thus protecting the rechargeable battery against any damage. Of course, the rechargeable battery (3) in this embodiment has a charging slot on it, which replaces the structure of charging plug (2) to perform the charging function and protect the rechargeable battery (3) against any damage. The operating indicator (1) is a LED. In this embodiment, there are two LEDs. The electronic circuit board (4) includes an electronic switch circuit, which controls the electric circuit according to the input signals, so that the rechargeable battery (3) electrifies the electric heating rod (82) inside the atomizer (8) and the LEDs as well.

[0036] As shown in FIGS. 1 and 2, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a reed relay (52) on one of its ends. Both ends of the said reed relay (52) correspond to the relay electrodes (51) respectively.

[0037] As shown in FIGS. 5-8, the atomizer assembly is an atomizer (8), which includes a porous component (81) and a heating rod (82). The body of the porous component (82) has a run-through atomizing chamber (811). The diameter of the electric heating rod (82) is less than the diameter of the atomizing chamber (811). The electric heating rod (82) enters into the atomizing chamber (811), and there is a clearance between the electric heating rod (82) and interior wall of the atomizing chamber (811), which forms a negative pressure cavity (83). One end of the porous component (81) fits with the cigarette bottle assembly. As FIGS. 5, 7 and 8 show, the porous component (81) has a protuberance (812) on the other end, and the protuberance (812) fits with the cigarette bottle assembly. The protuberance (812) is a protruding half sphere, on the side of which there is a run-through hole (813) connecting

to the atomizing chamber (811). Of course, the protuberance (812) may also be a taper, rectangle or any other shape. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics, providing the remarkable capabilities in liquid absorption and diffusion, and the ability to absorb the liquid stored in the cigarette bottle assembly.

[0038] As shown in FIG. 6, the electric heating rod (82) includes a cylinder (821). The heating wire (822) is wound on the wall of the cylinder (821). On the wall of both ends of the cylinder (821), there are mandrils (823) respectively, which lie against the interior wall of the atomizing chamber (811) of the porous component (81). There is a negative pressure cavity (83) between the electric heating rod and interior wall of the atomizing chamber.

[0039] The heating wire is made of platinum wire, nickel-chromium alloy wire or iron-chromium alloy wire containing rare earth, or is flaked. The electric heating rod (82) may alternatively have on its peripheral wall the heating layer made of electrically conductive ceramic PTC material, to replace the heating wire.

[0040] In this embodiment, the battery assembly and atomizer assembly are mutually connected and then installed inside the integrally formed shell (a) to form a one-piece part. The rechargeable battery (3) may be charged without frequent change of battery. The user just needs to plug the cigarette bottle assembly into the open end of the shell (a), for easy use and very easy change.

[0041] As shown in 3 and 4, the cigarette bottle assembly includes a hollow cigarette holder shell (b), and a perforated component for liquid storage (9) inside the shell (b). The perforated component for liquid storage (9) is made of such materials as

PLA fiber, terylene fiber or nylon fiber, which are suitable for liquid storage. Alternatively, it may be plastic foam molding or column of multi-layer plates made through plastic injection with polyvinyl chloride, ploypropylene and polycarbonate. One end of the cigarette holder shell (b) plugs into the shell (a), and the outer peripheral surface of the cigarette holder shell (b) has an inward ventilating groove (b2). On one end surface of the cigarette holder shell (b), there is an air channel (b1) extending inward. The air channel (b1) is located in the center on the surface of one end of shell (b).

[0042] As shown in FIGS. 1-9, one end of the porous component (81) lies against one end surface of the perforated component for liquid storage (9), and contacts the perforated component for liquid storage (9). It absorbs the cigarette liquid from the perforated component for liquid storage (9). When the smoker smokes, the cavity of the cigarette holder shell (b) is in the negative pressure state. In the shell (b), one end of the airflow sensor (5) forms a normal pressure cavity, while the other end forms a negative pressure cavity. The air pressure difference between the normal pressure cavity and negative pressure cavity or the high-speed airflow enables the magnetic steel (54) of the airflow sensor (5) to drive the reed relay (52) to contact the relay electrode (51).

[0043] As shown in FIG. 20, the electric circuit is electrified, and the electronic switch circuit on the electronic circuit board (4) is electrified. Thus, the rechargeable battery (3) starts to electrify the electric heating rod (82) inside the atomizer (8), and at the same time, the LEDs, which are electrified by the rechargeable battery (3), emit light. The air enters the normal pressure cavity through the air inlet (a1), passes the

check valve (7) via the airflow passage in the airflow sensor (5), and flows to the negative pressure cavity (83) in the atomizer (8). Since the negative pressure cavity (83) provides the negative pressure compared with the outside, the air flow sprays into it, bringing the cigarette liquid from the porous component (81) to spray into the negative pressure cavity (83) in the form of fine drops.

[0044] In the meantime, the electric heating rod (82) is electrified by the rechargeable battery (3) under the control of electronic circuit board (4), to heat the fine drips for atomization. After atomization, the big-diameter fine drips are re-absorbed by the porous component (81) under the action of vortex, while the small-diameter fine drips are suspended in the airflow to form aerosol, which is discharged through the negative pressure cavity (83) and run-through hole (813), flows into the cigarette holder shell (b) of the cigarette bottle assembly, and is absorbed by the air channel (b1). When the aerosol enters the cigarette holder shell (b), multiple small liquid drops are condensed into bigger ones, which fall into the clearance between the cigarette holder shell (b) and air channel (b1) without being absorbed by the air channel (b1). The perforated component for liquid storage (9) of the cigarette bottle assembly and the porous component (81) of the atomizer (8) contact each other to achieve the capillary impregnation for liquid supply.

[0045] The unit and its connecting structure of this invention may also be loaded with drugs for delivery to the lung.

[0046] As shown in FIGS. 22, 23 and 24, the electronic cigarette (5) is held in a charging device. The charging device includes a case (1), which contains an auxiliary charging storage battery (2) inside it, and holds the electronic cigarette (5) and the

charger (3) for the rechargeable battery embedded in the electronic cigarette (5), as well as the power supply circuit. The power inputs of the auxiliary charging storage battery (2) and charger (3) are connected with the power supply respectively. The charger (3) in this embodiment is a constant voltage & current charger. It may be a GY5210 charger, or any other constant voltage & current charger. The case (1) has a spare liquid supply bottle (4) in it. The power output of the auxiliary charging storage battery (2) is connected with the power input of the charger (3). The power output of the charger (3) is a charging slot (31), which fits with the charging plug of the rechargeable battery inside the electronic cigarette, or a charging plug, which fits with the charging slot of the rechargeable battery.

[0047] As shown in FIGS. 23 and 24, on the body of the shell (1), there is a pair of slide ways (12) corresponding to the position of the electronic cigarette, and on the slide ways, there is a slide cover (11).

[0048] In the second preferred embodiment, a restriction component (10), which is detachable, is set on one end of the porous component (81). There is a restriction hole (101) on the body of the restriction component (10). The restriction hole (101) corresponds to the atomizing chamber (811). The pore diameter of the restriction hole is less than the inner diameter of the atomizing chamber (811) to the extent that the size of the restriction component (10) installed on the porous component (81) varies, for the purpose of airflow capacity control. On the basis of different applications, the restriction component of different sizes and pore diameters may be used.

[0049] In the third preferred embodiment of this utility model, as shown in 11 and 12, on the outer peripheral wall of the cigarette shell (b), there is a protruding rib (b2)

that is evenly partitioned. The perforated component for liquid storage (9) enters the cigarette holder shell (b) and lies against the protruding rib (b2). Thus, there appears a clearance between the outer peripheral surface of the perforated component for liquid storage (9) and the interior wall of the shell (b). The clearance is for connection the shell (a) and cigarette holder shell (b). When the user smokes, the air channel (b1) absorbs the air to cause airflow inside the shell (a), thus triggering the airflow sensor (5) and eventually starting the electronic cigarette. Also, the atomizer (8) works to atomize the cigarette liquid and produce gas flow, which enters the cigarette holder shell (b).

[0050] In the fourth preferred embodiment, as shown in FIGS. 13, 14, 15 and 16, on one end of the cylinder (821), there is a fixed plate (84), whose outer peripheral wall has partitioned supports (841). The outer ends of the supports (841) lie against the interior wall of the shell (a), thus suspending the cylinder (821), which is connected with the fixed plate (84), in the cavity of the shell (a). On the surface of the fixed plate (84), there is a mandril (842), whose front end lies against one end of the porous component (81), so that the fixed plate (84) is separated from the atomizing chamber (811) of the porous component (81). As a result, the run-through hole on one end of the atomizing chamber (811) won't be blocked, and the mist generated in the atomizing chamber (811) can be dispersed. One end of the porous component (81) has two protuberances (812) at the outlet of the atomizing chamber (811). Between the two protuberances (812) is a clearance. The two protuberances (812) lie against the perforated component for liquid storage (9).

[0051] In the fifth preferred embodiment, as shown in FIGS. 17 and 18, the atomizer assembly is an atomizer (8), which includes a frame (82), the porous

component (81) set on the frame (82), and the heating wire (83) wound on the porous component (81). The frame (82) has a run-through hole (821) on it. The porous component (81) is wound with heating wire (83) in the part that is on the side in the axial direction of the run-through hole (821). One end of the porous component (81) fits with the cigarette bottle assembly. The porous component (81) is made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics.

[0052] In the sixth preferred embodiment, as shown in FIG. 19, the airflow sensor (5) has a silica gel corrugated membrane (53), which connects with magnetic steel (54) with a Hall element (52), or a magneto-diode or a magneto-triode on one of its ends. FIG. 21 shows the electric circuit of the electronic cigarette of this solution.

Electronic Acknowledgement Receipt	
EFS ID:	13436199
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	62008
Filer:	Kenneth H. Ohriner/Debbie Gilbert
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	RUYAN-001-DOA
Receipt Date:	07-AUG-2012
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Time Stamp:	14:21:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Amendment.pdf	775451 bb26b8efdfcde1e6fdf96750075fe24dfe1b5215	yes	6

	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Specification		2	2	
	Claims		3	4	
	Applicant Arguments/Remarks Made in an Amendment		5	6	
Warnings:					
Information:					
2	Specification	Marked-up_Spec.pdf	3405968 849256d544f69f3e0d29d69715f067ab63ac2542	no	20
Warnings:					
Information:					
3	Specification	Substitute_Spec.pdf	2041586 a46cecbf7eaca2e5de795f04695b8a1bc24d53c7	no	11
Warnings:					
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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/079,937	Filing Date 04/05/2011	☐ To be Mailed

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)	SMALL ENTITY ☒		OR	OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	08/07/2012	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 3	Minus	** 20	= 0	X $30 =	0	OR	X $ =	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0	X $125 =	0	OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/CURTIS NELLOMS JR/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/079,937	04/05/2011	Li HAN	RUYAN-001-DOA

CONFIRMATION NO. 1784

34055
PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

POA ACCEPTANCE LETTER

OC000000055856992

Date Mailed: 08/13/2012

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2012.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/kgebremichael/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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13/079,937	04/05/2011	Li HAN	RUYAN-001-DOA

CONFIRMATION NO. 1784

62008
MAIER & MAIER, PLLC
1000 DUKE STREET
ALEXANDRIA, VA 22314

POWER OF ATTORNEY NOTICE

OC000000055856966

Date Mailed: 08/13/2012

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/03/2012.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/kgebremichael/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Electronic Acknowledgement Receipt	
EFS ID:	13507795
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	RUYAN-001-DOA
Receipt Date:	15-AUG-2012
Filing Date:	05-APR-2011
Time Stamp:	18:40:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	NPL_TECHPOWERUP_What_is_a_MOSFET.pdf	169908 c532fc4ff060c6623549a117349500aeba17e8a1	no	2
Warnings:					
Information:					

Total Files Size (in bytes):	169908

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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PTO/SB/08b (07-09)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US20030108342	6/12/2003	Sherwood et al.	
	A2	US20040261802	12/30/2004	Griffin et al.	
	A3	US20050016550	1/1/2005	Katase	
	A4	US20050236006	10/27/2005	Cowan	
	A5	US20060196518	9/1/2006	Hon, Lik	
	A6	US20080188490	7/30/2009	Li Han	
	A7	US20080276947	11/13/2008	Martzel	
	A8	US20090095311	4/16/2009	Han, Li	
	A9	US20090126745	5/21/2009	Hon Lik	
	A10	US20090151717	6/18/2009	Bowen	
	A11	US20090230117	9/17/2009	Fernando	
	A12	US20090260642	10/22/2009	Monsees	
	A13	US20090272379	11/5/2009	Thorens	
	A14	US20100031968	2/11/2010	Sheikh	
	A15	US20100126505	5/27/2010	Rinker	
	A16	US20100181387	7/22/2010	Zaffaroni	
	A17	US20100200008	8/12/2010	Teieb	
	A18	US20100242974	9/30/2010	Pan	
	A19	US20100307518	12/9/2010	Wang	
	A20	US20110005535	1/13/2011	Xiu	
	A21	US20110036346	2/17/2011	Cohen	
	A22	US1775947	5/3/1927	Robinson	
	A23	US2057353	10/13/1936	Whittemore	
	A24	US3200819	8/17/1965	Gilbert	
	A25	US4171000	10/16/1979	Uhle	
	A26	US4641053	2/1/1987	Takeda	
	A27	US4735217	8/14/1990	Gerth	
	A28	US4756318	7/12/1988	Clearman	
	A29	US4771796	9/20/1988	Myer	
	A30	US4848374	7/1/1989	Chard	

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	A31	US4945931	8/7/1990	Gori	
	A32	US4947875	8/14/1990	Brooks	
	A33	US5042470	8/1/1991	Kanesaka	
	A34	US5060671	10/29/1991	Counts et al.	
	A35	US5080114	1/14/1992	Rudolph et al.	
	A36	US5095921	3/17/1992	Losee	
	A37	US5144962	9/8/1992	Counts	
	A38	US5159940	11/3/1992	Hayward et al.	
	A39	US5190060	3/2/1993	Gerding	
	A40	US5249586	10/5/1993	Morgan et al.	
	A41	US5261424	11/16/1993	Sprinkel Jr.	
	A42	US5285798	2/15/1994	Banerjee	
	A43	US5322075	6/21/1994	Deevi	
	A44	US5505214	4/9/1996	Collins	
	A45	US5666977	9/16/1997	Counts	
	A46	US5666978	9/16/1997	Counts	
	A47	US5743251	4/28/1998	Howell	
	A48	US5799663	9/1/1998	Elan Pharmaceuticals	
	A49	US5819756	10/13/1998	Mielordt	
	A50	US5878752	3/9/1999	Adams et al.	
	A51	US5894841	4/20/1999	Voges	
	A52	US6040560	3/21/2000	Fleischhauer	
	A53	US6041789	3/28/2000	Bankert	
	A54	US6164287	12/26/2000	White	
	A55	US6178969	1/30/2001	St. Charles	
	A56	US6196218	3/6/2001	Voges	
	A57	US6357671	3/2/2005	Cewers	
	A58	US6443146	9/3/2002	Voges	
	A59	US6532965	3/18/2003	Abhulimen	
	A60	US6772756	8/10/2004	Shayan	
	A61	US6803545	10/12/2004	Blake	
	A62	US6810883	11/2/2004	Felter	
	A63	US6854461	2/15/2005	Nichols	
	A64	US6854470	2/15/2005	Pu	

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 3 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	A65	US7131599	11/7/2006	Katase		
	A66	US7726320	6/1/2010	Robinson		
	A67	US7832410	11/16/2010	Lik HON		
	A68	US7845359	12/7/2010	Montaser		
	A69	US7997280	8/16/2011	Rosenthal		

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	B1	CN101116542A CN20071121524	2/6/2008	Chinese Acad Tech Inst Physics		
	B2	CN1135860	11/20/1996	Du, Xu		
	B3	CN200997909Y CN20062135072U	1/2/2008	Wang, Yumin		
	B4	CN2047485U CN89207339.X	11/15/1989	Yuzhong, Zhao		
	B5	CN2293957Y CN97216131	10/14/1998	Yuzhong, Zhao		
	B6	CN2777995Y CN200520089947.0	5/10/2006	Li HAN		
	B7	DE10051792	5/8/2002	Rainer, Puellen		
	B8	EP0230420	8/5/1987	Nilsson		
	B9	EP0295122 B1	1/22/1992	Imperial Tobacco Co Ltd		
	B10	EP0342538	11/23/1989	R.J. Reynolds Tobacco		
	B11	EP0358002	3/14/1990	Reynolds Tobacco		
	B12	EP0545186	6/9/1993	R.J. Reynolds Tobacco		

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 4 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	B13	EP0703735	4/3/1996	Philip Morris		
	B14	EP0824927	2/25/1998	Belli, Guido		
	B15	EP0845220	6/3/1998	Japan Tobacco Inc.		
	B16	EP0893071	1/27/1999	Japan Tobacco		
	B17	EP0951219	11/13/2002	Philip Morris		
	B18	GB1528391 A	10/11/1978	Gildemeister		
	B19	JP06114105	4/26/1994	Masanobu		
	B20	JP07506999	8/3/1995	Medix Electronics		
	B21	JP09075058	3/5/1997	Masaya		
	B22	JP64000498	1/5/1989	N/A		
	B23	UA47514	12/29/1997	Brown & Williamson Tobacco		
	B24	WO19940009842	5/11/1994	Rosen		
	B25	WO1994021317	9/29/1994	Xetel Corp		
	B26	WO1997040876	11/6/1997	Astrazeneca		
	B27	WO1997048293	12/24/1997	Japan Tobacco		
	B28	WO1998017130	4/30/1998	Philip Morris		
	B29	WO2000049901	8/31/2000	Weber-Quitzau		
	B30	WO2001005459	1/25/2001	Aradigm		
	B31	WO2003022364	3/20/2003	Marioff Corporation		
	B32	WO2003034847	1/5/2003	British American Tobacco		
	B33	WO2003055486	7/10/2003	Pharmacia AB		
	B34	WO2003101454	12/11/2003	Pharmacia AB		
	B35	WO2004001407	12/31/2003	Asthma Alert Ltd		
	B36	WO2004023222	3/18/2004	Brady Development		

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 5 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	B37	WO2004080216	9/23/2004	Best Partners Worldwide		
	B38	WO2006082571	8/10/2006	Oglesby & Butler Research and Development Limited		
	B39	WO2007078273	7/12/2007	Augite Incorporation		
	B40	WO2008077271	7/3/2008	Maas		
	B41	WO2008130813	10/30/2008	Sottera, Inc.		
	B42	WO2009118085	10/1/2009	Philip Morris		
	B43	WO2009135729	11/12/2009	British American Tobacco		
	B44	WO2010052323	5/14/2010	Inhaleness B. V.		
	B45	WO2010091593	8/19/2010	Hon Lik		
	B46	WO2010145805	12/23/2010	Zetzig AB		
	B47	WO2011010334	1/27/2011	RML S. R. L.		
	B48	WO2011022431	2/24/2011	Chong Corp.		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	CHINA INTELLECTUAL PROPERTY OFFICE, English Translation of Written Opinion for PCT/CN07/001575, July 20, 2007	
	C2	CHINA INTELLECTUAL PROPERTY OFFICE, English translation of Written Opinion for PCT/CN07/001576, August 3, 2007	
	C3	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN07/001576, August 16, 2007	
	C4	CHINA INTELLECTUAL PROPERTY OFFICE, Search Report for CN ZL 200620090805.0,	
	C5	Introduction to selecting and using electronic components, ISBN7-111-13752-3	
	C6	EUROPEAN PATENT OFFICE, Extended European Search Report for EP07721148, December 6, 2010	

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 6 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	C7	EUROPEAN PATENT OFFICE, Extended European Search Report for EP11001479, July 4, 2011	
	C8	Manual for Electric Engineers, 2nd Ed, March 2000	
	C9	Manual for Mechanical Designers, 4th Ed, January 2002	
	C10	Materials Manual-Nonmetal, July 1, 1985	
	C11	TechPowerUp "What is a MOSFET, what does it look like and how does it work?" May 24, 2004	

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

Electronic Patent Application Fee Transmittal	
Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	RUYAN-001-DOA
Filed as Large Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt	
EFS ID:	13507765
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	RUYAN-001-DOA
Receipt Date:	15-AUG-2012
Filing Date:	05-APR-2011
Time Stamp:	18:38:24
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	7374
Deposit Account	502586
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Transmittal Letter	2012-08-15_IDS_Letter_763208012US1.pdf	14306 9034a2c7735d1edb5d834bebb3d4cfc7e83735c5	no	1
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3	Foreign Reference	CN101116542A_Native_w_English_Abstract.pdf	840702 b5d2aef81f149e05c59a52edebe2653d1b94301f	no	16
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54	Non Patent Literature	NPL_CNPO_SearchReport_ZL200620090805_0_2008-11-18.pdf	1181660 62afbdee04ce829601c4cd41e9bbe9befa9987c5	no	4

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55	Non Patent Literature	NPL_Intro_Selecting_Using_Electronic_Components_ISBN7-111-13752-3.pdf	1562503 d80af22426f6a9b8fceb68ef0ae99804ae307946	no	3
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57	Non Patent Literature	eESR_EP11001479.pdf	128218 66e791a4ba702e6f0212f969386fa20a170343e1	no	4
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58	Non Patent Literature	NPL_Manual_Electric_Engineers_March_2000.pdf	2192000 eeebb5c148f8778cba42e3c2d15effb9a13b60b0	no	3
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59	Non Patent Literature	NPL_Manual_Mechanical_Designers_Jan_2002.pdf	2985162 07a5be7617327b491d12aba96bed47de5e5f3307	no	4
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60	Non Patent Literature	NPL_Materials_Manual_Nonmetal_Jul_1985.pdf	2347448 4a4e762ad09b0873c1cdfac38d550e1dbbd5abad	no	3
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		Total Files Size (in bytes):	49395485		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Docket No.: 76320.8012.US01
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Lik HON

Application No.: 13/079,937 Confirmation No.: 1784

Filed: April 5, 2011 Art Unit: 1747

For: AEROSOL ELECTRONIC CIGARETTE Examiner: Dionne Walls Mayes

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references listed on the enclosed Form PTO-SB/08 may be material to the examination of this application; the Examiner is requested to make them of record in the application. Copies of all foreign and non-patent literature cited references are enclosed.

The Information Disclosure Statement submission fee of $180.00 is authorized to be charged to our Deposit Account No. 50-2586 and is being paid herewith.

Dated: August 15, 2012

Respectfully submitted,

Electronic signature: / Kenneth H. OHRINER /
Kenneth H. Ohriner
Registration No.: 31,646
PERKINS COIE LLP
P.O. Box 1208
Seattle, Washington 98111-1208
(310) 788-3250
(206) 332-7198 (Fax)
Attorney for Applicant

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: LI HAN	EXAMINER: DIONNE WALLS MAYES
APPLICATION NO.: 13/079,937	ART UNIT: 1747
FILED: APRIL 5, 2011	CONF. NO: 1784
FOR: **AEROSOL ELECTRONIC CIGARETTE**	

EXAMINER INTERVIEW SUMMARY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

An in person interview was conducted on August 14, 2012 between the Examiner and the undersigned attorney. Claims 30, 31 and 32 were discussed. The following prior art references were also discussed: Voges, U.S. Patent No. 6,196,218; Robinson, U.S. Patent No. 1,775,947; Counts, U.S. Patent No. 5,144,962; Brooks, U.S. Patent No. 4,947,875; Japan Tobacco, EP 0 845 220 B1; Hon Lik WO/2004/095955; and Hon Lik WO/2005/099494. No agreement was reached.

Dated: August 23, 2012

Respectfully submitted,

PERKINS COIE LLP

Customer No. 34055
Perkins Coie LLP
Patent - LA
P.O. Box 1208
Seattle, WA 98111-1208
Phone: (310) 788-9900
Fax: (206) 332-7198

By: Kenneth H. Ohriner
Kenneth H. Ohriner
Reg. No. 31,646

Certificate of Electronic Filing

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being electronically filed with the U.S. Patent and Trademark Office on the date entered below.

August 23, 2012
Date of Electronic Submission

Debbie Gilbert

76320-8012.US01/LEGAL24482960.1

Electronic Acknowledgement Receipt	
EFS ID:	13569506
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Debbie Gilbert
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	23-AUG-2012
Filing Date:	05-APR-2011
Time Stamp:	12:22:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant summary of interview with examiner	8012_US01_summary.pdf	169832 dff3cb35c3727ac1f08cef7a790ee11737d8764b	no	1
Warnings:					
Information:					

Total Files Size (in bytes):	169832

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	13079937
Filing Date	2011-04-05
First Named Inventor	Han Li
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4819665	A	1989-04-11	Roberts	
	2	5224498		1993-07-06	Deevi	
	3	5388594	A	1995-02-14	Counts	
	4	5438978		1995-08-08	Hardester	
	5	5730158		1998-06-24	Collins	
	6	6095153	A	2000-08-01	Kessler	
	7	6354293		2002-03-12	Madison	
	8	6715494	B1	2004-04-06	McCoy	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	9	7100618	B2	2006-09-05	Dominguez	
	10	8156944	B2	2009-04-16	Lik Hon	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060196518	A1	2006-09-07	Lik Hon	
	2	20090188490		2009-07-30	Li Han	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	03111582.9	CN		2004-11-11	Lik Hon	published as CN1541577A	☐
	2	200420031182.0	CN		2005-08-24	Lik Hon	published as CN2719043	☐
	3	101176805	CN		2008-05-14	Dafubao Int Co Ltd		☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	4	0057243	EP		1982-08-01	Horst		☐
	5	0295122	EP	A2	1988-12-14	Imperial Tobacco Limited		☐
	6	PCT/CN04/000182	WO		2004-11-11	Lik Hon	published as WO2004095955	☐
	7	PCT/CN05/000337	WO		2005-08-24	Lik Hon	published as WO2005099494	☐

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NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	AUSTRALIAN PATENT OFFICE, Examination Report for SG 200505930-8, dated May 4, 2006.	☐
	2	AUSTRALIAN PATENT OFFICE; Exam Report for AU2004234199, dated August 14, 2009.	☐
	3	AUSTRALIAN PATENT OFFICE; Search and Examination Report for SG200604498-6, dated April 16, 2008.	☐
	4	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN04/000182, dated June 10, 2004.	☐
	5	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN05/000337, July 14, 2005.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	6	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN10/073613, August 26, 2010.	☐
	7	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN10/000125, April 1, 2010.	☐
	8	CN CREATIVE ; INTELLICIG USA, Ruyan v. Smoking Everywhere et al. CV11-6268 Invalidity Contentions, April 12, 2012.	☐
	9	CYPHERT, GIL DBA NU1S, Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, April 11, 2012.	☐
	10	EUROPEAN PATENT OFFICE, Supplemental Extended European Search Report for EP04718242, dated July 27, 2007.	☐
	11	EUROPEAN PATENT OFFICE, Supplemental Extended European Search Report for EP05729107, dated July 31, 2007.	☐
	12	EUROPEAN PATENT OFFICE, Supplemental Partial Extended European Search Report for EP05729107, dated May 22, 2007.	☐
	13	EUROPEAN PATENT OFFICE, Supplemental Partial Extended European Search Report for EP04718242, dated May 22, 2007.	☐
	14	FIN BRANDING GROUP, LLC, Request for Inter Partes Reexamination of U.S. Patent No. 8,156,944, filed September 13, 2012.	☐
	15	JAPANESE PATENT OFFICE, Office Action and English Translation for JP2006504199, dated October 30, 2009.	☐
	16	KOREAN INTELLECTUAL PROPERTY OFFICE, Notice of Preliminary Rejection for KR1020057009767, dated July 27, 2009.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	17	MACAU PATENT OFFICE, Official Communication for MOI121, dated April 17, 2009.	☐
	18	MALAYSIAN PATENT OFFICE, Examiner's Report for MY PI 20041407, dated September 28, 2007.	☐
	19	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, April 12, 2012.	☐
	20	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, Exhibit 7 (Claim 20 Claim Chart), April 12, 2012.	☐
	21	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, Exhibit 8 (Claim 24 Claim Chart), April 12, 2012.	☐
	22	TAIWAN PATENT OFFICE, Official Letter for TW093111573, dated April 24, 2009.	☐
	23	UKRAINE PATENT OFFICE, Examination Report for UA200511258, dated February 4, 2009.	☐

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☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-09-19
Name/Print	Kenneth H. Ohriner	Registration Number	31646

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Electronic Patent Application Fee Transmittal	
Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	76320.8012.US01
Filed as Large Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt	
EFS ID:	13790551
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	19-SEP-2012
Filing Date:	05-APR-2011
Time Stamp:	20:15:31
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	8493
Deposit Account	502586
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Information Disclosure Statement (IDS) Form (SB08)	2012-09-19_IDS_763208012US1.PDF	614107 e39b876ab14581d9f2c26051a7f7fc763cdb501a	no	7
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Information:					
2	Foreign Reference	CN1541577_w_English_Abstract.PDF	2351465 540c7bb7dc7ad69c579fd8298db9ad91df6d184b	no	17
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Information:					
3	Foreign Reference	CN2719043Y_w_English_Abstract.PDF	695270 23f32ac338218766014898ce573879794e7db42a	no	14
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4	Foreign Reference	CN101176805A_w_English_Abstract.pdf	420563 07b8bb5450d0219ac07f0ee077a92e9c1c7685ad	no	9
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Information:					
5	Foreign Reference	EP0057243A1.pdf	96136 df0d3adf0cfa914bdc89e53e6d7a8f2e36904df1	no	5
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6	Foreign Reference	EP0295122A2.pdf	227012 ebf3b08986f1eaa61fccf6df8d19f377ef8854dc	no	7
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8	Foreign Reference	WO2005099494.PDF	903211 d906bb061d466f07a7a2e29d347e310048bd12e7	no	20
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9	Non Patent Literature	NPL_AUPO_SGSearch20050593 0-8_2006-05-04.PDF	55907 f0f28d66fd2202887855499b7906d98c91858efc	no	3
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11	Non Patent Literature	NPL_AUPO_SGSearch2006-04498_2008-04-16.PDF	285630 25c295f4e1b60859d5c0d02ce90abcceaff9f5f2	no	8
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Information:					
13	Non Patent Literature	NPL_CNPO_ISR_PCTCN05000337.pdf	119522 da076b9ad3eddbd664ce84b6f6889a85ac446bca	no	3
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Information:					
14	Non Patent Literature	NPL_CNPO_ISR_PCTCN10073613.pdf	223347 89b2f83b8dc815d194dd253314fe925f280f1afd	no	7
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Information:					
15	Non Patent Literature	NPL_ISR_PCTCN10000125.pdf	172758 4f52de91587083835fb2ad36b0586ae8994f5405	no	5
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16	Non Patent Literature	NPL_CreativeLtd_Intellicig_Invalidity_Contentions.pdf	444644 8a48dcf0a7ed7b94d9572a9dca10002e5fe3211a	no	11
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Information:					

19	Non Patent Literature	NPL_EPO_EPSearch05729107_2_2007-07-31.PDF	90872 141ce6bbdd0c3f29965ce43439f26e68eb2ffb76	no	3
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Information:					
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Information:					
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Information:					
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25	Non Patent Literature	NPL_MOPO_MO000121_Report_2_2009-04-17.PDF	554893 df63a9d2e53b8fe99d0be1689c7c7b815a6e7bb8	no	14
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26	Non Patent Literature	NPL_MYPO_MY_ExamReport_2007-09-28.PDF	111852 8d2d9bfcee23bf7d28b27d84142727cc397d1a1f	no	2
Warnings:					
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Warnings:					
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28	Non Patent Literature	NPL_Sottera_Exhibit7_Claim20_ClaimChart_2.pdf	1168022 c5b5721ee725fde627528620fb747eab95c98fc3	no	40
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Information:					
29	Non Patent Literature	NPL_Sottera_Exhibit8_Claim24_ClaimChart_2.pdf	1294516 d4f2c6817b757ed86f3c376ba32882a1857fb4f2	no	42
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Information:					
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99)**

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Filing Date	2011-04-05
First Named Inventor	Han Li
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

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	1	IP AUSTRALIA, Patent Examination Report No. 1 for AU2007250367, July 30, 2012.	☐
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Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-10-04
Name/Print	Kenneth H. Ohriner	Registration Number	31646

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Electronic Acknowledgement Receipt	
EFS ID:	13908943
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	NPL_IPAU_ExamReport_AU2007250367_2012-07-30.pdf	126746 ff10e912ca9126b028f4dc842fa0548ca1ac749d	no	3
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	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Li Han
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

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	Application Number	13079937
	Filing Date	2011-04-05
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	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Li Han
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

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Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-11-07
Name/Print	Kenneth H. Ohriner	Registration Number	31646

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(19) 世界知识产权组织
国 际 局

(43) 国际公布日
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(72) 发明人; 及
(71) 申请人 : 李文博 (LI, Wenbo) [CN/CN]; 中国辽宁省沈阳市铁西区肇工北街六号沈阳电力机械总厂, Liaoning 110026 (CN)。

(74) 代理人: 沈阳科苑专利商标代理有限公司 (SHENYANG PATENT & TRADEMARK AGENCY ACADEMIA SINICA); 中国辽宁省沈阳市和平区三好街 24 号, Liaoning 110004 (CN)。

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本国际公布:
— 包括国际检索报告(条约第 21 条(3))。

(54) Title: HIGH-FREQUENCY INDUCTION ATOMIZATION DEVICE

(54) 发明名称 : 高频感应雾化装置

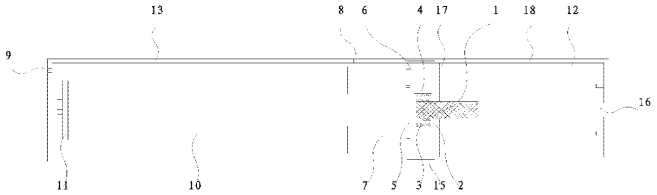

图1 /Fig.1

(57) Abstract: A high-frequency induction atomization device for delivering physiological active substance in atomizing form into a lung for absorption through a respiratory tract includes a housing and an atomizing core (1), a high-frequency generator (6), a sensor (7) and a power supply unit (10) provided in the housing. The power supply unit (10), the sensor (7) and the high-frequency generator (6) are installed in the housing sequentially. The sensor (7) and the high-frequency generator (6) are electrically connected with the power supply unit (10) respectively. The high-frequency generator (6) is provided with an air hole (5), the high-frequency generator (6) is provided with a high frequency coil (3), the atomizing core (1) installed in the housing is inserted into the high frequency coil (3), a gap functioned as a gas flow channel is left between the atomizing core (1) and the high frequency coil (3). The inspiratory end of the housing is provided with an air entry (16), and the housing is provided with an inflow port (9). The exothermic electric current of the atomizing core (1), which is stable in performance, is produced by the high-frequency induction. The atomizing core (1) is removable, low in cost, and easy in batch process. The quantitative atomizing is realized by replacing atomizing core (1).

[见续页]

WO 2010/145468 A1

(57) 摘要:

一种用于把生理活性物质以雾化的形式经呼吸道输送至肺部吸收的高频感应雾化装置，包括壳体及设在壳体内的雾化芯（１）、高频发生器（６）、传感器（７）和电源装置（１０）。电源装置（１０）、传感器（７）及高频发生器（６）依次安装在壳体内。传感器（７）与高频发生器（６）分别与电源装置（１０）电连接。高频发生器（６）开有气孔（５），在高频发生器（６）上设有高频线圈（３），安装在壳体内的雾化芯（１）插入高频线圈（３）内，雾化芯（１）与高频线圈（３）之间留有作为气流通道的间隙。壳体的吸气端开有吸气口（１６），在壳体上开有进气孔（９）。本雾化芯（１）发热的电流是高频感应产生的，工作稳定。雾化芯（１）可更换，成本低，易于批量生产。实现了通过更换雾化芯（１）来定量雾化。

高频感应雾化装置

技术领域

本实用新型涉及供肺部吸收的雾化设备，具体地说是一种用于把生理活性物质以雾化的形式经呼吸道输送至肺部吸收的高频感应雾化装置。

背景技术

目前，市场上已供应了多种供肺部吸收的输送装置，如超声雾化给药器或用于香烟替代品的雾化电子烟。其中超声雾化给药器体积大，不易携带，雾化颗粒过大；而雾化电子烟的雾化器是直连式或电接触点连接的直流供电系统，不利于可更换式雾化器的使用。

实用新型内容

为了克服上述现有技术中的缺点，本实用新型的目的在于提供一种工作稳定的高频感应雾化装置，利用高频发生器的输出线圈以电磁感应的非接触方式向雾化芯供电。

本实用新型的另一目的在于提供一种可定量雾化的高频感应雾化装置。

本实用新型的目的是通过以下技术方案来实现的：

本实用新型包括壳体及容置在壳体内的雾化芯、高频发生器、传感器和电源装置，电源装置、传感器及高频发生器依次安装在壳体内，传感器与高频发生器分别与电源装置电连接；所述高频发生器开有气孔，在高频发生器上设有高频线圈，安装在壳体内的雾化芯插入高频线圈内，雾化芯与高频线圈之间留有作为气流通道的间隙；所述壳体的吸气端开有吸气口，在壳体上开有进气孔。

其中：所述壳体内设有卡头，雾化芯的一端可拆卸地安装在卡头上，另一端插入高频线圈内；壳体内还容置有储液部件、位于雾化芯与吸气口之间，雾化芯的一端与储液部件相连接，另一端插入高频线圈内；在储液部件与壳体内壁之间留有与气孔及吸气口相通的气道；储液部件为微孔陶瓷、泡沫陶瓷、天然纤维、人造纤维或泡沫金属材料制成；储液部件或雾化芯中的雾化液的成份按重量百分比计为丙二醇 60～95%、丙三醇 1～30%，余量为香精；所述高频线圈的外面设有环形铁氧体，高频线圈通过环形铁氧体安装在高频发生器上；所述雾化芯的外面回设有闭合的螺旋电热丝，雾化芯为碳纤维、不锈钢纤维或泡沫金属制成；所述壳体与电源装置之间容置有与电源装置电连接的指示灯；电源装置为可充电电池或一次性电池；所述壳体包括第一壳体及第二壳体，第二壳体的一端可拆卸地与第一壳体相插接，另一端开有吸气口；电源装置、传感器及高频发生器容置在第一壳体内，高频发生器位于传感器的一侧，所述进气口开在传感器另一侧的第一壳体上；所述传感器为气流式或气压式传感器；所述高频发生器为推挽式输出电路，工作频率为 1MHz～960 MHz。

本实用新型的优点与积极效果为：

1．本实用新型的雾化芯插设在高频线圈内，与高频电路没有直接的电接触，雾化芯发热的电流是高频感应产生的，工作稳定。

2．本实用新型的雾化芯可更换，成本低，易于批量生产。

3．本实用新型可取消储液部件，仅靠充于雾化芯中的雾化液来工作，从而实现了通过更换雾化芯来定量雾化。

4．本实用新型的高频线圈可通过环形铁氧体安装在高频发生器上，由于环形铁氧体不导电，可防止磁场外泄，起到屏蔽罩的作用。

5．本实用新型的壳体为插接结构，便于更换雾化芯或储液部件。

附图说明

图 1 为本实用新型实施例 1 的结构示意图；

图 2 为本实用新型实施例 2 的结构示意图；

其中：1 为雾化芯，2 为螺旋电热丝，3 为高频线圈，4 为环形铁氧体，5 为气孔，6 为高频发生器，7 为传感器，8 为辅助进气孔，9 为进气孔，10 为电源装置，11 为指示灯，12 为气道，13 为第一壳体，14 为储液部件，15 为插接口，16 为吸气口，17 为卡头，18 为第二壳体。

具体实施方式

下面结合附图对本实用新型作进一步详述。

实施例 1

如图 1 所示，本实施例的高频感应雾化装置包括壳体及容置于壳体内的雾化芯 1、高频发生器 6、传感器 7、电源装置 10 和指示灯 11。壳体由第一壳体 13 及第二壳体 18 两部分组成，第一、二壳体 13、18 通过插接口 15 相插接，第二壳体 18 可拆卸，便于更换雾化芯 1。指示灯 11、电源装置 10、传感器 7 及高频发生器 6 在图 1 中从左至右依次设置在第一壳体 13 内，指示灯 11、传感器 7 及高频发生器 6 分别与电源装置 10 电连接，电源装置 10 可使用可充电电池或一次性电池。高频发生器 6 的一侧朝向传感器 7，另一侧设有高频线圈 3，高频线圈 3 的外面设有环形铁氧体 4，可防止磁场外泄，起到屏蔽罩的作用，高频线圈 3 通过环形铁氧体 4 安装在高频发生器 6 上；高频发生器 6 的电路板上开有气孔 5。电源装置 10 位于图 1 中传感器 7 的左侧，指示灯 11 位于电源位置 10 与第一壳体 13 顶端内壁之间。在第一壳体 13 上开有进气孔 9，该进气孔 9 的位置在图 1 中传感器 7 的左侧即可；为了使进气效果可好，还可在靠近传感器 7 的第一壳体 13 上再开设一个辅助进气孔 8。本实施例的第二壳体 18 内安装有卡头 17，雾化芯 1 的一端可拆卸地设置在卡头 17 上，另一端插接在高频线圈 3 内，雾化芯 1 与高频线圈 3 之间留有作为气流通道的间隙。如果雾化芯 1 由不导电的材料制成，可在雾化芯 1 的外面加设有闭合的螺旋电热丝 2，螺旋电热丝 2 与高频线圈 3 之间则留有作为气流通道的间隙。在第二壳体 18 的尾端开有吸气口 16。

本实施例的工作原理为：将本装置放在口中吸气时，指示灯 11 点亮，气体由进气孔 9 及辅助进气孔 8 进入第一壳体 13 内，传感器 7 启动高频发生器 6，置于高频线圈 3 内的雾化芯 1 在高频电磁场中将感应出高频电流，因此雾化芯 1 快速升温至其内的雾化液的沸点，并使雾化液气化；吸入的气体依次通过传感器 7、高频发生器 6 上的气孔 5 及高频线圈 3 与雾化芯 1 之间的间隙，被气化的雾化液蒸汽在伴随的气流中迅速冷凝为气溶胶，在吸气口 16 处形成仿真烟雾。

本实施例可通过更换雾化芯来实现定量雾化；雾化液的成份按重量百分比计为丙

二醇 70%、丙三醇 25%，余量为香精。

实施例 2

如图 2 所示，本实施例与实施例 1 的区别在于，在第二壳体 18 内还设置有储液部件 14，雾化芯 1 的一端与储液部件 14 相连接，另一端插入高频线圈 3 的内部；在储液部件 14 与壳体内壁之间留有与气孔 5 及吸气口 16 相通的气道 12。

本实施例的工作原理为：将本装置放在口中吸气时，气体由进气孔 9 及辅助进气孔 8 进入第一壳体 13 内，传感器 7 启动高频发生器 6，置于高频线圈 3 内的雾化芯 1 在高频电磁场中将感应出高频电流，因此雾化芯 1 快速升温至其内及储液部件 14 中的雾化液的沸点，并使雾化液气化；吸入的气体依次通过传感器 7、高频发生器 6 上的气孔 5 及高频线圈 3 与雾化芯 1 之间的间隙，被气化的雾化液蒸汽在伴随的气流中迅速冷凝为气溶胶，在吸气口 16 处形成仿真烟雾。雾化液的成份按重量百分比计为丙二醇 80%、丙三醇 15，余量为香精。

本实用新型的雾化芯 1 可用碳纤维、不锈钢纤维、泡沫金属制成；高频发生器 6 可用推挽式输出电路，工作频率为 1MHz～960 MHz；传感器 7 可用气流式或气压式传感器；储液部件 14 采用微孔陶瓷、泡沫陶瓷、天然纤维、人造纤维或泡沫金属材料制成；雾化液的成份按重量百分比计为丙二醇 60～95%、丙三醇 1～30%，余量为香精。

权 利 要 求 书

1. 一种高频感应雾化装置，其特征在于：包括壳体及容置在壳体内的雾化芯（1）、高频发生器（6）、传感器（7）和电源装置（10），电源装置（10）、传感器（7）及高频发生器（6）依次安装在壳体内，传感器（7）与高频发生器（6）分别与电源装置（10）电连接；所述高频发生器（6）开有气孔（5），在高频发生器（6）上设有高频线圈（3），安装在壳体内的雾化芯（1）插入高频线圈（3）内，雾化芯（1）与高频线圈（3）之间留有作为气流通道的间隙；所述壳体的吸气端开有吸气口（16），在壳体上开有进气孔（9）。

2. 按权利要求 1 所述的高频感应雾化装置，其特征在于：所述壳体内设有卡头（17），雾化芯（1）的一端可拆卸地安装在卡头（17）上，另一端插入高频线圈（3）内。

3. 按权利要求 1 所述的高频感应雾化装置，其特征在于：所述壳体内还容置有储液部件（14）、位于雾化芯（1）与吸气口（16）之间，雾化芯（1）的一端与储液部件（14）相连接，另一端插入高频线圈（3）内；在储液部件（14）与壳体内壁之间留有与气孔（5）及吸气口（16）相通的气道（12）。

4. 按权利要求 3 所述的高频感应雾化装置，其特征在于：所述储液部件（14）为微孔陶瓷、泡沫陶瓷、天然纤维、人造纤维或泡沫金属材料制成。

5. 按权利要求 3 所述的高频感应雾化装置，其特征在于：所述储液部件（14）或雾化芯（1）中的雾化液的成份按重量百分比计为丙二醇 60～95%、丙三醇 1～30%，余量为香精。

6. 按权利要求 1 或 3 所述的高频感应雾化装置，其特征在于：所述高频线圈（3）的外面设有环形铁氧体（4），高频线圈（3）通过环形铁氧体（4）安装在高频发生器（6）上。

7. 按权利要求 1 或 3 所述的高频感应雾化装置，其特征在于：所述雾化芯（1）的外面回设有闭合的螺旋电热丝（2），雾化芯（1）为碳纤维、不锈钢纤维或泡沫金属制成。

8. 按权利要求 1 或 3 所述的高频感应雾化装置，其特征在于：所述壳体与电源装置（10）之间容置有与电源装置（10）电连接的指示灯（11）；电源装置（10）为可充电电池或一次性电池。

9. 按权利要求 1 或 3 所述的高频感应雾化装置，其特征在于：所述壳体包括第一壳体（13）及第二壳体（18），第二壳体（18）的一端可拆卸地与第一壳体（13）相插接，另一端开有吸气口（16）；电源装置（10）、传感器（7）及高频发生器（6）容置在第一壳体（13）内，高频发生器（6）位于传感器（7）的一侧，所述进气口（9）开在传感器（7）另一侧的第一壳体（13）上；所述传感器（7）为气流式或气压式传感器。

10. 按权利要求 1 或 3 所述的高频感应雾化装置，其特征在于：所述高频发生器（6）为推挽式输出电路，工作频率为 1MHz～960 MHz。

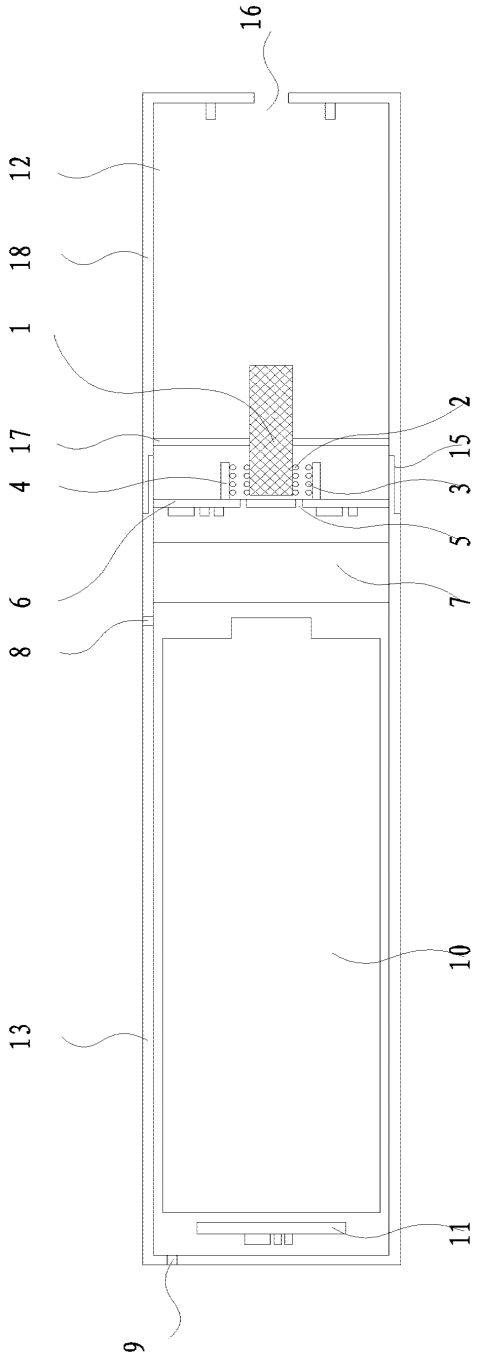

图1

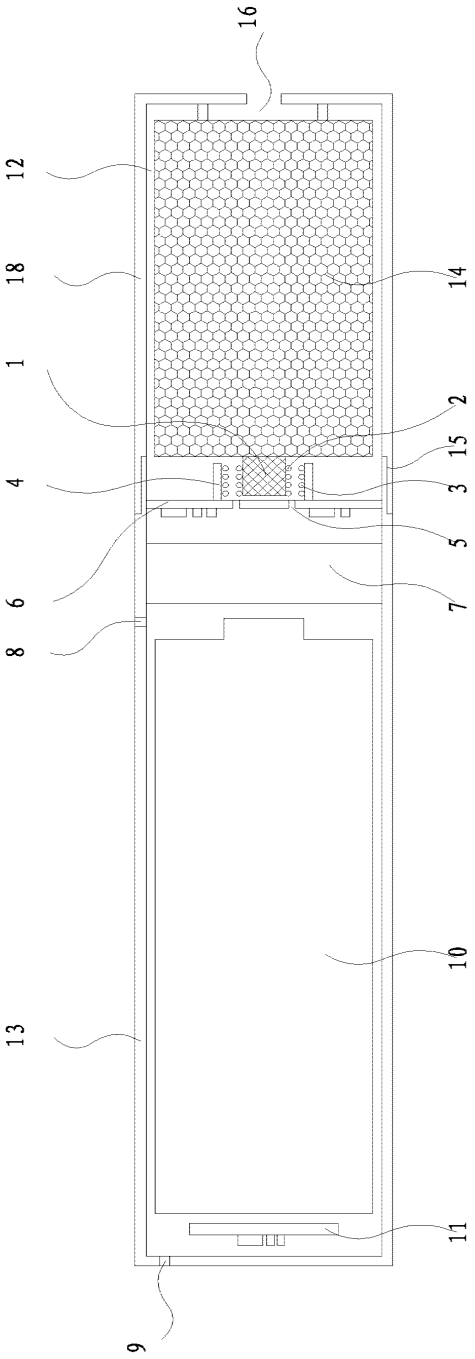

图2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2010/073613

A. CLASSIFICATION OF SUBJECT MATTER

A61M11/00 (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)

IPC: A61M 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)

WPI, EPODOC, CNPAT, CNKI

ATOMIZER?,CIGARETTE, ELECTR+, HEAT+

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN201079011Y(HAN,Li) 02 Jul.2008 (02.07.2008), the whole document.	1-10
A	CN100381083C (HAN,Li) 16 Apr. 2008 (16.04.2008), the whole document.	1-10
A	CN101176805A(DAFUBAO INT CO LTD) 14 May 2008 (14.05.2008), the whole document.	1-10
A	US5095921A (PHILIP MORRIS INC), 17 Mar. 1992(17.03.1992), the whole document.	1-10
A	US5144962A (PHILIP MORRIS INC), 08 Sept. 1992(08.09.1992), the whole document.	1-10

☐ 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

"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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	Date of mailing of the international search report
10 Aug. 2010 (10.08.2010)	**26 Aug. 2010 (26.08.2010)**
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer TIAN,Yunqing Telephone No. (86-10)62085631

Form PCT/ISA /210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2010/073613

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN201079011Y	02.07.2008	WO2007131450 A	22.11.2007
		WO2007131449 A	22.11.2007
		CA2647234 A	22.11.2007
		CA2647212 A	22.11.2007
		AU2007250368 A	22.11.2007
		AU2007250367 A	22.11.2007
		CN201067079Y	04.06.2008
		MX2008013527 A	04.11.2008
		MX2008013526 A	04.11.2008
		KR20090005139 A	12.01.2009
		EP2022350 A	11.02.2009
		EP2022349 A	11.02.2009
		KR20090018039 A	19.02.2009
		EA200802046 A	27.02.2009
		EA200802045 A	27.02.2009
		EA012481 B	30.10.2009
		US2009095311 A	16.04.2009
		US2009126745 A	21.05.2009
		JP2009537120T	29.10.2009
		JP2009537119T	29.10.2009
		ZA200809063 A	25.11.2009
		ZA200809062 A	25.11.2009
CN100381083C	16.04.2008	CN1541577 A	03.11.2004
		CA2518174 A	11.11.2004
		AU2004234199 A	11.11.2004
		WO2004095955 A	11.11.2004
		RU2336001 C	20.10.2008
		RU2005115958 A	10.11.2005
		EP1618803 A	25.01.2006
		BRPI0407944 A	07.03.2006

Form PCT/ISA /210 (patent family annex) (July 2009)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2010/073613

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
		MXPA05009191 A	10.03.2006
		PL379020 A	26.06.2006
		US2006196518 A	07.09.2006
		JP2006524494T	02.11.2006
		KR20070087265 A	28.08.2007
		EA009532 B	28.02.2008
		AT415831T	15.12.2008
		PT1618803E	29.12.2008
		DK1618803T	16.03.2009
		ES2316969T	16.04.2009
		SI1618803T	30.04.2009
		HK1070791 A	05.06.2009
CN101176805A	14.05.2008	CN100536951C	09.09.2009
		WO2008058455A	22.05.2008
US5095921 A	17.03.1992	NO910355 A	20.05.1992
		NO176545B	16.01.1995
		NO176545C	26.04.1995
		CA2035761 A	20.05.1992
		AU642460B	21.10.1993
		AU7013991 A	21.05.1992
		EP0488488 A	03.06.1992
		TR25275 A	01.01.1993
		US5179966 A	19.01.1993
		AT108311T	15.07.1994
		ES2057751T	16.10.1994
		JP6315366A	15.11.1994
		JP3078033B2	21.08.2000
		DK0488488T	21.11.1994
		DE69102862T	05.01.1995
US5144962 A	08.09.1992	CA2031225 A	02.06.1991

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2010/073613

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
		NO950330 A	03.06.1991
		NO302272B	16.02.1998
		NO905150 A	03.06.1991
		NO177174B	24.04.1995
		NO177174C	09.08.1995
		EP0430559 A	05.06.1991
		AU6762090 A	06.06.1991
		JP3232481 A	16.10.1991
		JP3392138B2	31.03.2003
		TR25316 A	01.01.1993
		AU646415B	24.02.1994
		AT118992T	15.03.1995
		ES2069027T	01.05.1995
		DK0430559T	01.05.1995
		DE69017371T	12.10.1995
		KR0178388B	18.02.1999

Form PCT/ISA /210 (patent family annex) (July 2009)

国际检索报告

国际申请号 **PCT/CN2010/073613**

A. 主题的分类

A61M11/00 (2006.01) i

按照国际专利分类(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类系统和分类号)

IPC: A61M A24

包含在检索领域中的除最低限度文献以外的检索文献

在国际检索时查阅的电子数据库(数据库的名称，和使用的检索词（如使用）)

WPI, EPODOC, CNPAT, CNKI

雾 烟 电子 高频 加热 ATOMIZER?,CIGARETTE, ELECTR+, HEAT+

C. 相关文件

类 型*	引用文件，必要时，指明相关段落	相关的权利要求
A	CN201079011Y(韩力) 02.7 月 2008 (02.07.2008)，全文。	1-10
A	CN100381083C (韩力) 16.4 月 2008 (16.04.2008)，全文。	1-10
A	CN101176805A(达福堡国际有限公司) 14.05 月 2008 (14.05.2008)，全文。	1-10
A	US5095921A(PHILIP MORRIS INC), 17.3 月 1992(17.03.1992), 全文。	1-10
A	US5144962A(PHILIP MORRIS INC), 08.9 月 1992(08.09.1992), 全文。	1-10

☐ 其余文件在 C 栏的续页中列出。 ☒ 见同族专利附件。

* 引用文件的具体类型：

"A" 认为不特别相关的表示了现有技术一般状态的文件

"E" 在国际申请日的当天或之后公布的在先申请或专利

"L" 可能对优先权要求构成怀疑的文件，或为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件（如具体说明的）

"O" 涉及口头公开、使用、展览或其他方式公开的文件

"P" 公布日先于国际申请日但迟于所要求的优先权日的文件

"T" 在申请日或优先权日之后公布，与申请不相抵触，但为了理解发明之理论或原理的在后文件

"X" 特别相关的文件，单独考虑该文件，认定要求保护的发明不是新颖的或不具有创造性

"Y" 特别相关的文件，当该文件与另一篇或者多篇该类文件结合并且这种结合对于本领域技术人员为显而易见时，要求保护的发明不具有创造性

"&" 同族专利的文件

国际检索实际完成的日期	国际检索报告邮寄日期
10.08 月 2010 (10.08.2010)	**26.8 月 2010 (26.08.2010)**
ISA/CN 的名称和邮寄地址： 中华人民共和国国家知识产权局 中国北京市海淀区蓟门桥西土城路 6 号 100088 传真号： (86-10)62019451	受权官员 田蕴青 电话号码：(86-10) **62085631**

PCT/ISA/210 表(第 2 页) (2009 年 7 月)

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2010/073613

检索报告中引用的专利文件	公布日期	同族专利	公布日期
CN201079011Y	02.07.2008	WO2007131450 A	22.11.2007
		WO2007131449 A	22.11.2007
		CA2647234 A	22.11.2007
		CA2647212 A	22.11.2007
		AU2007250368 A	22.11.2007
		AU2007250367 A	22.11.2007
		CN201067079Y	04.06.2008
		MX2008013527 A	04.11.2008
		MX2008013526 A	04.11.2008
		KR20090005139 A	12.01.2009
		EP2022350 A	11.02.2009
		EP2022349 A	11.02.2009
		KR20090018039 A	19.02.2009
		EA200802046 A	27.02.2009
		EA200802045 A	27.02.2009
		EA012481 B	30.10.2009
		US2009095311 A	16.04.2009
		US2009126745 A	21.05.2009
		JP2009537120T	29.10.2009
		JP2009537119T	29.10.2009
		ZA200809063 A	25.11.2009
		ZA200809062 A	25.11.2009
CN100381083C	16.04.2008	CN1541577 A	03.11.2004
		CA2518174 A	11.11.2004
		AU2004234199 A	11.11.2004
		WO2004095955 A	11.11.2004
		RU2336001 C	20.10.2008
		RU2005115958 A	10.11.2005
		EP1618803 A	25.01.2006
		BRPI0407944 A	07.03.2006
		MXPA05009191 A	10.03.2006
		PL379020 A	26.06.2006
		US2006196518 A	07.09.2006
		JP2006524494T	02.11.2006
		KR20070087265 A	28.08.2007
		EA009532 B	28.02.2008
		AT415831T	15.12.2008
		PT1618803E	29.12.2008

国际检索报告
关于同族专利的信息

国际申请号
PCT/CN2010/073613

检索报告中引用的专利文件	公布日期	同族专利	公布日期
		DK1618803T	16.03.2009
		ES2316969T	16.04.2009
		SI1618803T	30.04.2009
		HK1070791 A	05.06.2009
CN101176805A	14.05.2008	CN100536951C	09.09.2009
		WO2008058455A	22.05.2008
US5095921 A	17.03.1992	NO910355 A	20.05.1992
		NO176545B	16.01.1995
		NO176545C	26.04.1995
		CA2035761 A	20.05.1992
		AU642460B	21.10.1993
		AU7013991 A	21.05.1992
		EP0488488 A	03.06.1992
		TR25275 A	01.01.1993
		US5179966 A	19.01.1993
		AT108311T	15.07.1994
		ES2057751T	16.10.1994
		JP6315366A	15.11.1994
		JP3078033B2	21.08.2000
		DK0488488T	21.11.1994
		DE69102862T	05.01.1995
US5144962 A	08.09.1992	CA2031225 A	02.06.1991
		NO950330 A	03.06.1991
		NO302272B	16.02.1998
		NO905150 A	03.06.1991
		NO177174B	24.04.1995
		NO177174C	09.08.1995
		EP0430559 A	05.06.1991
		AU6762090 A	06.06.1991
		JP3232481 A	16.10.1991
		JP3392138B2	31.03.2003
		TR25316 A	01.01.1993
		AU646415B	24.02.1994
		AT118992T	15.03.1995
		ES2069027T	01.05.1995
		DK0430559T	01.05.1995
		DE69017371T	12.10.1995
		KR0178388B	18.02.1999

Electronic Patent Application Fee Transmittal	
Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	76320.8012.US01
Filed as Large Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt	
EFS ID:	14173446
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	07-NOV-2012
Filing Date:	05-APR-2011
Time Stamp:	16:32:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	3432
Deposit Account	502586
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Information Disclosure Statement (IDS) Form (SB08)	2012-11-07_IDS_763208012US 1.pdf	612325 b957879624c08d44be9b959e55d650be87bfe564	no	4
Warnings:					
Information:					
2	Foreign Reference	WO2010145468.pdf	606952 1ec8213fe38bc798626182cbc5b794f9a729d275	no	15
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30144 87adf4ba595eab7ae2edae2dc009058759b44892	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1249421		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

34055 7590 11/14/2012

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
MAYES, DIONNE WALLS	
ART UNIT	PAPER NUMBER
1747	

DATE MAILED: 11/14/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Li HAN	76320.8012.US01	1784

TITLE OF INVENTION: AEROSOL ELECTRONIC CIGARETTE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$885	$300	$0	$1185	02/14/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 02/11)

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

34055 7590 11/14/2012

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Li HAN	76320.8012.US01	1784

TITLE OF INVENTION: AEROSOL ELECTRONIC CIGARETTE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$885	$300	$0	$1185	02/14/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MAYES, DIONNE WALLS	1747	131-202000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Li HAN	76320.8012.US01	1784

34055 7590 11/14/2012

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
MAYES, DIONNE WALLS	
ART UNIT	**PAPER NUMBER**
1747	

DATE MAILED: 11/14/2012

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 13/079,937	Applicant(s) HAN, LI	
	Examiner DIONNE WALLS MAYES	Art Unit 1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Amendment filed on August 3, 2012*.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *31-33*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☒ Certified copies of the priority documents have been received in Application No. *12/226,818* .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/DIONNE WALLS MAYES/ Examiner, Art Unit 1747	/Richard Crispino/ Supervisory Patent Examiner, Art Unit 1747

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4819665	A	1989-04-11	Roberts	
	2	5224498		1993-07-06	Deevi	
	3	5388594	A	1995-02-14	Counts	
	4	5438978		1995-08-08	Hardester	
	5	5730158		1998-06-24	Collins	
	6	6095153	A	2000-08-01	Kessler	
	7	6354293		2002-03-12	Madison	
	8	6715494	B1	2004-04-06	McCoy	

EFS-Web 2.1.11 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 09/19/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	2011-04-05	
(Not for submission under 37 CFR 1.99)	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

	9	7100618	B2	2006-09-05	Dominguez	
	10	8156944	B2	2009-04-16	Lik Hon	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060196518	A1	2006-09-07	Lik Hon	
	2	20090188490		2009-07-30	Li Han	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	03111582.9	CN		2004-11-11	Lik Hon	published as CN1541577A	☐
	2	200420031182.0	CN		2005-08-24	Lik Hon	published as CN2719043	☐
	3	101176805	CN		2008-05-14	Dafubao Int Co Ltd		☐

EFS-Web 2.2.2 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 09/19/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2011-04-05	
	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

	4	0057243	EP		1982-08-01	Horst		☐
	5	0295122	EP	A2	1988-12-14	Imperial Tobacco Limited		☐
	6	PCT/CN04/000182	WO		2004-11-11	Lik Hon	published as WO2004095955	☐
	7	PCT/CN05/000337	WO		2005-08-24	Lik Hon	published as WO2005099494	☐

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	AUSTRALIAN PATENT OFFICE, Examination Report for SG 200505930-8, dated May 4, 2006.	☐
	2	AUSTRALIAN PATENT OFFICE; Exam Report for AU2004234199, dated August 14, 2009.	☐
	3	AUSTRALIAN PATENT OFFICE; Search and Examination Report for SG200604498-6, dated April 16, 2008.	☐
	4	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN04/000182, dated June 10, 2004.	☐
	5	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN05/000337, July 14, 2005.	☐

EFSWeb 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 09/19/2012	Application Number	13079937 13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	6	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN10/073613, August 26, 2010.	☐
	7	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN10/000125, April 1, 2010.	☐
	8	CN CREATIVE ; INTELLICIG USA, Ruyan v. Smoking Everywhere et al. CV11-6268 Invalidity Contentions, April 12, 2012.	☐
	9	CYPHERT, GIL DBA NU1S, Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, April 11, 2012.	☐
	10	EUROPEAN PATENT OFFICE, Supplemental Extended European Search Report for EP04718242, dated July 27, 2007.	☐
	11	EUROPEAN PATENT OFFICE, Supplemental Extended European Search Report for EP05729107, dated July 31, 2007.	☐
	12	EUROPEAN PATENT OFFICE, Supplemental Partial Extended European Search Report for EP05729107, dated May 22, 2007.	☐
	13	EUROPEAN PATENT OFFICE, Supplemental Partial Extended European Search Report for EP04718242, dated May 22, 2007.	☐
	14	FIN BRANDING GROUP, LLC, Request for Inter Partes Reexamination of U.S. Patent No. 8,156,944, filed September 13, 2012.	☐
	15	JAPANESE PATENT OFFICE, Office Action and English Translation for JP2006504199, dated October 30, 2009.	☐
	16	KOREAN INTELLECTUAL PROPERTY OFFICE, Notice of Preliminary Rejection for KR1020057009767, dated July 27, 2009.	☐

EFS Web 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M

Receipt date: 09/19/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2011-04-05	
	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

	17	MACAU PATENT OFFICE, Official Communication for MOI121, dated April 17, 2009.	☐
	18	MALAYSIAN PATENT OFFICE, Examiner's Report for MY PI 20041407, dated September 28, 2007.	☐
	19	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, April 12, 2012.	☐
	20	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, Exhibit 7 (Claim 20 Claim Chart), April 12, 2012.	☐
	21	SOTTERA, INC., Ruyan v. Smoking Everywhere et al. CV11-0367 Invalidity Contentions, Exhibit 8 (Claim 24 Claim Chart), April 12, 2012.	☐
	22	TAIWAN PATENT OFFICE, Official Letter for TW093111573, dated April 24, 2009.	☐
	23	UKRAINE PATENT OFFICE, Examination Report for UA200511258, dated February 4, 2009.	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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Receipt date: 09/19/2012	Application Number	13079937 13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-09-19
Name/Print	Kenneth H. Ohriner	Registration Number	31646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13079937	HAN, LI
	Examiner	Art Unit
	DIONNE W MAYES	1747

SEARCHED			
Class	Subclass	Date	Examiner
131	360, 194, 273	7/17/2012	DWM
128	202.21	7/17/2012	DWM
updated above		11/3/2012	DWM

SEARCH NOTES		
Search Notes	Date	Examiner
EAST search conducted (see attached search strategy)	7/17/2012	DWM
Inventor search conducted	7/17/2012	DWM
EAST search conducted (see attached search strategy)	11/3/2012	DWM
Inventor search conducted	11/3/2012	DWM

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
131	360, 194, 273	11/3/2012	DWM
128	202.21	11/3/2012	DWM

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US20030108342	6/12/2003	Sherwood et al.	
	A2	US20040261802	12/30/2004	Griffin et al.	
	A3	US20050016550	1/1/2005	Katase	
	A4	US20050236006	10/27/2005	Cowan	
	A5	US20060196518	9/1/2006	Hon, Lik	
	A6	US20080188490	7/30/2009	Li Han	
	A7	US20080276947	11/13/2008	Martzel	
	A8	US20090095311	4/16/2009	Han, Li	
	A9	US20090126745	5/21/2009	Hon Lik	
	A10	US20090151717	6/18/2009	Bowen	
	A11	US20090230117	9/17/2009	Fernando	
	A12	US20090260642	10/22/2009	Monsees	
	A13	US20090272379	11/5/2009	Thorens	
	A14	US20100031968	2/11/2010	Sheikh	
	A15	US20100126505	5/27/2010	Rinker	
	A16	US20100181387	7/22/2010	Zaffaroni	
	A17	US20100200008	8/12/2010	Teieb	
	A18	US20100242974	9/30/2010	Pan	
	A19	US20100307518	12/9/2010	Wang	
	A20	US20110005535	1/13/2011	Xiu	
	A21	US20110036346	2/17/2011	Cohen	
	A22	US1775947	5/3/1927	Robinson	
	A23	US2057353	10/13/1936	Whittemore	
	A24	US3200819	8/17/1965	Gilbert	
	A25	US4171000	10/16/1979	Uhle	
	A26	US4641053	2/1/1987	Takeda	
	A27	US4735217	8/14/1990	Gerth	
	A28	US4756318	7/12/1988	Clearman	
	A29	US4771796	9/20/1988	Myer	
	A30	US4848374	7/1/1989	Chard	

Examiner Signature		Date Considered	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	A31	US4945931	8/7/1990	Gori	
	A32	US4947875	8/14/1990	Brooks	
	A33	US5042470	8/1/1991	Kanesaka	
	A34	US5060671	10/29/1991	Counts et al.	
	A35	US5080114	1/14/1992	Rudolph et al.	
	A36	US5095921	3/17/1992	Losee	
	A37	US5144962	9/8/1992	Counts	
	A38	US5159940	11/3/1992	Hayward et al.	
	A39	US5190060	3/2/1993	Gerding	
	A40	US5249586	10/5/1993	Morgan et al.	
	A41	US5261424	11/16/1993	Sprinkel Jr.	
	A42	US5285798	2/15/1994	Banerjee	
	A43	US5322075	6/21/1994	Deevi	
	A44	US5505214	4/9/1996	Collins	
	A45	US5666977	9/16/1997	Counts	
	A46	US5666978	9/16/1997	Counts	
	A47	US5743251	4/28/1998	Howell	
	A48	US5799663	9/1/1998	Elan Pharmaceuticals	
	A49	US5819756	10/13/1998	Mielordt	
	A50	US5878752	3/9/1999	Adams et al.	
	A51	US5894841	4/20/1999	Voges	
	A52	US6040560	3/21/2000	Fleischhauer	
	A53	US6041789	3/28/2000	Bankert	
	A54	US6164287	12/26/2000	White	
	A55	US6178969	1/30/2001	St. Charles	
	A56	US6196218	3/6/2001	Voges	
	A57	US6357671	3/2/2005	Cewers	
	A58	US6443146	9/3/2002	Voges	
	A59	US6532965	3/18/2003	Abhulimen	
	A60	US6772756	8/10/2004	Shayan	
	A61	US6803545	10/12/2004	Blake	
	A62	US6810883	11/2/2004	Felter	
	A63	US6854461	2/15/2005	Nichols	
	A64	US6854470	2/15/2005	Pu	

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

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Sheet 3 of 6

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Application Number	13/079,937
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Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	A65	US7131599	11/7/2006	Katase	
	A66	US7726320	6/1/2010	Robinson	
	A67	US7832410	11/16/2010	Lik HON	
	A68	US7845359	12/7/2010	Montaser	
	A69	US7997280	8/16/2011	Rosenthal	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T[6]
	B1	CN101116542A CN20071121524	2/6/2008	Chinese Acad Tech Inst Physics		
	B2	CN1135860	11/20/1996	Du, Xu		
	B3	CN200997909Y CN20062135072U	1/2/2008	Wang, Yumin		
	B4	CN2047485U CN89207339.X	11/15/1989	Yuzhong, Zhao		
	B5	CN2293957Y CN97216131	10/14/1998	Yuzhong, Zhao		
	B6	CN2777995Y CN200520089947.0	5/10/2006	Li HAN		
	B7	DE10051792	5/8/2002	Rainer, Puellen		
	B8	EP0230420	8/5/1987	Nilsson		
	B9	EP0295122 B1	1/22/1992	Imperial Tobacco Co Ltd		
	B10	EP0342538	11/23/1989	R.J. Reynolds Tobacco		
	B11	EP0358002	3/14/1990	Reynolds Tobacco		
	B12	EP0545186	6/9/1993	R.J. Reynolds Tobacco		

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

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Sheet 4 of 6

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Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
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Attorney Docket Number	76320.8012.US01

	B13	EP0703735	4/3/1996	Philip Morris		
	B14	EP0824927	2/25/1998	Belli, Guido		
	B15	EP0845220	6/3/1998	Japan Tobacco Inc.		
	B16	EP0893071	1/27/1999	Japan Tobacco		
	B17	EP0951219	11/13/2002	Philip Morris		
	B18	GB1528391 A	10/11/1978	Gildemeister		
	B19	JP06114105	4/26/1994	Masanobu		
	B20	JP07506999	8/3/1995	Medix Electronics		
	B21	JP09075058	3/5/1997	Masaya		
	B22	JP64000498	1/5/1989	N/A		
	B23	UA47514	12/29/1997	Brown & Williamson Tobacco		
	B24	WO19940009842	5/11/1994	Rosen		
	B25	WO1994021317	9/29/1994	Xetel Corp		
	B26	WO1997040876	11/6/1997	Astrazeneca		
	B27	WO1997048293	12/24/1997	Japan Tobacco		
	B28	WO1998017130	4/30/1998	Philip Morris		
	B29	WO2000049901	8/31/2000	Weber-Quitzau		
	B30	WO2001005459	1/25/2001	Aradigm		
	B31	WO2003022364	3/20/2003	Marioff Corporation		
	B32	WO2003034847	1/5/2003	British American Tobacco		
	B33	WO2003055486	7/10/2003	Pharmacia AB		
	B34	WO2003101454	12/11/2003	Pharmacia AB		
	B35	WO2004001407	12/31/2003	Asthma Alert Ltd		
	B36	WO2004023222	3/18/2004	Brady Development		

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 5 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	B37	WO2004080216	9/23/2004	Best Partners Worldwide		
	B38	WO2006082571	8/10/2006	Oglesby & Butler Research and Development Limited		
	B39	WO2007078273	7/12/2007	Augite Incorporation		
	B40	WO2008077271	7/3/2008	Maas		
	B41	WO2008130813	10/30/2008	Sottera, Inc.		
	B42	WO2009118085	10/1/2009	Philip Morris		
	B43	WO2009135729	11/12/2009	British American Tobacco		
	B44	WO2010052323	5/14/2010	Inhaleness B. V.		
	B45	WO2010091593	8/19/2010	Hon Lik		
	B46	WO2010145805	12/23/2010	Zetzig AB		
	B47	WO2011010334	1/27/2011	RML S. R. L.		
	B48	WO2011022431	2/24/2011	Chong Corp.		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	CHINA INTELLECTUAL PROPERTY OFFICE, English Translation of Written Opinion for PCT/CN07/001575, July 20, 2007	
	C2	CHINA INTELLECTUAL PROPERTY OFFICE, English translation of Written Opinion for PCT/CN07/001576, August 3, 2007	
	C3	CHINA INTELLECTUAL PROPERTY OFFICE, International Search Report for PCT/CN07/001576, August 16, 2007	
	C4	CHINA INTELLECTUAL PROPERTY OFFICE, Search Report for CN ZL 200620090805.0,	
	C5	Introduction to selecting and using electronic components, ISBN7-111-13752-3	
	C6	EUROPEAN PATENT OFFICE, Extended European Search Report for EP07721148, December 6, 2010	

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

PTO/SB/08b (07-09)
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 6 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	C7	EUROPEAN PATENT OFFICE, Extended European Search Report for EP11001479, July 4, 2011	
	C8	Manual for Electric Engineers, 2nd Ed, March 2000	
	C9	Manual for Mechanical Designers, 4th Ed, January 2002	
	C10	Materials Manual-Nonmetal, July 1, 1985	
	C11	TechPowerUp "What is a MOSFET, what does it look like and how does it work?" May 24, 2004	

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

76320-8012.US01/LEGAL24078841.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13079937	HAN, LI
	Examiner	Art Unit
	DIONNE WALLS MAYES	1747

ORIGINAL		INTERNATIONAL CLASSIFICATION														
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED									
131	273	A	2	4	F	47 / 00 (2006.01.01)										
CROSS REFERENCE(S)																
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)															
131	194	360														
128	202.21															

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17												
	2		18												
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	4		20												
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	13		29												
	14	1	30												
	15	2	31												
	16	3	32												

/DIONNE WALLS MAYES/ Examiner.Art Unit 1747	11/03/2012	Total Claims Allowed:
(Assistant Examiner)	(Date)	3
/RICHARD CRISPINO/ Supervisory Patent Examiner.Art Unit 1747	11/05/2012	O.G. Print Claim(s): 1 / O.G. Print Figure: 1
(Primary Examiner)	(Date)	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	("8156944").PN.	US-PGPUB; USPAT	OR	OFF	2012/07/17 10:02
S2	940	((131/273) or (131/360) or (131/194) or (128/202.21)).CCLS.	US-PGPUB; USPAT	OR	OFF	2012/07/17 10:08
S3	52	("20030108342" | "20040261802" | "20050016550" | "20050236006" | "20060196518" | "20070267031" | "20080276947" | "20090151717" | "20090230117" | "20090260642" | "20090272379" | "20100031968" | "20100126505" | "20100181387" | "20100200008" | "20100242974" | "20100307518" | "20110005535" | "20110036346" | "4228925" | "4641053" | "4848374" | "4945929" | "4945931" | "5042470" | "5060671" | "5080114" | "5095921" | "5159940" | "5190060" | "5249586" | "5261424" | "5285798" | "5322075" | "5666978" | "5743251" | "5746251" | "5878752" | "5894841" | "6040560" | "6041789" | "6164287" | "6178969" | "6196218" | "6357671" | "6443146" | "6532965" | "6772756" | "6803545" | "6854461" | "7131599" | "7845359").PN. OR ("8156944").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 10:19
S4	23	(("20030108342" | "20040261802" | "20050016550" | "20050236006" | "20060196518" | "20070267031" | "20080276947" | "20090151717" | "20090230117" | "20090260642" | "20090272379" | "20100031968" | "20100126505" | "20100181387" | "20100200008" | "20100242974" | "20100307518" | "20110005535" | "20110036346" | "4228925" | "4641053" | "4848374" | "4945929" | "4945931" | "5042470" | "5060671" | "5080114" | "5095921" | "5159940" | "5190060" | "5249586" | "5261424" | "5285798" | "5322075" | "5666978" | "5743251" | "5746251" | "5878752" | "5894841" | "6040560" | "6041789" | "6164287" | "6178969" | "6196218" | "6357671" | "6443146" | "6532965" | "6772756" | "6803545" | "6854461" | "7131599" | "7845359").PN. OR ("8156944").URPN.) and wire	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 10:21
S5	1	(("20030108342" | "20040261802" | "20050016550" | "20050236006" | "20060196518" | "20070267031" | "20080276947" | "20090151717" | "20090230117" | "20090260642" |	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 10:23

		"20090272379" | "20100031968" | "20100126505" | "20100181387" | "20100200008" | "20100242974" | "20100307518" | "20110005535" | "20110036346" | "4228925" | "4641053" | "4848374" | "4945929" | "4945931" | "5042470" | "5060671" | "5080114" | "5095921" | "5159940" | "5190060" | "5249586" | "5261424" | "5285798" | "5322075" | "5666978" | "5743251" | "5746251" | "5878752" | "5894841" | "6040560" | "6041789" | "6164287" | "6178969" | "6196218" | "6357671" | "6443146" | "6532965" | "6772756" | "6803545" | "6854461" | "7131599" | "7845359").PN. OR ("8156944").URPN.) and (wire near15 (wind$3 or wound))				
S6	1	("4945929").PN.	US-PGPUB; USPAT	OR	OFF	2012/07/17 11:30
S7	1	("7832410").PN.	US-PGPUB; USPAT	OR	OFF	2012/07/17 12:05
S9	6	((lik near3 hon) or (han near3 li)).in. and cigarette	USPAT	ADJ	ON	2012/07/17 12:11
S10	10	((lik near3 hon) or (han near3 li)).in. and cigarette and wire	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:00
S11	3	((lik near3 hon) or (han near3 li)).in. and cigarette and (wire and (wind$3 or wound)).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:00
S12	3	((lik near3 hon) or (han near3 li)).in. and (wire and (wind$3 or wound)).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:01
S13	3	((lik near3 hon) or (han near3 li)).in. and (wire and (wind$3 or wound) and porous).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/07/17 15:15
S14	86	"219"/$.ccls. and (porous near15 heat$3 near25 (coil or wire))	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:06
S15	4	"219"/$.ccls. and (porous near15 heat$3 near25 (coil or wire)) near50 (wind$3 or wound)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:09
S16	4	"219"/$.ccls. and (porous near25 heat$3 near25 (coil or wire)) near50 (wind$3 or wound)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:09
S17	591	((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:17
S18	446	((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) and (liquid or fluid)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:19
S19	518	((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) and (liquid or fluid or water or flavor$4 or nicotine)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:20
S20	87	((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) and (liquid or fluid or water or flavor$4 or nicotine) and battery	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:20

S21	335	((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) near50 (liquid or fluid or water or flavor$4 or nicotine)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:23
S22	81	"219"/$.ccls. and ((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) near50 (liquid or fluid or water or flavor$4 or nicotine)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:28
S23	12	"219"/$.ccls. and ((electric$2 or electronic) near5 heat$4).ti. and (vapori$4 or vaporization or atomi$4 or atomization) near50 (liquid or fluid or water or flavor$4 or nicotine) and ((coil or wire) near25 (wind or winding or wound))	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 16:29
S24	42	(vaporizer or humidified).ti. and (vapori$4 or vaporization or atomi$4 or atomization) near50 (liquid or fluid or water or flavor$4 or nicotine) and ((coil or wire) near25 (wind or winding or wound))	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/10/16 17:13
S25	0	("2005099494").PN.	US-PGPUB; USPAT	OR	OFF	2012/10/22 10:36
S26	5	("2005099494").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2012/10/22 10:36
S27	2	("7832410").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2012/10/22 10:53
S28	2	("6196218").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2012/10/22 11:05
S29	50	(porous near15 heat$3 near25 (coil or wire)) near50 (wind$3 or wound)	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 13:52
S30	213	131/360.ccls. and (cigarette).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 14:19
S31	3	131/360.ccls. and (electronic cigarette).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 14:22
S32	33	(electronic cigarette).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 14:23
S33	76	(electr$6 cigarette).clm.	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 14:23
S34	77	"219"/$.ccls. and ((electr$6 cigarette).clm.	US-PGPUB;	ADJ	ON	2012/11/03

		or (electr$4 cigarette).ti.)	USPAT; USOCR			14:33
S35	18	((lik near3 hon) or (han near3 li)).in. and cigarette	US-PGPUB; USPAT; USOCR	ADJ	ON	2012/11/03 15:31

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S36	224	((131/273) or (131/360) or (131/194) or (128/202.21)).CCLS.	US-PGPUB; UPAD	OR	OFF	2012/11/03 13:49
S37	13	((lik near3 hon) or (han near3 li)).in. and cigarette	US-PGPUB; UPAD	ADJ	ON	2012/11/03 13:49
S38	12	(porous near15 heat$3 near25 (coil or wire)) near50 (wind$3 or wound)	US-PGPUB; UPAD	ADJ	ON	2012/11/03 13:52
S39	27	(electr$6 cigarette).clm.	US-PGPUB; UPAD	ADJ	ON	2012/11/03 14:31
S40	2	"219"/$.ccls. and ((electr$6 cigarette).clm. or (electr$4 cigarette).ti.)	US-PGPUB; UPAD	ADJ	ON	2012/11/03 14:41

11/3/2012 6:34:12 PM
C:\Users\dmayes\Documents\EAST\Workspaces\13079937.wsp

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Li HAN	76320.8012.US01	1784

34055 7590 11/21/2012

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
MAYES, DIONNE WALLS	
ART UNIT	**PAPER NUMBER**
1747	

NOTIFICATION DATE	DELIVERY MODE
11/21/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

PTOL-90A (Rev. 04/07)

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
13/079,937	05 April, 2011	HAN, LI	76320.8012.US01

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
DIONNE WALLS MAYES	
ART UNIT	PAPER
1747	20121116

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on October 4, 2012 and November 7, 2012 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Acknowledgement of Typographical Error on "Notice of Allowability"

2. In the "Notice of Allowability" mailed on November 14, 2012, the Examiner inadvertently listed claims 31-33 as the allowed claims. This was a typographical error as, in fact, the claims which are allowed are claims 30-32. Please consider this communication to be a written acknowledgement of the error, and update your records to reflect the corrected information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE WALLS MAYES whose telephone number is (571)272-5836. The examiner can normally be reached on Monday thru Friday, 8:30A - 5:00P EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

I

/DIONNE WALLS MAYES/
Examiner, Art Unit 1747

PTO-90C (Rev.04-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

EFS Web 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 10/04/2012	Application Number	13079937 13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	1	IP AUSTRALIA, Patent Examination Report No. 1 for AU2007250367, July 30, 2012.	☐
	2	IP AUSTRALIA, Patent Examination Report No. 1 for AU2007250368, August 9, 2012.	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

EFS Web 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 10/04/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2011-04-05	
	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☒ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-10-04
Name/Print	Kenneth H. Ohriner	Registration Number	31646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Li Han
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	2631219		1953-03-10	Suchy	
	2	5497791		1996-03-12	Bowen et al.	
	3	5591368		1997-01-07	Fleischauer et al.	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					
If you wish to add additional U.S. Published Application citation information please click the Add button.						Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2010145468	WO		2010-12-23	Wenbo Li		☐

EFS-Web 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 11/07/2012	Application Number	13079937 13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2011-04-05
	First Named Inventor	Li Han
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

If you wish to add additional Foreign Patent Document citation information please click the Add button			Add
NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		☐
If you wish to add additional non-patent literature document citation information please click the Add button			Add

EXAMINER SIGNATURE			
Examiner Signature	/Dionne Walls Mayes/	Date Considered	11/16/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

EFS Web 2.1.17 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 11/07/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2011-04-05	
	First Named Inventor	Li Han	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-11-07
Name/Print	Kenneth H. Ohriner	Registration Number	31646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Docket No.: 76320.8012.US00
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Li HAN

Application No.: 13/079,937 Confirmation No.: 1784

Filed: April 5, 2011 Art Unit: 1747

For: AEROSOL ELECTRONIC CIGARETTE Examiner: Dionne Walls Mayes

REQUEST FOR CORRECTION OF INVENTOR NAME - MPEP 605.04(B)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This letter is to notify the Office of the correction of a transliteration error in the name of the inventor. There is no change of individual but an incorrect name was given in the declaration due to transliteration error. The name in the inventor declaration is Li HAN, and the correct name is **Lik HON**.

MPEP 605.04(B) specifies that this situation does not require a petition or a new declaration. A Supplemental Application Data Sheet (ADS) showing the correct name ***is*** enclosed herewith.

Dated: December 7, 2012

Respectfully submitted,

Electronic signature: /KennethHOhriner/
Kenneth H. Ohriner
Registration No.: 31,646
PERKINS COIE LLP
P.O. Box 1208
Seattle, Washington 98111-1208
(310) 788-3250
(206) 332-7198 (Fax)
Attorney for Applicant

76320-8012.US01/LEGAL25332508.1

SUPPLEMENTAL APPLICATION DATA SHEET

PTO/SB/14 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~JANLEA-001-DIV~~ 76320.8012.US01
	Application Number	13/079,937
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Applicant Information:

Applicant 1

Applicant Authority ◉ Inventor ○ Legal Representative under 35 U.S.C. 117 ○ Party of Interest under 35 U.S.C. 118

Prefix	Given Name	Middle Name	Family Name	Suffix
	~~Li~~ Lik		~~HAN~~ HON	

Residence Information (Select One) ○ US Residency ◉ Non US Residency ○ Active US Military Service

City	Hong Kong	Country Of Residencei	CN
Citizenship under 37 CFR 1.41(b)	CN		

Mailing Address of Applicant:

Address 1	1010-12 Room, West Tower, Shun Centre		
Address 2	168 Connaught Road, Mid-Gannuo		
City	Hong Kong	State/Province	
Postal Code		Country	CN

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ An Address is being provided for the correspondence Information of this application.

Customer Number	~~62008~~ 34055		
Email Address	~~info@malerandmaier.com~~ patentprocurement@perkinscoie.com	Add Email	Remove Email

Application Information:

Title of the Invention	AEROSOL ELECTRONIC CIGARETTE		
Attorney Docket Number	~~JANLEA-001-DIV~~ 76320.8012.US01	Small Entity Status Claimed	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Suggested Class (if any)		Sub Class (if any)	
Suggested Technology Center (if any)			
Total Number of Drawing Sheets (if any)	8	Suggested Figure for Publication (if any)	1

EFS Web 2.2.2

PTO/SB/14 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~JANLEA-001-DIV~~ 76320.8012.US01
	Application Number	13/079,937
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)
☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Enter either Customer Number or complete the Representative Name section below. If both sections are completed the Customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	~~62008~~ 34055		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78(a)(2) or CFR 1.78(a)(4), and need not otherwise be made part of the specification.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Division of	12/226818	2008-10-29
Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
12/226818	a 371 of international	PCT/CN2007/001575	2007-05-15

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a).

Remove

Application Number	Country	Parent Filing Date (YYYY-MM-DD)	Priority Claimed
200620090805.0	CN	2006-05-16	◉ Yes ○ No

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

PTO/SB/14 (07-07)
Approved for use through 06/30/2010. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~JANLEA-001-DIV~~ 76320.8012.US01
	Application Number	13/079,937
Title of Invention	AEROSOL ELECTRONIC CIGARETTE	

Assignee Information:

Providing this information in the application data sheet does not substitute for compliance with any requirement of part 3 of Title 37 of the CFR to have an assignment recorded in the Office.

Assignee 1

If the Assignee is an Organization check here. [X]

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix
RUYAN INVESTMENT (HOLDINGS) LIMITED				

Mailing Address Information:

Address 1	28 Marble Road		
Address 2	Room 1101/ 11/F, China United Center		
City	North Point	**State/Province**	
Country	Hong Kong	Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee Data may be generated within this form by selecting the **Add** button.

Signature:

A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature.

Signature	~~/Timothy J. Maier/~~ /Kenneth H. Ohriner/			Date (YYYY-MM-DD)	~~2011-04-05~~ 2012-12-07
First Name	~~Timothy~~ Kenneth H.	Last Name	~~Maier~~ Ohriner	Registration Number	~~51986~~ 31646

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Electronic Acknowledgement Receipt

EFS ID:	14414772
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	07-DEC-2012
Filing Date:	05-APR-2011
Time Stamp:	16:13:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	2012-12-07_Ltr_Inventor_Name_763208012US1.pdf	16235 0e9f2ee654403f48b707ccf3799368141276c1f0	no	1
Warnings:					
Information:					

2	Application Data Sheet	2012-12-07_Supp_ADS_763208012US1.pdf	586349 983238508343173edd3450a70ced945131519331	no	3
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
		Total Files Size (in bytes):	602584		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(**Not for submission under 37 CFR 1.99)**

Application Number	13079937
Filing Date	2011-04-05
First Named Inventor	Han Li
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] ¡	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

	1	UNITED STATES PATENT AND TRADEMARK OFFICE, Office Action in Inter Partes Reexamination of U.S. Patent No. 8,156,944, mailed 11/27/2012.	☐
	2	Machine translation Chinese Patent Application 200420031182 which corresponds to the priority document of WO2005/099494 (Hon '494) October 27, 2005, cited by the Examiner in the 11/27/2012 Office Action identified above.	☐
	3	Machine translation of Chinese Patent Application 03111582.9 which corresponds to the priority document of WO2004/095955 (Hon '955) November 11, 2004, cited by the Examiner in the 11/27/2012 Office Action identified above.	☐

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

CERTIFICATION STATEMENT

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OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-12-10
Name/Print	Kenneth H. Ohriner	Registration Number	31646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal	
Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	76320.8012.US01
Filed as Small Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt	
EFS ID:	14429385
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	10-DEC-2012
Filing Date:	05-APR-2011
Time Stamp:	18:05:37
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	5794
Deposit Account	502586
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Information Disclosure Statement (IDS) Form (SB08)	2012-12-10_IDS_763208012US1.PDF	612502 b34efaa1253962741d74f96555c7791345862962	no	4
Warnings:					
Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
2	Non Patent Literature	2012-11-27_REX_Office_Action.PDF	1065242 42425b13c28e87a8c8c26bd7566749bb4f5ee0f4	no	22
Warnings:					
Information:					
3	Non Patent Literature	NPL_Hon_955.PDF	564685 2ee72c17f19e56c63d17887dd9b9afe5816928b0	no	8
Warnings:					
Information:					
4	Non Patent Literature	NPL_Hon_494.PDF	462419 1d46df0de8cac0fd4e39eb6852bed088d27f7fee	no	7
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30004 448c6b6151f30a30fb983176ce7f2e1cb2490fd0	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2734852		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

34055 7590 11/14/2012
PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	~~YI HAN~~ Lik HON	76320.8012.US01	1784

TITLE OF INVENTION: AEROSOL ELECTRONIC CIGARETTE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$885	$300	$0	$1185	02/14/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MAYES, DIONNE WALLS	1747	131-202000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication for "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 Perkins Coie LLP
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: RUYAN INVESTMENT (HOLDINGS) LIMITED
(B) RESIDENCE: (CITY and STATE OR COUNTRY): Hong Kong, HK

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☒ Advance Order - # of Copies 3

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 502586 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature Kenneth H Ohriner Date Dec. 11, 2012

Typed or printed name Kenneth H. Ohriner Registration No. 31,646

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Electronic Patent Application Fee Transmittal

Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	76320.8012.US01

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee	2501	1	885	885
Publ. Fee- early, voluntary, or normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
Printed copy of patent - no color	8001	3	3	9
		Total in USD ($)		**1194**

Electronic Acknowledgement Receipt	
EFS ID:	14440938
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Li HAN
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	11-DEC-2012
Filing Date:	05-APR-2011
Time Stamp:	17:33:27
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$1194
RAM confirmation Number	4771
Deposit Account	502586
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	2012-12-11_IssueFee_7632080 12US1.pdf	1330496 125c1ee899554c91f9cddcfbd42fc4d14d46 bcea	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	33198 1cf7291e1046229a49ce2f2b9f654e557802 9cfd	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1363694		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/079,937	04/05/2011	1747	762	76320.8012.US00	1	1

CONFIRMATION NO. 1784

34055
PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

CORRECTED FILING RECEIPT

OC000000058134974

Date Mailed: 12/13/2012

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)
Lik HON, Hong Kong, CHINA;

Applicant(s)
Lik HON, Hong Kong, CHINA;

Power of Attorney: The patent practitioners associated with Customer Number 34055

Domestic Priority data as claimed by applicant
This application is a DIV of 12/226,818 10/29/2008 PAT 8156944
which is a 371 of PCT/CN2007/001575 05/15/2007

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)
CHINA 200620090805.0 05/16/2006

If Required, Foreign Filing License Granted: 04/13/2011

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/079,937**

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No
** **SMALL ENTITY** **

Title

AEROSOL ELECTRONIC CIGARETTE

Preliminary Class

131

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as

set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13079937
	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					
If you wish to add additional U.S. Patent citation information please click the Add button.						Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					
If you wish to add additional U.S. Published Application citation information please click the Add button.						Add

FOREIGN PATENT DOCUMENTS								Remove
Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐
If you wish to add additional Foreign Patent Document citation information please click the Add button								Add

NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

EFS-Web 2.1.17

Receipt date: 12/10/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2011-04-05	
	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

	1	UNITED STATES PATENT AND TRADEMARK OFFICE, Office Action in Inter Partes Reexamination of U.S. Patent No. 8,156,944, mailed 11/27/2012.	☐
	2	Machine translation Chinese Patent Application 200420031182 which corresponds to the priority document of WO2005/099494 (Hon '494) October 27, 2005, cited by the Examiner in the 11/27/2012 Office Action identified above.	☐
	3	Machine translation of Chinese Patent Application 03111582.9 which corresponds to the priority document of WO2004/095955 (Hon '955) November 11, 2004, cited by the Examiner in the 11/27/2012 Office Action identified above.	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Dionne Walls Mayes/	Date Considered	12/17/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 12/10/2012	Application Number	13079937 13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2011-04-05
	First Named Inventor	Han Li
	Art Unit	1747
	Examiner Name	Dionne Walls Mayes
	Attorney Docket Number	76320.8012.US01

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Kenneth H. Ohriner/	Date (YYYY-MM-DD)	2012-12-10
Name/Print	Kenneth H. Ohriner	Registration Number	31646

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	04/05/2011	Lik HON	76320.8012.US00	1784

34055 7590 12/21/2012

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
MAYES, DIONNE WALLS	
ART UNIT	**PAPER NUMBER**
1747	

NOTIFICATION DATE	DELIVERY MODE
12/21/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

PTOL-90A (Rev. 04/07)

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
13/079,937	05 April, 2011	HON, LIK	76320.8012.US00

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

EXAMINER	
DIONNE WALLS MAYES	
ART UNIT	PAPER
1747	20121217

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 10, 2012 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Conclusion
Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE WALLS MAYES whose telephone number is (571)272-5836. The examiner can normally be reached on Monday thru Friday, 8:30A - 5:00P EST.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached o n 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/DIONNE WALLS MAYES/
Examiner, Art Unit 1747

PTO-90C (Rev.04-03)

PTO/SB/08b (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

	A31	US4945931	8/7/1990	Gori	
	A32	US4947875	8/14/1990	Brooks	
	A33	US5042470	8/1/1991	Kanesaka	
	A34	US5060671	10/29/1991	Counts et al.	
	A35	US5080114	1/14/1992	Rudolph et al.	
	A36	US5095921	3/17/1992	Losee	
	A37	US5144962	9/8/1992	Counts	
	A38	US5159940	11/3/1992	Hayward et al.	
	A39	US5190060	3/2/1993	Gerding	
	A40	US5249586	10/5/1993	Morgan et al.	
	A41	US5261424	11/16/1993	Sprinkel Jr.	
	A42	US5285798	2/15/1994	Banerjee	
	A43	US5322075	6/21/1994	Deevi	
	A44	US5505214	4/9/1996	Collins	
	A45	US5666977	9/16/1997	Counts	
	A46	US5666978	9/16/1997	Counts	
	A47	US5743251	4/28/1998	Howell	
Change(s) applied to document, /T.C.T./ 12/19/2012	A48	US5799663	9/1/1998	~~Elan Pharmaceuticals~~	Gross, et al.
	A49	US5819756	10/13/1998	Mielordt	
	A50	US5878752	3/9/1999	Adams et al.	
	A51	US5894841	4/20/1999	Voges	
	A52	US6040560	3/21/2000	Fleischhauer	
	A53	US6041789	3/28/2000	Bankert	
	A54	US6164287	12/26/2000	White	
	A55	US6178969	1/30/2001	St. Charles	
	A56	US6196218	3/6/2001	Voges	
	A57	US6357671	3/2/2005	Cewers	
	A58	US6443146	9/3/2002	Voges	
	A59	US6532965	3/18/2003	Abhulimen	
	A60	US6772756	8/10/2004	Shayan	
	A61	US6803545	10/12/2004	Blake	
	A62	US6810883	11/2/2004	Felter	
	A63	US6854461	2/15/2005	Nichols	
	A64	US6854470	2/15/2005	Pu	

Examiner Signature	/Dionne Walls Mayes/	Date Considered	10/22/2012

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 6

Complete if Known	
Application Number	13/079,937
Filing Date	2011-04-05
First Named Inventor	Lik Hon
Art Unit	1747
Examiner Name	Dionne Walls Mayes
Attorney Docket Number	76320.8012.US01

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US20030108342	6/12/2003	Sherwood et al.	
	A2	US20040261802	12/30/2004	Griffin et al.	
	A3	US20050016550	1/1/2005	Katase	
	A4	US20050236006	10/27/2005	Cowan	
	A5	US20060196518	9/1/2006	Hon, Lik	
	A6	~~US20090188490~~	7/30/2009	Li Han 2009/0188490	
	A7	US20080276947	11/13/2008	Martzel	
	A8	US20090095311	4/16/2009	Han, Li	
	A9	US20090126745	5/21/2009	Hon Lik	
	A10	US20090151717	6/18/2009	Bowen	
	A11	US20090230117	9/17/2009	Fernando	
	A12	US20090260642	10/22/2009	Monsees	
	A13	US20090272379	11/5/2009	Thorens	
	A14	US20100031968	2/11/2010	Sheikh	
	A15	US20100126505	5/27/2010	Rinker	
	A16	US20100181387	7/22/2010	Zaffaroni	
	A17	US20100200008	8/12/2010	Teieb	
	A18	US20100242974	9/30/2010	Pan	
	A19	US20100307518	12/9/2010	Wang	
	A20	US20110005535	1/13/2011	Xiu	
	A21	US20110036346	2/17/2011	Cohen	
	A22	US1775947	5/3/1927	Robinson	
	A23	US2057353	10/13/1936	Whittemore	
	A24	US3200819	8/17/1965	Gilbert	
	A25	US4171000	10/16/1979	Uhle	
	A26	US4641053	2/1/1987	Takeda	
	A27	US4735217	8/14/1990	Gerth	
	A28	US4756318	7/12/1988	Clearman	
	A29	US4771796	9/20/1988	Myer	
	A30	US4848374	7/1/1989	Chard	

Change(s) applied to document, /T.C.T./ 12/20/2012

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

76320-8012.US01/LEGAL24078841.1

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

Receipt date: 09/19/2012	Application Number	13079937	13079937 - GAU: 1747
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date	2011-04-05	
(Not for submission under 37 CFR 1.99)	First Named Inventor	Han Li	
	Art Unit	1747	
	Examiner Name	Dionne Walls Mayes	
	Attorney Docket Number	76320.8012.US01	

	9	7100618	B2	2006-09-05	Dominguez	
Change(s) applied to document, /T.C.T./ 12/20/2012	10	8156944	B2	~~2009-04-16~~	~~Lik Hon~~ Han 04/17/2012	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060196518	A1	2006-09-07	Lik Hon	
	2	20090188490		2009-07-30	Li Han	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	03111582.9	CN		2004-11-11	Lik Hon	published as CN1541577A	☐
	2	200420031182.0	CN		2005-08-24	Lik Hon	published as CN2719043	☐
	3	101176805	CN		2008-05-14	Dafubao Int Co Ltd		☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.W.M./

EFS Web 2.2.2

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/079,937	02/05/2013	8365742	76320.8012.US01	1784

34055 7590 01/16/2013

PERKINS COIE LLP
POST OFFICE BOX 1208
SEATTLE, WA 98111-1208

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Lik HON, Hong Kong, CHINA;

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: LIK HON
U.S. PATENT NO.: 8,365,742 B2
ISSUED: FEBRUARY 5, 2013
FOR: ELECTRONIC CIGARETTE

REQUEST FOR CERTIFICATE OF CORRECTION UNDER 37 C.F.R. § 1.323

Attn: Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. Applicants request a Certificate of Correction to correct the errors in the above-identified patent listed on the enclosed Form PTO/SB/44.

2. The requested corrections do not constitute new matter or require reexamination of the patent.

3. At least one of the errors listed on Form PTO/SB/44 is due to mistake on the part of the Applicant. USPTO (37 C.F.R. § 1.323). Accordingly, the required fee of $100.00 is paid herewith.

4. Please send the Certificate of Correction to the undersigned at the address shown below.

Dated: June 9, 2013

Respectfully submitted,

PERKINS COIE LLP

By: Kenneth H. Ohriner
Kenneth H. Ohriner
Reg. No. 31,646

Customer No. 34055
Perkins Coie LLP
Patent - LA
P.O. Box 1208
Seattle, WA 98111-1208
Phone: (310) 788-9900
Fax: (310) 788-3399

PTO/SB/44 (09-07)
Approved for use through 08/31/2013. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 8,365,742 Page 1 of 1

APPLICATION NO.: 13/079,937

ISSUE DATE : February 5, 2013

INVENTOR(S) : Lik Hon

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the First page, in field (54), under “Title”, in column 1, line 1, delete "AEROSOL ELECTRONIC CIGARETTE" and insert - - ELECTRONIC CIGARETTE - -, therefor.

In column 1, line 1, delete "AEROSOL ELECTRONIC CIGARETTE" and insert - - ELECTRONIC CIGARETTE - -, therefor.

In column 1, line 2, below "Title" and insert - - This application is divisional of U.S. Patent Application No. 12/226,818, filed Oct. 29, 2008, which is the U.S. national stage application to International Patent Application No. PCT/CN2007/001575, filed on May 15, 2007, which claims priority, under 35 U.S.C. § 119, to Chinese Patent application No.: 200620090805.0, filed on May 16, 2006, the disclosures of which are incorporated by reference herein in their entireties. - -.

In column 3, line 28, delete "(2)" and insert - - (82) - -, therefor.

In column 3, line 49, after "shown in" insert - - FIGS. - -.

In column 3, line 56, delete "ploypropylene" and insert - - polypropylene - -, therefor.

In column 6, lines 45-46, in claim 3, delete "run through" and insert - - run-through - -, therefor.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Perkins Coie LLP, P.O. Box 1247, Seattle, WA 98111-1247

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal	
Application Number:	13079937
Filing Date:	05-Apr-2011
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Lik HON
Filer:	Kenneth H. Ohriner/Amy Candeloro
Attorney Docket Number:	76320.8012.US01
Filed as Large Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Certificate of Correction	1811	1	100	100
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
		Total in USD ($)		**100**

Electronic Acknowledgement Receipt	
EFS ID:	15949954
Application Number:	13079937
International Application Number:	
Confirmation Number:	1784
Title of Invention:	AEROSOL ELECTRONIC CIGARETTE
First Named Inventor/Applicant Name:	Lik HON
Customer Number:	34055
Filer:	Kenneth H. Ohriner/Amy Candeloro
Filer Authorized By:	Kenneth H. Ohriner
Attorney Docket Number:	76320.8012.US01
Receipt Date:	04-JUN-2013
Filing Date:	05-APR-2011
Time Stamp:	19:30:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	2013-06-04_Cert_Correction_763208012US1.pdf	159939 4ab375d21ac955fe2f36d3494c4d73e9ad0c1200	no	3
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	29800 ef7f319daf2a197ff79c38cb91c6bcef93649c39	no	2
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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.	: 8,365,742 B2
APPLICATION NO.	: 13/079937
DATED	: February 5, 2013
INVENTOR(S)	: Lik Hon

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title page, in Item (54), under "Title", in column 1, line 1, and in specification, column 1, line 1, delete "AEROSOL ELECTRONIC CIGARETTE" and insert -- ELECTRONIC CIGARETTE --, therefor.

In the Specifications:

In column 1, line 2, below "Title" insert -- This application is divisional of U.S. Patent Application No. 12/226,818, filed Oct. 29, 2008, which is the U.S. national stage application to International Patent Application No. PCT/CN2007/001575, filed on May 15, 2007, which claims priority, under 35 U.S.C. § 119, to Chinese Patent application No.: 200620090805.0, filed on May 16, 2006, the disclosures of which are incorporated by reference herein in their entireties. --.

In column 3, line 28, delete "(2)" and insert -- (82) --, therefor.

In column 3, line 49, after "shown in" insert -- FIGS. --.

In column 3, line 56, delete "ploypropylene" and insert -- polypropylene --, therefor.

In the Claims:

In column 6, lines 45-46, in claim 3, delete "run through" and insert -- run-through --, therefor.

Signed and Sealed this
Second Day of July, 2013

Teresa Stanek Rea
Acting Director of the United States Patent and Trademark Office

Trials@uspto.gov
571-272-7822

Paper 9
Entered: September 16, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VMR PRODUCTS LLC,
Petitioner,

v.

FONTEM HOLDINGS 1 B.V.,
Patent Owner.

Case IPR2015-00859
Patent 8,365,742 B2

Before JACQUELINE WRIGHT BONILLA, BRIAN J. McNAMARA, and JO-ANNE M. KOKOSKI, *Administrative Patent Judges.*

KOKOSKI, *Administrative Patent Judge.*

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

VMR Products LLC ("Petitioner") filed a Petition ("Pet.") to institute an *inter partes* review of claims 1–3 of U.S. Patent No. 8,365,742 B2 ("the '742 patent," Ex. 1001). Paper 2. Fontem Holdings 1 B.V. ("Patent Owner") filed a Preliminary Response ("Prelim. Resp."). Paper 5. We have jurisdiction under 35 U.S.C. § 314.

Upon consideration of the Petition and Preliminary Response, we determine that Petitioner has not established a reasonable likelihood of prevailing with respect to claims 1–3 of the '742 patent. Accordingly, we deny the Petition, and do not institute an *inter partes* review.

A. Related Proceedings

Petitioner indicates that the '742 patent is asserted in numerous cases pending in the Central District of California, including *Fontem Ventures B.V. v. VMR Products LLC*, Case No. 2:14-cv-01655 ("the District Court Action"). Pet. 1–2. Patent Owner states that the '742 patent is also the subject of IPR2015-01587, filed by JT International SA on July 14, 2015. Paper 7, 1.

B. The '742 Patent (Ex. 1001)

The '742 patent, titled "Electronic Cigarette," is directed to an aerosol electronic cigarette having a battery assembly, an atomizer assembly, a cigarette bottle assembly, and a hollow, integrally-formed shell. Ex. 1001, Abstract. According to the '742 patent, prior art devices had various disadvantages, including low atomizing efficiency, being structurally complicated, and not providing ideal aerosol effects. *Id.* at 1:21–24.

Figure 1 of the '742 patent is reproduced below:

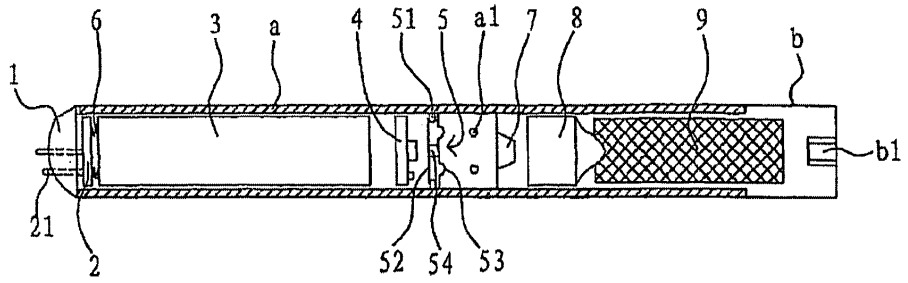


Figure 1

Figure 1 is a side section view of an electronic cigarette. *Id.* at 1:45. Hollow, integrally-formed shell "a" includes a battery assembly, atomizer assembly, and cigarette bottle assembly. *Id.* at 2:30–33. The battery assembly connects to the atomizer assembly in shell "a," and the detachable cigarette body assembly (which fits with the atomizer assembly) is located in one end of shell "a." *Id.* at 2:33–37. Shell "a" also includes through-air-inlets a1. *Id.* at 2:37–38. The battery assembly includes operating indicator 1, battery 3, electronic circuit board 4, and airflow sensor 5. *Id.* at 2:39–45. The atomizer assembly is atomizer 8, which includes a porous component and a heating rod. *Id.* at 3:6–8. The cigarette bottle assembly includes hollow cigarette shell holder "b," and perforated component for liquid storage 9. *Id.* at 3:49–51. Air channel b1 is located in the center on the surface of one end of cigarette shell holder "b," and extends inward. *Id.* at 3:59–62.

Figures 5, 6, and 7 of the '742 patent are reproduced below:

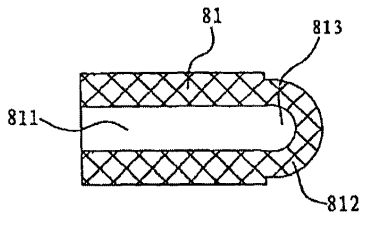


Figure 5

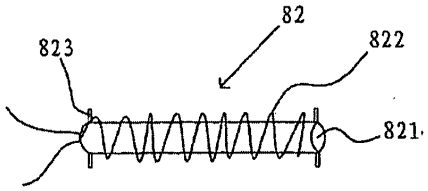


Figure 6

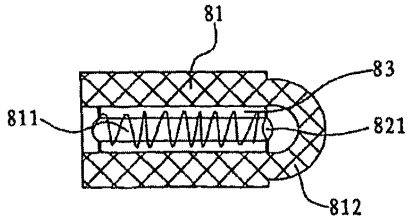


Figure 7

Figure 5 is a side-section view of the porous component of atomizer 8, Figure 6 is a diagram of the structure of a heating rod in atomizer 8, and Figure 7 is a side-section view of atomizer 8. *Id.* at 1:53–59. Atomizer 8 includes porous component 81 and heating rod 82. *Id.* at 3:6–8. Heating rod 82 includes heating wire 822 wound on the wall of cylinder 821. *Id.* at 3:28–30. Porous component 81 contains run-through atomizing chamber 811. *Id.* at 3:8–9. Heating rod 82 enters run-through atomizing chamber 811, and the space between heating rod 82 and the interior wall of run-through atomizing chamber 811 creates negative pressure cavity 83. *Id.* at 3:11–15. One end of porous component 81 fits with the cigarette bottle assembly, with protuberance 812 at the other end connecting to atomizing chamber 811 with run-through hole 813. *Id.* at 3:16–19.

C. Illustrative Claim

Petitioner challenges claims 1–3 of the '742 patent. Each of claims 1–3 is independent. Claim 1 is illustrative, and recites as follows:

1. An aerosol electronic cigarette, comprising:

a battery assembly, an atomizer assembly and a cigarette bottle assembly, and a shell that is hollow and integrally formed;

the battery assembly electrically connected with the atomizer assembly, and both are located in the shell;

the cigarette bottle assembly is detachably located in one end of the shell, and fits with the atomizer assembly inside of it;

the shell has through-air-inlets;

the atomizer assembly is an atomizer, which includes a porous component and a heating body;

the heating body is a heating wire;

the atomizer includes a frame;

the porous component is supported by the frame;

the heating wire is wound on the porous component;

the frame has a run-through hole;

a heating wire wound on a part of the porous component that is substantially aligned with the run-through hole; and with the porous component also positioned substantially within the cigarette bottle assembly.

D. The Prior Art

Petitioner relies on the following prior art references:

Reference	Patent	Date	Exhibit No.
Whittemore	US 2,057,353	Sept. 27, 1935	1013
Counts	US 5,144,962	Sept. 8, 1992	1011
Susa	EP 0 845 220 A1	June 3, 1998	1010
Abhulimen	WO 03/034847 A1	May 1, 2003	1012
Hon '043	Chinese Patent No. CN 2719043 Y	Aug. 24, 2005	1004 and 1005 (English translation)

Reference	Patent	Date	Exhibit No.
Hon '494[1]	WO 2005/099494 A1	Oct. 27. 2005	1006 and 1007 (English translation

E. The Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–3 of the '742 patent on the following grounds:

Reference(s)	Basis	Claims Challenged
Hon and Susa	§ 103(a)	1–3
Hon and Abhulimen	§ 103(a)	1–3
Hon and Whittemore	§ 103(a)	1–3
Hon and Counts	§ 103(a)	1–3
Susa	§ 103(a)	1–3
Susa and Abhulimen	§ 103(a)	1–3
Susa and Whittemore	§ 103(a)	1–3

[1] Hon '494 is the PCT application equivalent of Hon '043. Pet. 15. When referring to Hon '043 in the Petition, Petitioner cites the English translation of Hon '494 "because the translation [of Hon '043] does not have paragraph numbers or line numbers." *Id.* at n. 2. Petitioner also uses Hon '043 and Hon '494 interchangeably throughout the Petition. For clarity, we will refer to Hon '494 and Hon '043 collectively as "Hon," and we will cite to the English translation of Hon '494 (Ex. 1007) when referring to Hon.

II. ANALYSIS

A. Claim Interpretation

We interpret claims of an unexpired patent using the "broadest reasonable construction in light of the specification of the patent in which [the claims] appear[]." 37 C.F.R. § 42.100(b). For purposes of this Decision, based on the record before us, we make explicit the interpretation of the claim terms "frame" and "porous component," as set forth in claims 1–3.

1. "frame"

Petitioner proposes that we construe "frame" to mean "rigid structure." Pet. 8. In support of its construction, Petitioner relies on the district court's ruling on claim construction in the District Court Action. *Id.* at 7–8 (citing Ex. 1014, 5–7). Patent Owner proposes that we construe the term to mean "a firm structure designed to hold up another component." Prelim. Resp. 10. Patent Owner cites the Specification's description of the fifth preferred embodiment, which includes a frame with a run-through hole on it, and a porous component set on the frame, in support of its construction. *Id.* at 10. (citing Ex. 1001. 5:42–47). According to Patent Owner, "[i]n the context of the '742 patent, this is the better interpretation, particularly because 'supported by' means 'held up.'" *Id.* at 11.

Based on the record before us, we are persuaded that Petitioner's interpretation is the broadest reasonable interpretation in light of the Specification. The only mention of "frame" in the Specification is in the discussion of the fifth preferred embodiment, where it states, with reference to Figures 17 and 18, that "the atomizer assembly is an atomizer (8), which includes a frame (82), the porous component is set on the frame (82)," and

"[t]he frame (82) has a run-through hole (821) on it." Ex. 1001, 5:42–47. That the porous component is set on the frame in one embodiment, however, is not enough to limit "frame" to a structure that is designed to hold up another component, as suggested by Patent Owner. The language of the claims further indicates that a frame need not necessarily "hold up another component." Claims 1 and 2 require that the porous component be "supported by" the frame, but claim 3 only requires that there is "a porous component between the frame and the outlet." Petitioner's proposed interpretation of "frame" as "a rigid structure" is consistent with the use of the term in the Specification and the claims.

For purposes of this Decision, consistent with the disclosures in the Specification and its ordinary meaning, we interpret "frame" to be "a rigid structure."

2. *"porous component"*

Petitioner proposes that we construe "porous component" to mean "a component of the atomizer assembly in the electronic cigarette that includes pores and is permeable to liquid, such as cigarette solution from the cigarette solution storage area." Pet. 7. In support of this construction, Petitioner relies on the Board's interpretation of "porous component" in the Decision to Institute *Inter Partes* Review in IPR2013-00387, relating to U.S. Patent No. 8,156,944 ("the '944 patent"), because "[t]he '742 Patent is a divisional of the application that led to the '944 Patent, and therefore both patents share the same specification." *Id.*; *see CB Distributors, Inc. v. Ruyan Investment (Holdings) Limited*, Case IPR2013-00387, slip op. at 11 (PTAB Dec. 30, 2013) (Paper 7).

Patent Owner proposes that we construe the term to mean "a component of the atomizer assembly having pores or interstices and providing for absorption or diffusion of liquid." Prelim. Resp. 6–7. As support for this construction, Patent Owner states that the claims of the '742 patent include a number of recitations relating to the porous component, including that "the atomizer includes a porous component and a heating wire," "the porous component is supported by the atomizer frame having a run-through hole," "the porous component is positioned substantially within the cigarette bottle assembly," and "the porous component is substantially surrounded by the liquid storage component." *Id.* at 7–8. Patent Owner also cites to the Specification's statements that "the porous component provides 'liquid absorption and diffusion, and the ability to absorb liquid stored in the cigarette bottle assembly' . . . [a]nd that it 'absorbs the cigarette liquid from the perforated component for liquid storage.'" *Id.* at 8 (citing Ex. 1001, 3:25–26, 66–67). According to Patent Owner, "Petitioner offers no analysis why [the construction from IPR2013-00387] is proper for the claims of the '742 patent," because, "based upon the claims and the disclosure of the '742 patent, a porous component is something more than a component that simply has holes." *Id.* at 8–9.

Based on the record before us, we are persuaded that Petitioner's proposed interpretation is the broadest reasonable interpretation in light of the Specification. Petitioner's proposed interpretation is consistent with the Specification, which describes the porous component as being "made of foamed nickel, stainless steel fiber felt, macromolecular polymer foam or foamed ceramics, providing the remarkable capabilities in liquid absorption and diffusion, and the ability to absorb the liquid stored in the cigarette

bottle assembly." Ex. 1001, 3:23–27. The Specification further states that the porous component "absorbs the cigarette liquid from the perforated component for liquid storage," and, "[a]fter atomization, the big-diameter fine drips are re-absorbed by the porous component." *Id.* at 4:25–27.

Therefore, for purposes of this Decision and in accordance with the broadest reasonable interpretation in light of the Specification, we interpret "porous component" to mean "a component of the atomizer assembly in the electronic cigarette that includes pores and is permeable to liquid, such as cigarette solution from the cigarette solution storage area."

B. Obviousness over Hon and Susa

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hon and Susa. Pet. 15–32. Petitioner relies on a Declaration by Gregory Buckner, Ph.D. ("the Buckner Declaration," Ex. 1002) in support of the contentions. *Id.*

1. Overview of Hon

Hon is directed to an electronic atomization cigarette. Ex. 1007, 1:4–5. Figures 1 and 6 of Hon are reproduced below:

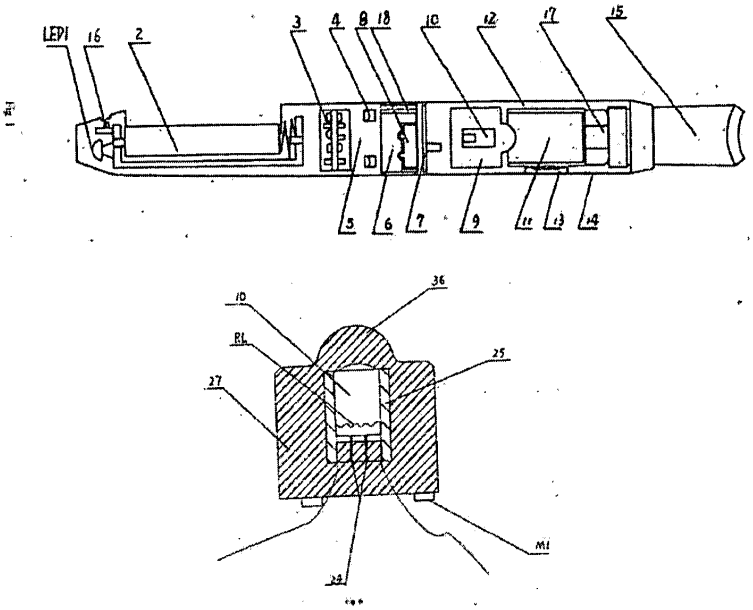


Figure 1 is a schematic diagram of the structure of an electronic cigarette that includes air inlet 4, normal pressure cavity 5, sensor 6, vapor-liquid separator 7, atomizer 9, liquid-supplying bottle 11, and mouthpiece 15 within shell 16. *Id.* at 2:40, 3:14–18. Figure 6 is a structural diagram of an atomizer, which includes atomization cavity 10, heating element RL, first piezoelectric element M1, atomization cavity wall 25, porous body 27, and bulge 36. *Id.* at 2:48, 3:24–29, 35–38.

Hon states that heating element RL "can be made of platinum wire, nickel chromium alloy or iron chromium aluminum alloy wire with rare earth element" and "can also be made into a sheet form." *Id.* at 3:27–29. Hon also states that "atomization cavity wall 25 is surrounded with the porous body 27, which can be made of foam nickel, stainless steel fiber felt, high molecule polymer foam and foam ceramic," and that "atomization cavity wall 25 can be made of aluminum oxide or ceramic." *Id.* at 3:35–38.

Hon further states that "[w]hen a smoker smokes, the mouthpiece 15 is under negative pressure, the air pressure difference or high speed stream between the normal pressure cavity 5 and the negative pressure cavity 8 will cause the sensor 6 to output an actuating signal," which causes the cigarette to begin operating. *Id.* at 4:11–14. Hon describes that air enters normal pressure cavity 5 through air inlet 4, proceeds through the through hole in vapor-liquid separator 7, and flows into atomization cavity 10 in atomizer 9. *Id.* at 4:21–24. The nicotine solution in porous body 27 is driven by the high speed stream passing through the ejection hole into atomization cavity 10 in the form of a droplet, where it "is subjected to the ultrasonic atomization by the first piezoelectric element M1 and is further atomized by the heating element RL." *Id.* at 4:26–27. After atomization, large-diameter droplets stick to the wall and are reabsorbed by porous body 27 via overflow hole 20, and small-diameter droplets form aerosols that are sucked out via aerosol passage 12, gas vent 17, and mouthpiece 15. *Id.* at 4:28–31.

2. *Overview of Susa*

Susa is directed to a flavor generation article used for simulated smoking. Ex. 1010, 1:5–7. Susa Figure 1 is reproduced below:

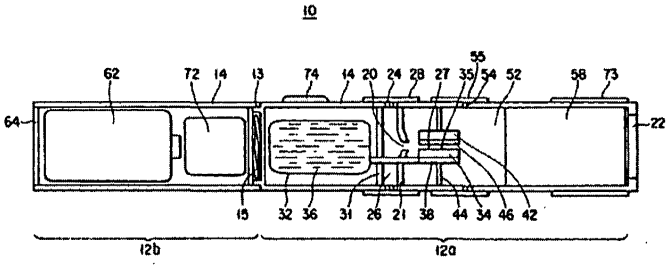


FIG. 1

Figure 1 is a schematic diagram of a flavor generation article described by Susa. *Id.* at 4:20–22. Casing 12 includes "first portion 12a to be held by the user's mouth" and "second portion 12b for incorporating a power supply and the like." *Id.* at 5:17–20. Portions 12a and 12b are detachably connected by connecting portion 13 formed on casing main body 14, and "are electrically connected to each other through a cable 15 stored in a space formed in the casing main body 14 to correspond to the connecting portion 13." *Id.* at 5:20–26. Gas flow path 26 is formed in casing 12 between air intake ports 24 and suction port 22. *Id.* at 5:36–37.

Throttle hole 20, in the center of throttle plate 21, is located in gas flow path 26 and directs air from air intake ports 24 to flow along the surface of ceramic heater 42. *Id.* at 5:46–50. Ceramic heater 42 is fixed on the inner surface of casing main body 14 by support member 44. *Id.* at 7:30–32. Air from throttle hole 20 flows through gap 27 between discharge ports 35 and ceramic heater 42. *Id.* at 7:35–38. Liquid-absorbing porous layer 46 is formed on the surface of ceramic heater 42, and can be made of an organic compound (such as natural cellulose, a cellulose derivative, or an aramid resin), or an inorganic compound (such as carbon, alumina, or silicon carbide). *Id.* at 7:50–8:5.

When a user inhales through suction port 22, sensor 73 outputs an operation signal to control circuit 72, which energizes ceramic heater 42. *Id.* at 9:41–50. After a predetermined time, discharge drive portion 38 is triggered, liquid material 36 is discharged from discharge ports 35, and is gasified with heating by ceramic heater 42. *Id.* at 9:50–55. As the user inhales, the gasified material is mixed with the suctioned air from air intake ports 24, passed through the throttle hole 20, passes between the discharge

ports 35 and ceramic heater 42, and is guided to suction port 22. *Id.* at 9:55–10:2.

Figure 13 of Susa is reproduced below:

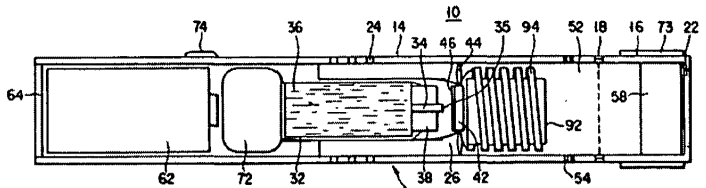


FIG. 13

Figure 13 is a schematic view of another embodiment of Susa's flavor generation article. *Id.* at 15:28–30. Formed body 92 consists "of a solid material that generates a flavor or the like to be inhaled by the user" and is detachably disposed in gas flow path 26 between ceramic heater 42 and cooling chamber 52. *Id.* at 14:57–15:4. Susa states that when formed body 92 is sized such that there is no gap between it and the inner surface of casing main body 14, formed body 92 consists of a solid material that has good air permeability, and gas flow path 26 is formed to extend through formed body 92. *Id.* at 15:13–19. When there is a gap between formed body 92 and the inner surface of casing main body 14, formed body 92 can have little or no air permeability, and gas flow path 26 is formed to extend through that gap. *Id.* at 15:19–27. Coil heater 94 "is disposed around" formed body 92, and "may be arranged in a hole formed in" formed body 92. *Id.* at 15:34–36.

3. Analysis

a. Claims 1 and 2

Petitioner contends that Hon describes porous component 27 supported by atomization cavity wall 25, and therefore teaches "the atomizer

includes a frame; the porous component is supported by the frame" limitations recited in claim 1, and "the atomizer assembly including a porous component supported by a frame having a run-through hole" limitation in claim 2. Pet. 21, 28. In particular, Petitioner contends that, in Hon, "[t]he porous component is 'arranged around the atomization cavity wall' which 'can be made of aluminum oxide or ceramic.'" *Id.* at 21 (citing Ex. 1007, 2:12, 3:38). Thus, according to Petitioner, Hon's atomization cavity wall 25 is a "frame" as recited in the challenged claims.

Patent Owner argues that Hon does not disclose a frame or any element that supports the porous body. Prelim. Resp. 23. Patent Owner argues that Hon's cylindrical atomization cavity wall 25 "is supported from below and laterally by porous body 27" and "is a liner within the porous body which forms the atomization cavity 10." *Id.* at 24. According to Patent Owner, atomization cavity wall 25 "that is entirely within porous body 27 does not support the porous body," and, instead, "the porous body 27 supports the wall 25 as the porous body will hold the wall in place." *Id.*

As discussed above, we interpret "frame" to mean "a rigid structure." *See supra* Section II.A.1. Petitioner contends Hon's atomization cavity wall 25 is this frame, at least because it can be made of aluminum oxide or ceramic. Pet. 21. We are persuaded that atomization cavity wall 25 is a rigid structure, and is therefore a frame as recited in claims 1 and 2.

We are not persuaded, however, that Petitioner has established that Hon teaches a frame that supports a porous component, as also required by claims 1 and 2. Petitioner points to Hon's description of porous component 27 as being "arranged around the atomization cavity wall" to show that porous component 27 is supported by atomization cavity wall 25. *Id.* The

ordinary meaning of "support" is "bear all or part of the weight of: hold up." Prelim. Resp. 12 (citing Ex. 2005, 1708). Petitioner does not explain adequately, nor cite to sufficient evidence of record explaining, how porous component 27 is held up by atomization cavity wall 25. The teachings in Hon on which Petitioner relies describe porous component 27 surrounding atomization cavity wall 25, but do not indicate that atomization cavity wall 25 is bearing the weight of, or holding up, porous cavity 27. Petitioner does not rely on Susa to teach this limitation.

Petitioner alternatively argues that Hon "discloses that the atomizer includes a vapor-liquid separator (7), which also constitutes a frame that supports the porous component" because it "is 'sequentially interconnected' with the atomizer and 'can be made of plastic or silicon rubber.'" Pet. 21. This argument is not persuasive.

Even if Hon's vapor-liquid separator 7 is a frame, which we need not determine for purposes of this Decision, it is not located in the atomizer as is required by claims 1 and 2. Hon consistently describes vapor-liquid separator 7 as an element separate from the atomizer. *See, e.g.,* Ex. 1007, 3:16–18 ("a vapor-liquid separator 7, an atomizer 9, a liquid-supplying bottle 11 and a mouthpiece 15 are sequentially provided within the shell 14"); 4:23–24 (air passes through "the through hole in the vapor-liquid separator 7, and flows into the atomization cavity 10 in the atomizer 9"); 5:12–14 (describing an embodiment where "the atomizer 9 is postposed within the shell 14, and the liquid-supplying bottle 11 is arranged between the vapor-liquid separator 7 and the atomizer 9"). Furthermore, the statement in Hon on which Petitioner relies regarding vapor-liquid separator 7 being "sequentially interconnected" to atomizer 9, when read in context,

describes the order in which the elements are arranged within the body of the electronic cigarette: "[T]he air inlet, normal pressure cavity, vapor-liquid separator, atomizer, aerosol passage, gas vent and mouthpiece are sequentially interconnected." Ex. 1007, 1:47–49.

Accordingly, we are not persuaded that Petitioner has established a reasonable likelihood of showing that claims 1 and 2 would have been obvious over the combination of Hon and Susa.

b. Claims 1-3

Claim 1 recites "the heating wire is wound on the porous component," and claims 2 and 3 recite "a heating wire wound on a part of the porous component." Petitioner contends that Susa describes that "coil heater 94 'is disposed around the formed body 92,' which is adjacent to ceramic heater 42 and porous layer 46," and that "[f]ormed body 92 has qualities and functions similar to the porous layer." Pet. 22. According to Petitioner, because Susa's coil heater 94 envelops formed body 92, "[i]t would have been obvious to one of ordinary skill in the art to wind the coil heater of Susa around the porous layer in [Hon] in order to provide [the heating wire is wound on the porous component] limitation" of claims 1–3. *Id.* at 23, 28–29, 31–32. Petitioner contends that this modification of the Hon electronic cigarette "is motivated by the interest of providing more efficient, uniform heating" and "would enhance commercial opportunities and make the product more desirable by increasing the efficiency of atomization." *Id.* at 23.

Patent Owner argues that Susa's coil heater 94 is not wound on porous layer 46, "which the Petition asserts discloses the claimed porous component." Prelim. Resp. 29. Patent Owner further argues that "[t]he

embodiment in Fig. 13 gasifies liquid in the same way as Fig. 1 discussed above, that is via liquid projected from the discharge head 34 onto a now vertical porous layer 46 on the ceramic heater 42," and that "coil heater 94 together with the formed body 92 generate flavor by heating, but presumptively without gasifying where liquid contacts a heated surface, as in Fig. 1." *Id.* at 29–30.

We are not persuaded by Petitioner's arguments. As set forth above, we interpret "porous component" to mean "a component of the atomizer assembly in the electronic cigarette that includes pores and is permeable to liquid, such as cigarette solution from the cigarette solution storage area." *See supra* Section II.A.2. Petitioner contends that Susa's formed body 92 "has qualities and functions similar to the porous layer," but does not explain sufficiently, nor direct us to adequate evidence of record indicating, that a person having ordinary skill in the art would have understood the formed body 92 to include pores and be permeable to liquid. *See* Pet. 22.

Susa describes formed body 92 as "a solid material that generates flavor or the like," that, depending on its size, can have good air permeability, or poor to no air permeability. Ex. 1010, 14:57–15:2, 15:13–27. The embodiment shown in Susa Figure 13 that shows coil heater 94 disposed around formed body 92 also includes liquid-absorbing porous layer 46 that "is formed on a surface of the ceramic heater 42 that receives the liquid splash of the material" and "stabiliz[es] gasification of the splash of material." *Id.* at 7:50–8:1. Consequently, we are not persuaded that that formed body 92 in Susa is a "porous component" as recited in the challenged claims, or that Petitioner has demonstrated that Susa teaches a heating wire wound on a porous component, as is required by claims 1–3.

A showing of obviousness must be supported by an articulated reasoning with rational underpinning to support a motivation to combine the prior art teachings. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Petitioner asserts that a person having ordinary skill in the art would be motivated to modify the Hon electronic cigarette to include a heating wire wound on a porous component "by the interest of providing more efficient, uniform heating" that "would enhance commercial opportunities and make the product more desirable by increasing the efficiency of atomization." Pet. 23. Petitioner does not provide sufficient explanation as to why a person having ordinary skill in the art would have wanted to provide "more efficient, uniform heating" in the Hon cigarette. Petitioner does not direct us to, nor do we discern, statements in Hon or Susa with respect to the efficiency—or inefficiency—of atomization within the described articles. Petitioner's unsupported, conclusory statements do not constitute articulated reasoning with rational underpinnings as to why one of ordinary skill in the art would modify Hon in view of Susa's teachings to arrive at the claimed invention.

For these reasons, Petitioner has not established a reasonable likelihood that it would prevail on the ground that claims 1–3 of the '742 patent would have been obvious over the combination of Hon and Susa.

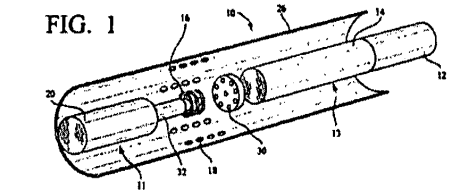
C. Obviousness over Hon and Abhulimen

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hon and Abhulimen. Pet. 32–34. Petitioner relies on the Buckner Declaration (Ex. 1002) in support of its contentions. *Id.*

1. Overview of Abhulimen

Abhulimen is directed to a simulated smoking article, with a fuel element physically separated from an aerosol-generating element. Ex. 1012, 1. Figures 1 and 2 of Abhulimen are reproduced below:

FIG. 1



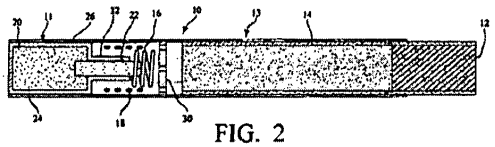


FIG. 2

Figure 1 is partially-fragmented perspective view of a simulated smoking device as described by Abhulimen, and Figure 2 is a longitudinal view of the device shown in Figure 1. *Id.* at 3–4. Simulated smoking device 10 includes fuel element 11, flavor-generating material 13 disposed within tubular wrapper 26, and tobacco rod 14 attached to filter 12. *Id.* at 4. Fuel element 11 includes fuel tank 20, which is non-permeable and non-combustible, and fuel cartridge 24 comprising a porous medium. *Id.* Fuel element 11 also includes extended wick 22 and glow element 16. *Id.* Fuel tank 20 is open-ended at its upstream end, where ceramic tube 32 surrounds wick 22. *Id.* Glow element 16 is a coil comprised of copper wire filament, or other heat-conducting or glowing materials such as brass, platinum, or metallic alloy. *Id.* Heat diffuser 30 is positioned within tubular wrapper 26 between the distal end of flavor-generating material 13 and glow element 16. *Id.* Heat diffuser 30 delivers hot gas and hot air coming into tubular member 26 through puffing air inlets 18 to vapor-generating material of tobacco rod 14,

and also blocks the flame from contact with flavor-generating material 13 when a user inhales. *Id.*

Abhulimen describes that smoking device 10 is started by lighting the metal filament of glow element 16, using a lighter placed under the article in the region of puffing air inlets 18. *Id.* Wick 22 draws fuel to the region of the metal filament, and the flame causes the fuel to vaporize. *Id.* When the user inhales, air is pulled through puffing air inlets 18 and across the metal filament of glow element 16, and the vaporized fuel combusts. *Id.*

2. Analysis

a. Claims 1 and 2

As set forth above, Petitioner has not established that Hon teaches a frame that supports a porous component, as required by claims 1 and 2. *See supra* Section II.B.3.a. Petitioner does not rely on Abhulimen as teaching this limitation of claims 1 and 2. Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1 and 2 would have been obvious over the combination of Hon and Abhulimen.

b. Claims 1–3

Petitioner contends that Hon discloses most of the limitations of claims 1– 3, but concedes that it does not disclose "a heating wire wound on a part of the porous component." Pet. 33. Petitioner contends that Abhulimen teaches this limitation. *Id.* According to Petitioner, Abhulimen teaches that glow element 16 (which Petitioner equates to a heating wire) is wound on a part of wick 22 (which Petitioner equates to a porous component). *Id.* Petitioner contends that a person having ordinary skill in the art would have been motivated "to wind the heating wire of Abhulimen

around the porous layer in [Hon] to yield" a heating wire wound on a part of the porous component as recited in the claims because it would provide more efficient, uniform heating. *Id.* at 33–34.

As was the case with Petitioner's proposed combination of Hon and Susa as set forth above, Petitioner does not provide sufficient explanation as to why a person having ordinary skill in the art would have wanted to provide "more efficient, uniform heating" in the Hon cigarette. *See supra* Section II.B.3.a. Petitioner does not direct us to, nor do we discern, statements in Hon or Abhulimen with respect to the efficiency—or inefficiency—of atomization within the described articles. Petitioner's unsupported, conclusory statements do not constitute articulated reasoning with rational underpinnings as to why one of ordinary skill in the art would modify Hon in view of Abhulimen's teachings to arrive at the claimed invention.

Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over the combination of Hon and Abhulimen.

D. Obviousness over Hon and Whittemore

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hon and Whittemore. Pet. 34–36. Petitioner relies on the Buckner Declaration in support of its contentions. *Id.*

1. Overview of Whittemore

Whittemore is directed to vaporizing units for a therapeutic apparatus. Ex. 1013, 1:1–2. Whittemore Figure 2 is reproduced below:

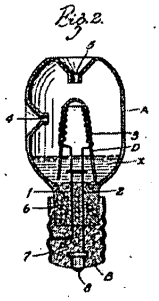


Figure 2 is an enlarged sectional view of a therapeutic apparatus with a vaporizing unit as taught by Whittemore. *Id.* at 1:15–16. Vaporizing vessel A is a hollow glass container that holds liquid medicament x. *Id.* at 1:19–23. Conductors 1 and 2 are combined with heating element 3 such that, when conductors 1 and 2 are energized, heating element 3 is heated. *Id.* at 1:24–27. Wick D is combined with heating element 3 so that a portion of wick D is always in contact, or in approximate contact, with heating element 3, and a portion of wick D is also in contact with liquid medicament x. *Id.* at 1:53–2:5.

According to Whittemore, medicament x is carried on wick D by capillary action to a point where it will be vaporized by the heat from heating element 3. *Id.* at 2:5–8. Whittemore states that "wick D consists of a thread, string or strand of some suitable wick material doubled intermediate its ends so as to form a substantially inverted V-shaped device whose side portions are encased in and surrounded by coiled or looped portions" of heating element 3, and "the lower ends or free ends of the side pieces of the wick projecting downwardly into the medicament and terminating at or in close proximity to the closed bottom 6 of the vessel." *Id.* at 2:9–18.

2. Analysis

a. Claims 1 and 2

As set forth above, Petitioner has not established that Hon teaches a frame that supports a porous component, as is required by claims 1 and 2. *See supra* Section II.B.3.a. Petitioner does not rely on Whittemore as teaching this limitation of claims 1 and 2. Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1 and 2 would have been obvious over the combination of Hon and Whittemore.

b. Claims 1–3

Petitioner contends that Whittemore teaches "a heating wire wound on a part of the porous component" because "[a]ccording to Whittemore, the vaporizing unit is combined with the 'heating element or filament 3' in such a way that 'a portion of said wick is always in contact or approximate contact with the heating element or filament 3' whereby the 'medicament will be carried by capillary action to a point where it will be vaporized by the heat from filament 3.'" Pet. 35 (citing Ex. 1002 ¶ 88; Ex. 1013, 1:50–2:8 and Fig. 2). Petitioner contends that a person having ordinary skill in the art would have been motivated "to wind the coil heater of Whittemore around the porous layer in Hon" to provide more efficient, uniform heating. *Id.* at 36.

As set forth above with respect to the combinations of Hon and Susa, and Hon and Abhulimen, we are not persuaded that Petitioner has articulated reasoning with rational underpinnings as to why one of ordinary skill in the art would modify Hon's teachings to arrive at the claimed invention based on the asserted reasoning that it would have provided more efficient,

uniform heating. *See supra* Sections II.B.3.b, II.C.3.b. Petitioner does not point to other evidence or explanation to support its proposed combination of Hon and Whittemore. Consequently, for the reasons set forth above with respect to the modification of Hon and Susa, and Hon and Abhulimen, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over the combination of Hon and Whittemore.

E. Obviousness over Hon and Counts

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Hon and Counts. Pet. 36–38. Petitioner relies on the Buckner Declaration in support of its contentions. *Id.*

1. Overview of Counts

Counts is directed to electrically-heated flavor delivery vehicles. Ex. 1011, 1:5–6. Counts Figure 2 is reproduced below:

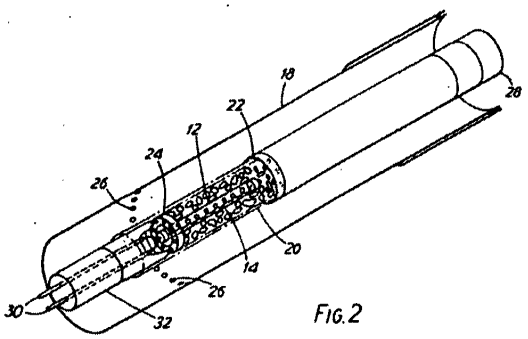


FIG. 2

Figure 2 is a perspective view of an embodiment of the Counts flavor delivery article. *Id.* at 2:38–39. Article 10 includes flavor-generating medium 12 and heating element 16 within outer tube or overwrapper 18. *Id.* at 3:16–20. Flavor-generating medium 12 may be formed in a packed bed,

or as an extruded rod disposed around heating element 14, and is located within thermally-insulating tube 20. *Id.* at 3:20–24.

According to Counts, "[f]lavor-generating medium 12 typically is placed around heating element 14," and "[a]lternatively, the heating element may surround the flavor-generating medium." *Id.* at 3:53–55. Counts teaches that flavor-generating medium 12 "may be similar to flavor pellets shown in commonly-assigned U.S. patent application Ser. No. 07/222,831, filed Jul. 22, 1988" and "may include tobacco or tobacco-derived materials." *Id.* at 3:65–4:2. Counts also teaches that heating element 14 may be formed from a variety of materials, may be a resistive wire coil (such as tungsten, tantalum, or an alloy of nickel, chromium, and iron), or may be formed with graphite or ceramics. *Id.* at 4:5–14.

Counts Figure 3 is reproduced below:

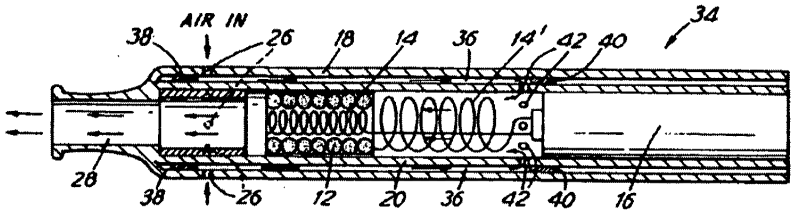


FIG. 3

Figure 3 is a longitudinal view of another embodiment of the Counts flavor delivery article. *Id.* at 2:40–42. Article 34 includes first heating element 14 in contact with flavor-generating medium 12, and second heating element 14' for preheating air drawn into tube 20 before it enters flavor-generating medium 12. *Id.* at 4:15–21. When a user puffs on filter 28, air is drawn through passageway 36, enters tube 20 through air holes 42, and is drawn past heater 14' and through heated flavor-generating medium 12. *Id.* at

4:21–28. A mixture of heated air and flavor components is then drawn through filter 28 for consumer use. *Id.* at 4:28–30.

2. Analysis

a. Claims 1 and 2

As set forth above, Petitioner has not established that Hon teaches a frame that supports a porous component, as is required by claims 1 and 2. *See supra* Section II.B.3.a. Petitioner does not rely on Counts as teaching this limitation of claims 1 and 2. Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1 and 2 would have been obvious over the combination of Hon and Counts.

b. Claims 1–3

Petitioner asserts that Hon "discloses each limitation of claims 1, 2 and 3 with the exception of 'a heating wire wound on a part of the porous component.'" Pet. 37. Petitioner asserts that Counts teaches this limitation when it states that "the heating element may surround the flavor generating medium." *Id.* (citing Ex. 1011, 3:53–55 and Fig. 6). According to Petitioner, "heating wire (14') can be wound on a part of the porous component (12)." *Id.* Petitioner asserts that "[i]t would have been obvious to one of ordinary skill in the art to wind the heating wire of Counts around the porous layer in Hon" in order to provide more efficient, uniform heating. *Id.* at 37–38.

As set forth above with respect to the combinations of Hon and Susa, and Hon and Abhulimen, we are not persuaded that Petitioner has articulated reasoning with rational underpinnings as to why one of ordinary skill in the art would modify Hon's teachings to arrive at the claimed invention based

on the asserted reasoning that it would have provided more efficient, uniform heating. *See supra* Sections II.B.3.b, II.C.3.b. Petitioner does not point to other evidence or explanation to support its proposed combination of Hon and Counts. Consequently, for the reasons set forth above with respect to the modification of Hon and Susa, and Hon and Abhulimen, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over the combination of Hon and Counts.

F. Obviousness over Susa

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over Susa. Pet. 38–54. Petitioner relies on the Buckner Declaration in support of its contentions. *Id.*

In particular, Petitioner contends that Susa teaches "the heating wire is wound on the porous component." Petitioner states that, "[a]lthough the coil heater 94 is 'disposed around the formed body 92,' the formed body 92 is adjacent to the ceramic heater 42 and porous layer 46." Pet. 44. Petitioner states that "[f]ormed body 92 has qualities and functions similar to the porous layer," and because "coil heater 94 works together with ceramic heater 42 (containing porous layer 46), it would have been obvious to one of ordinary skill in the art to wind the coil heater around the porous layer." *Id.* at 44–45. Petitioner argues that this "modification is motivated by the interest of providing more efficient, uniform heating." *Id.* at 45.

For the reasons set forth above with respect to the combination of Hon and Susa, Petitioner has not established that Susa teaches a heating wire wound on a porous component, as is required by claims 1–3. *See supra* Section II.B.3.b. We are also not persuaded that Petitioner has established

that it would have been obvious to modify Susa to wind coil heater 94 on porous layer 46. Petitioner argues that this modification would provide more efficient, uniform heating, and that Susa provides motivation to make the modification when it "explains that the 'characteristic features can be appropriately combined according to the object.'" Pet. 45–46 (citing Ex. 101, 17:11–19). Petitioner also relies on Susa's statement that "the present invention can be practiced in various embodiments other than those shown in the drawings within the spirit and scope of the invention." *Id.* at 46 (citing Ex. 1010, 17:11–19).

Petitioner does not provide sufficient explanation as to why a person having ordinary skill in the art would have wanted to provide "more efficient, uniform heating" in the Susa flavor-generation article. Petitioner does not direct us to, nor do we discern, statements in Susa with respect to the efficiency—or inefficiency—of atomization within the described article. Additionally, Petitioner does not explain how Susa's general statements regarding combining characteristic features "in accordance with the object" and the ability to practice embodiments other than those shown in Susa would lead a person having ordinary skill in the art to modify Susa to arrive at the claimed invention. Petitioner's unsupported, conclusory statements do not constitute articulated reasoning with rational underpinnings.

Accordingly, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over Susa.

G. Obviousness over Susa and Abhulimen

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Susa and Abhulimen. Pet. 54–57. Petitioner relies on the Buckner Declaration in support of its contentions. *Id.*

Petitioner argues that Abhulimen teaches "a heating wire wound on a part of the porous component" for the same reasons set forth with respect to the combination of Hon and Abhulimen. Pet. 54–55; *see supra* Section II.C.2.b. Petitioner also argues that "[i]t would have been obvious to one of ordinary skill in the art to wind the coil heater of Abhulimen around the porous layer in Susa" to yield a heating wire wound on a part of the porous component, and that "[t]he modification is motivated for the same reasons explained above regarding Susa (*e.g.*, to provide more efficient uniform heating)." Pet. 55 (citing Pet. 44–46). Petitioner does not point to other evidence or explanation to support its proposed combination of Susa and Abhulimen. Accordingly, for the reasons set forth above regarding the modification of Susa (*see supra* Section II.F), we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over the combination of Susa and Abhulimen.

H. Obviousness over Susa and Whittemore

Petitioner contends that claims 1–3 would have been obvious under 35 U.S.C. § 103(a) over the combination of Susa and Whittemore. Pet. 57–60. Petitioner relies on the Buckner Declaration in support of its contentions. *Id.*

Petitioner argues that Whittemore teaches "a heating wire wound on a part of the porous component" because,

> [a]ccording to Whittemore, the vaporizing unit is combined with the "heating element or filament 3" in such a way that "a

> portion of said wick is always in contact or approximate contact with the heating element or filament 3" whereby the "medicament will be carried by capillary action to a point where it will be vaporized by the heat from the filament 3."

Pet. 57–58 (citing Ex. 1013, 1:50–2:8, Fig. 2). Petitioner further argues that it would have been obvious to a person having skill in the art "to wind the heating wire of Whittemore around the porous layer in Susa," and that such a modification "is motivated for the same reasons explained above regarding Susa (*e.g.*, to provide a more efficient, uniform heating)." *Id.* at 58 (citing Pet. 44–46).

As set forth above with respect to Susa, we are not persuaded that Petitioner articulated reasoning with rational underpinnings as to why one of ordinary skill in the art would modify Susa's teachings to arrive at the claimed invention based on the asserted reasoning that it would have provided more efficient, uniform heating. *See supra* Section II.F. Petitioner does not point to other evidence or explanation to support its proposed combination of Susa and Whittemore. Consequently, for the reasons set forth above with respect to the modification of Susa, we determine that the record before us does not establish a reasonable likelihood that Petitioner would prevail in establishing that claims 1–3 of the '742 patent would have been obvious over the combination of Susa and Whittemore.

III. CONCLUSION

For the foregoing reasons, we are not persuaded that Petitioner has established a reasonable likelihood that at least one of the challenged claims of the '742 patent is unpatentable based on the asserted grounds.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is *denied.*

PETITIONER:

Gregory L. Hillyer
Javier Sobrado
FELDMAN GALE, P.A.
ghillyer@feldmangale.com
jsobrado@feldmangale.com

PATENT OWNER:

Michael J. Wise
Joseph P. Hamilton
PERKINS COIE LLP
MWise@perkinscoie.com
JHamilton@perkinscoie.com
patentprocurement@perkinscoie.com

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Acknowledgement of Loss of Entitlement to Entity Status Discount

The entity status change request below filed through Private PAIR on 10/07/2015 has been accepted.

CERTIFICATIONS:

Change of Entity Status:

X Applicant changing to regular undiscounted fee status.

NOTE: Checking this box will be taken to be notification of loss of entitlement to small or micro entity status, as applicable.

This portion must be completed by the signatory or signatories making the entity status change in accordance with 37 CFR 1.4(d)(4).

Signature:	/Kenneth H. Ohriner/
Name:	Kenneth H. Ohriner
Registration Number:	31646