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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	USP5697A-NSG
		Application Number	
Title of Invention	Waterproof Induction Actuated Container		
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	Xin		WANG		
Residence Information (Select One) US Residency <input type="radio"/> Non US Residency Active US Military Service					
City	Fuzhou	Country of Residence ⁱ		CN	
Mailing Address of Inventor:					
Address 1	No. 47, Pushang Zone, Jinshan Instrial Area,				
Address 2					
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Postal Code	350008	Country ⁱ	CN		
Inventor	2				Remove
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	Jiangqun		CHEN		
Residence Information (Select One) US Residency <input checked="" type="radio"/> Non US Residency Active US Military Service					
City	Fuzhou	Country of Residence ⁱ		CN	
Mailing Address of Inventor:					
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Address 2					
City	Fuzhou, Fujian	State/Province			
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An Address is being provided for the correspondence information of this application.

Customer Number	30265		
Email Address	raymondchan@davidandraymond.com	<input type="button" value="Add Email"/>	<input type="button" value="Remove Email"/>

Application Information:

Title of the Invention	Waterproof Induction Actuated Container		
Attorney Docket Number	USP5697A-NSG	Small Entity Status Claimed	<input checked="" type="checkbox"/>
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	8	Suggested Figure for Publication (if any)	

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 I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in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.

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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.

Prior Application Status	<input type="text"/>	<input type="button" value="Remove"/>
Application Number	Continuity Type	Prior Application Number
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	USP5697A-NSG
		Application Number	
Title of Invention	Waterproof Induction Actuated Container		

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Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)

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Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

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Authorization to Permit Access to the Instant Application by the Participating Offices

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	USP5697A-NSG
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Title of Invention	Waterproof Induction Actuated Container		

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In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

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

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Assignee

Legal Representative under 35 U.S.C. 117

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Person to whom the inventor is obligated to assign.

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If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	USP5697A-NSG	
		Application Number		
Title of Invention	Waterproof Induction Actuated Container			

Mailing Address Information For Applicant:				
Address 1				
Address 2				
City		State/Province		
Country		Postal Code		
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Email Address				
Additional Applicant Data may be generated within this form by selecting the Add button.				<input type="button" value="Add"/>

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Assignee	1			
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		Application Number	
Title of Invention	Waterproof Induction Actuated Container		

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Signature	/Raymond Y. Chan/			Date (YYYY-MM-DD)	2016-09-20
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As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

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

Waterproof Induction Actuated Container

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

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

The above-identified application was made or authorized to be made by me. 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.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

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

Prior Foreign Application(s)	Priority Claimed	Certified Copy Attached
_____ (Number) (Country) (Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
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Additional foreign application numbers are listed on a supplemental priority data sheet attached hereto.

I hereby claimed the benefit under 35 USC 119(c) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (Day/Month/Year)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet attached hereto.
_____	_____	
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I hereby appoint the following attorney(s) and/or agent(s), with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Raymond Yat Chan, Reg. No. 37,484
Address all correspondence to: 108 North Ynez Avenue, Suite 128, Monterey Park, CA 91754, U.S.A.
Telephone Calls to: (626) 571-9812
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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 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor (given name, family name) Xin Wang

Inventor's signature [Signature] Date 09/17/2016
Residence Same as below Citizenship China
Mailing Address No. 47, Pushang Zone, Jiashan Industrial Area, Fuzhou, Fujian, 350008 China

Full name of second joint inventor, if any (given name, family name) Jiangqun Chen

Second Inventor's signature [Signature] Date 09/17/2016
Residence Same as below Citizenship China
Mailing Address No. 47, Pushang Zone, Jiashan Industrial Area, Fuzhou, Fujian, 350008 China

Additional inventors are being named on separately numbered sheets attached hereto.

TITLE

Waterproof Induction Actuated Container

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BACKGROUND OF THE PRESENT INVENTION

10 FIELD OF INVENTION

[0002] The present invention relates to a container, and more particularly to a
waterproof induction container, wherein the electrical and mechanical components are
sealed in a concealed compartment of the container to prevent any contamination of the
electrical and mechanical components by moisture, corrosive gas, and/or trash residuals.

15 DESCRIPTION OF RELATED ARTS'

[0003] A conventional container for storing predetermined objects, such as a trash
container, usually comprises a container body having a storage cavity formed therein, and
an opening communicated with the storage cavity, and a cover panel movably mounted
on top of the housing for selectively opening and enclosing the storage cavity for
20 allowing the user to dispose predetermined objects into the container body. When the

container is not in use, the storage cavity is substantially enclosed for physically separating the objects disposed in the storage cavity from an exterior of the container.

[0004] In recent years, electrically-operated containers or induction containers have been developed in which the cover panel is largely driven by electrical and mechanical components so as to achieve automatic opening or closing of that cover panel via a motor. For most of these induction containers, such as induction trash cans, a sensor is formed on the housing and is utilized for detecting a target movement, such as a movement of the person throwing trash, in a detection range, so that when that person stands in that detection range, the sensor will send a signal to the relevant electrical components so as to automatically lift up the cover panel, and when the user has left the detection range, the sensor will send a corresponding signal to those electrical components for automatically lowering down the cover panel so as to close the container.

[0005] However, the conventional induction container has several drawbacks. The convention induction container does not include any water resistance feature to protect the electrical and mechanical components. For example, when the trash is disposed in the storage cavity of the container body, fluid residuals in the trash may accidentally spilled to the container body to damage the electrical and/or mechanical components. In addition, moisture and/or corrosive gas will be released from the trash, such that a circuit board and/or mechanical components of the induction container will be eroded to shorten the service lifespan of the induction container.

[0006] In addition, the actuation of the cover panel is driven to open and close by the motor via a transmission shaft. In particular, one end of the transmission shaft is connected to the cover panel, and an opposed end of the transmission shaft is connected to the motor via a gear unit. Through the structural configuration of the transmission shaft with the gear unit, the electrical and mechanical components cannot be concealed in a storage compartment of the housing. In addition, the transmission shaft is exposed, such that moisture, corrosive gas, and/or trash residuals will inevitably contaminate the transmission shaft, the gear unit, and even the storage compartment.

[0007] Accordingly, a power supply unit is provided at the housing, wherein the power supply unit has a battery compartment formed at the bottom side of the housing and a battery cover detachably coupled at the bottom side of the housing to cover the battery compartment. Therefore, the battery cover may accidentally fall into the storage cavity of the container body. The moisture, corrosive gas, and/or trash residuals will also inevitably contaminate the battery in the battery compartment and will erode the power supply unit as well. Once the power supply unit is malfunctioned, the cover panel cannot be operated as well. It is also inconvenient for the user to replace the battery in the battery compartment because the housing must be detached from the container body for battery replacement.

SUMMARY OF THE PRESENT INVENTION

[0008] The invention is advantageous in that it provides a waterproof induction container, wherein different electrical and mechanical components of the container are concealed in the side concealed compartment in a waterproof manner to prevent any contamination of the electrical and mechanical components by moisture, corrosive gas, and/or trash residuals. Therefore, the electrical and mechanical components of the container will be protected within the side concealed compartment against such adverse environmental factor as excess humidity, so as to prolong a general life span of the present invention.

[0009] Another advantage of the invention is to a waterproof induction container, wherein the pivot shaft is directly driven by an actuation unit to move the cover panel between an opened position and a closed position.

[0010] Another advantage of the invention is to a waterproof induction container, wherein two end portions of the pivot shaft are extended into the side concealed compartments respectively and are operatively linked to the actuation unit and a resilient

element, such that the rotational movement of the pivot shaft is balanced at the two ends portions thereof to ensure the smooth pivotal movement of the cover panel.

[0011] Another advantage of the invention is to a waterproof induction container, wherein the exposed portion of the pivot shaft between the two end portions thereof is received along a shaft sleeve of the cover panel to conceal the exposed portion of the pivot shaft so as to prevent the pivot shaft from exposing to the container opening of said container body.

[0012] Another advantage of the invention is to a waterproof induction container, wherein the gear transmission unit serves as a decelerating gear unit for controllably lifting up and dropping down the cover panel at a speed determined by gear ratios of the gear transmission unit so as to move the cover panel between the opened and closed positions in a hydraulic manner.

[0013] Another advantage of the invention is to provide a water induction container, wherein the servo motor, the transmission gear unit, and the pivot shaft are directly and operatively linked with each other so as to minimize energy lost through the energy transmission.

[0014] Another advantage of the invention is to a waterproof induction container, wherein the power supply unit is provided at the rear portion of the control housing, such that the user is able to access the power supply unit, such as replacing the battery, without detaching the control housing from the container body. In addition, since there is no access of the power supply unit from the storage cavity, the battery compartment is not communicated with the storage cavity to prevent any contamination of the battery compartment by moisture, corrosive gas, and/or trash residuals from the storage cavity.

[0015] Another object of the present invention is to provide a waterproof induction container, wherein the induction actuated container cover can be adapted to perform a wide variety of functions so as to allow widespread application of the present invention.

[0016] Another object of the present invention is to provide a waterproof induction container, which does not require to alter the original structural design of the induction container, so as to minimize the manufacturing cost of the induction container incorporating with the induction actuated container cover.

5 [0017] Another object of the present invention is to provide a waterproof induction container, wherein no expensive or complicated structure is required to employ in the present invention in order to achieve the above mentioned objects. Therefore, the present invention successfully provides an economic and efficient solution for providing a sterilized and clean configuration for the induction container to prevent any
10 contamination of the electrical and mechanical components of the induction container.

[0018] Additional advantages and features of the invention will become apparent from the description which follows, and may be realized by means of the instrumentalities and combinations particular point out in the appended claims.

[0019] According to the present invention, the foregoing and other objects and
15 advantages are attained by a waterproof induction container which comprises a container body and an induction actuated container cover. The container body has a storage cavity and a container opening communicating with the storage cavity. The induction actuated container cover comprises a control housing, a cover unit, and an automatic driving arrangement.

20 [0020] The control housing is detachably coupled at the container body at the container opening thereof, wherein the control housing has first and second side concealed compartments formed at a rear portion of the control housing, and a cover opening formed between the first and second side concealed compartments to communicate with the storage cavity of the container body.

25 [0021] The cover unit comprises a pivot shaft having first and second end portions extended into the first and second side concealed compartments respectively, and a cover panel pivotally mounted to the control housing via the pivot shaft to pivotally move

between a closed position that the cover panel covers at the cover opening to enclose the storage cavity and an opened position that the cover panel exposes the cover opening for communicating with the storage cavity.

5 [0022] The automatic driving arrangement comprises a sensor unit mounted at the control housing for detecting a target movement of a user, and an actuation unit concealed in the first side concealed compartment of the control housing in a waterproof manner to operatively link with the sensor unit and to operatively coupled to the pivot shaft, wherein the actuation unit is actuated to move the cover panel via the pivot shaft between the opened and closed positions.

10 [0023] Still further objects and advantages will become apparent from a consideration of the ensuing description and drawings.

[0024] These and other objectives, features, and advantages of the present invention will become apparent from the following detailed description, the accompanying drawings, and the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] Fig. 1 is a perspective view of a waterproof induction container according to a preferred embodiment of the present invention.

[0026] Fig. 2 is a perspective view of an induction actuated container cover of the waterproof induction container according to the above preferred embodiment of the present invention.

[0027] Fig. 3 is a perspective view of the structure of the induction actuated container cover without the upper casing according to the above preferred embodiment of the present invention.

[0028] Fig. 4 is an exploded perspective view of the induction actuated container cover of the waterproof induction container according to the above preferred embodiment of the present invention.

[0029] Fig. 5 is a perspective view of the actuation driving arrangement of the waterproof induction container according to the above preferred embodiment of the present invention.

[0030] Fig. 6 is a rear view of a power supply unit of the waterproof induction container according to the above preferred embodiment of the present invention.

[0031] Fig. 7 is a sectional view of the induction actuated container cover according to the above preferred embodiment of the present invention.

[0032] Fig. 8 illustrates the resilient element of the induction actuated container cover according to the above preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0033] The following description is disclosed to enable any person skilled in the art to make and use the present invention. Preferred embodiments are provided in the following description only as examples and modifications will be apparent to those skilled in the art. The general principles defined in the following description would be applied to other embodiments, alternatives, modifications, equivalents, and applications without departing from the spirit and scope of the present invention.

[0034] Referring to Fig. 1 to Fig. 7 of the drawings, a waterproof induction container according to a preferred embodiment of the present invention is illustrated, wherein the waterproof induction container comprises a container body 10 and an induction actuated container cover.

[0035] The container body 10 has a storage cavity 11 and a container opening 12 formed at an upper portion of the container body 10, wherein the storage cavity 11 is utilized for storing predetermined objects, such as trash, disposed by a user of the present invention. Accordingly, the container opening 12 forms a top opening of the container body 10.

[0036] The induction actuated container cover comprises a control housing 30, a cover unit 40, and an automatic driving arrangement 50. The control housing 30, having a cover opening 31, is adapted for mounting at the container body 10 at the container opening thereof 11 to communicate the cover opening 31 with the storage cavity 11 of the container body 10. The control housing 30 further has first and second side concealed compartments 32, 33 formed at a rear portion of the control housing 30, wherein the cover opening 31 is formed between the first and second side concealed compartments 32, 33 to communicate with the storage cavity 11 of the container body 10. In one embodiment, the first and second side concealed compartments 32, 33 are left and right concealed compartments of the control housing 30.

[0037] The cover unit 40 comprises a pivot shaft 41 having first and second end portions 411, 412 extended into the first and second side concealed compartments 32, 33 respectively, and a cover panel 42 pivotally mounted to the control housing 30 via the pivot shaft 41 to pivotally move between a closed position that the cover panel 42 covers at the cover opening 31 to enclose the storage cavity 11 and an opened position that the cover panel 42 exposes the cover opening 31 for communicating with the storage cavity 11.

[0038] The automatic driving arrangement 50 comprises a sensor unit 51 mounted at the control housing 30 for detecting a target movement of a user, and an actuation unit 60 concealed in the first side concealed compartment 32 of the control housing 30 in a waterproof manner to operatively link with the sensor unit 51 and to operatively coupled to the pivot shaft 41, wherein the actuation unit 60 is actuated to move the cover panel 42 via the pivot shaft 41 between the opened and closed positions.

[0039] According to the preferred embodiment, the control housing 30 has a trapezoid cross section that a height of the front portion of the control housing 30 is shorter than that of the rear portion thereof to maximize a size of each of the first and second side concealed compartments 32, 33. Accordingly, a longitudinal width of the cover opening 31 between two sidewalls of the control housing 30 is larger than a transverse width of the cover opening 31 between the front wall and the rear wall of the control housing 30 to maximum an usable opening area of the cover opening 31 when the cover panel 42 is pivotally moved at the opened position.

[0040] In particular, the control housing 30 comprises a lower base frame 34 detachably coupled at the container opening 12 of the container body 10, and an upper casing 35 sealed and coupled at the lower base frame 34 to define the first and second side concealed compartments 32, 33 therebetween. Accordingly, the base frame 34, which has an annular shape, has a base platform 341 to support the automatic driving arrangement 50, wherein a sealing channel 342 is upwardly extended from a peripheral of the base platform 341 and a coupling channel is downwardly extended from the peripheral of the base platform 341 to detachably engage with an opening rim of the

container opening 12 of the container body 10. The upper casing 35 is sealed and coupled on the base frame 34. In particular, a bottom edge of the upper casing 35 is sealed and coupled at the sealing channel 342 of the base frame 34. Preferably, a sealing element 343 is disposed along the sealing channel 342 of the base frame 34 and is provided to seal a connection between the bottom edge of the upper casing 35 and the sealing channel 342 of the base frame 34 to ensure the waterproof configuration of the first and second side concealed compartments 32, 33. It is worth mentioning that the upper casing 35 has a trapezoid cross section to maximize the size of each of the first and second side concealed compartments 32, 33.

10 [0041] As shown in Fig. 4, the pivot shaft 41 is an elongated shaft extended between the first and second side concealed compartments 32, 33. In particular, the two end portions 411, 412 of the pivot shaft 41 are extended into and sealed in the first and second side concealed compartments 32, 33 respectively. The pivot shaft 41 further has an exposed portion 413 defined between the two end portions 411, 412, wherein the cover panel 42 is coupled at the exposed portion 413 of the pivot shaft 41.

[0042] Accordingly, the cover panel 42 has a folding edge coupled at the exposed portion 413 of the pivot shaft 41 and a free edge being pivotally on the control housing 30 to enclose the cover opening 31 thereof. The cover panel 42 comprises a shaft sleeve 421 formed along the folding edge thereof, wherein the exposed portion 413 of the pivot shaft 41 is received in the shaft sleeve 421 to conceal the exposed portion 413 of the pivot shaft 41 so as to prevent the pivot shaft 41 from exposing to the container opening 12 of the container body 10.

[0043] It is worth mentioning that the exposed portion 413 of the pivot shaft 41 has a non-circular cross section and the shaft sleeve 421 has a corresponding non-circular cross section to fit the exposed portion 413 of the pivot shaft 41, such that when the pivot shaft 41 is received along the shaft sleeve 421 and is driven to rotate, the cover panel 42 is pivotally moved between the opened and closed positions. As shown in Fig. 4, the control housing 30 further comprises a shaft housing 301 integrally extended between the first and second side concealed compartments 32, 33, wherein the shaft sleeve 421 is

received in the shaft housing 301, such that the pivot shaft 41 is hidden within the shaft housing 301 to keep the pivot shaft 41 away from the container opening 12 of the container body 10.

[0044] According to the preferred embodiment, the sensor unit 51 comprises a sensor circuit board 511 and a sensor 512 operatively linked to the sensor circuit board 511, wherein the sensor circuit board 511 and the sensor 512 are concealed in the front concealed compartment 36. The sensor 512 is mounted at a front side of the control housing 30 for delivering a sensor signal from a front side of the control housing 30 to detect a user's movement in front of the container body 10. The sensor circuit board 511 is electrically connected to the actuation unit 60 in such a manner that when the sensing unit 2311 detects the user's movement in front of the container body 10, the sensor 512 will send a corresponding sensor signal to the actuation input 60 for actuating the cover panel 42 to move from the normal closed position to the opened position.

[0045] As shown in Figs. 3 and 4, the control housing 30 further has a front concealed compartment 36 formed between the base frame 34 and the upper casing 35 at a position in front of the cover opening 31 of the control housing 30, wherein a slanted front wall 37 is defined on the front concealed compartment 36 at a top side of the upper casing 35. The sensor circuit board 511 is concealed in the front concealed compartment 36 and the sensor 512 is supported at the slanted front wall 37 of the control housing 30. Accordingly, a window 351 is formed on the top side of the upper casing 35, wherein the sensor 512 is connected to the sensor circuit board 511 below the window 351 of the upper casing 35. It is worth mentioning that since the sensor 512 is supported at the slanted front wall 37, the sensor 512 is supported in a slanted orientation. Therefore, the sensor 512 is located in front of the cover panel 42 to maximize the detecting range of the sensor 512 at the approaching direction for detecting the target movement.

[0046] According to the preferred embodiment, the actuation unit 60 comprises a servo motor 61 supported in the first side concealed compartment 32 of the control housing 30 and a gear transmission unit 62 operatively coupled between the first end portion 411 of

the pivot shaft 41 and the servo motor 61 for transmitting a rotational power from the servo motor 61 to the pivot shaft 41.

[0047] Accordingly, the sensor 512 will send the sensor signal to the actuation unit 60, the servo motor 61 is activated for generating the rotational power, wherein the rotational
5 power is transmitted through the gear transmission unit 62 to drive the pivot shaft 41 to rotate. It is worth mentioning that the servo motor 61 can generate a forward rotational power to drive the pivot shaft 41 so as to move the cover panel 42 from the closed position to the opened position, and can generate a rearward rotational power to drive the pivot shaft 41 so as to move the cover panel 42 from the opened position to the closed
10 position.

[0048] The gear transmission unit 62 is a decelerating gear unit for controllably lifting up and dropping down the cover panel 42 at a speed determined by gear ratios of the gear transmission unit 62 so as to move the cover panel 42 between the opened and closed positions in a hydraulic manner. In other words, the gear transmission unit 62 is adapted
15 to transmit and convert the rotational power to the controlled decelerating and torque enhancing force so as to move the cover panel 42 between the opened and closed positions in a hydraulic manner. In other words, with the help of the gear transmission unit 62, the cover panel 42 can be lifted up and down in a manner as though it is lifted up and down hydraulically, i.e. generation of a decelerating and torque enhancing force in a
20 stable and controllable manner.

[0049] As shown in Fig. 5, the gear transmission unit 62 comprises a gear worm sector 621 affixed at the first end portion 411 of the pivot shaft 41 to operatively coupled with the servo motor 61 via a gear seat. In particular, the gear worm sector 621 is one of the gear elements of the gear transmission unit 62. It is worth mentioning a curvature of the
25 gear worm sector 621 is configured corresponding to the rotational movement of the pivot shaft 41. In other words, the angular length of the gear worm sector 621 is configured to allow the cover panel 42 to move between the opened and closed positions. Therefore, the servo motor 61, the transmission gear unit 62, and the pivot shaft 41 are

directly and operatively linked with each other so as to minimize energy lost through the energy transmission.

[0050] The automatic driving arrangement further comprises a resilient element 70 concealed in the second side concealed compartment 33 of the control housing 30 and coupled at the second end portion 412 of the pivot shaft 41. In one embodiment, the resilient element 70 is a coil spring coaxially coupled at the second end portion 412 of the pivot shaft 41 to apply an urging force to the cover panel 42, as shown in Fig. 8. Preferably, one end of the coil spring is biased against the shaft sleeve 421 and an opposed end of the coil spring is biased against the shaft housing 301 to apply the urging force to the cover panel 42. Accordingly, the urging force generated by the resilient element 70 serves as an initial force towards the cover panel 42 for initially pushing up the cover panel 41 simultaneously when the cover panel 42 is started to move from the closed position to the opened position. In other words, the resilient element 70 will help the servo motor 61 to initially lift up the cover panel 42 at the closed position. The the urging force generated by the resilient element 70 also serves as a weight supporting force for partially offsetting a weight of the cover panel 42 when the cover panel 42 is started to move from the opened position to the closed position.

[0051] It is worth mentioning that the two end portions 411, 412 of the pivot shaft 41 are extended into the side concealed compartments 32, 33 respectively and are operatively linked to the actuation unit 60 and a resilient element 70, such that the rotational movement of the pivot shaft 41 is balanced at the two ends portions 411, 412 thereof to ensure the smooth pivotal movement of the cover panel 42.

[0052] The waterproof induction container further comprises a power supply unit 80 for electrically connecting with the sensor unit 50 and the actuation unit 60 of the automatic driving arrangement, wherein the power supply unit 80 comprises a battery compartment 81 formed within the rear portion of the control housing 30 and a battery compartment cover 82 detachably coupled at a rear wall 301 of the control housing 30 to enclose the battery compartment 81.

[0053] According to the preferred embodiment of the present invention, the power supply unit 80 is adapted for receiving one or more batteries (such as disposable batteries or rechargeable batteries) which acts as energy source for operating the automatic driving arrangement. Alternatively, the power supply unit 80 may be electrically connected to an external AC power source or utilizes rechargeable batteries for providing power to the automatic driving arrangement.

[0054] As shown in Figs. 6 and 7, the battery compartment 81 is formed at the control housing 30 at a position that an opening of the battery compartment 81 is formed at the rear wall 301 of the control housing 30, wherein the batteries can be operatively received in the battery compartment 81. The battery compartment 81 is located between the first and second side concealed compartments 32, 33 and below the pivot shaft 41.

[0055] The battery compartment cover 82 is a panel detachably coupled at the rear wall 301 of the control housing 30 at the opening of the battery compartment 81 to enclose the battery compartment 81. In other words, the user is able to access the power supply unit 80, such as replacing the battery, without detaching the control housing 30 from the container body 10. In addition, since there is no access of the power supply unit 30 from the storage cavity 11, the battery compartment 81 is not communicated with the storage cavity 11 to prevent any contamination of the batteries and the battery compartment 81 by moisture, corrosive gas, and/or trash residuals from the storage cavity 11.

[0056] The operation of the present invention is as follows: when the automatic driving arrangement is turned on, the sensor 512 is activated to search for user's movement in a detection range, e.g. an area in front of the induction actuated container, and when a user actually enters the detection range and approaches the induction actuated container, the sensor 512 will generate an actuation signal to the actuation unit 60 which then activates the servo motor 61 for controllably lifting up the cover panel 42 from the closed position to the opened position, and when the user leaves the detection range, the sensor 512 will also send another actuation signal to the actuation unit 60 which then actuates the servo motor 61 for moving the cover panel 42 from the opened position back to the closed position.

[0057] It is worth mentioning that, even if the user does not leave the detection range for long, the sensor circuit board 511 is pre-programmed to activate closing of the cover panel 42 when a predetermined time lapses after the cover panel 42 has been opened. This ensures that the cover panel 42 will be closed after a predetermined time period.

5 Thus, it is important to stress that the sensor circuit board 511 can actually pre-programmed in a wide variety of ways so as to fit specific needs of individual manufacturers or users. Moreover, the cover panel 42 may also be manually operated through a plurality of control buttons provided on the control housing 30.

[0058] One skilled in the art will understand that the embodiment of the present invention as shown in the drawings and described above is exemplary only and not intended to be limiting.

10

[0059] It will thus be seen that the objects of the present invention have been fully and effectively accomplished. The embodiments have been shown and described for the purposes of illustrating the functional and structural principles of the present invention and is subject to change without departure from such principles. Therefore, this invention includes all modifications encompassed within the spirit and scope of the following claims.

15

WHAT IS CLAIMED IS:

1. A waterproof induction container, comprising:

a container body having a storage cavity and a container opening; and

an induction actuated container cover which comprises:

5 a control housing detachably coupled at said container body at said container opening thereof, wherein said control housing has first and second side concealed compartments formed at a rear portion of said control housing, and a cover opening formed between said first and second side concealed compartments to communicate with said storage cavity of said container body;

10 a cover unit which comprises a pivot shaft having first and second end portions extended into said first and second side concealed compartments respectively, and a cover panel pivotally mounted to said control housing via said pivot shaft to pivotally move between a closed position that said cover panel covers at said cover opening to enclose said storage cavity and an opened position that said cover panel exposes said
15 cover opening for communicating with said storage cavity; and

an automatic driving arrangement, which comprises:

a sensor unit mounted at said control housing for detecting a target movement of a user; and

20 an actuation unit concealed in said first side concealed compartment of said control housing in a waterproof manner to operatively link with said sensor unit and to operatively coupled to said pivot shaft, wherein said actuation unit is actuated to move said cover panel via said pivot shaft between said opened and closed positions.

2. The waterproof induction container, as recited in claim 1, wherein said actuation unit comprises a servo motor supported in said first side concealed

compartment of said control housing and a gear transmission unit operatively coupled between said first end portion of said pivot shaft and said servo motor for transmitting a rotational power from said servo motor to said pivot shaft.

3. The waterproof induction container, as recited in claim 2, wherein said
5 gear transmission unit comprises a gear worm sector affixed at said first end portion of said pivot shaft to operatively coupled with said servo motor.

4. The waterproof induction container, as recited in claim 3, wherein said
gear transmission unit is a decelerating gear unit for controllably lifting up and dropping
down said cover panel at a speed determined by gear ratios of said gear transmission unit
10 so as to move said cover panel between said opened and closed positions in a hydraulic
manner.

5. The waterproof induction container, as recited in claim 1, wherein said
control housing comprises a lower base frame detachably coupled at said container
opening of said container body, and an upper casing sealed and coupled at said lower
15 base frame to define said first and second side concealed compartments therebetween.

6. The waterproof induction container, as recited in claim 3, wherein said
control housing comprises a lower base frame detachably coupled at said container
opening of said container body, and an upper casing sealed and coupled at said lower
base frame to define said first and second side concealed compartments therebetween.

7. The waterproof induction container, as recited in claim 1, wherein said
20 control housing has a trapezoid cross section that a height of said front portion of said
control housing is shorter than that of said rear portion thereof to maximize a size of each
of said first and second side concealed compartments.

8. The waterproof induction container, as recited in claim 3, wherein said
25 control housing has a trapezoid cross section that a height of said front portion of said

control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments.

9. The waterproof induction container, as recited in claim 6, wherein said control housing has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each
5 of said first and second side concealed compartments.

10. The waterproof induction container, as recited in claim 1, wherein said automatic driving arrangement further comprises a resilient element concealed in said second side concealed compartment of said control housing and coupled at said second
10 end portion of said pivot shaft to apply an urging force as an initial force towards said cover panel for initially pushing up said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for partially offsetting a weight of said cover panel when said cover panel is started to move from said opened position.

11. The waterproof induction container, as recited in claim 3, wherein said automatic driving arrangement further comprises a resilient element concealed in said second side concealed compartment of said control housing and coupled at said second
15 end portion of said pivot shaft to apply an urging force as an initial force towards said cover panel for initially pushing up said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for partially offsetting a weight of said cover panel when said cover panel is started to move
20 from said opened position.

12. The waterproof induction container, as recited in claim 9, wherein said automatic driving arrangement further comprises a resilient element concealed in said
25 second side concealed compartment of said control housing and coupled at said second end portion of said pivot shaft to apply an urging force as an initial force towards said cover panel for initially pushing up said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for

partially offsetting a weight of said cover panel when said cover panel is started to move from said opened position.

13. The waterproof induction container, as recited in claim 1, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an
5 exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.

14. The waterproof induction container, as recited in claim 6, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an
10 exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.

15. The waterproof induction container, as recited in claim 12, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an
15 exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.

16. The waterproof induction container, as recited in claim 13, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve
20 has a corresponding non-circular cross section to fit said exposed portion of said pivot shaft, such that when said pivot shaft is driven to rotate, said cover panel is pivotally moved between said opened and closed positions.

17. The waterproof induction container, as recited in claim 14, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve
25 has a corresponding non-circular cross section to fit said exposed portion of said pivot shaft, such that when said pivot shaft is driven to rotate, said cover panel is pivotally moved between said opened and closed positions.

18. The waterproof induction container, as recited in claim 15, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve has a corresponding non-circular cross section to fit said exposed portion of said pivot shaft, such that when said pivot shaft is driven to rotate, said cover panel is pivotally moved between said opened and closed positions.

19. The waterproof induction container, as recited in claim 1, further comprising a power supply unit for electrically connecting with said automatic driving arrangement, wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover detachably coupled at a rear wall of said control housing to enclose said battery compartment.

20. The waterproof induction container, as recited in claim 3, further comprising a power supply unit for electrically connecting with said automatic driving arrangement, wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover detachably coupled at a rear wall of said control housing to enclose said battery compartment.

21. The waterproof induction container, as recited in claim 18, further comprising a power supply unit for electrically connecting with said automatic driving arrangement, wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover detachably coupled at a rear wall of said control housing to enclose said battery compartment.

22. The waterproof induction container, as recited in claim 19, wherein said battery compartment is located between said first and second side concealed compartments and below said pivot shaft.

23. The waterproof induction container, as recited in claim 20, wherein said battery compartment is located between said first and second side concealed compartments and below said pivot shaft.

24. The waterproof induction container, as recited in claim 21, wherein said
5 battery compartment is located between said first and second side concealed compartments and below said pivot shaft.

25. The induction actuated container cover, as recited in claim 1, wherein said control housing has a front concealed compartment defining a slanted front wall, wherein said sensor unit comprises sensor circuit board concealed in said front concealed
10 compartment and a sensor supported at said slanted front wall of said control housing to operatively linked to said sensor circuit board, such that said sensor is located in front of said cover panel to maximize said detecting range of said sensor at said approaching direction for detecting said target movement.

26. The induction actuated container cover, as recited in claim 6, wherein said
15 control housing has a front concealed compartment defining a slanted front wall, wherein said sensor unit comprises sensor circuit board concealed in said front concealed compartment and a sensor supported at said slanted front wall of said control housing to operatively linked to said sensor circuit board, such that said sensor is located in front of said cover panel to maximize said detecting range of said sensor at said approaching
20 direction for detecting said target movement.

27. The induction actuated container cover, as recited in claim 24, wherein said control housing has a front concealed compartment defining a slanted front wall, wherein said sensor unit comprises sensor circuit board concealed in said front concealed compartment and a sensor supported at said slanted front wall of said control housing to
25 operatively linked to said sensor circuit board, such that said sensor is located in front of said cover panel to maximize said detecting range of said sensor at said approaching direction for detecting said target movement.

Waterproof Induction Actuated Container

ABSTRACT OF THE DISCLOSURE

A waterproof induction container includes a container body and an induction actuated container cover. The container body includes a storage cavity and a container opening. The induction actuated container cover includes a control housing, a cover panel, and an automatic driving arrangement. The control housing has a side concealed compartment and a cover opening. The cover panel is pivotally mounted to the control housing to pivotally move between a closed position and an opened position. The automatic driving arrangement is concealed in the side concealed compartment of the control housing in a waterproof manner to prevent any contamination of the automatic driving arrangement by moisture, corrosive gas, and trash residuals.

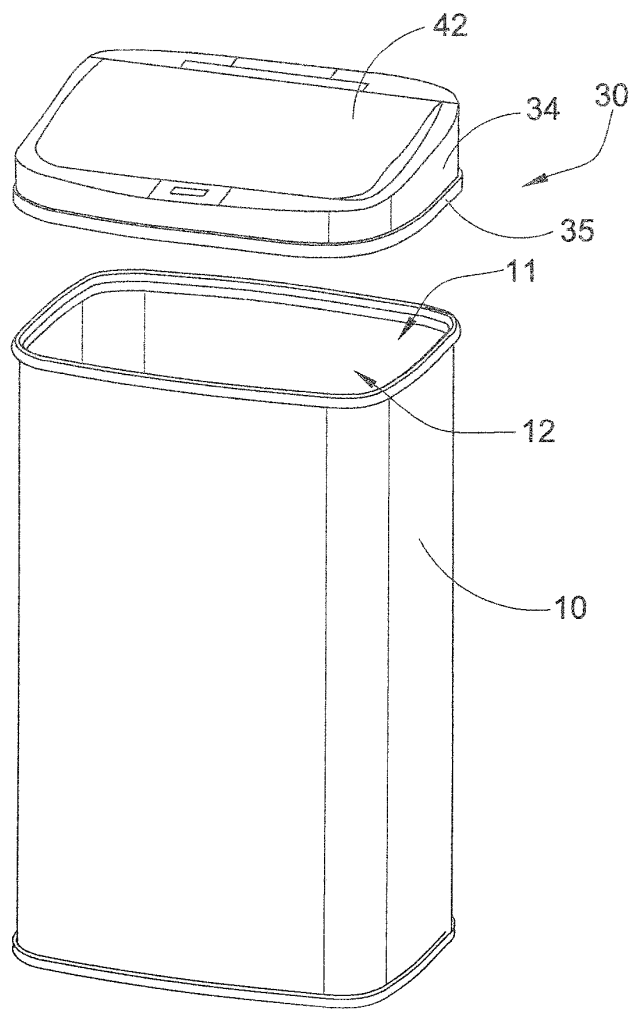


FIG.1

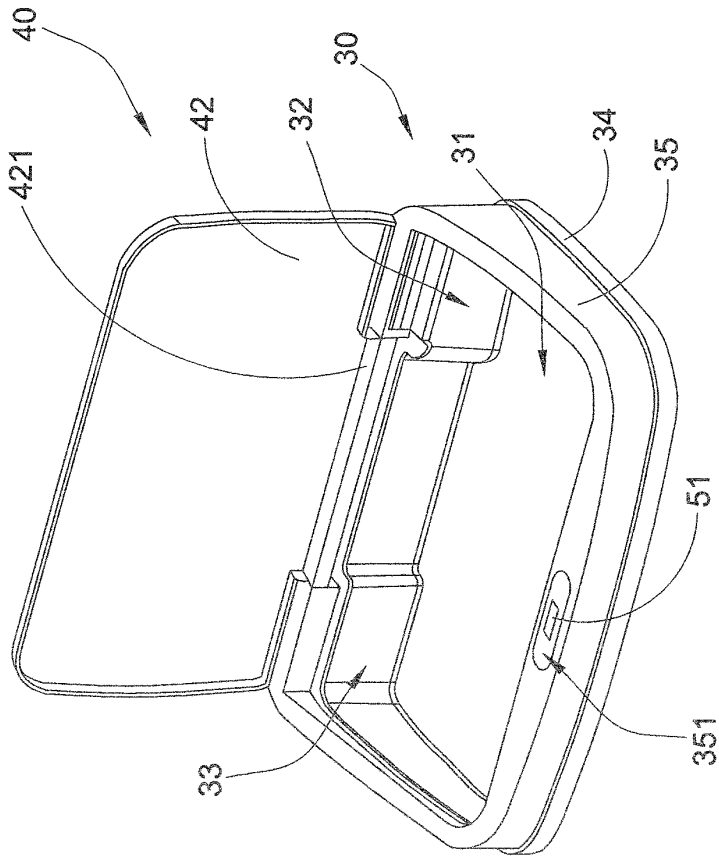


FIG.2

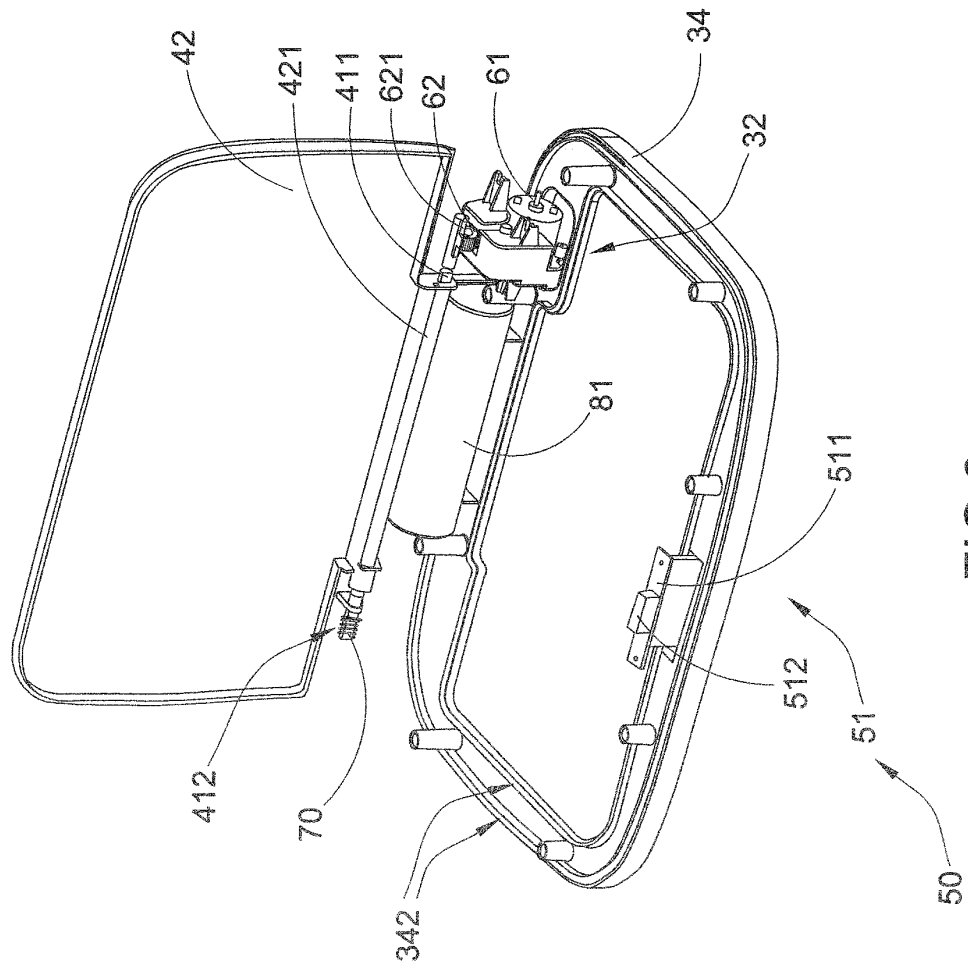


FIG.3

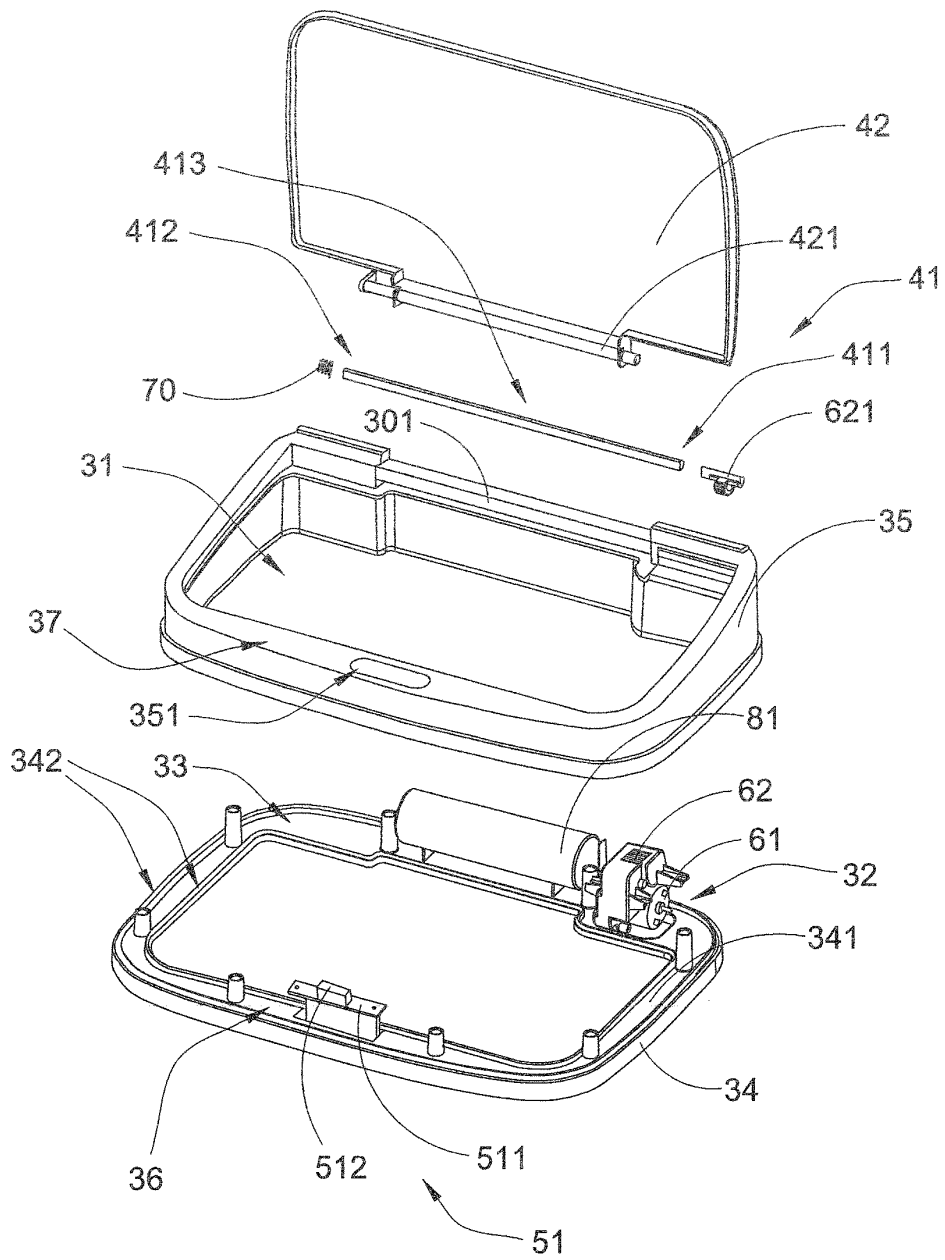


FIG.4

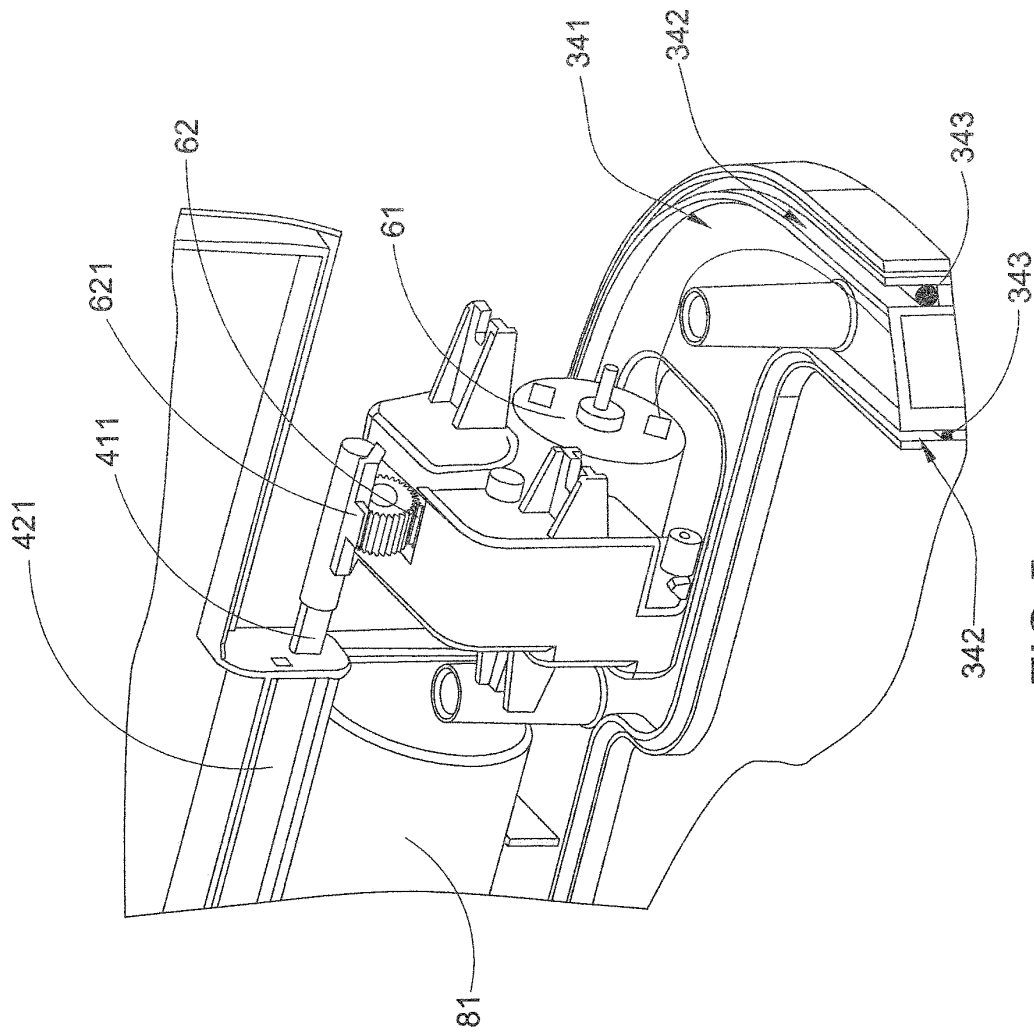


FIG.5

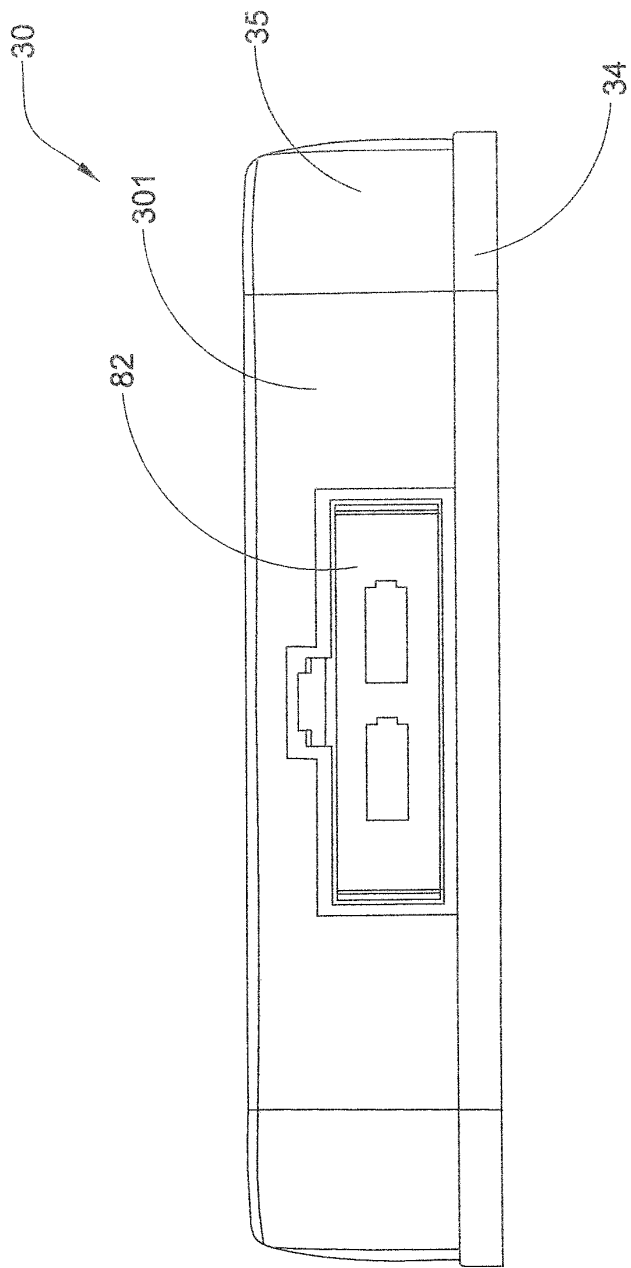


FIG.6

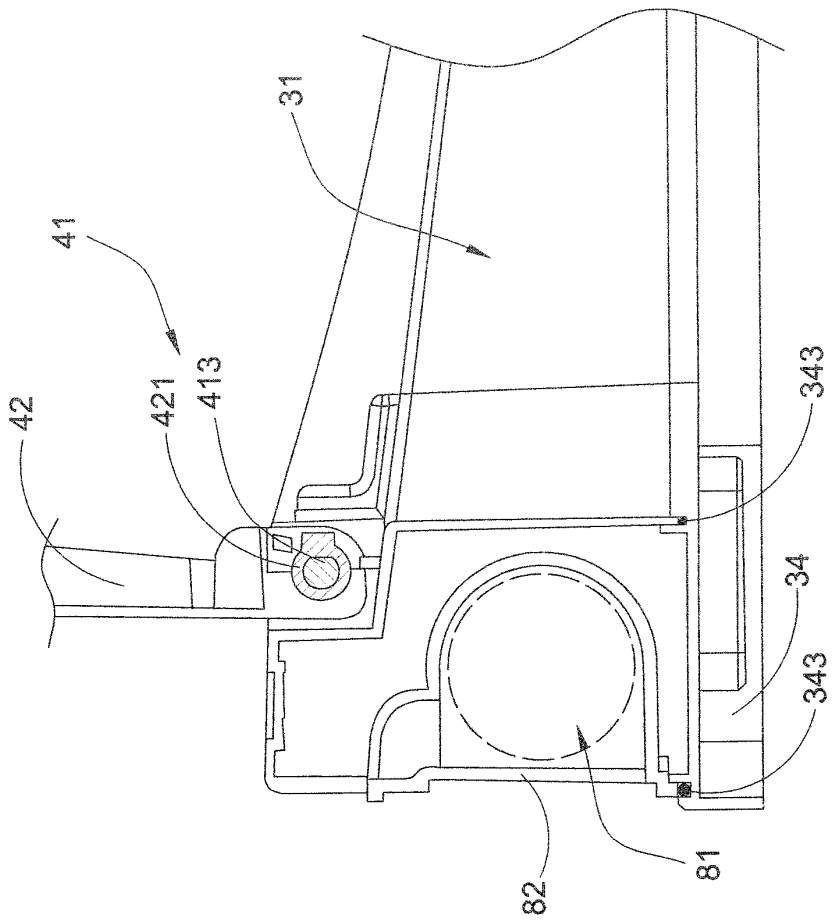


FIG. 7

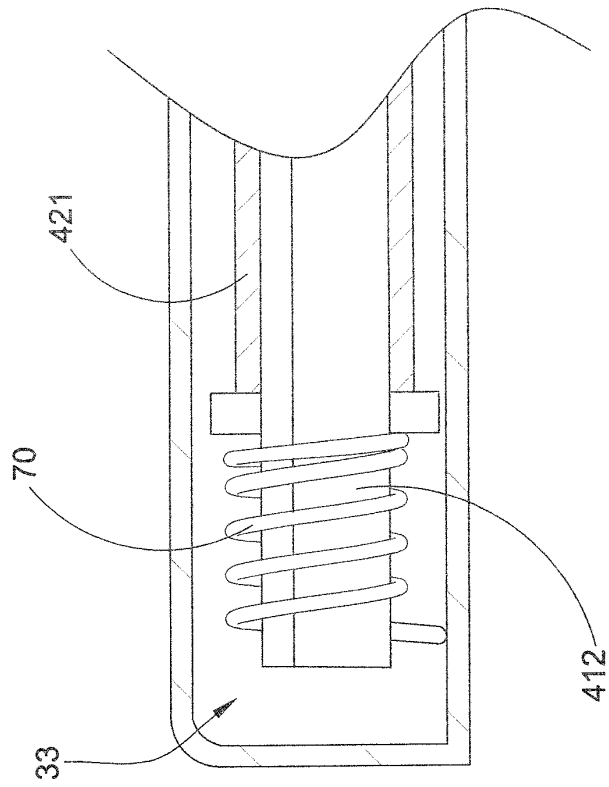


FIG.8

Electronic Patent Application Fee Transmittal

Application Number:				
Filing Date:				
Title of Invention:	Waterproof Induction Actuated Container			
First Named Inventor/Applicant Name:	Xin WANG			
Filer:	Raymond Yat Chan/Michael Lee			
Attorney Docket Number:	USP5697A-NSG			
Filed as Small Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY FILING FEE (ELECTRONIC FILING)	4011	1	70	70
UTILITY SEARCH FEE	2111	1	300	300
UTILITY EXAMINATION FEE	2311	1	360	360
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	2202	7	40	280
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1010

Electronic Acknowledgement Receipt

EFS ID:	26985448
Application Number:	15271211
International Application Number:	
Confirmation Number:	5137
Title of Invention:	Waterproof Induction Actuated Container
First Named Inventor/Applicant Name:	Xin WANG
Customer Number:	30265
Filer:	Raymond Yat Chan/Michael Lee
Filer Authorized By:	Raymond Yat Chan
Attorney Docket Number:	USP5697A-NSG
Receipt Date:	20-SEP-2016
Filing Date:	
Time Stamp:	22:29:36
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$1010
RAM confirmation Number	6737
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	USP5697ADS.pdf	1503051	no	7
			9584ba97d41656be858d1e62018d8c06db4b4579		
Warnings:					
Information:					
2	Oath or Declaration filed	USP5697declaration.pdf	185290	no	1
			4db711b252c30f1ca6a45219afc25eda57ca5f00		
Warnings:					
Information:					
3	Specification	USP5697specification.pdf	132231	no	15
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4	Claims	USP5697claims.pdf	63594	no	6
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5	Abstract	USP5697abstract.pdf	46459	no	1
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6	Drawings-only black and white line drawings	USP5697drawings.pdf	1178324	no	8
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Information:					

7	Fee Worksheet (SB06)	fee-info.pdf	36683 b2e6fce11561423d29d0210fa9a83b61260 ece6a	no	2
Warnings:					
Information:					
Total Files Size (in bytes):				3145632	
<p>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.</p> <p><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.</p> <p><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.</p> <p><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.</p>					

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number
15/271,211

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	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (j), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	27 minus 20 = *	7	x 40 =	280	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	1 minus 3 = *		x 210 =	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 \$310 (\$155 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	1010		TOTAL	

APPLICATION AS AMENDED - PART II

(Column 1)		(Column 2)	(Column 3)	SMALL ENTITY		OR	OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	x	=
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
				TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	x	=
	Application Size Fee (37 CFR 1.16(s))								
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
				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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Table with 7 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY DOCKET NO, TOT CLAIMS, IND CLAIMS. Row 1: 15/271,211, 09/20/2016, 2837, 1010, USP5697A-NSG, 27, 1

CONFIRMATION NO. 5137

FILING RECEIPT

30265
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754



Date Mailed: 10/03/2016

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)

Xin WANG, Fuzhou, CHINA;
Jiangqun CHEN, Fuzhou, CHINA;

Applicant(s)

Xin WANG, Fuzhou, CHINA;
Jiangqun CHEN, Fuzhou, CHINA;

Power of Attorney:

Raymond Chan--37484

Domestic Applications for which benefit is claimed - None.

A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.

Foreign Applications for which priority is claimed (You may be eligible to benefit from the Patent Prosecution Highway program at the USPTO. Please see http://www.uspto.gov for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: No

Permission to Access Search Results: No

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 09/30/2016

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/271,211**

Projected Publication Date: 03/22/2018

Non-Publication Request: No

Early Publication Request: No

**** SMALL ENTITY ****

Title

Waterproof Induction Actuated Container

Preliminary Class

318

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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.

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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 (1-866-999-4258).

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Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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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).

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/271,211	09/20/2016	Xin WANG	USP5697A-NSG	5137

30265 7590 09/06/2017
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

EXAMINER

DHAKAL, BICKEY

ART UNIT	PAPER NUMBER
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2837

MAIL DATE	DELIVERY MODE
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09/06/2017

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.

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Examiner Notes

Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: item "60" not shown in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

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.

Claims 16-18, 21, 24, and 27 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. The phrase “pivot shaft is driven” of **claims 16-18** are indefinite because these merely state function (driven) without providing any indication how this function is achieved. The recited function does not follow from the structure of the claim and it’s not clear if the automatic driving arrangement is used to perform this function.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of

rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1 and 5 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Yang et al. US Pub. no. 2015/0259140 A1.

Regarding claim 1, Yang discloses

A waterproof induction container (See Fig. 5, item 20), comprising:

a container body (Item 22) having a storage cavity (See Fig. 5) and a container opening (Item 26); and

an induction actuated container cover (Items 24 and 38) which comprises:

a control housing (Item 38) detachably coupled at said container body at said container opening thereof, wherein said control housing has first and second side concealed compartments (Items 39) formed at a rear portion of said control housing, and a cover opening (**See Fig. below**) formed between said first and second side concealed compartments to communicate with said storage cavity of said container body (**See Fig. below**) (**See page 4, para 0052-0054**);

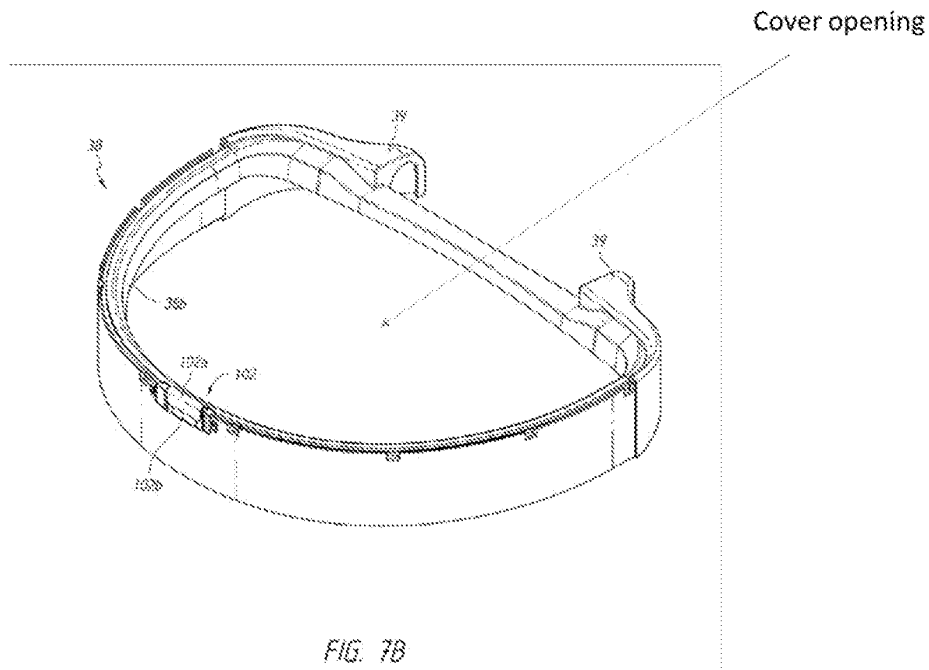
a cover unit (Item 56) which comprises a pivot shaft (Item 80) having first and second end portions extended into said first and second side concealed compartments

respectively (See Fig. 11A and 11B), and a cover panel (Item 24) pivotally mounted to said control housing via said pivot shaft to pivotally move between a closed position that said cover panel covers at said cover opening to enclose said storage cavity and an opened position that said cover panel exposes said cover opening for communicating with said storage cavity (See page 10, para 0092 and 0093); and

an automatic driving arrangement (Item 70), which comprises:

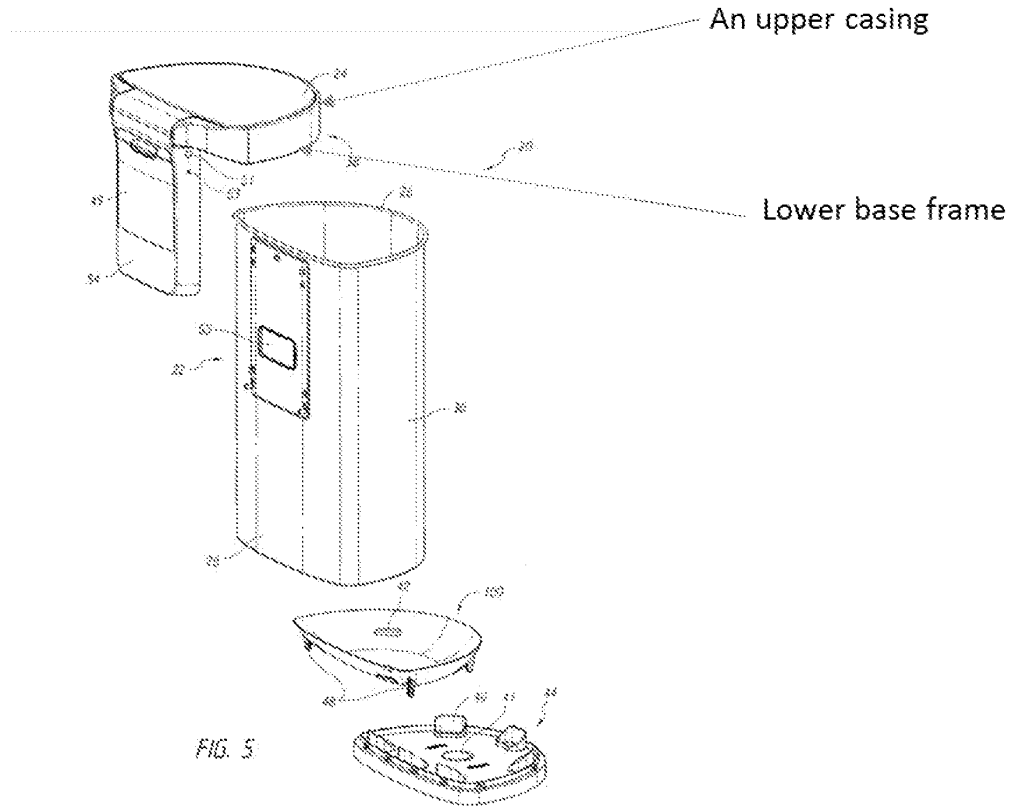
a sensor unit (Item 102) mounted at said control housing for detecting a target movement of a user (See pages 4 and 5, para 0056 and para 0057); and

an actuation unit (Item 78) concealed in said first side concealed compartment of said control housing in a waterproof manner (Fig. 11A shows item 78 concealed in said first side of item 38 in a waterproof manner inherently) to operatively link with said sensor unit and to operatively coupled to said pivot shaft, wherein said actuation unit is actuated to move said cover panel via said pivot shaft between said opened and closed positions. (See page 3, para 0041, page 11, para 0101)



Regarding claim 5, Yang discloses

wherein said control housing comprises a lower base frame detachably coupled at said container opening of said container body, and an upper casing sealed and coupled at said lower base frame to define said first and second side concealed compartments therebetween. **(See Fig. below)**



Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 6, 8, 19, 20, 22, and 23 are rejected under 35 U.S.C. 103 as being unpatentable over Yang et al. US Pub. no. 2015/0259140 A1 in a view of Wang et al. US Patent no. 8,678,219 B1.

Regarding claim 2, Yang discloses

, wherein said actuation unit comprises a servo motor (Item 78) supported in said first side concealed compartment of said control housing (See Figs. 11A and 11B where item 78 supported within item 38. See page 10, para 0092).

Yang does not explicitly disclose “and a gear transmission unit operatively coupled between said first end portion of said pivot shaft and said servo motor for transmitting a rotational power from said servo motor to said pivot shaft.”

Regarding claim 2, Wang discloses and a gear transmission unit (See Fig. 5, item 52) operatively coupled between said first end portion of said pivot shaft (Item 201) and said servo motor for transmitting a rotational power from said servo motor to said pivot shaft. (See column 8, lines 9-42)

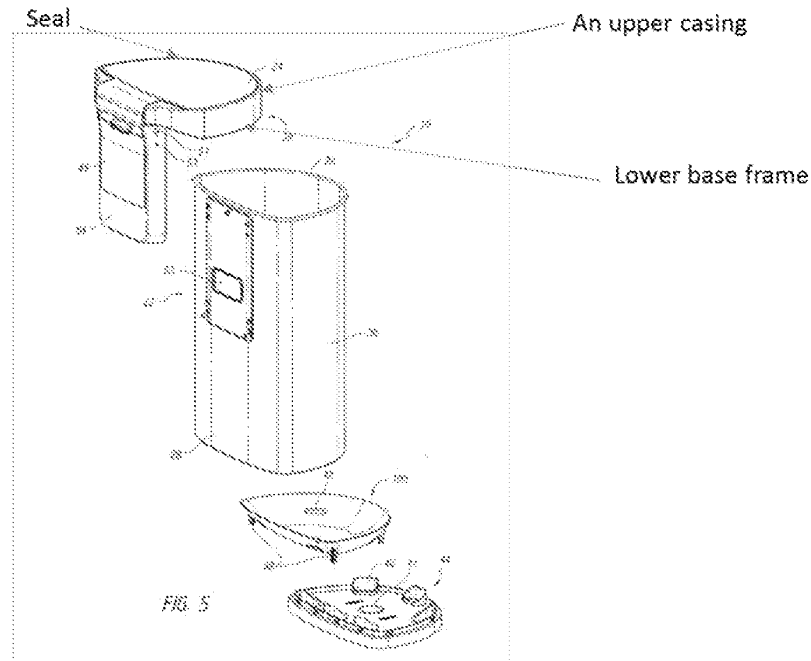
It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to use a gear transmission unit disclosed by Wang's in Yang's teachings for controllably lifting up and dropping down the lid panel at a speed determined by gear ratios of the gear transmission unit so as to move the lid panel between the opened and closed positions in a hydraulic manner. (See Wang's column 8, lines 1-8)

Regarding claim 3, a combination of Yang and Wang discloses wherein said gear transmission unit comprises a gear worm sector (See Fig. 5, item 521) affixed at said first end portion of said pivot shaft (Fig. 5 shows item 521 coupled to end portion of item 21) to operatively coupled with said servo motor. (See Wang's column 8, lines 25-42)

Regarding claim 4, a combination of Yang and Wang discloses, wherein said gear transmission unit is a decelerating gear unit for controllably lifting up and dropping down said cover panel at a speed determined by gear ratios of said gear transmission unit so as to move said cover panel between said opened and closed positions in a hydraulic manner. (See Wang's column 8, lines 1-8, lines 25-33)

Regarding claim 6, a combination of Yang and Wang discloses, wherein said control housing comprises a lower base frame (**See Fig. below**) detachably coupled at said container opening (Item 26) of said container body, and an upper casing sealed (**See**

Fig. below) and coupled at said lower base frame to define said first and second side concealed compartments (Fig. 7B shows compartments (Items 39)) therebetween.



Regarding claim 8, a combination of Yang and Wang is silent about “wherein said control housing has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments.”

Regarding claim 8, Wang discloses wherein said control housing (Item 214) has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to

maximize a size of each of said first and second side concealed compartments (Item 2142). (See column 5, lines 45-52)

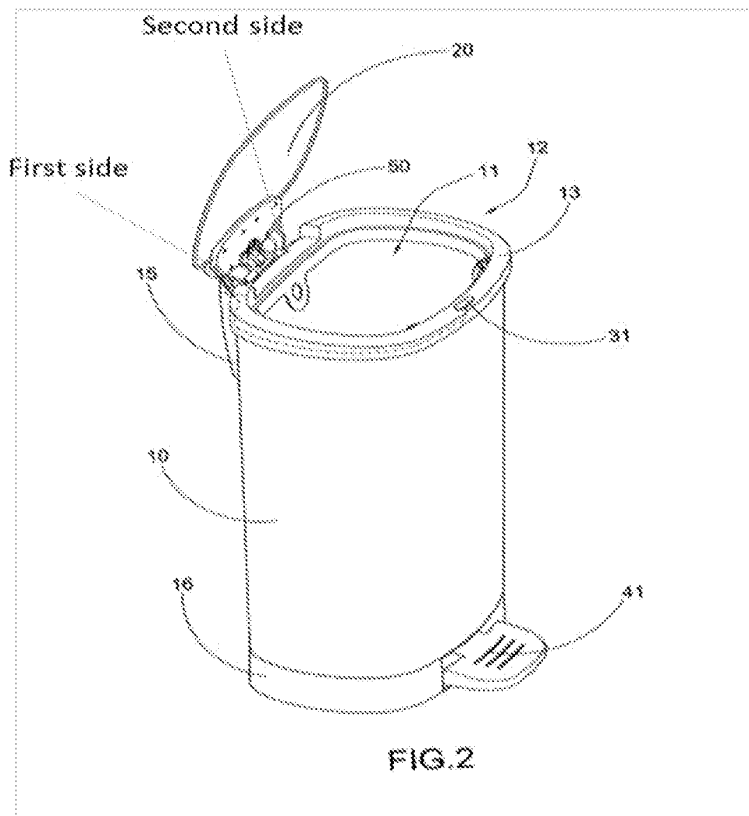
It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a trapezoid cross section disclosed by Wang's in Yang's teachings to maximize an opening area of the cover opening. (See Wang's column 5, lines 45-52)

Regarding claims 19 and 20, Yang is silent about “a power supply unit for electrically connecting with said automatic driving arrangement, wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover detachably coupled at a rear wall of said control housing to enclose said battery compartment.”

Regarding claims 19 and 20, Wang discloses a power supply unit (Item 60) for electrically connecting with said automatic driving arrangement (Item 51), wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover (Item 15) detachably coupled at a rear wall of said control housing to enclose said battery compartment (See Figs. 3 and 4 for detail). (See column 9, lines 50-67, column 10, lines 1-12)

It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a power supply unit along with a battery compartment and a battery compartment cover disclosed by Wang in Yang's teachings to automatically operate the lid panel. (See Wang's column 7, lines 12-20)

Regarding claims 22 and 23, a combination of Yang and Wang discloses wherein said battery compartment is located between said first and second side concealed compartments (**See Fig. below**) and below said pivot shaft (See Wang's Fig. 3, item 201).



Claim 7 is rejected under 35 U.S.C. 103 as being unpatentable over Yang et al. US Pub. no. 2015/0259140 A1 in a view of Wang et al. US Patent no. 8,129,930 B2.

Regarding claim 7, Yang is silent about “wherein said control housing has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments.”

Regarding claim 7, Wang discloses wherein said control housing (Item 214) has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments (Item 2142). (See column 5, lines 45-52)

It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a trapezoid cross section disclosed by Wang's in Yang's teachings to maximize an opening area of the cover opening. (See Wang's column 5, lines 45-52)

Claim 9 is rejected under 35 U.S.C. 103 as being unpatentable over Yang et al. US Pub. no. 2015/0259140 A1 in a view of Wang et al. US Patent no. 8,678,219 B1 and further in a view of Wang et al. US Patent no. 8,129,930 B2.

Regarding claim 9, Yang is silent about “wherein said control housing has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments.”

Regarding claim 9, Wang discloses wherein said control housing (Item 214) has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments (Item 2142). (See column 5, lines 45-52)

It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a trapezoid cross section disclosed by Wang's in Yang's teachings to maximize an opening area of the cover opening. (See Wang's column 5, lines 45-52)

Claims 13, and 16 are rejected under 35 U.S.C. 103 as being unpatentable over Yang et al. US Pub. no. 2015/0259140 A1 in a view of Yang et al. US Pub. no. 2017/0096299 A1.

Regarding claim 13, Yang is silent about, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an

exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.”

Regarding claim 13, Yang discloses wherein said cover panel (Item 24) comprises a shaft sleeve (See Fig. 11A, item 64. Here covering is treated as a shaft sleeve) formed along a folding edge thereof, wherein an exposed portion of said pivot shaft (Item 80) between said two end portions (See Fig. 11A) thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening (Item 26) of said container body (Item 22) (See page 14, para 0130).

It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a shaft sleeve disclosed by Yang's in Yang's teachings to protect the driving mechanism.

Regarding claim 16, a combination of Yang and Yang discloses, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve has a corresponding **non-circular cross section** to fit said exposed portion of said pivot shaft, such that when said pivot shaft is driven to rotate, said cover panel is pivotally moved between said opened and closed positions. (See Yang's 2017, page 14, para 0130. Yang does not explicitly say "non-circular cross section". Applicant has not

disclosed that having non-circular cross section solves any stated problem or is for any particular purpose. Moreover, it appears that the cross section of Yang (2017) would perform equally well with the non-circular cross section of said pivot shaft and said shaft sleeve.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have the non-circular cross section in Yang's teaching because such a modification would have been considered a mere design consideration which fails to patentably distinguish over Yang (2017).

Claims 14 and 17 are rejected under 35 U.S.C. 103 as being unpatentable over Yang et al. US Pub. no. 2015/0259140 A1 in a view of Wang et al. US Patent no. 8,678,219 B1 and further in a view of Yang et al. US Pub. no. 2017/0096299 A1.

Regarding claim 14, a combination of Yang and Wang is silent about, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.”

Regarding claim 14, Yang discloses wherein said cover panel (Item 24) comprises a shaft sleeve (See Fig. 11A, item 64. Here covering is treated as a shaft sleeve) formed along a folding edge thereof, wherein an exposed portion of said pivot shaft (Item 80) between said two end portions (See Fig. 11A) thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening (Item 26) of said container body (Item 22) (See page 14, para 0130).

It would have been obvious to one having ordinary skilled in the art before the effective filing date of the claimed invention to use a shaft sleeve disclosed by Yang's in Yang's teachings to protect the driving mechanism.

Regarding claim 17, a combination of Yang, Wang, and Yang discloses, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve has a corresponding **non-circular cross section** to fit said exposed portion of said pivot shaft, such that when said pivot shaft is driven to rotate, said cover panel is pivotally moved between said opened and closed positions. (See Yang's 2017, page 14, para 0130. Yang does not explicitly say "non-circular cross section". Applicant has not disclosed that having non-circular cross section solves any stated problem or is for any particular purpose. Moreover, it appears that the cross section of Yang (2017) would

perform equally well with the non-circular cross section of said pivot shaft and said shaft sleeve.

Accordingly, it would have been prima facie obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to have the non-circular cross section in Yang's teaching because such a modification would have been considered a mere design consideration which fails to patentably distinguish over Yang (2017).

Allowable Subject Matter

Claims 10-12, 15, 25, and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18, 21, 24 and 27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BICKEY DHAKAL whose telephone number is (571)272-3577. The examiner can normally be reached on M-F (7:30 AM-5:00 PM).

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Colon-Santana can be reached on 571-272-2060. 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.

/BICKEY DHAKAL/
Primary Examiner, Art Unit 2837

Application/Control Number: 15/271,211
Art Unit: 2837

Page 20

Notice of References Cited	Application/Control No. 15/271,211	Applicant(s)/Patent Under Reexamination WANG ET AL.	
	Examiner BICKEY DHAKAL	Art Unit 2837	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-2015/0259140 A1	09-2015	Yang; Frank	E05F15/73	220/211
*	B	US-8,678,219 B1	03-2014	Wang; Xin	B65F1/163	220/211
*	C	US-8,129,930 B2	03-2012	Wang; Xin	B65F1/1607	318/283
*	D	US-2017/0096299 A1	04-2017	Yang; Frank	B65F1/1638	1/1
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.




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 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

BIB DATA SHEET

CONFIRMATION NO. 5137

SERIAL NUMBER 15/271,211	FILING or 371(c) DATE 09/20/2016 RULE	CLASS 318	GROUP ART UNIT 2837	ATTORNEY DOCKET NO. USP5697A-NSG		
APPLICANTS						
INVENTORS Xin WANG, Fuzhou, CHINA; Jiangqun CHEN, Fuzhou, CHINA;						
** CONTINUING DATA *****						
** FOREIGN APPLICATIONS *****						
** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** * SMALL ENTITY ** 09/30/2016						
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Met after Allowance Initials	STATE OR COUNTRY CHINA	SHEETS DRAWINGS 8	TOTAL CLAIMS 27	INDEPENDENT CLAIMS 1
Verified and Acknowledged <u>/BICKEY DHAKAL/</u> Examiner's Signature						
ADDRESS DAVID AND RAYMOND PATENT FIRM 108 N. YNEZ AVE., SUITE 128 MONTEREY PARK, CA 91754 UNITED STATES						
TITLE Waterproof Induction Actuated Container						
FILING FEE RECEIVED 1010	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		

<i>Index of Claims</i> 	Application/Control No. 15271211	Applicant(s)/Patent Under Reexamination WANG ET AL.
	Examiner BICKEY DHAKAL	Art Unit 2837

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

Claims renumbered in the same order as presented by applicant
 CPA
 T.D.
 R.1.47

CLAIM		DATE									
Final	Original	09/04/2017									
	1	✓									
	2	✓									
	3	✓									
	4	✓									
	5	✓									
	6	✓									
	7	✓									
	8	✓									
	9	✓									
	10	○									
	11	○									
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	20	✓									
	21	✓									
	22	✓									
	23	✓									
	24	✓									
	25	○									
	26	○									
	27	✓									

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	259	(A47G19/32 A47G29/00 H02P9/18 G05B2219/37604).cpc. and (garbage or container or trash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:05
S2	47220	(garbage or container or trash or trash\$6) and (sensor or transducer or transmitter) and (shaft or axle) and (housing or cover or enclosure) and (actuator or motor or servo\$6 or servo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:09
S4	10031	S2 and (cover near80 (closed or close or open or opened))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:10
S5	256	S4 and gear and (speed or velocity) and (waterproof or water\$3proof or water\$2resistance or waterresistance)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:13
S6	11	((WANG near3 Xin) (CHEN near3 Jiangqun)).inv. and S2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:17
S7	3521	(S4 and gear and (speed or velocity)) not S5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:18
S8	288	((waterproof or water\$3proof or water\$2resistance or waterresistance) near50 (shaft or transmission)) and (servo\$6 or servo or actuator or motor) and (garbage or container or trash or trash\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 13:02
S9	186	S8 and (cover or enclosure or housing) and (open or opened or closed or close)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 13:03
S10	102	S8 not S9	US-PGPUB; USPAT;	OR	ON	2017/08/21 13:12

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S17	433	(trapezoid near20 (housing or enclosure or cover)) and (trash or trash\$6 or container or garbage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 11:51
S18	2	"20150259140"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 11:58
S19	8	("2015/0259140").URPN.	USPAT	OR	ON	2017/08/22 11:58
S20	8	("2015/0259140").URPN.	USPAT	OR	ON	2017/08/22 12:00
S21	3210	(B65F1/163 B65F1/062 B65F1/1623 B65F1/1646 B65F43/38).cpc. and (garbage or container or trash or trash\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 12:04
S22	0	(trapezoid near20 (housing or enclosure or cover)) and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 12:04
S23	105	S21 and (motor or actuator or servo or servo\$6) and (sensor or transducer or transmitter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 12:04
S24	6	("7750591" "8129930").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 14:11
S25	2	S24 and (battery or cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 14:13
S28	17511	(Shaft near6 sleeve) and (container or trash or trash\$6 or garbage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:18
S29	2	(Shaft near6 sleeve) same (container or trash or trash\$6 or garbage) same end same conceal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/08/22 16:20

EAST Search History


			DERWENT; IBM_TDB			
S31	3214	((Shaft near6 sleeve) same (container or trash or trash\$6 or garbage)) and (motor or actuator or servo or servo\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:22
S32	2	S31 and ((hide or concea\$4) near20 (shaft or axle))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:22

EAST Search History (Interference)

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9/ 4/ 2017 12:47:59 PM

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Search Notes 	Application/Control No. 15271211	Applicant(s)/Patent Under Reexamination WANG ET AL.
	Examiner BICKEY DHAKAL	Art Unit 2837

CPC- SEARCHED		
Symbol	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/
Inventor Searched	09/04/17	/BD/
East Searched	09/04/17	/BD/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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In The United States Patent and Trademark Office

Application Number: 15/271,211 Examiner: Bickey Dhakal
Applicant(s): Xin Wang Group Art Unit: 2837
Filing Date: 09/20/2016 Att. Docket No.: USP5697A-NSG
Title: Waterproof Induction Actuated Container

Date: December 29, 2017

AMENDMENT A

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

Sir:

In response to the Office Action mailed 09/06/2017, kindly amend the above application as follows.

DRAWING AMENDMENTS

A new reference character "60", for an element previously shown in the drawings and described in the original specification, has been amended to Figs. 3-5 of the drawings in red ink along with the new element. A drawing amendment approval request form is enclosed herewith, as pursuant to MPEP 608.02(v).

CLAIM AMENDMENTS

Claims 1-27 (cancelled).

Claim 28 (new): A waterproof induction container, comprising:

a container body having a storage cavity and a container opening; and

an induction actuated container cover which comprises:

a control housing detachably coupled at said container body at said container opening thereof, wherein said control housing has first and second side concealed compartments formed at a rear portion of said control housing, and a cover opening formed between said first and second side concealed compartments to communicate with said storage cavity of said container body;

a cover unit which comprises a pivot shaft having first and second end portions extended into said first and second side concealed compartments respectively, and a cover panel pivotally mounted to said control housing via said pivot shaft to pivotally move between a closed position that said cover panel covers at said cover opening to enclose said storage cavity and an opened position that said cover panel exposes said cover opening for communicating with said storage cavity; and

an automatic driving arrangement, which comprises:

a sensor unit mounted at said control housing for detecting a target movement of a user;

an actuation unit concealed in said first side concealed compartment of said control housing in a waterproof manner to operatively link with said sensor unit and to operatively coupled to said pivot shaft, wherein said actuation unit is actuated to move said cover panel via said pivot shaft between said opened and closed positions; and

a resilient element concealed in said second side concealed compartment of said control housing and coupled at said second end portion of said pivot shaft to apply

an urging force as an initial force towards said cover panel for initially pushing up said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for partially offsetting a weight of said cover panel when said cover panel is started to move from said opened position.

Claim 29 (new): The waterproof induction condition, as recited in claim 28, wherein said actuation unit comprises a servo motor supported in said first side concealed compartment of said control housing and a gear transmission unit operatively coupled between said first end portion of said pivot shaft and said servo motor for transmitting a rotational power from said servo motor to said pivot shaft, wherein said gear transmission unit comprises a gear worm sector affixed at said first end portion of said pivot shaft to operatively coupled with said servo motor.

Claim 30 (new): The waterproof induction container, as recited in claim 29, wherein said control housing comprises a lower base frame detachably coupled at said container opening of said container body, and an upper casing sealed and coupled at said lower base frame to define said first and second side concealed compartments therebetween, wherein said control housing has a trapezoid cross section that a height of said front portion of said control housing is shorter than that of said rear portion thereof to maximize a size of each of said first and second side concealed compartments.

Claim 31 (new): The waterproof induction container, as recited in claim 30, wherein said automatic driving arrangement further comprises a resilient element concealed in said second side concealed compartment of said control housing and coupled at said second end portion of said pivot shaft to apply an urging force as an initial force towards said cover panel for initially pushing up said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for partially offsetting a weight of said cover panel when said cover panel is started to move from said opened position, wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.

Claim 32 (new): The waterproof induction container, as recited in claim 31, wherein said exposed portion of said pivot shaft has a non-circular cross section and said shaft sleeve has a corresponding non-circular cross section to fit said exposed portion of said pivot shaft, such that said cover panel is pivotally moved between said opened and closed positions along with a rotation of said pivot shaft.

Claim 33 (new): The waterproof induction container, as recited in claim 32, further comprising a power supply unit for electrically connecting with said automatic driving arrangement, wherein said power supply unit comprises a battery compartment formed within said rear portion of said control housing and a battery compartment cover detachably coupled at a rear wall of said control housing to enclose said battery compartment.

Claim 34 (new): The waterproof induction container, as recited in claim 33, wherein said battery compartment is located between said first and second side concealed compartments and below said pivot shaft.

Claim 35 (new): The induction actuated container cover, as recited in claim 34, wherein said control housing has a front concealed compartment defining a slanted front wall, wherein said sensor unit comprises sensor circuit board concealed in said front concealed compartment and a sensor supported at said slanted front wall of said control housing to operatively linked to said sensor circuit board, such that said sensor is located in front of said cover panel to maximize said detecting range of said sensor at said approaching direction for detecting said target movement.

Claim 36 (new): A waterproof induction container, comprising:

a container body having a storage cavity and a container opening; and

an induction actuated container cover which comprises:

a control housing detachably coupled at said container body at said container opening thereof, wherein said control housing has first and second side concealed compartments formed at a rear portion of said control housing, and a cover opening

formed between said first and second side concealed compartments to communicate with said storage cavity of said container body, wherein said control housing has a front concealed compartment defining a slanted front wall;

a cover unit which comprises a pivot shaft having first and second end portions extended into said first and second side concealed compartments respectively, and a cover panel pivotally mounted to said control housing via said pivot shaft to pivotally move between a closed position that said cover panel covers at said cover opening to enclose said storage cavity and an opened position that said cover panel exposes said cover opening for communicating with said storage cavity; and

an automatic driving arrangement, which comprises:

a sensor unit mounted at said control housing for detecting a target movement of a user, wherein said sensor unit comprises a sensor circuit board concealed in said front concealed compartment and a sensor supported at said slanted front wall of said control housing to operatively linked to said sensor circuit board, such that said sensor is located in front of said cover panel to maximize said detecting range of said sensor at said approaching direction for detecting said target movement; and

an actuation unit concealed in said first side concealed compartment of said control housing in a waterproof manner to operatively link with said sensor unit and to operatively coupled to said pivot shaft, wherein said actuation unit is actuated to move said cover panel via said pivot shaft between said opened and closed positions.

Claim 37 (new): The induction actuation container cover, as recited in claim 35, wherein said actuation unit comprises a servo motor supported in said first side concealed compartment of said control housing and a gear transmission unit operatively coupled between said first end portion of said pivot shaft and said servo motor for transmitting a rotational power from said servo motor to said pivot shaft, wherein said gear transmission unit comprises a gear worm sector affixed at said first end portion of said pivot shaft to operatively coupled with said servo motor, wherein said control housing comprises a lower base frame detachably coupled at said container opening of

said container body, and an upper casing sealed and coupled at said lower base frame to define said first and second side concealed compartments therebetween.

REMARKS-General

1. Applicants acknowledge the the allowability of claims 10-12, 15, 18, 21, 24, and 25-27.
2. The newly drafted independent claim 28 incorporates all structural limitations of the original claim 1 and includes further limitations previously brought forth in the allowable claim 10. The newly drafted independent claim 36 incorporates all structural limitations of the original claim 1 and includes further limitations previously brought forth in the allowable claim 25. The newly drafted dependent claims 29-35 are drafted to include all limitations of the original allowable claims 11, 12, 15, 18, 21, 24, and 27 and any intervening claims respectively. The newly drafted dependent claim 37 is drafted to include all limitations of the original allowable claim 26 and any intervening claims. No new matter has been included. All new claims 28-37 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 U.S.C. §112.

Response to Objection of the Drawings

3. The reference number "60" has been added to the Figs. 3-5. Replacement sheets of Figs. 3-5 are submitted herewith to replace the original Figs. 3-5 in the drawings in order to overcome the drawings objection.

Response to Rejection of Claims 16-18, 21, 24, 27 under 35 U.S.C. §112

4. The applicant submits that the newly drafted claims 28-37 particularly point out and distinctly claim the subject matter of the instant invention, as pursuant to 35 U.S.C. §112.

Response to Rejection of Claims under 35 U.S.C. §102 and §103

5. The rejected claims 1-9, 13-14, 17, 19-20, and 22-23 are deleted in this application.

The Cited but Non-Applied References

6. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

7. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the objection and rejection are requested. Allowance of claims 28-37 at an early date is solicited.

8. Should the Examiner believe that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

/Raymond Y. Chan/
Raymond Y. Chan
Reg. Nr.: 37,484
108 N. Ynez Ave.
Suite 128
Monterey Park, CA 91754
Tel.: 1-626-571-9812
Fax.: 1-626-571-9813

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Typed or printed name of person signing this certificate:

Raymond Y. Chan
Reg. Nr. 37,484

/Raymond Y. Chan/
(Signature)

Proposed Drawing Correction

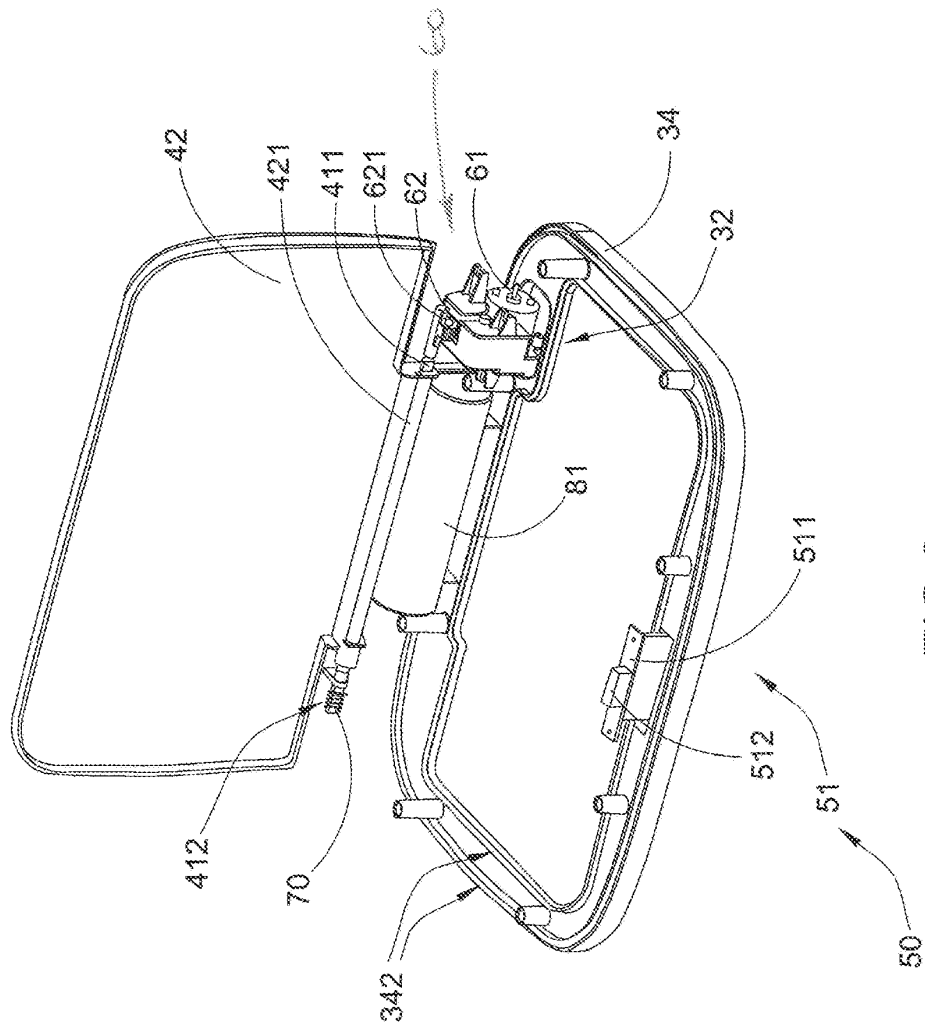


FIG.3

Proposed Drawing Correction

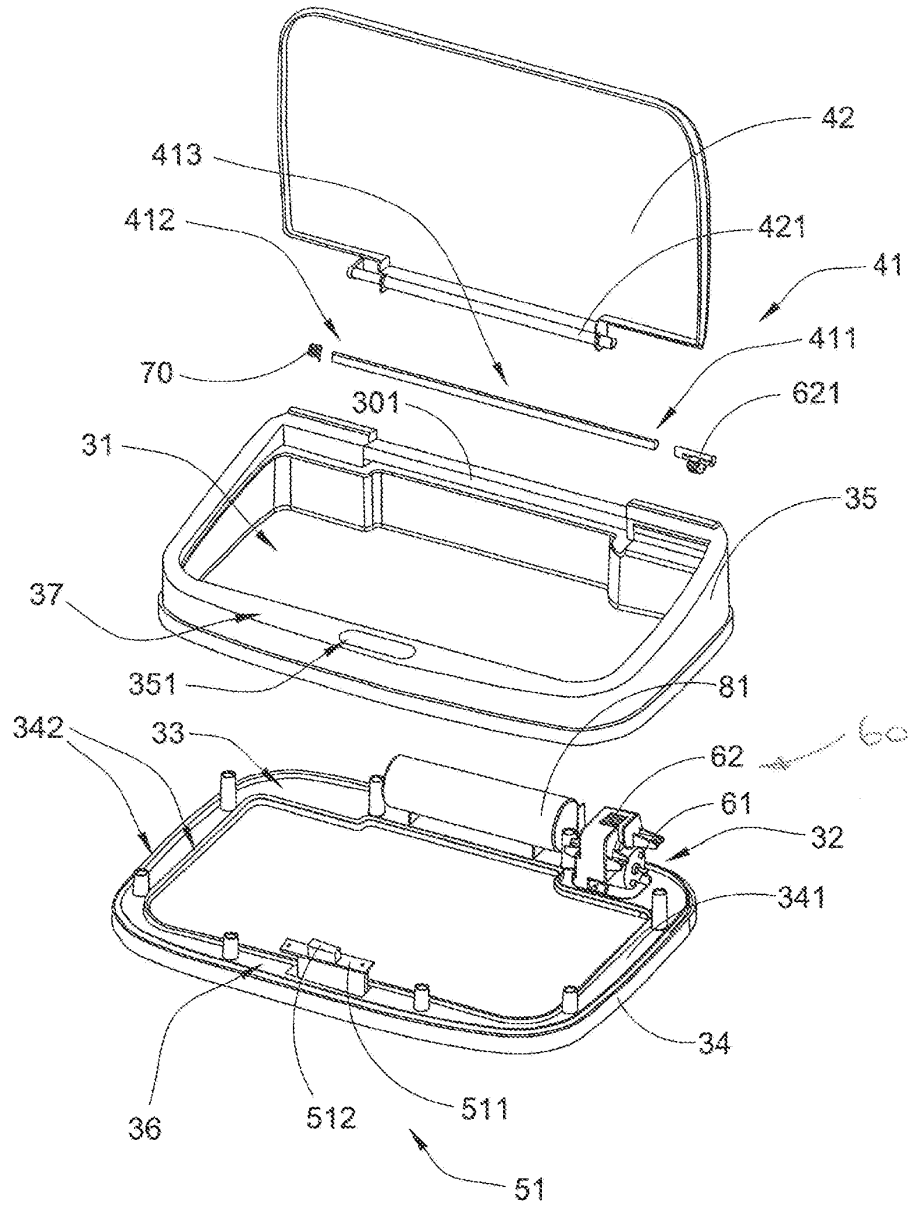


FIG.4

Proposed Drawing Correction

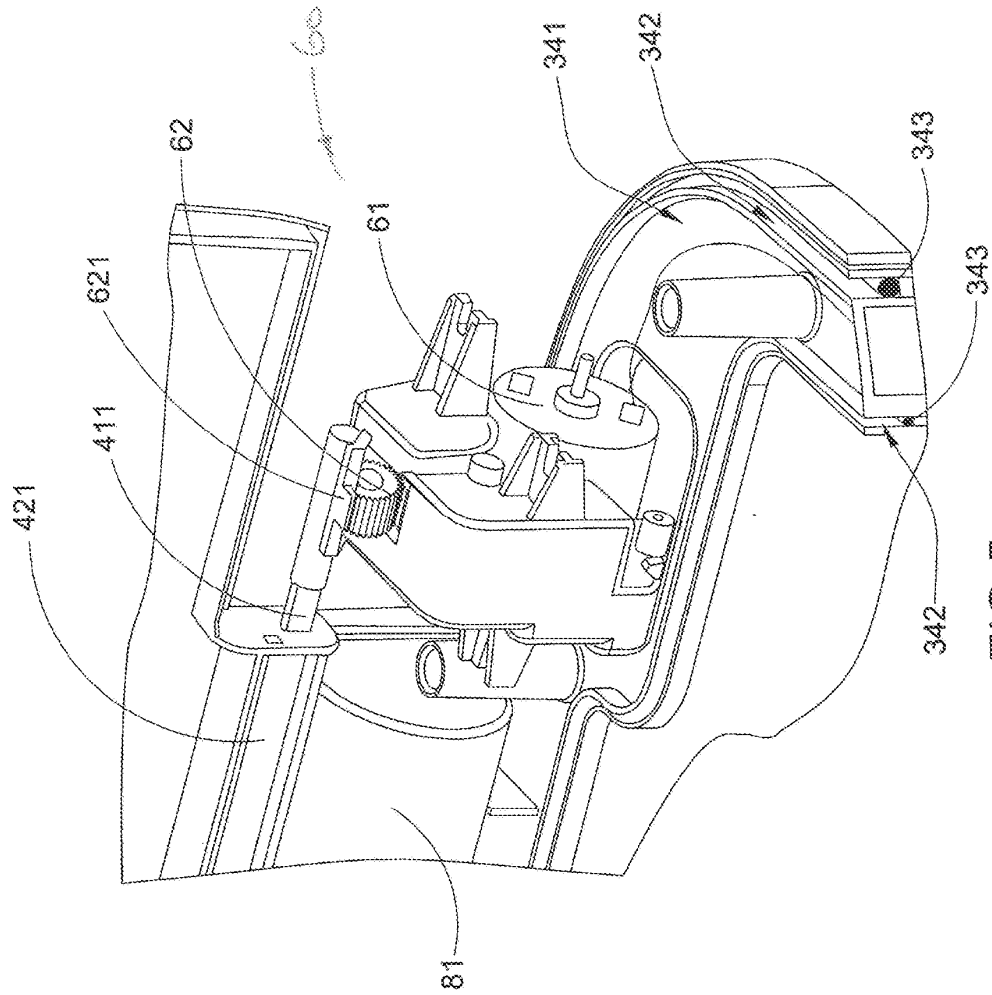


FIG.5

In The United States Patent and Trademark Office

Application Number: 15/271,211 Examiner: Bickey Dhakal
Applicant(s): Xin Wang Group Art Unit: 2837
Filing Date: 09/20/2016 Att. Docket No.: USP5697A-NSG
Title: Waterproof Induction Actuated Container

Date: December 29, 2017

Submission of Corrected Drawings

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

Sir:

New drawing sheets, Figs. 3-5, for the above application are enclosed, corrected as necessary. Please substitute these for the corresponding sheets on file.

Respectfully submitted,

 /Raymond Y. Chan/
Raymond Y. Chan
Reg. Nr.: 37,484
c/o 108 N. Ynez Ave., Suite 128
Monterey Park, CA 91754

Certificate of EFS-Web Transmission

I hereby certify that this correspondence is being transmitted via the United States Patent and Trademark Office electronic filing system (EFS-Web) to the USPTO on January 02, 2018 (Date).

Typed or printed name of person signing this certificate:
Raymond Y. Chan
Reg. Nr. 37,484

 /Raymond Y. Chan/
(Signature)

REPLACEMENT SHEET

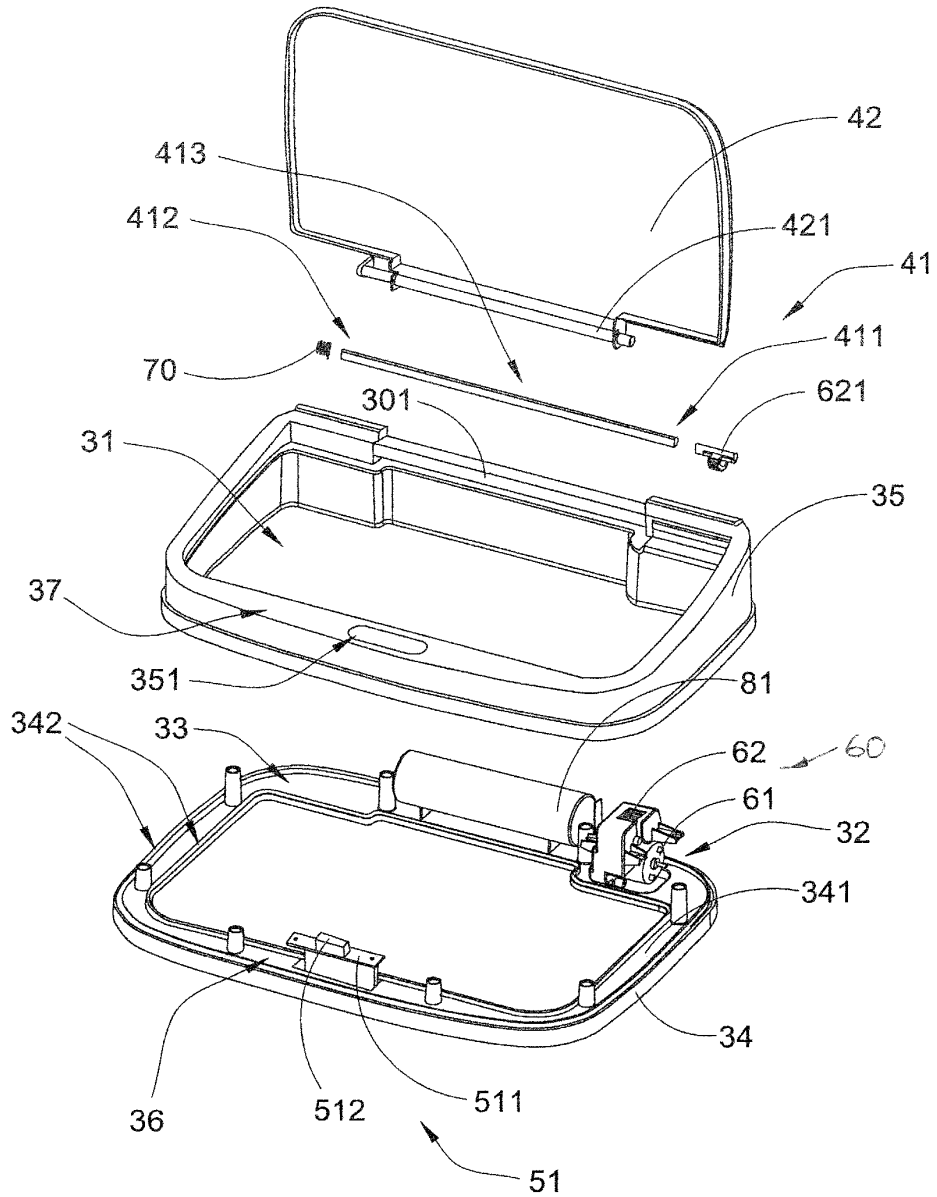


FIG.4

REPLACEMENT SHEET

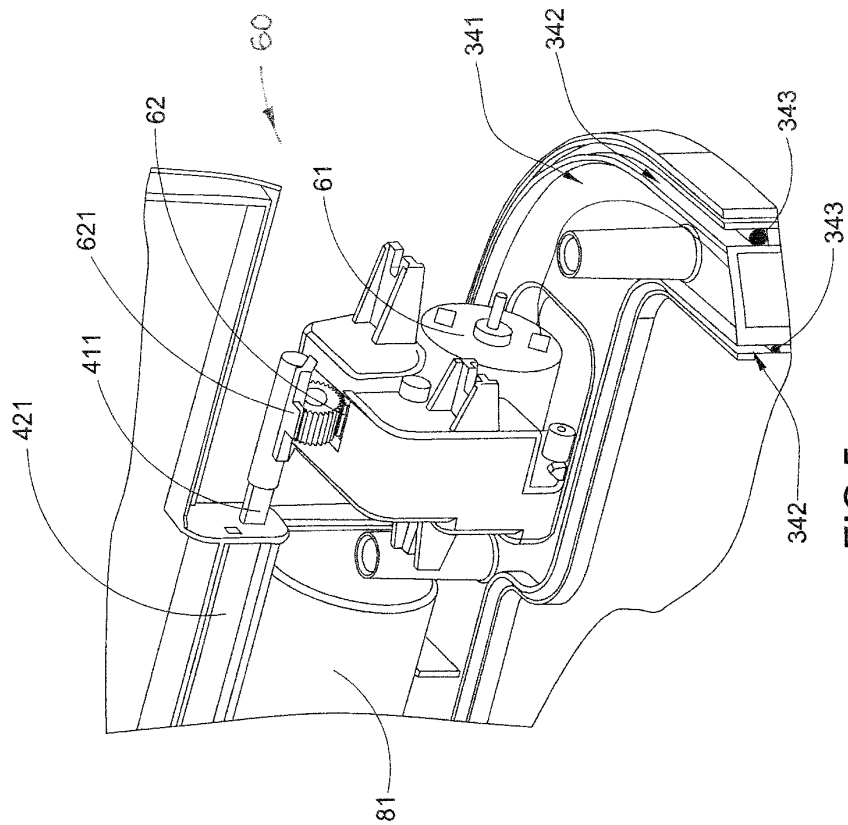


FIG.5

In The United States Patent and Trademark Office

Application Number: 15/271,211
Applicant(s): Xin Wang
Filing Date: 09/20/2016
Title: Waterproof Induction Actuated Container

Examiner: Bickey Dhakal
Group Art Unit: 2837
Att. Docket No.: USP5697A-NSG

Date: December 29, 2017

PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. 1.136

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

Sir.:

It is respectfully requested that an Extension of Time for the period indicated below be granted in accordance with the provisions of 37 C.F.R. 1.136 to take the action required in the application identified in caption, as reflected by the papers submitted.

<input checked="" type="checkbox"/> First Month	\$200.00 (Small Entity \$100.00) (Micro Entity \$50.00)
<input type="checkbox"/> Second Month	\$600.00 (Small Entity \$300.00) (Micro Entity \$150.00)
<input type="checkbox"/> Third Month	\$1400.00 (Small Entity \$700.00) (Micro Entity \$350.00)
<input type="checkbox"/> Fourth Month	\$2200.00 (Small Entity \$1100.00) (Micro Entity \$550.00)
<input type="checkbox"/> Fifth Month	\$3000.00 (Small Entity \$1500.00) (Micro Entity \$750.00)
*Small Entity	TOTAL: \$ <u>100.00</u>

- The amount of the above total fee is paid electronically.
This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 502111. A duplicate copy of this letter is attached.
- Please charge any fee which may be required to Deposit Account No. 502111 in the name of David and Raymond Patent Firm. A duplicate copy of this letter is attached.

Respectfully submitted,

/Raymond Y. Chan/
Raymond Y. Chan
Reg. No. : 37,484
108 N. Ynez Avenue, Suite 128
Monterey Park, CA 91754
Tel.: (626) 571 9812/ Fax: (626) 571 9813

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Typed or printed name of person signing this certificate:

Raymond Y. Chan
Reg. Nr. 37,484

/Raymond Y. Chan/
(Signature)

Electronic Patent Application Fee Transmittal

Application Number:	15271211				
Filing Date:	20-Sep-2016				
Title of Invention:	Waterproof Induction Actuated Container				
First Named Inventor/Applicant Name:	Xin WANG				
Filer:	Raymond Yat Chan/Michael Lee				
Attorney Docket Number:	USP5697A-NSG				
Filed as Small Entity					
Filing Fees for Utility under 35 USC 111(a)					
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(\$)
Extension - 1 month with \$0 paid	2251	1	100	100
Miscellaneous:				
Total in USD (\$)				100

Electronic Acknowledgement Receipt

EFS ID:	31375020
Application Number:	15271211
International Application Number:	
Confirmation Number:	5137
Title of Invention:	Waterproof Induction Actuated Container
First Named Inventor/Applicant Name:	Xin WANG
Customer Number:	30265
Filer:	Raymond Yat Chan/Michael Lee
Filer Authorized By:	Raymond Yat Chan
Attorney Docket Number:	USP5697A-NSG
Receipt Date:	02-JAN-2018
Filing Date:	20-SEP-2016
Time Stamp:	01:27:21
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$100
RAM confirmation Number	010218INTEFSW01293600
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	USP5697AmdACover.pdf	73922	no	1
			a03add234e8d9a8e8923c96e59a004eaf974115		
Warnings:					
Information:					
2	Applicant Arguments/Remarks Made in an Amendment	USP5697AmdADrawing.pdf	95315	no	1
			e36ffaad3f67b13726ca594938b095f92ccc89f8		
Warnings:					
Information:					
3	Claims	USP5697AmdAClaims.pdf	107766	no	5
			8c91d0910c4453d71422e00f1eb8b4dccc68c25		
Warnings:					
Information:					
4	Applicant Arguments/Remarks Made in an Amendment	USP5697AmdARemarks.pdf	117120	no	2
			588a3b3e14f14ed0d41b1c347e1a57b6e1786744		
Warnings:					
Information:					
5	Miscellaneous Incoming Letter	USP5697SubmissionOfProposedDrawingsCorrection.pdf	78434	no	1
			6147578d89547ac12a2e39e0c38573e01ee894e7		
Warnings:					
Information:					
6	Applicant Arguments/Remarks Made in an Amendment	USP5697AnnotatedSheets.pdf	3512043	no	3
			d94a987f38d568147e649b6940c56b36ba50964b		
Warnings:					
Information:					

7	Miscellaneous Incoming Letter	USP5697SubmissionOfCorrectedDrawings.pdf	78057 d5e2001b9c7ba018b394c8e0ac269b99a3bfb26a	no	1
Warnings:					
Information:					
8	Drawings-only black and white line drawings	USP5697ReplacementSheets.pdf	485940 30d31a8ddb3c72f9f875b4c821d2c0c3923d4406	no	3
Warnings:					
Information:					
9	Extension of Time	USP5697extot.pdf	95377 77ba020d15445b8d9b1c88ee32b638850ceb2c53	no	1
Warnings:					
Information:					
10	Fee Worksheet (SB06)	fee-info.pdf	30296 23861dec14d4037c7a6deb7c0809b28e26d1750e	no	2
Warnings:					
Information:					
Total Files Size (in bytes):				4674270	
<p>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.</p> <p><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.</p> <p><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.</p> <p><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.</p>					

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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 15/271,211		Filing Date 09/20/2016		<input type="checkbox"/> To be Mailed			
ENTITY: <input type="checkbox"/> LARGE <input checked="" type="checkbox"/> SMALL <input type="checkbox"/> MICRO											
APPLICATION AS FILED – PART I											
(Column 1)			(Column 2)								
FOR		NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)				
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A	N/A		N/A						
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A	N/A		N/A						
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A	N/A		N/A						
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =	*		X \$ =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =	*		X \$ =						
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 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).									
<input type="checkbox"/> 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						
APPLICATION AS AMENDED – PART II											
(Column 1)			(Column 2)			(Column 3)					
AMENDMENT	01/02/2018		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))		* 10	Minus	** 20	= 0	X \$40 =		0		
	Independent (37 CFR 1.16(h))		* 2	Minus	***3	= 0	X \$210 =		0		
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
							TOTAL ADD'L FEE		0		
(Column 1)			(Column 2)			(Column 3)					
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)		
	Total (37 CFR 1.16(i))		*	Minus	**	=	X \$ =				
	Independent (37 CFR 1.16(h))		*	Minus	***	=	X \$ =				
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
							TOTAL ADD'L FEE				
<p>* 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.</p>											

LIE
RAMONA WILSON

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.



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

Table with 4 columns: APPLICATION NUMBER (15/271,211), FILING OR 371(C) DATE (09/20/2016), FIRST NAMED APPLICANT (Xin WANG), ATTY. DOCKET NO./TITLE (USP5697A-NSG)

CONFIRMATION NO. 5137

30265
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

PUBLICATION NOTICE



Title:Waterproof Induction Actuated Container

Publication No.US-2018-0079592-A1

Publication Date:03/22/2018

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 Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, 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 https://portal.uspto.gov/pair/PublicPair. 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 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

NOTICE OF ALLOWANCE AND FEE(S) DUE

30265 7590 05/17/2018
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

EXAMINER

DHAKAL, BICKEY

ART UNIT PAPER NUMBER

2837

DATE MAILED: 05/17/2018

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

15/271,211 09/20/2016 Xin WANG USP5697A-NSG 5137

TITLE OF INVENTION: Waterproof Induction Actuated Container

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional SMALL \$500 \$0 \$0 \$500 08/17/2018

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 ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

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: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

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)

30265 7590 05/17/2018
DAVID AND RAYMOND PATENT FIRM
 108 N. YNEZ AVE., SUITE 128
 MONTEREY PARK, CA 91754

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.
15/271,211	09/20/2016	Xin WANG	USP5697A-NSG	5137

TITLE OF INVENTION: Waterproof Induction Actuated Container

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0	\$0	\$500	08/17/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
DHAKAL, BICKEY	2837	318-003000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "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.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(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. 2 _____</p> <p>3 _____</p>
---	---

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

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. **Change in Entity Status** (from status indicated above)

Applicant certifying micro entity status. See 37 CFR 1.29

Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____



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

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Values: 15/271,211, 09/20/2016, Xin WANG, USP5697A-NSG, 5137

30265 7590 05/17/2018
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

EXAMINER

DHAKAL, BICKEY

ART UNIT PAPER NUMBER

2837

DATE MAILED: 05/17/2018

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

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.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B 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.

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. 15/271,211	Applicant(s) WANG ET AL.	
	Examiner BICKEY DHAKAL	Art Unit 2837	AIA (First Inventor to File) Status Yes

-- 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 amendments filed on 01/02/18.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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 28-37. 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).
Certified copies:
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. _____ .
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. <input type="checkbox"/> Notice of References Cited (PTO-892)	5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment
2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____	6. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	7. <input type="checkbox"/> Other _____
4. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date <u>20180508</u> .	

/BICKEY DHAKAL/ Primary Examiner, Art Unit 2837	
--	--

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Applicant's submission filed on 01/02/18 has been entered. **Claims 28-37** are allowable based on applicant's amendments. Examiner also withdraws objection to the drawings and 112 rejections. **Claims 1-27** are canceled.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Raymond Y. Chan on 05/08/18.

The application has been amended as follows:

In the Claims:

Rewrite **claim 31** as follows:

Claim 31 (new): The waterproof induction container, as recited in claim 30, **wherein ~~said automatic driving arrangement further comprises a resilient element concealed in said second side concealed compartment of said control housing and coupled at said second end portion of said pivot shaft to apply an urging force as an initial force towards said cover panel for initially pushing up~~**

~~said cover panel simultaneously when said cover panel is started to move from said closed position and as a weight supporting force for partially offsetting a weight of said cover panel when said cover panel is started to move from said opened position,~~ wherein said cover panel comprises a shaft sleeve formed along a folding edge thereof, wherein an exposed portion of said pivot shaft between said two end portions thereof is received in said shaft sleeve to conceal said exposed portion of said pivot shaft so as to prevent said pivot shaft from exposing to said container opening of said container body.

REASONS FOR ALLOWANCE

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

Claims 28-37 are allowed.

Upon further consideration and in a view of the limitation, the prior art does not explicitly teach or fairly suggest alone or in combination the following:

Claims 28-37 are allowable among other elements and details, but for at least the reason specified in the last office action. The objected claims 10 and 25 have been incorporated in new claims 28 and 36 respectively. As a result, **claims 28 and 36** are allowable.

None of the prior art teaches a resilient element and a sensor unit as claimed in **claims 28 and 36** respectively and the claim limitations are neither inherent nor obvious.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BICKEY DHAKAL whose telephone number is (571)272-3577. The examiner can normally be reached on M-F (7:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Colon-Santana can be reached on 571-272-2060. 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. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions, contact the Electronic Business Center at 866-217-9197. If you would like assistance, call 800-786-9199 or 571-272-1000.

/BICKEY DHAKAL/

Application/Control Number: 15/271,211
Art Unit: 2837

Page 5

Primary Examiner, Art Unit 2837

<i>Examiner-Initiated Interview Summary</i>	Application No. 15/271,211	Applicant(s) WANG ET AL.	
	Examiner BICKEY DHAKAL	Art Unit 2837	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Bickey Dhakal. (3)_____.
- (2) Raymond Y. Chan (Reg. no. 37,484). (4)_____.

Date of Interview: 08 May 2018.

Type: Telephonic Video Conference
 Personal [copy given to: applicant applicant's representative]

Exhibit shown or demonstration conducted: Yes No.
If Yes, brief description: _____.

Issues Discussed 101 112 102 103 Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 31.

Identification of prior art discussed: NONE.

Substance of Interview

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)


Attorney agreed to correct minor informalities with regards to claim 31 via Examiner's amendments.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Attachment

/BICKEY DHAKAL/
Primary Examiner, Art Unit 2837

Search Notes 	Application/Control No. 15271211	Applicant(s)/Patent Under Reexamination WANG ET AL.
	Examiner BICKEY DHAKAL	Art Unit 2837

CPC- SEARCHED		
Symbol	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

SEARCH NOTES		
Search Notes	Date	Examiner
A47G19/32 A47G29/00 H02P9/18 G05B2219/37604 B65F1/163 B65F1/062 B65F1/1623 B65F1/1646	09/04/17	/BD/
Inventor Searched	09/04/17	/BD/
East Searched	09/04/17	/BD/
East Searched	05/08/18	/BD/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
Interference Searched	Interference Searched	05/08/18	/BD/

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	50077	(garbage or container or trash or trash\$6) and (sensor or transducer or transmitter) and (shaft or axle) and (housing or cover or enclosure) and (actuator or motor or servo\$6 or servo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:34
L2	4070	L1 and (resilient near10 (element or member or device))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:34
L3	362	l2 and (hide or conceal\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:35
L4	339	l3 and cover and (shaft or axle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:38
L6	3369	((Shaft near6 sleeve) same (container or trash or trash\$6 or garbage)) and (motor or actuator or servo or servo\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:45
L7	1	L6 and ((sens\$3 or detect\$4) near30 (conceal\$3 or hide)) same (housing or enclosure or cover)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2018/05/08 14:45
S1	259	(A47G19/32 A47G29/00 H02P9/18 G05B2219/37604).cpc. and (garbage or container or trash)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:05
S2	47220	(garbage or container or trash or trash\$6) and (sensor or transducer or transmitter) and (shaft or axle) and (housing or cover or enclosure) and (actuator or motor or servo\$6 or servo)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:09
S4	10031	S2 and (cover near80 (closed or close or open or opened))	US-PGPUB; USPAT;	OR	ON	2017/08/21 11:10

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S5	256	S4 and gear and (speed or velocity) and (waterproof or water\$3proof or water\$2resistance or waterresistance)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:13
S6	11	((WANG near3 Xin) (CHEN near3 Jiangqun)).inv. and S2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:17
S7	3521	(S4 and gear and (speed or velocity)) not S5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 11:18
S8	288	((waterproof or water\$3proof or water\$2resistance or waterresistance) near50 (shaft or transmission)) and (servo\$6 or servo or actuator or motor) and (garbage or container or trash or trash\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 13:02
S9	186	S8 and (cover or enclosure or housing) and (open or opened or closed or close)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 13:03
S10	102	S8 not S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/21 13:12
S17	433	(trapezoid near20 (housing or enclosure or cover)) and (trash or trash\$6 or container or garbage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 11:51
S18	2	"20150259140"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 11:58
S19	8	("2015/0259140").URPN.	USPAT	OR	ON	2017/08/22 11:58
S20	8	("2015/0259140").URPN.	USPAT	OR	ON	2017/08/22 12:00
S21	3210	(B65F1/163 B65F1/062 B65F1/1623 B65F1/1646 B65F43/38).cpc. and (garbage or container or trash or trash\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/08/22 12:04

			DERWENT; IBM_TDB			
S22	0	(trapezoid near20 (housing or enclosure or cover)) and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 12:04
S23	105	S21 and (motor or actuator or servo or servo\$6) and (sensor or transducer or transmitter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 12:04
S24	6	("7750591" "8129930").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 14:11
S25	2	S24 and (battery or cell)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 14:13
S28	17511	(Shaft near6 sleeve) and (container or trash or trash\$6 or garbage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:18
S29	2	(Shaft near6 sleeve) same (container or trash or trash\$6 or garbage) same end same conceal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:20
S31	3214	((Shaft near6 sleeve) same (container or trash or trash\$6 or garbage)) and (motor or actuator or servo or servo\$6)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:22
S32	2	S31 and ((hide or concea\$4) near20 (shaft or axle))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/08/22 16:22

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L5	32	("I3" and cover and (shaft or axle)).clm.	US-PGPUB; USPAT	OR	ON	2018/05/08 14:42

5/ 8/ 2018 2:46:03 PM

C:\Users\bdhakil\Documents\EAST\Workspaces\15271211.wsp

05/08/2018
OK TO ENTER: /B.D/

REPLACEMENT SHEET

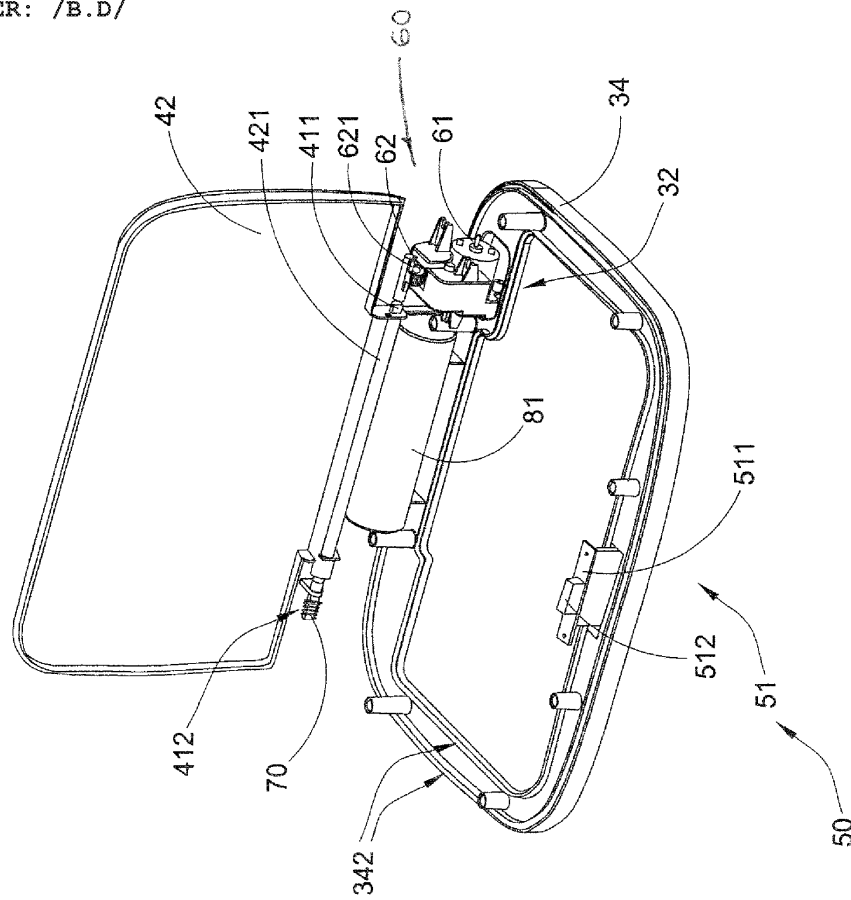


FIG.3

REPLACEMENT SHEET

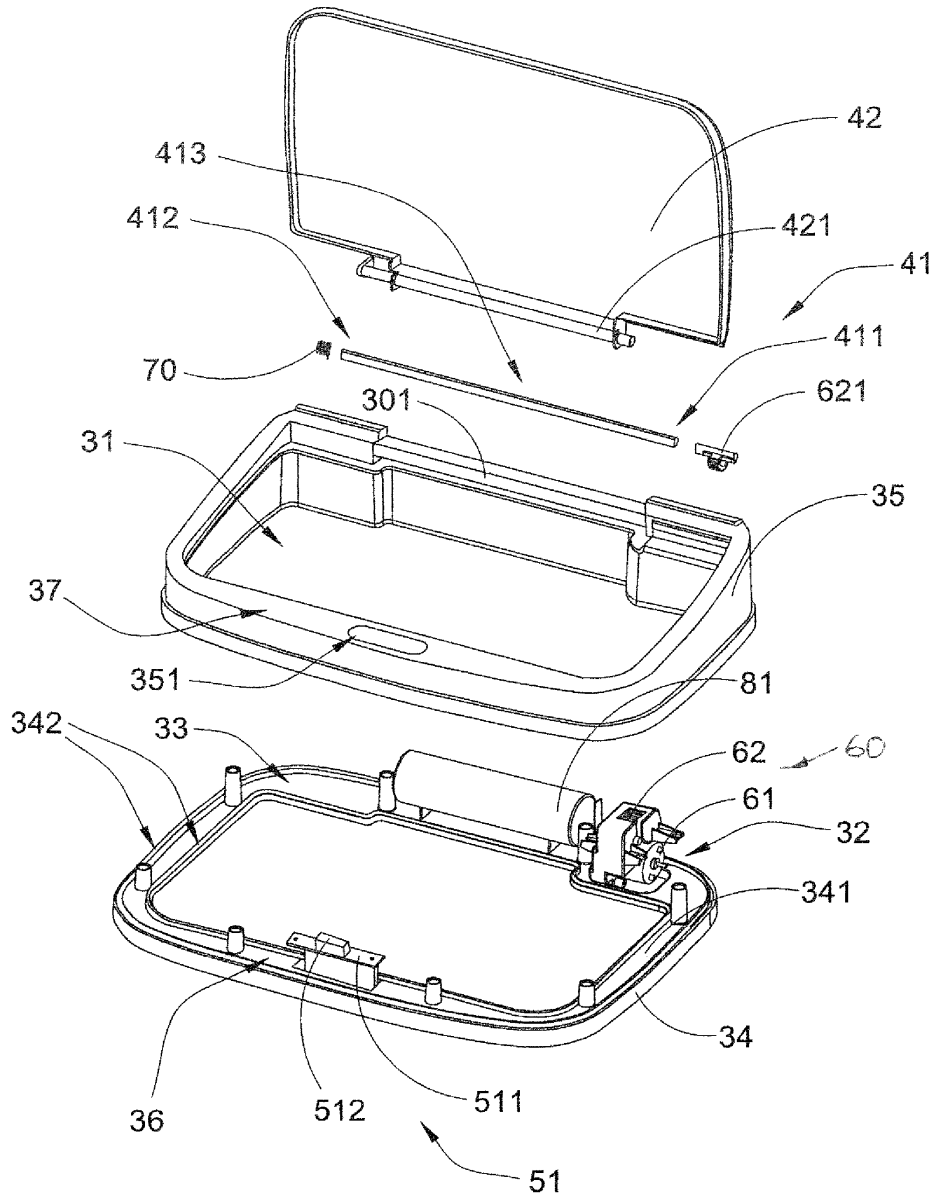


FIG.4

REPLACEMENT SHEET

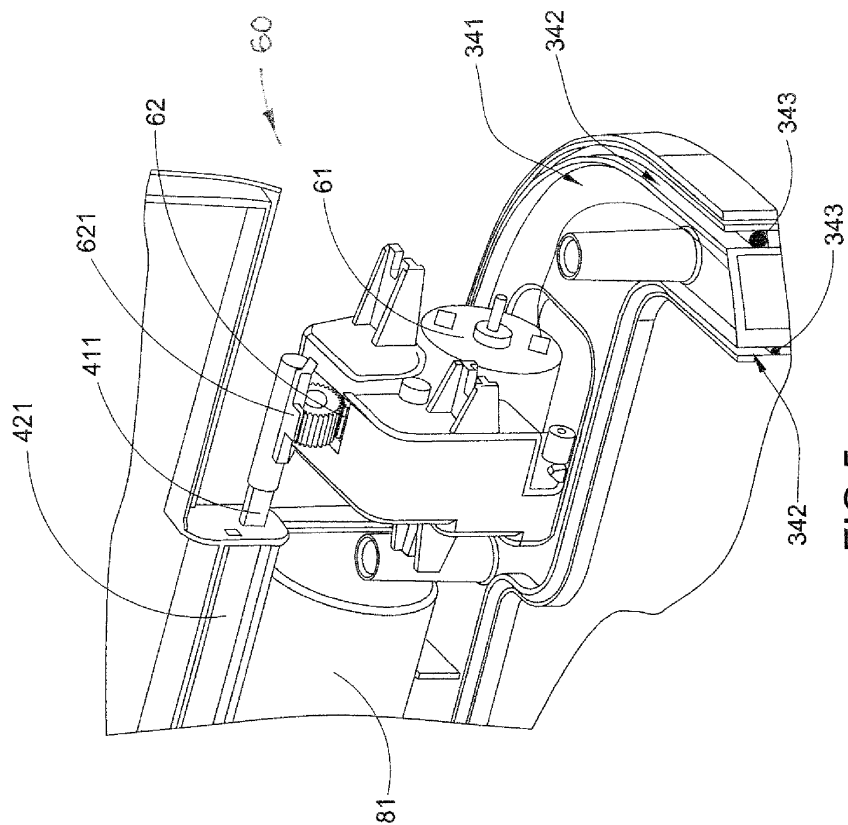


FIG.5

Bibliographic Data

Application No: 15/271,211

Foreign Priority claimed: Yes No

35 USC 119 (a-d) conditions met: Yes No Met After Allowance

Verified and Acknowledged:

/BICKEY DHAKAL/

Examiner's Signature

Initials

Title:

Waterproof Induction Actuated Container

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
09/20/2016	318	2837	USP5697A-NSG
RULE			

APPLICANTS

INVENTORS

Xin WANG Fuzhou, CHINA

Jiangqun CHEN Fuzhou, CHINA

CONTINUING DATA

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

09/30/2016

** SMALL ENTITY **

STATE OR COUNTRY

CHINA

ADDRESS

DAVID AND RAYMOND PATENT FIRM


108 N. YNEZ AVE., SUITE 128

MONTEREY PARK, CA 91754

UNITED STATES

FILING FEE RECEIVED


\$1,010

Issue Classification 	Application/Control No. 15271211	Applicant(s)/Patent Under Reexamination WANG ET AL.
	Examiner BICKEY DHAKAL	Art Unit 2837

CPC					
Symbol				Type	Version
B65F		1	1638	F	2013-01-01
B65F		1	1646	I	2013-01-01
B65F		2210	168	A	2013-01-01

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	10	
/BICKEY DHAKAL/ Primary Examiner. Art Unit 2837	(Date)	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	28	1

Issue Classification 	Application/Control No. 15271211	Applicant(s)/Patent Under Reexamination WANG ET AL.
	Examiner BICKEY DHAKAL	Art Unit 2837

<input type="checkbox"/> Claims renumbered in the same order as presented by applicant		<input type="checkbox"/> CPA		<input type="checkbox"/> T.D.		<input type="checkbox"/> R.1.47									
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
-	1	-	17	6	33										
-	2	-	18	7	34										
-	3	-	19	8	35										
-	4	-	20	9	36										
--	5	-	21	10	37										
-	6	-	22												
-	7	-	23												
-	8	-	24												
-	9	-	25												
-	10	-	26												
-	11	-	27												
-	12	1	28												
-	13	2	29												
-	14	3	30												
-	15	4	31												
-	16	5	32												

NONE	Total Claims Allowed:	
(Assistant Examiner)	(Date)	10
/BICKEY DHAKAL/ Primary Examiner. Art Unit 2837	(Date)	O.G. Print Claim(s) 28
(Primary Examiner)	(Date)	O.G. Print Figure 1



In The United States Patent and Trademark Office

Application Number: 15/271,211
First Named Inventor: Xin Wang
Filing Date: 09/20/2016

Examiner: Dhakal, Blickey
Group Art Unit: 2837
Atty's Docket No.: USP5697A-NSG

Title: Waterproof Induction Actuated Container

Date: July 13, 2018

Submission of Issue Fee and Publication Fee

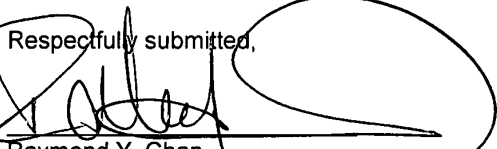
MS Issue Fee
Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

In response to the Notice of Allowance and Fee(s) Due dated 05/17/2018, the applicant respectfully submits a payment of Issue Fee and Publication Fee.

- A check in the amount of **\$500.00** is enclosed herewith for the payment.
- The Director is hereby authorized by charging the required fee(s) in the amount of \$ _____ to the Deposit Account Number 502111 in the name of David and Raymond Patent Firm.
- The fees submitted are believed to be correct. However, the Director is hereby authorized to charge the additional required fee(s) or credit any overpayment to Deposit Account Number 502111 in the name of David and Raymond Patent Firm.
- Please associate the customer number **30265** with the above identified application. The Correspondence Address and Fee Address are updated to read as: 108 N. Ynez Avenue, Suite 128, Monterey Park, CA 91754, US.
- Others:

Please accept the payment(s) and/or document(s) and proceed with the issuance of the patent as soon as possible. Thank you for your assistance.

Respectfully submitted,

 Raymond Y. Chan
 Reg. No.: 37,484
 108 N. Ynez Avenue, Suite 128
 Monterey Park, CA 91754
 Tel.: (626) 571 9812/ Fax: (626) 571 9813

Certification of Mailing or Transmission

I hereby certify that this correspondence is being deposited with the United States Postal Service with proper postage as first class mail in an envelope addressed to: "MS Issue Fee, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" or being facsimile transmitted to the USPTO on the date shown below.

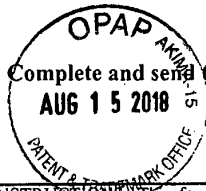
Signature: 
Name in print: Raymond Y. Chan

Date: 08/13/2018

Best Available Copy

PART B - FEE(S) TRANSMITTAL

M



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)

30265 7590 05/17/2018
DAVID AND RAYMOND PATENT FIRM
108 N. YNEZ AVE., SUITE 128
MONTEREY PARK, CA 91754

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.

Raymond Y. Chan (Depositor's name)
[Signature] (Signature)
08/13/2018 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/271,211	09/20/2016	Xin WANG	USP5697A-NSG	5137

TITLE OF INVENTION: Waterproof Induction Actuated Container

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$500	\$0	\$0	\$500	08/17/2018

EXAMINER	ART UNIT	CLASS-SUBCLASS
DHAKAL, BICKEY	2837	318-003000

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 Raymond Y. Chan
 1 David and Raymond Patent Firm
 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: Nine Stars Group (U.S.A.) Inc.
 (B) RESIDENCE: (CITY and STATE OR COUNTRY) Pomona, CA, USA

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 credits any overpayment, to Deposit Account Number 502111 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)
 Applicant certifying micro entity status. See 37 CFR 1.29
 Applicant asserting small entity status. See 37 CFR 1.27
 Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
 NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
 NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature: *[Signature]*
 Typed or printed name: Raymond Y. Chan

08/16/2018 HVUONG2 00000001 15271211
 Date: 08/13/2018
 Registration No. 37,484
 01 FL:2301

Attorney's
Docket No.: USP5697A-NSG

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: Xin Wang
Filing Date: 09/20/2016
Application Number: 15/271,211
Examiner: _____
Art Unit: 2837

Title Waterproof Induction Actuated Container

To: The Commissioner for Patents
Alexandria, VA 22313-1450

POWER OF ATTORNEY BY INVENTOR

As a named applicant/inventor of the entire interest of the above identified application/ patent, I hereby appoint the following attorney(s) and/or agent(s) to prosecute the application/patent identified above, and to transact all business in the Patent and trademark Office connected therewith:

Raymond Y. Chan, Reg. No. 37,484

Please Send Correspondence to:

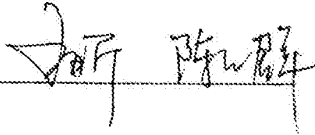
Raymond Y. Chan
108 North Ynez Avenue
Suite 128
Monterey Park, CA 91754

Please Direct Telephone Calls to:

Raymond Y. Chan
(626) 571-9812

NAME OF INVENTOR: Xin Wang ; Jianguan Chen
ADDRESS: No. 16, Xinchengxi Road, Qingkou Town, Minhou Country, Fuzhou, China

SIGNATURE



DATE

6/30/2018

Attorney's
Docket No.: USP5697A-NSG

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: Xin Wang
Filing Date: 09/20/2016
Application Number: 15/271,211
Examiner: _____
Art Unit: 2837

Title Waterproof Induction Actuated Container

To: The Commissioner for Patents
Alexandria, VA 22313-1450

POWER OF ATTORNEY BY ASSIGNEE

As a named assignee of the entire interest of the above identified application/ patent, I hereby appoint the following attorney(s) and/or agent(s) to prosecute the application/patent identified above, and to transact all business in the Patent and trademark Office connected therewith:

Raymond Y. Chan, Reg. No. 37,484

Please Send Correspondence to:

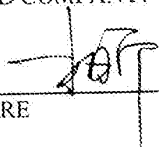
Raymond Y. Chan
108 North Ynez Avenue
Suite 128
Monterey Park, CA 91754

Please Direct Telephone Calls to:

Raymond Y. Chan
(626) 571-9812

NAME: Xin Wang
ADDRESS: 1929 Mount Vernon Ave., Pomona, CA 91768 USA
TITLE AND COMPANY: Chief Executive Officer; Nine Stars Group (U.S.A.) Inc.

SIGNATURE



DATE

6/30/2018

Electronic Acknowledgement Receipt

EFS ID:	33474354
Application Number:	15271211
International Application Number:	
Confirmation Number:	5137
Title of Invention:	Waterproof Induction Actuated Container
First Named Inventor/Applicant Name:	Xin WANG
Customer Number:	30265
Filer:	Raymond Yat Chan/Michael Lee
Filer Authorized By:	Raymond Yat Chan
Attorney Docket Number:	USP5697A-NSG
Receipt Date:	21-AUG-2018
Filing Date:	20-SEP-2016
Time Stamp:	05:51:27
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	USP5697POAinventor.pdf	457598 <small>62b40901acfd2c39f080c220cdf26651851b98a80</small>	no	1

Warnings:

Information:					
2	Power of Attorney	USP5697POAassignee.pdf	489172	no	1
			90bf8288fb08ca75be5a6b0b2e96f20058ca748		
Warnings:					
Information:					
Total Files Size (in bytes):				946770	
<p>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.</p> <p><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.</p> <p><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.</p> <p><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.</p>					



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/271,211	09/20/2016	Xin WANG	USP5697A-NSG

CONFIRMATION NO. 5137

POA ACCEPTANCE LETTER

Raymond Y. Chan
108 North Ynez Avenue
Suite 128
Monterey Park, CA 91754



Date Mailed: 08/22/2018

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/14/2018.

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.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/nguyen/



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Table with 5 columns: APPLICATION NO., ISSUE DATE, PATENT NO., ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 15/271,211, 09/18/2018, 10077154, USP5697A-NSG, 5137

7590 08/29/2018
Raymond Y. Chan
108 North Ynez Avenue
Suite 128
Monterey Park, CA 91754

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):

Xin WANG, Fuzhou, CHINA;
Jiangqun CHEN, Fuzhou, CHINA;

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