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(19) **United States**(12) **Patent Application Publication**
Wang(10) **Pub. No.: US 2009/0263754 A1**(43) **Pub. Date: Oct. 22, 2009**(54) **UTILITY LIGHT WITH ILLUMINATION
ARRANGEMENT***F23Q 2/02* (2006.01)*F23Q 2/32* (2006.01)(76) Inventor: **Boqi Wang**, City of Bell, CA (US)(52) **U.S. Cl. 431/153; 362/119; 361/260; 431/253;
431/255**

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MONTEREY PARK, CA 91754 (US)**(57) **ABSTRACT**

A utility lighter includes a lighter casing having a casing body and an extension arm, a gas releasing valve provided in the lighter casing, an ignition nozzle provided at an upper end of the extension arm to communicate with the gas releasing valve; a piezoelectric unit, an actuation unit and an illumination arrangement. The illumination arrangement includes an illumination holder mounted on the lighter casing; and an illumination unit mounted on the illumination holder, in such a manner that the illumination unit is arranged to provide illumination primarily toward the ignition zone so that a user is able to accurately apply the ignition of the utility lighter to a target spot as clearly visualized by illumination of the ignition zone.

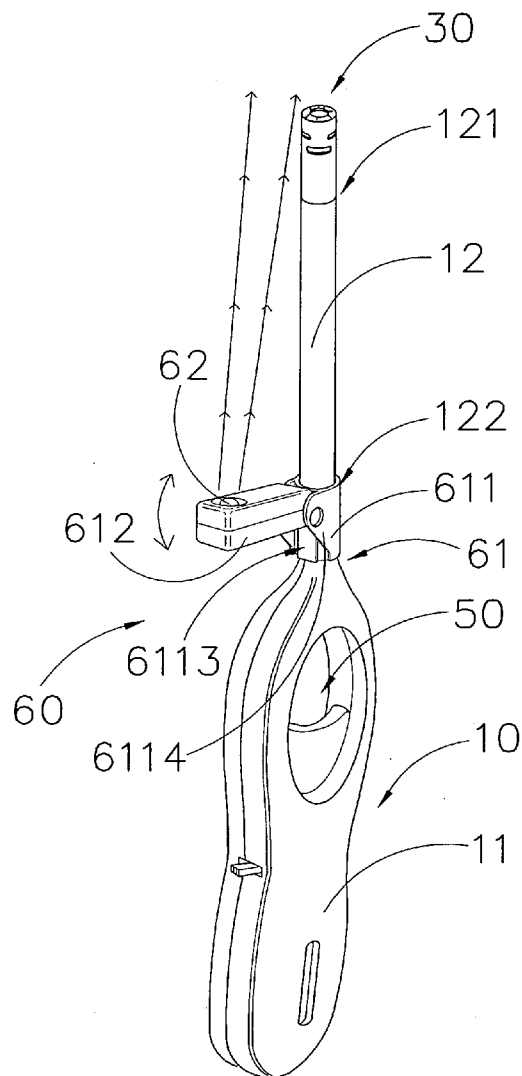
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C10L 11/00 (2006.01)
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FIG. 1

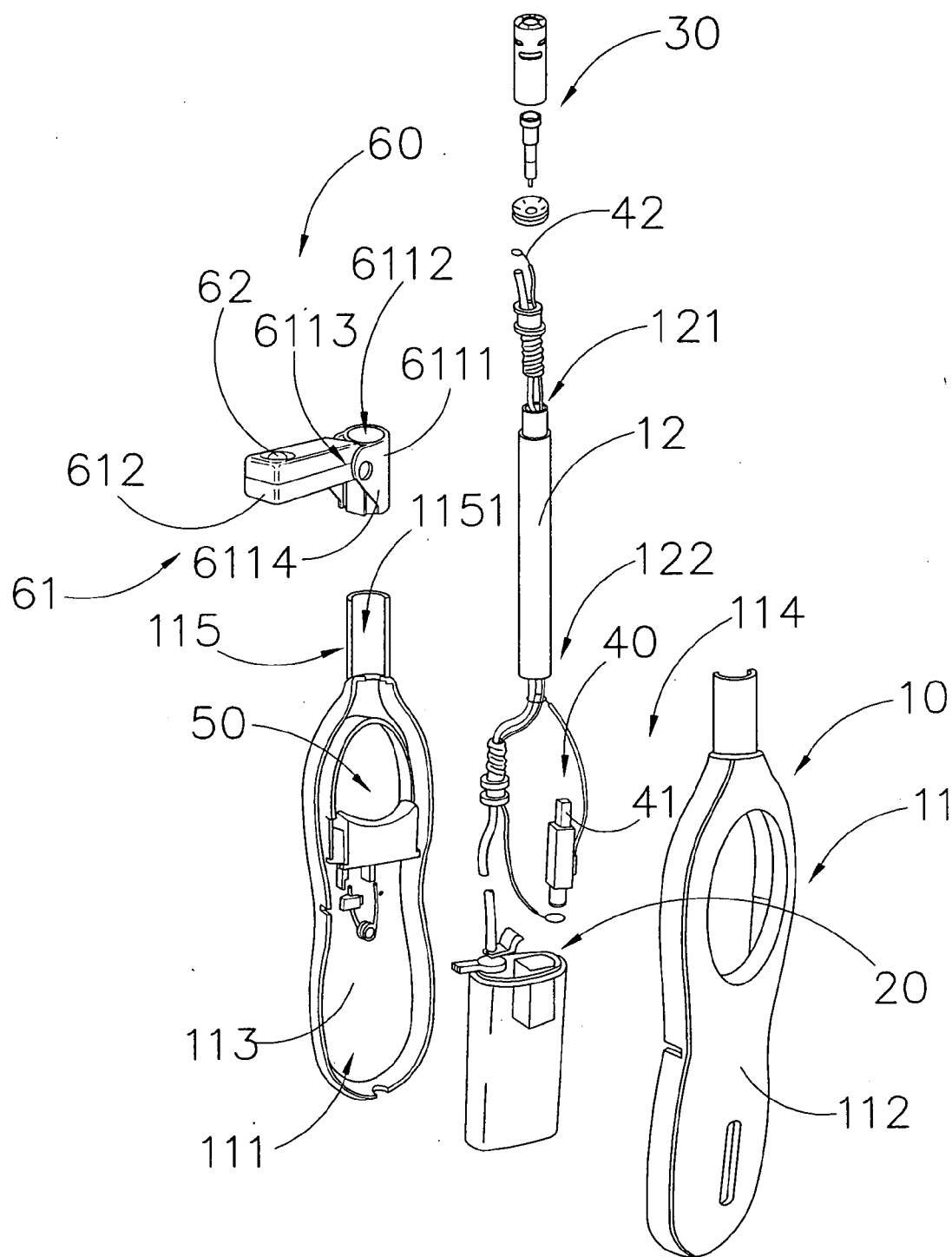


FIG. 2

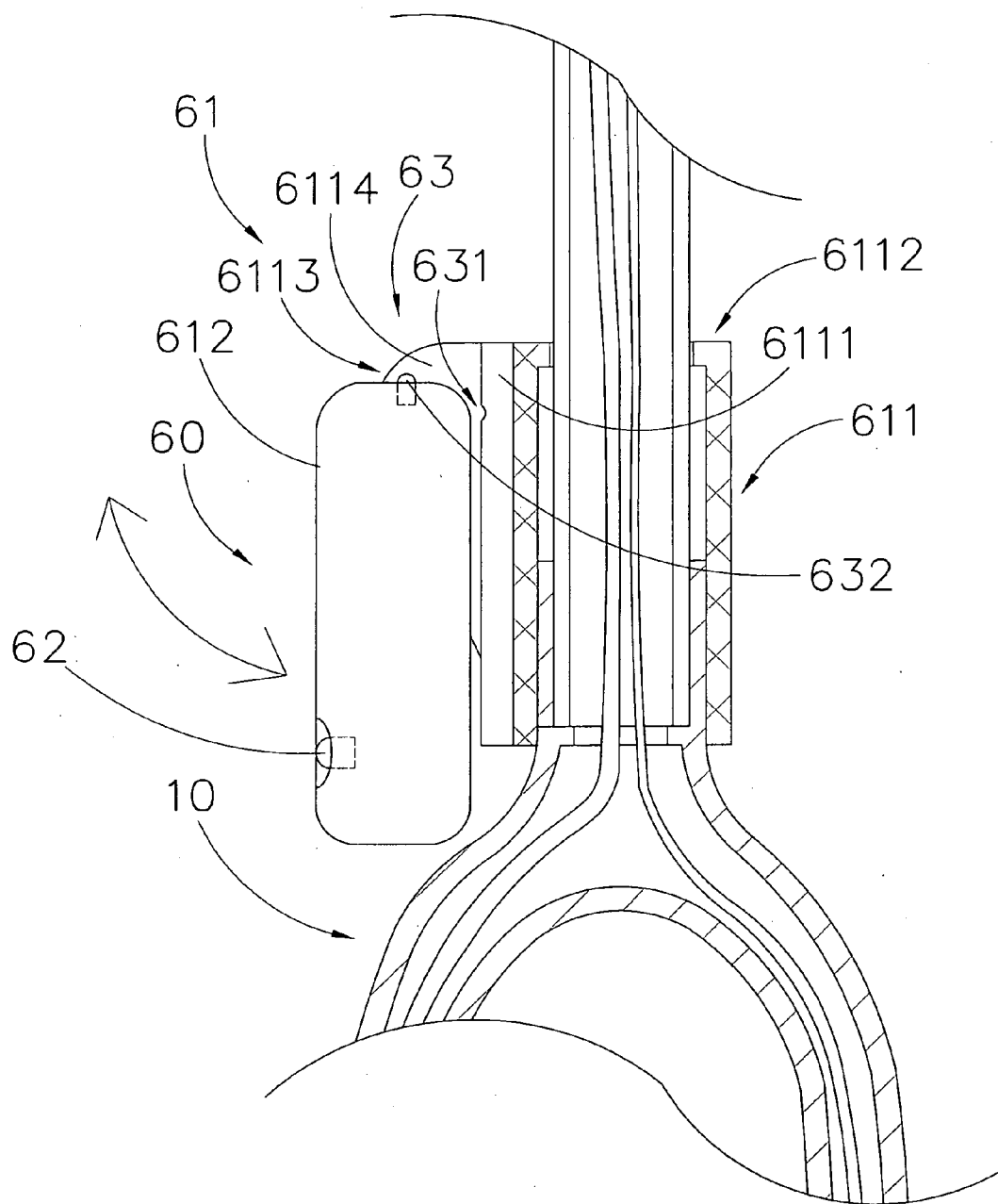


FIG. 3A

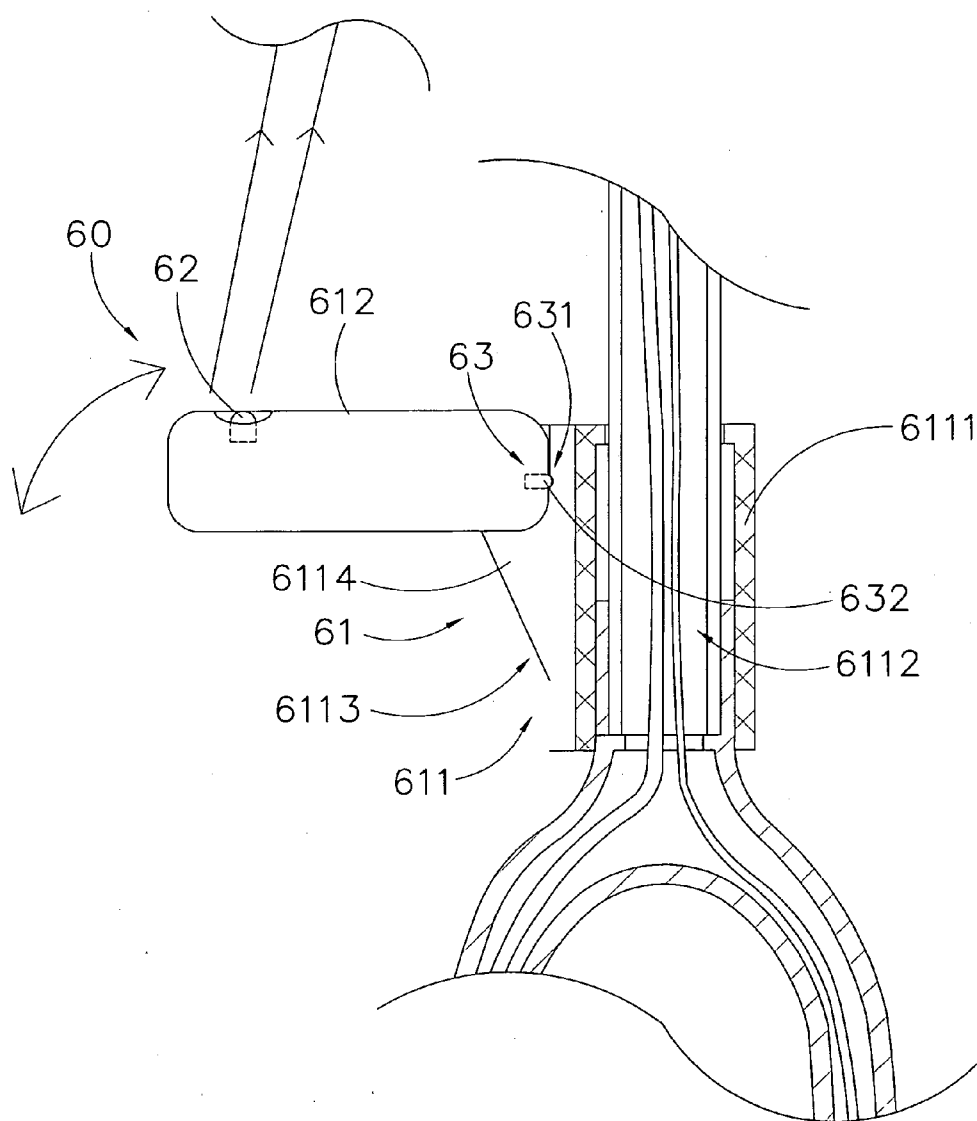


FIG. 3B

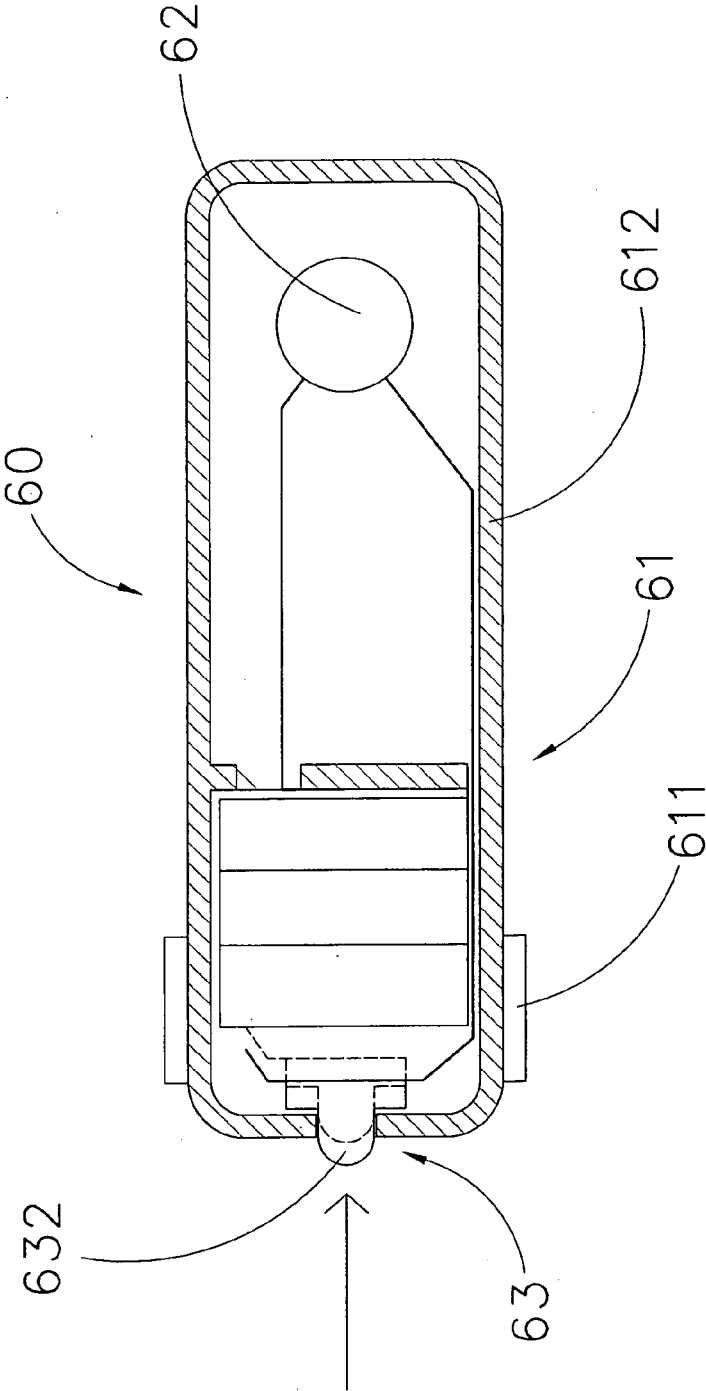
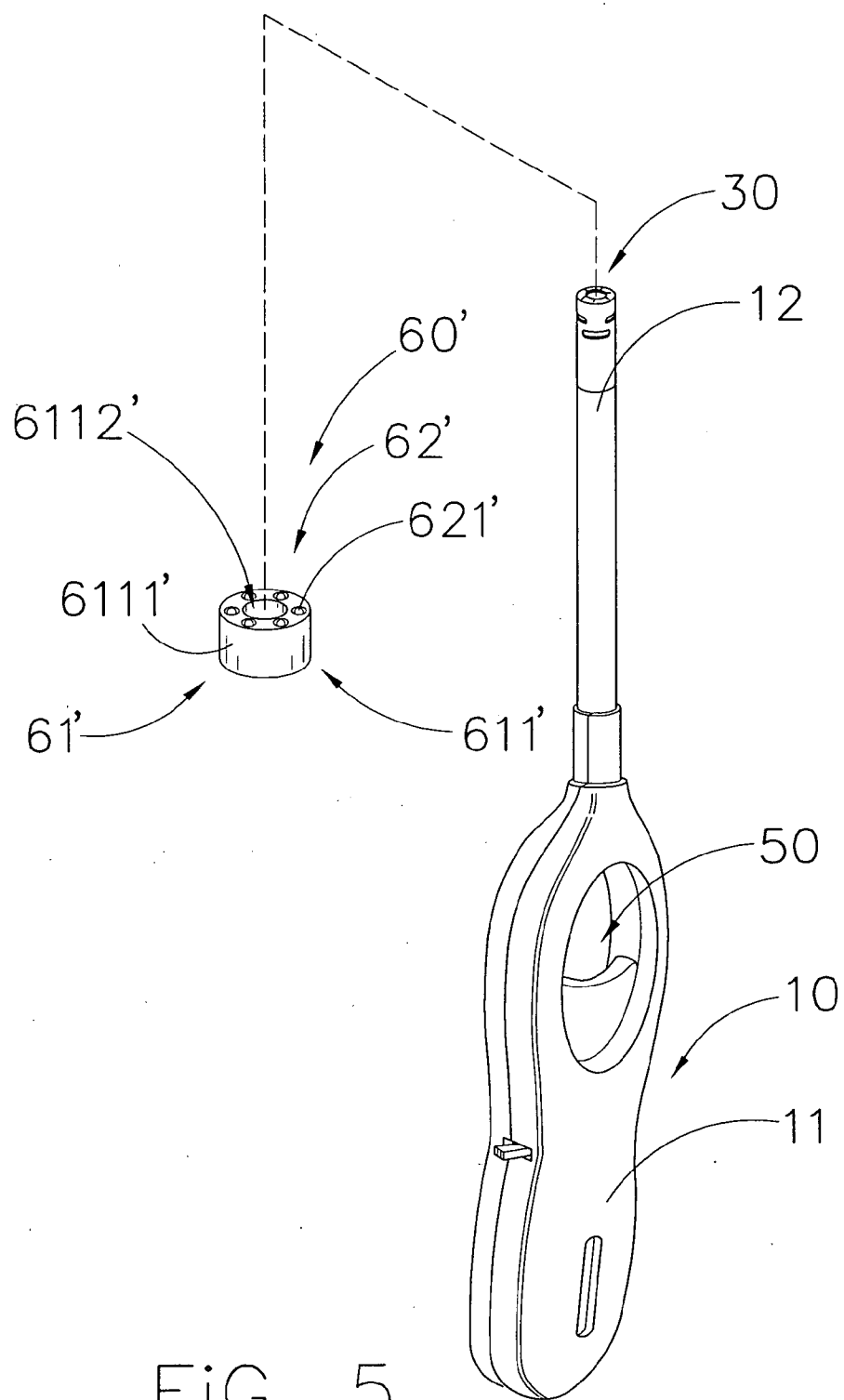


FIG. 4



UTILITY LIGHT WITH ILLUMINATION ARRANGEMENT

BACKGROUND OF THE PRESENT INVENTION

[0001] 1. Field of Invention

[0002] The present invention relates to a lighter, and more particularly to a utility lighter comprising an illumination arrangement which is capable of providing illumination toward an ignition zone to allow a user to apply ignition at exact target spot as visualized by said illumination of said ignition zone.

[0003] 2. Description of Related Arts

[0004] A conventional utility lighter typically comprises a handle casing having a fuel storage compartment formed therein, a bendable extension arm extended from the handle casing, a gas releasing valve provided at the fuel storage compartment for releasing the gas therein in a controllable manner, an ignition nozzle provided at the bendable extension arm; a piezoelectric unit received within the handle casing, and an actuation unit provided on the handle casing for actuating the piezoelectric unit to generate a spark at the ignition nozzle, wherein the gaseous fuel is simultaneously released for generating an ignition flame at the ignition nozzle when the actuation unit is actuated. Since the point of ignition at the ignition nozzle is far away from the handle casing, a user is able to apply the ignition flame to ignite various objects for a wide variety of purposes. For example, a user is able to ignite a stove to initialize generation of stove flame.

[0005] In light of this background, there exists a number of a discrepancy or insufficiency in association with this kind of conventional utility lighter. First, when a user wishes to use the utility lighter in a dim environment, in which the user is unable to accurately discern the exact target spot of ignition, that user has to rely on other illumination equipment, such as a flashlight, to help him locating that exact target spot of ignition. This is inconvenience, especially when the user is unable to get such a flashlight or other illumination equipment in specific situations.

[0006] Second, a major difficulty for manufacturing a utility lighter having an illumination arrangement is to secure a power source for illuminators. When a typical replaceable battery (such as a regular dry cell) is used and mounted within the handle casing, it would be very difficult for a user to replace that battery. Moreover, the introduction of a dry cell into the handle casing would inevitably increase the overall size thereof, making it bulky and heavy.

[0007] Third, another difficulty for manufacturing a utility lighter having an illumination arrangement is that when the structure of the utility light is altered in order to accommodate the illumination arrangement, the manufacturing cost will inevitably be increased. Since competition in utility lighters market is extremely keen, any significant increase in selling price would put the corresponding manufacturer in a very disadvantageous market position.

SUMMARY OF THE PRESENT INVENTION

[0008] A main object of the present invention is to provide a utility lighter comprising an illumination arrangement which is capable of providing illumination toward an ignition zone to allow a user to apply ignition at exact target spot as visualized by said illumination of said ignition zone.

[0009] Another object of the present invention is to provide a utility lighter comprising an illumination arrangement

which can be detachably mounted onto a lighter casing. In other words, the illumination arrangement does not alter the original structure and operation of the utility lighter so that the manufacturing cost of the present invention can be minimized.

[0010] Another object of the present invention is to provide a utility lighter comprising an illumination arrangement, which comprises an automatic switching mechanism for optimally providing illumination to an ignition zone of the utility lighter. Thus, a user is able to conveniently switch on the illumination unit for acquiring optimal illumination at the ignition zone.

[0011] Another object of the present invention is to provide an illumination arrangement for a utility lighter, wherein a user is able conveniently install and detach the illumination arrangement to and from the utility lighter.

[0012] Another object of the present invention is to provide an illumination arrangement for a utility lighter, wherein the illumination arrangement can be incorporated with any utility lighter having an extension arm by coaxially inserting the extension arm into the mounting hole of the illumination arrangement.

[0013] Another object of the present invention is to provide an illumination arrangement, which is adapted to incorporate with other tools, such as screwdriver, pen, and pencil, to provide illumination at the operation tip of the tool.

[0014] Accordingly, in order to accomplish the above objects, the present invention provides a utility lighter, comprising:

[0015] a lighter casing which comprises a casing body having a fuel storage compartment formed therein for storing a predetermined amount of liquefied gas, and an extension arm having an upper end and a lower end extended from the lighter casing, wherein the extension arm has a receiving channel which is extended from the lower end to the upper end, wherein the upper end of the extension arm defines an ignition zone of the utility lighter;

[0016] a gas releasing valve provided at the fuel storage compartment for releasing the gas therein in a controllable manner;

[0017] an ignition nozzle provided at the upper end of the extension arm to communicate with the gas releasing valve through the receiving channel for releasing the gas through the ignition nozzle;

[0018] a piezoelectric unit, which is supported in the lighter casing, having a depressible part and a spark-generating element extended at a position that when the depressible part of the piezoelectric unit is depressed, the spark-generating element generates a spark at the ignition nozzle to ignite the gas emitting therefrom so as to generate an ignition flame;

[0019] an actuation unit provided on the lighter casing for actuating the piezoelectric unit to generate a spark at the ignition nozzle, wherein the gaseous fuel is simultaneously released for generating an ignition flame at the ignition zone when the actuation unit is actuated; and

[0020] an illumination arrangement, which comprises:

[0021] an illumination holder mounted on the lighter casing; and

[0022] an illumination unit mounted on the illumination holder in such a manner that the illumination unit is arranged to provide illumination primarily toward the ignition zone so that a user is able to accurately apply the ignition of the utility lighter to a target spot as clearly visualized by illumination of the ignition zone.

[0023] 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

[0024] FIG. 1 is a perspective view of a utility lighter according to a preferred embodiment of the present invention.

[0025] FIG. 2 is an exploded perspective view of the utility lighter according to the above preferred embodiment of the present invention.

[0026] FIG. 3A and FIG. 3B are schematic diagrams of the utility lighter according to the above preferred embodiment of the present invention.

[0027] FIG. 4 is a sectional view of the illumination arrangement according to the above preferred embodiment of the present invention.

[0028] FIG. 5 is an alternative mode of the utility lighter according to the above preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0029] Referring to FIG. 1 to FIG. 2, FIG. 3A to FIG. 3B and FIG. 4 of the drawings, a utility lighter according to a preferred embodiment of the present invention is illustrated, in which the utility lighter comprises a lighter casing 10, a gas releasing valve 20, an ignition nozzle 30, a piezoelectric unit 40, an actuation unit 50, and an illumination arrangement 60.

[0030] The lighter casing 10 comprises a casing body 11 having a fuel storage compartment 111 formed therein for storing a predetermined amount of liquefied gas, and an extension arm 12 having an upper end 121 and a lower end 122 extended from the lighter casing 10, wherein the extension arm 12 has a receiving channel which is extended from the lower end 122 to the upper end 121, wherein the upper end 121 of the extension arm 12 defines an operation tip thereof as an ignition zone of the utility lighter. On the other hand, the gas releasing valve 20 is provided at the fuel storage compartment 111 for releasing the gas therein in a controllable manner.

[0031] The ignition nozzle 30 is provided at the upper end 121 of the extension arm 12 to communicate with the gas releasing valve 20 through the receiving channel for releasing the gas through the ignition nozzle 30.

[0032] The piezoelectric unit 40, which is supported in the lighter casing 10, has a depressible part 41 and a spark-generating element 42 extended at a position that when the depressible part 41 of the piezoelectric unit 40 is depressed, the spark-generating element 42 generates a spark at the ignition nozzle 30 to ignite the gas emitting therefrom so as to generate an ignition flame at the operation tip of the utility lighter.

[0033] The actuation unit 50 is provided at the lower portion of the lighter casing 10 for actuating the piezoelectric unit 40 to generate a spark at the ignition nozzle 30, wherein the gaseous fuel is simultaneously released for generating the ignition flame at the ignition zone when the actuation unit 50 is actuated.

[0034] The illumination arrangement 60 comprises an illumination holder 61 and an illumination unit 62. The illumination holder 61 is mounted at a top side of the lighter casing 10. The illumination unit 62 is mounted on the illumination

holder 61 in such a manner that the illumination unit 62 is arranged to provide illumination primarily toward the ignition zone so that a user is able to accurately apply the ignition of the utility lighter to a target spot as clearly visualized by illumination of the ignition zone.

[0035] It is worth mentioning that the illumination unit 62 provides an illumination zone at the operation tip that the illumination zone covers the ignition zone so that the user is able to clearly target the ignition flame at the target spot. In addition, the illumination direction of the illumination unit 62 is corresponding to the axis of the extension arm 12. Accordingly, when the user actuates the actuation unit 50 by his or her finger for ignition, the illumination unit 62 provides enough illumination at the operation tip of the utility lighter without blocking the light from the illumination unit 62 by the hand of the user.

[0036] According to the preferred embodiment of the present invention, the casing body 11 comprises a first body member 112 and a second body member 113 which is detachably connected with the first body member 112 to form a receiving cavity 114 between the first body member 112 and the second body member 113, wherein the fuel storage compartment 111 is provided within the receiving cavity 114. Accordingly, the first and second body members 112, 113 are two half-casings of the casing body 11, i.e. the left side and right side of the casing body 11. Referring to FIG. 1 and FIG. 2 of the drawings, the casing body 11 further has an extension portion 115 defining a through hole 1151 thereon wherein the extension arm 12 is supported in the receiving cavity 114 and extended therefrom via the through hole 1151 of the extension portion 115.

[0037] The illumination holder 61 comprises a retention member 611 attached on the casing body 11, and an illuminator housing 612 movably mounted on the retention member 611 for supporting the illumination unit 62 thereon, wherein the illuminator housing 612 is capable of pivotally moving between an idle position and an illumination position, wherein in the idle position, the illuminator housing 612 is pivotally folded with respect to the retention member 611 to align with the extension arm 12 for reducing an overall size of the utility lighter, wherein in the illumination position, the illuminator housing 612 is pivotally and outwardly unfolded with respect to the retention member 611 to allow the illumination unit 62 to generate illumination toward the ignition zone of the utility lighter.

[0038] The retention member 611 comprises a tubular retention element 6111 defining a through mounting hole 6112 extended therealong, wherein the mounting hole 6112 has a diameter substantially the same as or slightly larger than the diameter of the extension portion 115 of the casing body 11 so that the tubular retention element 6111 is capable of fittedly mounting onto the extension portion 115 of the casing body 11 by inserting the extension portion 115 into the mounting hole 6112. The retention member 611 further comprises a supporting seat 6113 integrally extended from the tubular retention element 6111 wherein the illuminator housing 612 is pivotally mounted onto the supporting seat 6113 for moving between the idle position and the illumination position.

[0039] According to the preferred embodiment, the retention element 6111 also forms a locking ring to securely lock up the first and second body members 112, 113. In other words, when the first and second body members 112, 113 are coupled with each other, the extension arm 12 is coaxially

inserted into the mounting hole **6112** of the retention element **6111** until the retention element **6111** is coaxially mounted at the extension portion **115** of the casing body **11** to lock up the first and second body members **112**, **113**. Therefore, the extension arm **12** is also securely locked at the extension portion **115** of the casing body **11**.

[0040] It is worth mentioning that the illumination arrangement **60** can be incorporated with the conventional utility lighter by removing the conventional locking ring thereof and being replaced by the retention element **6111**. Therefore, the illumination arrangement **60** of the present invention can be formed as an add-on device to incorporate with any conventional utility lighter having the extension arm **12**.

[0041] More specifically, the supporting seat **6113** comprises a plurality of seat members **6114** upwardly extended from the tubular retention element **6111** at two sides thereof to form a seat cavity within an inner side of each of the seat members **6114** and an upper surface of the tubular retention element **6111**, wherein the illuminator housing **612** is pivotally mounted in the seat cavity to move between the idle position and the illumination position.

[0042] The illumination unit **62** comprises a LED illuminator mounted on the illuminator housing **612** in such a manner that when the illuminator housing **612** is at the illumination position, the LED illuminator is capable of generating illumination as a point source of light toward the ignition zone.

[0043] The illumination arrangement **60** further comprises an automatic switching mechanism **63** provided on the illuminator housing **612** to automatically switch on the illumination unit **62** when the illuminator housing **612** is moved from the idle position to the illumination position, and to automatically switch off the illumination unit **62** when the illuminator housing **612** is moved from the illumination position back to the idle position.

[0044] According to the preferred embodiment of the present invention, the automatic switching mechanism **63** contains a switching indentation **631** indently formed on an upper surface of the tubular retention element **6111**, and comprises a depressible switch **632** provided on a bottom surface of the illuminator housing **612** to align with the switching indentation **631** when the illuminator housing **612** is at the illumination position. The depressible switch **632** is adapted to be depressed with respect to the illuminator housing **612** for turning on the illumination unit **62** mounted within the illuminator housing **612**.

[0045] It is worth mentioning that when the illuminator housing **612** is at the idle position, the depressible switch **632** is not subject to any depression and thus the illumination unit **62** is turned off. On the other hand, when the illuminator housing **612** is at the illumination position, the depressible switch **632** is moved to engage with the switching indentation **631** so that the depressible switch **632** is depressed by the switching indentation **631** for turning on the illumination unit **62**. Accordingly, the depressible switch **632** has a spherical shape wherein a diameter of the switching indentation **631** is slightly less than a diameter of the depressible switch **632** so that when the illuminator housing **612** is at the illumination position, the depressible switch **632** is depressed to turn on the illumination unit **62**. It is important to point out that, however, a manual switch can also be installed at the illuminator housing **612** for manually switching on and off the illumination unit **62**. FIG. 4 illustrates the internal structural

of the illuminator housing **612**, which has a plurality of batteries and terminals mounted therein for providing electricity for the illumination unit **62**.

[0046] Since the illuminator housing **612** is pivotally movable on the illumination holder **61**, the angle of illumination by the illumination unit **62** is adjustable so as to allow a user to flexibly or fine tune the angle of illumination in order to suit his or her own need under particular circumstances.

[0047] Referring to FIG. 5 of the drawings, an alternative mode of the utility lighter of the present invention is illustrated. The alternative mode is similar to the preferred embodiment except the illumination arrangement **60'**. According to the alternative mode, the illumination arrangement **60'** comprises an illumination holder **61'** and an illumination unit **62'**. The illumination holder **61'** is mounted on the lighter casing **10'**. The illumination unit **62'** is mounted on the illumination holder **61'** in such a manner that the illumination unit **62'** is arranged to provide illumination primarily toward the ignition zone so that a user is able to accurately apply the ignition of the utility lighter to a target spot as clearly visualized by illumination of the ignition zone. This alternative mode illustrates that the light beam coming out from the illumination unit **62'** is parallel to the extension arm **12** of the lighter casing **10**.

[0048] The illumination holder **61'** comprises a retention member **611'** attached on the casing body **11** wherein the illumination unit **62'** comprises a plurality of LED illuminators **621'** spacedly provided on a peripheral portion of the retention member **611'** for providing illumination toward the ignition zone. More specifically, the retention member **611'** comprises a tubular retention element **6111'** defining a through mounting hole **6112'** extended therealong, wherein the mounting hole **6112'** has a diameter substantially the same as the diameter of the extension portion **115** of the casing body **11** so that the tubular retention element **6111'** is capable of fittedly mounting onto the extension portion **115** of the casing body **11** by inserting the extension portion **115** into the mounting hole **6112**. A manual switch can be installed at the illumination holder **61'** for switching on and off the LED illuminators **621'**.

[0049] Accordingly, the retention element **6111'** also forms a locking ring to securely lock up the first and second body members **112**, **113**. In other words, when the first and second body members **112**, **113** are coupled with each other, the extension arm **12** is coaxially inserted into the mounting hole **6112'** of the retention element **6111'** until the retention element **6111'** is coaxially mounted at the extension portion **115** of the casing body **11** to lock up the first and second body members **112**, **113**. Therefore, the extension arm **12** is also securely locked at the extension portion **115** of the casing body **11**.

[0050] It is worth to mention that the illumination arrangement **60**, **60'** and its alternative mode can be incorporated with another tool to provide the illumination for the operation tip of the tool. For example, the illumination arrangement **60**, **60'** can be mounted to a screwdriver to provide the illumination for the screw head as the operation tip. Likewise, the illumination arrangement **60**, **60'** can be mounted to a pen or pencil to provide the illumination for the writing tip as the operation tip.

[0051] 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.

[0052] 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.

What is claimed is:

1. A utility lighter, comprising:

a lighter casing which comprises a casing body having a fuel storage compartment for storing a predetermined amount of liquefied gas and an extension portion, and an extension arm having an upper end and a lower end extended from said extension portion of said lighter casing, wherein said extension arm has a receiving channel which is extended from said lower end to said upper end, wherein said upper end of said extension arm defines an operation tip as an ignition zone;

a gas releasing valve provided at said fuel storage compartment for releasing said gas therein in a controllable manner;

an ignition nozzle provided at said upper end of said extension arm to communicate with said gas releasing valve through said receiving channel for releasing said gas through said ignition nozzle;

a piezoelectric unit, which is supported in said lighter casing, having a depressible part and a spark-generating element extended at a position that when said depressible part of said piezoelectric unit is depressed, said spark-generating element generates a spark at said ignition nozzle to ignite said gas emitting therefrom so as to generate an ignition flame at said operation tip of said extension arm;

an actuation unit provided on said lighter casing for actuating said piezoelectric unit to generate a spark at said ignition nozzle, wherein said gaseous fuel is simultaneously released for generating said ignition flame at said ignition zone when said actuation unit is actuated; and

an illumination arrangement, which comprises:

an illumination holder mounted on said lighter casing; and
an illumination unit mounted on said illumination holder for providing illumination primarily toward said ignition zone;

thereby, a user is able to accurately apply said ignition of said utility lighter to a target spot as clearly visualized by illumination of said ignition zone.

2. The utility lighter, as recited in claim 1, wherein said illumination holder comprises a retention member attached on said casing body, and an illuminator housing movably mounted on said retention member for supporting said illumination unit thereon, wherein said illuminator housing is pivotally moved between an idle position and an illumination position, wherein in said idle position, said illuminator housing is pivotally folded with respect to said retention member to align with said extension arm for reducing an overall size of said utility lighter, wherein in said illumination position, said illuminator housing is pivotally and outwardly unfolded with respect to said retention member to allow said illumination unit to generate illumination towards said ignition zone of said utility lighter.

3. The utility lighter, as recited in claim 2, wherein said retention member comprises a tubular retention element defining a through mounting hole extended therealong,

wherein said mounting hole has a diameter slightly larger than a diameter of said extension portion of said casing body so that said tubular retention element is fittedly encirclingly mounted at said extension portion of said casing body when said extension portion is coaxially inserted into said mounting hole.

4. The utility lighter, as recited in claim 3, wherein said retention member further comprises a supporting seat integrally extended from said tubular retention element, wherein said illuminator housing is pivotally mounted at said supporting seat for moving between said idle position and said illumination position.

5. The utility lighter, as recited in claim 4, wherein said supporting seat comprises a plurality of seat members upwardly extended from said tubular retention element at two sides thereof to form a seat cavity within an inner side of each of said seat members and an upper surface of said tubular retention element, wherein said illuminator housing is pivotally mounted in said seat cavity to move between said idle position and said illumination position.

6. The utility lighter, as recited in claim 2, wherein said illumination unit comprises at least one LED illuminator mounted at said illuminator housing in such a manner that when said illuminator housing is at said illumination position, said LED illuminator generates illumination as a point source of light towards said ignition zone.

7. The utility lighter, as recited in claim 3, wherein said illumination unit comprises at least one LED illuminator mounted at said illuminator housing in such a manner that when said illuminator housing is at said illumination position, said LED illuminator generates illumination as a point source of light towards said ignition zone.

8. The utility lighter, as recited in claim 4, wherein said illumination unit comprises at least one LED illuminator mounted at said illuminator housing in such a manner that when said illuminator housing is at said illumination position, said LED illuminator generates illumination as a point source of light towards said ignition zone.

9. The utility lighter, as recited in claim 2, wherein said illumination arrangement further comprises an automatic switching mechanism provided on said illuminator housing to automatically switch on said illumination unit when said illuminator housing is moved from said idle position to said illumination position, and to automatically switch off said illumination unit when said illuminator housing is moved from said illumination position back to said idle position, wherein said automatic switching mechanism contains a switching indentation indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

10. The utility lighter, as recited in claim 6, wherein said illumination arrangement further comprises an automatic switching mechanism provided on said illuminator housing to automatically switch on said illumination unit when said illuminator housing is moved from said idle position to said illumination position, and to automatically switch off said illumination unit when said illuminator housing is moved from said illumination position back to said idle position,

wherein said automatic switching mechanism contains a switching indentation indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

11. The utility lighter, as recited in claim **8**, wherein said illumination arrangement further comprises an automatic switching mechanism provided on said illuminator housing to automatically switch on said illumination unit when said illuminator housing is moved from said idle position to said illumination position, and to automatically switch off said illumination unit when said illuminator housing is moved from said illumination position back to said idle position, wherein said automatic switching mechanism contains a switching indentation indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

12. The utility lighter, as recited in claim **9**, wherein said automatic switching mechanism contains a switching indentation indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

13. The utility lighter, as recited in claim **10**, wherein said automatic switching mechanism contains a switching indentation indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

14. The utility lighter, as recited in claim **11**, wherein said automatic switching mechanism contains a switching inden-

tion indently formed on an upper surface of said tubular retention element, and comprises a depressible switch provided on a bottom surface of said illuminator housing to align with said switching indentation when said illuminator housing is at said illumination position, such that when said illuminator housing is at said idle position, said depressible switch is undepressed to allow said illumination unit to be turned off, wherein when the illuminator housing is at said illumination position, said depressible switch is moved to engage with said switching indentation so that said depressible switch is pushed to depress by said switching indentation for turning on said illumination unit.

15. The utility lighter, as recited in claim **12**, wherein said depressible switch has a spherical shape, wherein a diameter of said switching indentation is slightly less than a diameter of said depressible switch so that when said illuminator housing is at said illumination position, said depressible switch is pushed to depress to turn on said illumination unit.

16. The utility lighter, as recited in claim **13**, wherein said depressible switch has a spherical shape, wherein a diameter of said switching indentation is slightly less than a diameter of said depressible switch so that when said illuminator housing is at said illumination position, said depressible switch is pushed to depress to turn on said illumination unit.

17. The utility lighter, as recited in claim **14**, wherein said depressible switch has a spherical shape, wherein a diameter of said switching indentation is slightly less than a diameter of said depressible switch so that when said illuminator housing is at said illumination position, said depressible switch is pushed to depress to turn on said illumination unit.

18. The utility lighter, as recited in claim **3**, wherein said casing body comprises a first body member and a second body member detachably coupled with said first body member to receive said fuel storage compartment therebetween, wherein said retention element also forms a locking ring to securely lock up said first and second body members.

19. The utility lighter, as recited in claim **8**, wherein said casing body comprises a first body member and a second body member detachably coupled with said first body member to receive said fuel storage compartment therebetween, wherein said retention element also forms a locking ring to securely lock up said first and second body members.

20. The utility lighter, as recited in claim **17**, wherein said casing body comprises a first body member and a second body member detachably coupled with said first body member to receive said fuel storage compartment therebetween, wherein said retention element also forms a locking ring to securely lock up said first and second body members.

21. The utility lighter, as recited in claim **1**, wherein said illumination holder comprises a retention member attached on said casing body, wherein said illumination unit comprises a plurality of LED illuminators spacedly provided on a peripheral portion of said retention member for providing illumination toward said ignition zone as a parallel line source of light.

22. The utility lighter, as recited in claim **21**, wherein said casing body comprises a first body member and a second body member detachably coupled with said first body member to receive said fuel storage compartment therebetween, wherein said retention element also forms a locking ring to securely lock up said first and second body members.

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