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(54) **CIGAR LIGHTER WITH ENCLOSED BURN AREA**

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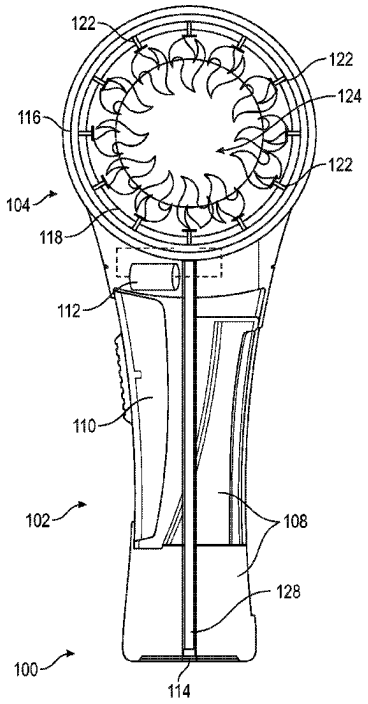
(57) **ABSTRACT**

A lighter for lighting cigars, cigarettes, pipes, and other objects is disclosed. The lighter may comprise an enclosed top section defining an opening for receiving the object for lighting. An inner surface of the top section includes a plurality of spouts disposed and configured to direct a plurality of flames towards a center of the opening. A bottom section may comprise a fuel reservoir, an igniter, and an actuator. The actuation may actuate the igniter which, in turn, ignites fuel from the fuel reservoir. The igniter may be a piezoelectric igniter. The enclosed burn area of the lighter with flames directed towards a center thereof may promote even burning of the object, such as a cigar.

20 Claims, 5 Drawing Sheets



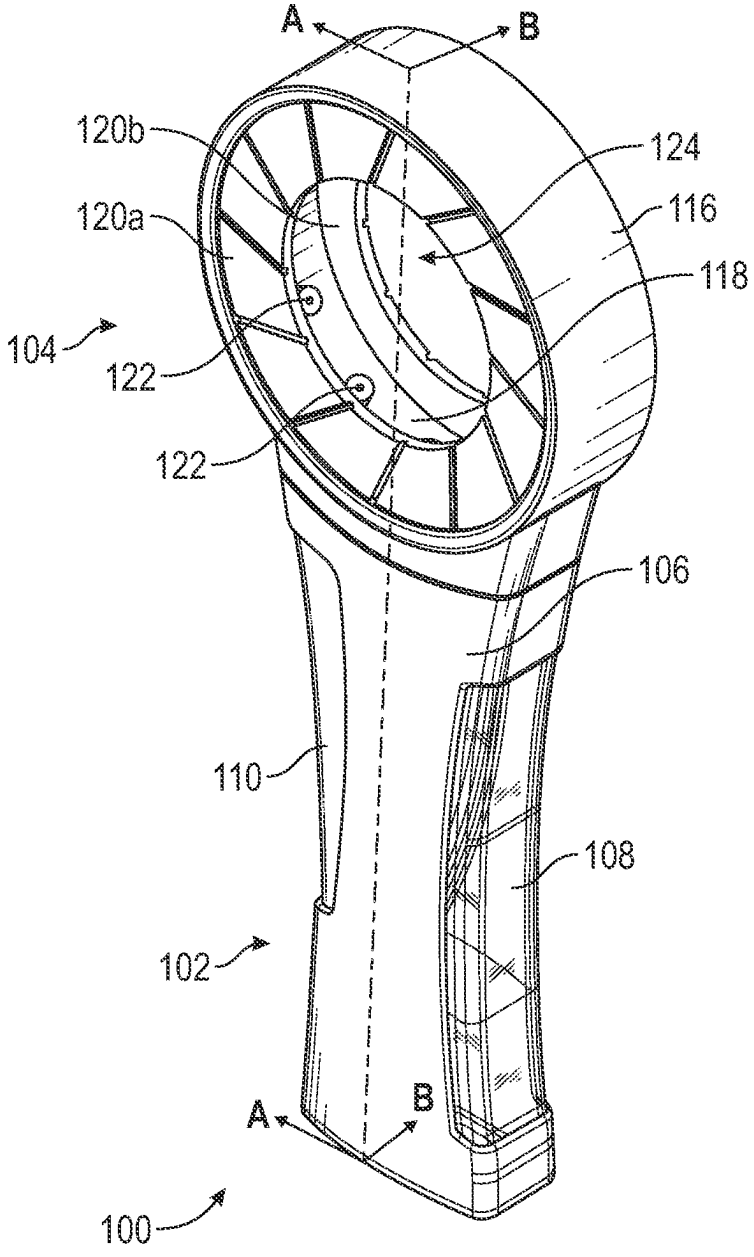


FIG. 1A

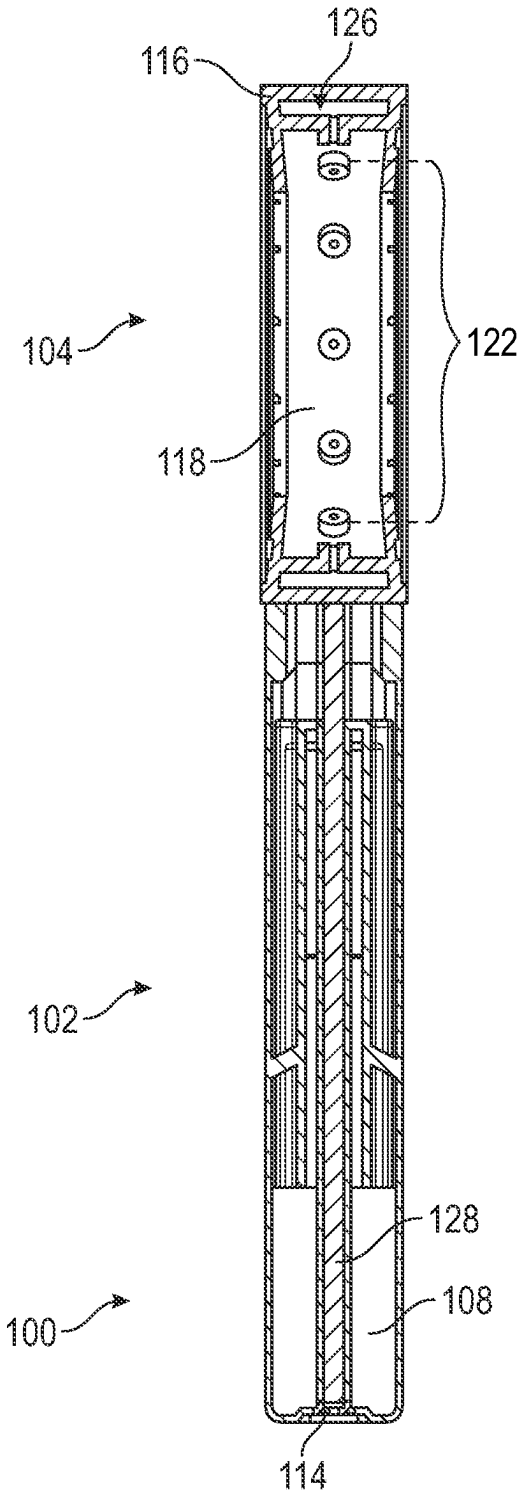


FIG. 1B

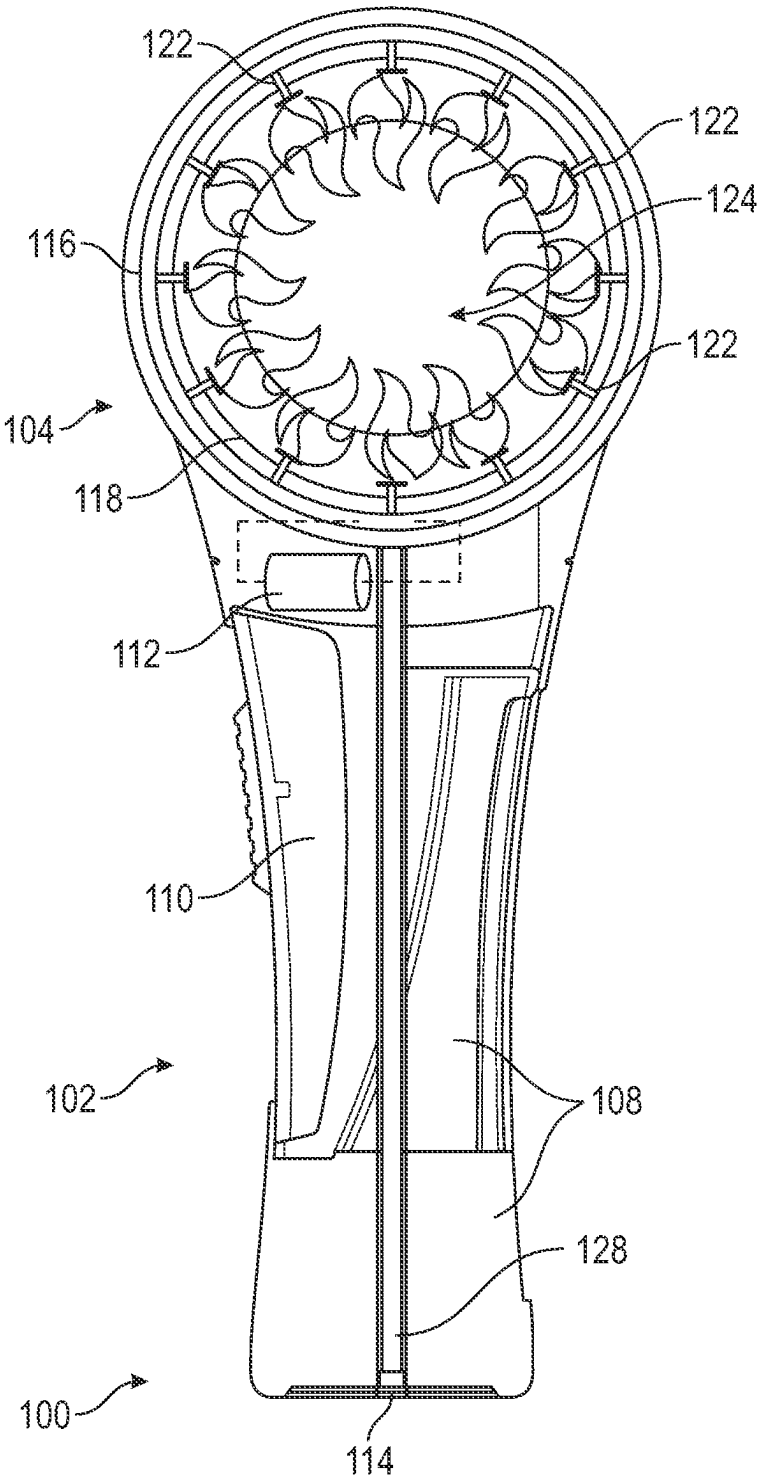


FIG. 1C

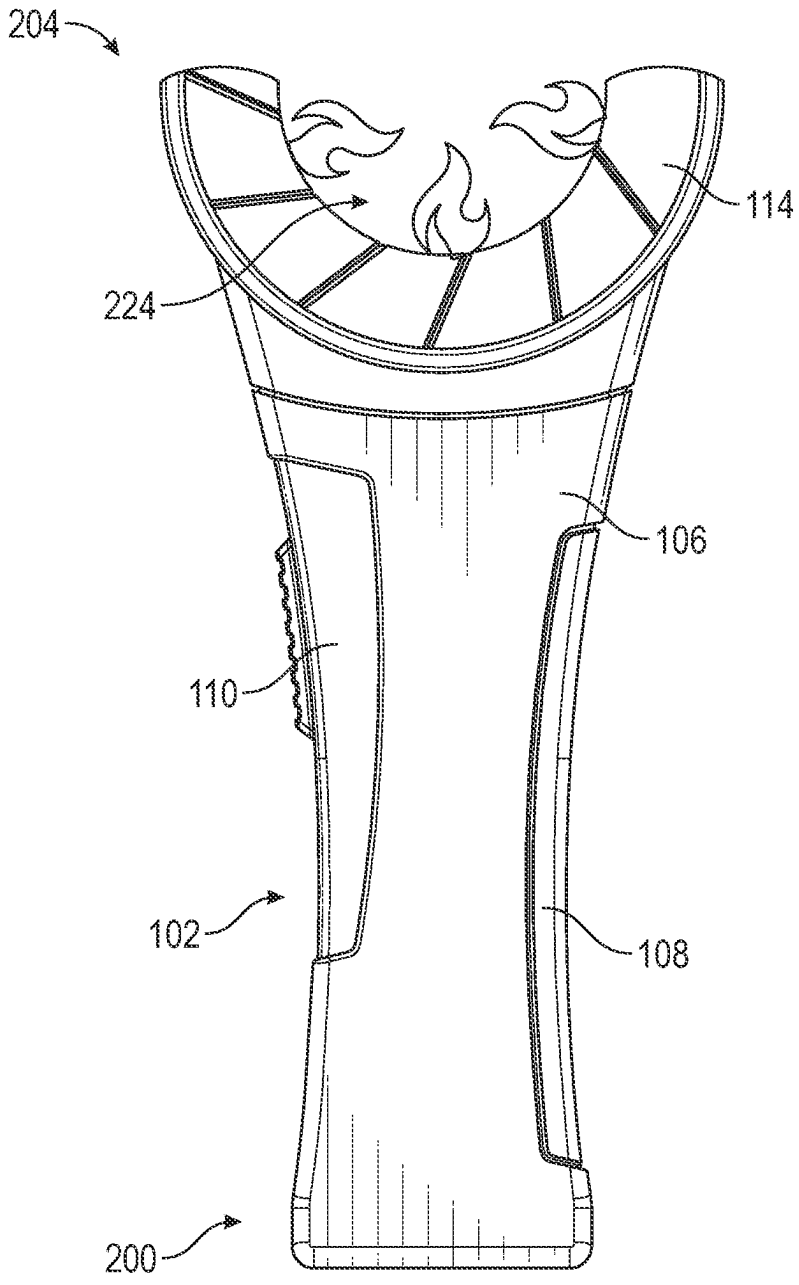


FIG. 2

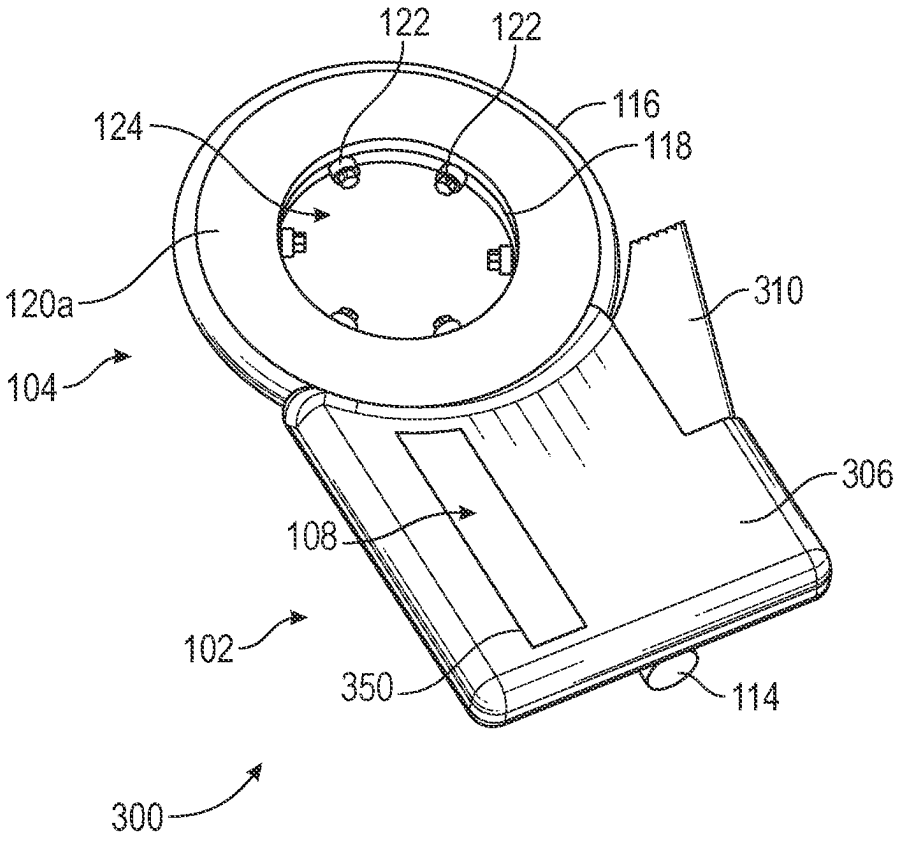


FIG. 3

CIGAR LIGHTER WITH ENCLOSED BURN AREA

TECHNICAL FIELD

Embodiments of the invention generally relate to igniting devices. More specifically, embodiments of the invention relate to a cigar lighter to promote even burning and toasting.

RELATED ART

Premium handmade cigars are a class of tobacco products which are distinguishable from cigarettes, cigarillos, and machine-made cigars. These premium cigars are consumed largely for their taste and are "sipped" but not inhaled by the consumer. Factors such as humidification, blend type, head cutting, and lighting all influence taste perception of a cigar.

Ensuring an even burn when lighting a cigar is essential to preserving the quality of the cigar. Aggressive lighting of a cigar can lead to off-putting tasting notes and can affect even the highest-quality cigars. Additionally, poor lighting can also lead to an uneven burn of the cigar. As such, cigar smokers spend considerable amounts of time learning to correctly light a cigar.

Traditional cigar lighters include butane lighters that direct a jet of flame directly upwards. Lighting a cigar using traditional cigar lighters involves "toasting" the cigar at a foot of the cigar to avoid introducing harsh and/or burnt flavors. This toasting technique requires the user to gently rotate the cigar at an angle away from the flame. Because the cigar must be manually rotated to toast the entire circumference, human error often leads to an uneven toasting of the cigar.

As such, what is needed is an improved cigar lighter. Further, what is needed is a cigar lighter that can evenly light the cigar without requiring substantial rotation of the cigar by the user.

SUMMARY

Embodiments of the invention address the above-identified need by providing a lighter for lighting cigars and other objects. The lighter may comprise a circular opening through which a cigar or other object may be passed through. Flames may be directed towards a center of the opening such that a substantially even light may be achieved by holding the object near the center of the opening.

In some aspects, the techniques described herein relate to a lighter, including: a top section having an opening therethrough, including: an outer wall; an inner wall wherein the opening is formed by the inner wall; and a plurality of spouts disposed around the inner wall, each spout of the plurality of spouts directed towards a center of the opening; and a bottom section, including: a housing; a fuel reservoir at least partially contained within the housing for storing fuel; and a passage connecting the bottom section to the top section, wherein the fuel is configured to travel through the passage to the top section, and wherein after exiting the passage, the fuel is configured to ignite to obtain a flame directed out of the plurality of spouts.

In some aspects, the techniques described herein relate to a lighter, wherein the plurality of spouts is disposed equidistantly along the inner wall.

In some aspects, the techniques described herein relate to a lighter, wherein the bottom section further includes: an igniter for igniting the fuel; and an actuator for actuating the igniter.

In some aspects, the techniques described herein relate to a lighter, wherein the igniter is a piezoelectric igniter or a flint-and-wheel igniter.

In some aspects, the techniques described herein relate to a lighter, wherein the top section further includes: a first side wall and a second side wall extending from the outer wall, wherein the first side wall is disposed opposite the second side wall.

In some aspects, the techniques described herein relate to a lighter, wherein an inner diameter of one of the first side wall or the second side wall defines a diameter of the opening, and wherein the inner diameter of at least one of the first side wall or the second side wall is adjustable.

In some aspects, the techniques described herein relate to a lighter, wherein the fuel reservoir includes a transparent or semi-transparent material.

In some aspects, the techniques described herein relate to a lighter, including: a bottom section, including: a fuel reservoir for storing fuel; an igniter for igniting the fuel to obtain a flame; and an actuator for actuating the igniter; and an enclosed top section defining an opening therethrough and coupled to the bottom section, including: a plurality of spouts disposed along an inner wall of the enclosed top section, wherein each spout of the plurality of spouts is configured to direct the flame towards a center of the opening.

In some aspects, the techniques described herein relate to a lighter, wherein the enclosed top section is circular, elliptical, or semi-circular.

In some aspects, the techniques described herein relate to a lighter, wherein the enclosed top section includes about a 60 gage diameter.

In some aspects, the techniques described herein relate to a lighter, wherein the bottom section further includes an adjustment valve for adjusting an intensity of the flame.

In some aspects, the techniques described herein relate to a lighter, wherein the adjustment valve is fluidly connected to the fuel reservoir, and wherein the adjustment valve includes a removable portion for adding additional fuel to the fuel reservoir.

In some aspects, the techniques described herein relate to a lighter, wherein the bottom section further includes a housing at least partially containing the fuel reservoir, the igniter, and the actuator.

In some aspects, the techniques described herein relate to a lighter, including: a bottom section, including: a fuel reservoir for holding fuel; an igniter for igniting the fuel; and an actuator for actuating the igniter; a top section, including: an outer wall; an inner wall including at least one spout, wherein the inner wall and the outer wall define a cavity; and a passage connecting the bottom section to the top section for providing fuel from the fuel reservoir to the at least one spout, whereby the fuel is ignited by the igniter to obtain a flame, wherein the flame exits through the at least one spout.

In some aspects, the techniques described herein relate to a lighter, further including a removable cap fluidly connected to the fuel reservoir for refilling of the fuel reservoir.

In some aspects, the techniques described herein relate to a lighter, wherein the inner wall defines an opening, and wherein the at least one spout includes a plurality of spouts directed towards a center of the opening.

In some aspects, the techniques described herein relate to a lighter, wherein the top section further includes a first side wall and a second side wall opposite the first side wall, wherein the first side wall and the second side wall extend

from the outer wall, wherein at least one of the first side wall and the second side wall is adjustable to adjust a size of the opening.

In some aspects, the techniques described herein relate to a lighter, wherein the fuel reservoir is configured to be removable from the bottom section.

In some aspects, the techniques described herein relate to a lighter, wherein the bottom section is substantially rectangular and configured to be hand-held.

In some aspects, the techniques described herein relate to a lighter, wherein the top section is shaped as a partial circle defining a semi-enclosed opening, and wherein the at least one spout is directed towards a center of the semi-enclosed opening.

This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description. This summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter. Other aspects and advantages of the current invention will be apparent from the following detailed description of the embodiments and the accompanying drawing figures.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Embodiments of the invention are described in detail below with reference to the attached drawing figures, wherein:

FIG. **1**A illustrates a perspective view of a lighter for some embodiments;

FIG. **1**B illustrates a first cross-sectional view of the lighter taken along the line A-A depicted in FIG. **1**A for some embodiments;

FIG. **1**C illustrates a second cross-sectional view of the lighter taken along the line B-B depicted in FIG. **1**A for some embodiments;

FIG. **2** illustrates a second embodiment of a lighter having a semi-enclosed burn area; and

FIG. **3** illustrates a third embodiment of the lighter.

The drawing figures do not limit the invention to the specific embodiments disclosed and described herein. The drawings are not necessarily to scale, emphasis instead being placed upon clearly illustrating the principles of the invention.

DETAILED DESCRIPTION

The subject matter of the invention is described in detail below to meet statutory requirements; however, the description itself is not intended to limit the scope of claims. Rather, the claimed subject matter might be embodied in other ways to include different steps or combinations of steps similar to the ones described in this document, in conjunction with other present or future technologies. Minor variations from the description below will be understood by one skilled in the art and are intended to be captured within the scope of the claimed invention. Terms should not be interpreted as implying any particular ordering of various steps described unless the order of individual steps is explicitly described.

The following detailed description of embodiments of the invention references the accompanying drawings that illustrate specific embodiments in which the invention can be practiced. The embodiments are intended to describe aspects of the invention in sufficient detail to enable those skilled in the art to practice the invention. Other embodiments can be utilized and changes can be made without departing from the scope of the invention. The following detailed description is, therefore, not to be taken in a limiting sense. The scope of embodiments of the invention is defined only by the appended claims, along with the full scope of equivalents to which such claims are entitled.

In this description, references to "one embodiment," "an embodiment," or "embodiments" mean that the feature or features being referred to are included in at least one embodiment of the technology. Separate reference to "one embodiment" "an embodiment", or "embodiments" in this description do not necessarily refer to the same embodiment and are also not mutually exclusive unless so stated and/or except as will be readily apparent to those skilled in the art from the description. For example, a feature, structure, or act described in one embodiment may also be included in other embodiments but is not necessarily included. Thus, the technology can include a variety of combinations and/or integrations of the embodiments described herein.

Embodiments described herein are generally directed to a lighter having an enclosed or semi-enclosed burn area. The lighter may comprise a bottom section and a top section. The top section may be circular, having a central opening (i.e., the burn area) therethrough, with a plurality of spouts disposed on an inner surface and directed inwards towards a center of the opening. The plurality of spouts may be configured to evenly light a cigar inserted near the center of the burn area. By utilizing a circular ring of spouts, the cigar may not need to be rotated to achieve an even burn. In some embodiments, the cigar lighter may utilize butane for fuel and may comprise a piezo igniter for igniting the fuel to obtain a flame. Thus, the lighter described herein can improve the ease and consistency at which users can toast cigars.

FIG. **1**A illustrates a perspective view of a lighter **100** for some embodiments. Lighter **100** may be used for lighting cigars, cigarettes, pipes, or any other object. Lighter **100** may comprise a bottom section **102** and a top section **104**. Bottom section **102** may comprise housing **106**, fuel reservoir **108**, actuator **110**, igniter **112** (see FIG. **1**C), adjustment valve **114** (see FIG. **1**C), or any combination thereof. Bottom section **102** may be substantially rectangular, cylindrical, square, or any other geometric shape. In some embodiments, bottom section **102** and top section **104** are detachable from one another. Thus, the user may customize lighter **100** to their preferences. For example, bottom section **102** may be replaced with a larger bottom section having a larger fuel reservoir **108** for storing more fuel. Bottom section **102** may be coupled to top section **104** via screws, welds, bolts, push fittings, snap fittings, or any other mechanical connection.

In use, a user may hold lighter **100** via housing **106**. Housing **106** may at least partially contain fuel reservoir **108**, actuator **110**, and igniter **112**. In some embodiments, igniter **112** is entirely contained within housing **106**. Housing **106** may be fabricated from metals, such as stainless steel, titanium, brass, nickel, chromium, gold, silver, or any combination thereof. In some embodiments, housing **106** comprises plastic or polymers, such as DELRIN®, acetyl resin, polypropylene, polycarbonate (PC), polymethylmethacrylate (PMMA), polystyrene (PS), polyvinylchloride (PVC), or any combination thereof. In some embodiments, housing **106** comprises filleted and/or chamfered edges to improve the useability and comfort for the user when holding lighter **100**. For example, housing **106** may comprise ridges, bumps, knurls, checkered patterns, or any combination thereof. In some embodiments, housing **106** comprises a sleeve, (e.g., a silicon sleeve) configured to

enhance grip. Housing **106** may be contoured to comfortably fit in a user's hand for hand-held use.

In some embodiments, bottom section **102** is about 1 inch to about 3 inches in length. In some embodiments, bottom section **102** is about 0.5 inches to about 1.5 inches in width. In some embodiments, bottom section **102** is about 1.5 inches to about inches in height. In some embodiments, a larger bottom section **102** may be configured for tabletop use to hold a larger amount of fuel.

Fuel reservoir **108** may store fuel, which may be a pressurized gas in a liquid state. In some embodiments, the fuel is butane. In some embodiments, the fuel is naphtha, which may be used with a wick-based igniter **112**. When the liquid fuel exits fuel reservoir **108**, the fuel may undergo a state change into a gas due to the pressure differential between fuel reservoir **108** and the ambient air and mix with air, whereby the fuel may be ignited by igniter **112** to generate a flame for lighting the cigar. Fuel reservoir **108** may comprise a transparent, semi-transparent, or translucent material through which a fuel level may be monitored. For example, fuel reservoir **108** may be wholly or partially formed from borosilicate glass or poly(methyl methacrylate) (PMMA). One of skill in the art will appreciate that fuel reservoir **108** may be constructed from a variety of materials. At least a portion of fuel reservoir **108** may be exposed from housing **106** for monitoring the fuel level. For example, fuel reservoir **108** may be exposed from housing **106** on a side wall of bottom section **102**. In some embodiments, housing **106** may comprise a window through which fuel reservoir **108** may be exposed, as shown in FIG. **3**. In some embodiments, fuel reservoir **108** comprises markings thereon to indicate an amount of fuel left. For example, fuel reservoir **108** may comprise scale markings that indicate when fuel reservoir **108** is at 75% capacity, 50% capacity, and 25% capacity. In some embodiments, fuel reservoir **108** is substantially opaque.

Actuator **110** may be configured as a slidable actuator for actuating igniter **112** to ignite the fuel. When actuator **110** is moved from a home position in a first direction (e.g., upwards towards top section **104**), igniter **112** may ignite the fuel. Simultaneously, or near simultaneously, a valve (not shown) may be opened to allow the fuel to exit fuel reservoir **108** such that the fuel may be ignited by igniter **112**. When actuator **110** is moved from the first direction back to the home position, igniter **112** may be disabled and the valve may be closed. In some embodiments, actuator **110** is configured as a push button, a switch, a lever, or any other actuator mechanism. In some embodiments, actuator **110** comprises a rubber or other slip-resistant material to aid the user in actuating actuator **110**. As shown, actuator **110** may be at least partially contained within housing **106** and may be exposed on a side wall of bottom section **102** substantially opposite fuel reservoir **108**. Broadly, any positioning of fuel reservoir **108** and actuator **110** in bottom section **102** is considered within the scope of embodiments herein.

Top section **104** may comprise outer wall **116**, inner wall **118**, a first side wall **120***a* and a second side wall **120***b*, spouts **122**, opening **124** or any combination thereof. Inner wall **118** may be concentric with outer wall **116**. Spouts **122** may be disposed circumferentially around inner wall **118**, as discussed further below. In some embodiments, outer wall **116** and/or side walls **120***a*, **120***b* comprise similar materials to housing **106**. Inner wall **118** may comprise an insulated metal or ceramic. For example, inner wall **118** may comprise a ceramic material such as silicon carbide. As another example, inner wall **118** may comprise brass. Broadly, inner wall **118** may comprise any material(s) capable of withstanding the heat from the flame of lighter **100**. In some embodiments, lighter **100** is configured to emit a flame in the range of about 600° F. to about 800° F. In some embodiments, lighter **100** is configured to emit flames above about 800° F. In some embodiments, the materials of lighter **100** are selected based on the desired temperature of the flame.

Side walls **120***a*, **120***b* may extend from outer wall **116** as shown. First side wall **120***a* may be disposed substantially opposite second side wall **120***b*. Side walls **120***a*, **120***b* may be formed as a ring with an inner diameter of side walls **120***a*, **120***b* defining a diameter of opening **124**. In some embodiments, opening **124** comprises a 60 ring gauge diameter. In some embodiments, opening **124** comprises a diameter or width of about 3 millimeters to about 30 millimeters. While embodiments are directed towards lighting cigars, lighter **100**, and opening **124** may be suitably sized to light larger sized objects as needed. In some embodiments, side walls **120***a*, **120***b* are adjustable such that opening **124** comprises a variable size. For example, the size of opening **124** may be decreased when lighter **100** is used for lighting a cigarette. For example, additional side wall portions may be hinged behind or in front of side walls **120***a*, **120***b* and deployed to decrease the effective diameter of opening **124**. In some embodiments, side walls **120***a*, **120***b* are detachable from outer wall **116**. Thus, in some embodiments, the user may vary the size of opening **124** by attaching smaller or larger side walls **120***a*, **120***b* to outer wall **116**.

It will be appreciated that top section **104** may take any geometric shape (e.g., circular, semi-circular, rectangular, elliptical, pentagonal, etc.), and side walls **120***a*, **120***b* may match the geometry of outer wall **116** and inner wall **118**. For example, if outer wall **116** is formed as a rectangle, side walls **120***a*, **120***b* may also be rectangular. In some embodiments, side walls **120***a*, **120***b* are substantially similar. In other embodiments, one of side walls **120***a*, **120***b* comprises a smaller inner diameter than the other side wall **120***a*, **120***b*. In some such embodiments, the diameter of opening **124** is defined by the side wall **120***a*, **120***b* having the smallest diameter. For example, second side wall **120***b* may comprise a smaller inner diameter (or have no opening) than first side wall **120***a* to prevent the user from overextending the cigar or object through opening **124**. In some embodiments, one or both of side walls **120***a*, **120***b* is omitted from top section **104**. In some embodiments, the side walls **120***a*, **120***b* may be parallel to each other. In some embodiments, one or both of the side walls **120***a*, **120***b* may be slanted towards the center of the opening.

In some embodiments, top section **104** forms a semicircle, a partial circle, or any other semi-enclosed shape. For example, outer wall **116** may comprise a three-quarter circle with an opening at the top, left, or right sides of top section **104**. A semi-enclosed top section **104** may increase oxygen flow into opening **124** which may aid in evenly burning the cigar. While illustrated as a ring, top section **104** may instead take other geometric shapes such as a triangle, a rectangle, a pentagon, a hexagon, an octagon, and the like. As another example, top section **104** may comprise two opposing outer walls **116** and inner walls **118** projecting substantially upwards from bottom section **102**, forming a partial rectangle. Flame may then be directed inwards from each inner wall **118** towards opening **124** for lighting of the cigar.

FIG. **1**B illustrates a cross-sectional view of lighter **100** taken from the line A-A illustrated in FIG. **1**A. As shown, top section **104** outer wall **116** and inner wall **118** may comprise a gap therebetween defining a cavity **126**. Spouts **122** may be disposed on inner wall **118** and project inwards towards

a center of opening **124**. Fuel may flow from fuel reservoir **108** through a passage **128** and into cavity **126** before exiting (after ignition, as a flame) out of spouts **122**.

In some embodiments, spouts **122** are spaced equidistantly on inner wall **118**. For example, when top section **104** is configured as a circle, six spouts **122** may be spaced at 60° intervals on inner wall **118**. Alternatively, four spouts **122** may be spaced at 90° intervals, or eight spouts **122** may be spaced at 45° intervals. Broadly, any arrangement of spouts **122** around the inner wall **118** is considered for embodiments herein, and spouts **122** are not limited to being equally spaced along inner wall **118**. In some embodiments, the spouts **122** are spaced unevenly. Spouts **122** may be directed substantially towards a center of opening **124**. As such, a user may insert a cigar near the center of opening **124** and receive a substantially even light from flame exiting each of the plurality of spouts **122** without having to rotate the cigar. Further, as described below, the user may utilize adjustment valve **114** to adjust an intensity of the flame exiting spouts **122** to increase the lighting efficiency of objects having smaller dimensions (e.g., a cigarette).

In some embodiments, spouts **122** are not directed towards the center of opening **124**. For example, when top section **104** is formed as a partial rectangle, a first spout may be directed horizontally to toast a top surface of a cigar inserted into the center of opening **124**, and a second spout may be directed horizontally and disposed below the first spout to toast a bottom surface of the cigar.

Spouts **122** may comprise a circular, square, triangular, or any other shape orifice through which the flame exits. Spouts may comprise a diameter or width of less than about 1 millimeter to about 1 millimeter. In some embodiments, spouts **122** comprise a diameter or width of about 1 millimeter to about 3 millimeters. In some embodiments, spouts **122** comprise similar materials to inner wall **118**.

FIG. **1**C illustrates a cross-sectional view of lighter **100** taken along the line B-B as depicted in FIG. **1**A for some embodiments. In some embodiments, top section **104** is substantially symmetrical about line B-B.

Fuel may flow from fuel reservoir **108** through a passage **128** and into top section **104** whereby the fuel may be ignited by igniter **112**. Passage **128** may have a proximal end near a bottom face of bottom section **102** and a distal end near top section **104**. In some embodiments, passage **128** is formed as a plastic or metal cylindrical or rectangular tube.

As described above, lighter **100** may comprise adjustment valve **114** on a bottom face of bottom section **102**. In some embodiments, adjustment valve **114** is a dual-purpose knob that may allow the user to adjust an intensity of the flame and add additional fuel to fuel reservoir **108**. Rotating adjustment valve **114** in a first direction may increase the flame intensity, and rotating adjustment valve **114** in a second direction that is opposite the first direction may decrease the flame intensity. In some embodiments, rotation of adjustment valve **114** causes a valve (not shown) disposed at the distal end of passage **128** to rotate open and/or closed. As the valve is opened, the amount of fuel exiting passage **128** may increase, thereby increasing the flame intensity. Adjusting the flame intensity may aid in lighting varying sizes of cigars, cigarettes, and the like. For example, if opening **124** is sized for 60 gage diameter cigars, a 30 gage diameter cigar may be lit with a higher flame intensity such that an even burn can be achieved while keeping the cigar substantially stationary in the center of opening **124**.

In some embodiments, adjustment valve **114** comprises a removable knob, cap, or the like that provides access for adding additional fuel to fuel reservoir **108**. Additionally, or alternatively, in some embodiments, a cap or other access point to fuel reservoir **108** may be disposed separately from adjustment valve **114**. In some embodiments, lighter **100** is non-refillable, and adjustment valve **114** is permanently secured to bottom section **102**. In some such embodiments, adjustment valve **114** may be used solely to adjust the intensity of the flame. In some embodiments, fuel reservoir **108** may be removable from housing **106** such that a new fuel reservoir **108** can replace an empty reservoir.

As shown, fuel reservoir **108** may comprise a majority of a volume of bottom section **102**. Fuel may escape through passage **128** and into cavity **126** due to the depressurization caused by opening of the valve near the distal end of passage **128** that results in the liquid fuel undergoing a state change to gaseous fuel for igniting by igniter **112**. Passage **128** may be fluidly connected to fuel reservoir **108**. Igniter **112** may be disposed near actuator **110** whereby igniter **112** may be actuated by actuator **110**. In some embodiments, igniter **112** is a piezoelectric igniter comprising a hammer that, when actuated, strikes a piezoelectric crystal to generate a spark, thereby igniting the fuel exiting passage **128** and into cavity **126** to obtain a flame. The flame may then travel through cavity **126** and out of spouts **122** into opening **124** to light the cigar. Those skilled in the art will appreciate that other igniting mechanisms, such as a flint-and-wheel igniter may be used without departing from the scope hereof. In some embodiments, multiple igniters may be provided and spaced closer to the spouts **122**.

FIG. **2** illustrates an embodiment of lighter **200** having a semi-enclosed top section **204** for some embodiments. A semi-enclosed top section **204** may increase the oxygen flow through opening **224** which may aid in toasting the cigar. In some embodiments, the semi-enclosed top section **204** is a semicircle. In some embodiments, top section **204** may comprise two parallel walls defining an opening **224** therebetween, forming a partial rectangle. Other geometric shapes are contemplated as within the scope of embodiments herein. Spouts **122** may be positioned appropriately to direct the flame towards a central location of opening **224**. For example, in the embodiment of the partial rectangular top section **204** described above, spouts **122** may be directed perpendicularly from the two parallel inner walls and spaced such that the user may insert a cigar into the burn area and the flame will evenly toast the circumference of the cigar.

FIG. **3** illustrates a third embodiment of lighter **300**. Lighter **300** may be substantially similar to lighter **100**. As shown, lighter **300** comprises a window **350** for viewing fuel reservoir **108** near a middle portion of housing **306**. In some embodiments, actuator **310** is a push button actuator which may be depressed by the user to engage the igniter **112**. Actuator **310** may be a push-and-hold actuator requiring the user to hold actuator **310** in the depressed position to maintain the flame. In other embodiments, upon depressing actuator **310**, a second depression of actuator **310** is required to release actuator **310** from the engaged position to close off passage **128**. As illustrated with respect to FIG. **3**, the cross-section of bottom section **102** may take a substantially square shape.

While embodiments have been described herein with respect to utilizing lighter **100**, **200**, **300** for lighting cigars, it should be noted that lighter **100**, **200**, **300** may be used to light various objects. For example, lighter **100**, **200**, **300** may be used to light cigarettes, cigarillos, marshmallows, and smoking pipes. Additionally, lighter **100**, **200**, **300** may be used in industrial lighting environments. For example, lighter **100**, **200**, **300** may be used to heat and/or burn objects passing by on a conveyor belt in a manufacturing setting. It

is contemplated that lighter **100**, **200**, **300** may be coupled with a control system that is configured to signal lighter **100**, **200**, **300** (e.g., wired or wirelessly) to turn on and off in response to varying conditions. The control system may also control adjustment valve **114** to adjust the intensity of the flame. As one example, lighter **100**, **200**, **300** may be used to toast marshmallows prior to packaging.

Further, bottom section **102** may be configured for use as a tabletop lighter. For example, bottom section **102** may be a substantially large cube or hemisphere configured to sit on a table and store enough fuel for use in commercial environments, such as at a smoking lounge.

Many different arrangements of the various components depicted, as well as components not shown, are possible without departing from the scope of the claims below. Embodiments of the invention have been described with the intent to be illustrative rather than restrictive. Alternative embodiments will become apparent to readers of this disclosure after and because of reading it. Alternative means of implementing the aforementioned can be completed without departing from the scope of the claims below. Certain features and sub-combinations are of utility and may be employed without reference to other features and sub-combinations and are contemplated within the scope of the claims. Although the invention has been described with reference to the embodiments illustrated in the attached drawing figures, it is noted that equivalents may be employed, and substitutions made herein, without departing from the scope of the invention as recited in the claims.

The invention claimed is:

1. A lighter, comprising:

a top section having an unobstructed opening therethrough, comprising:

an outer wall;

an inner wall, wherein the unobstructed opening is formed by the inner wall; and

a plurality of spouts disposed around the inner wall, each spout of the plurality of spouts directed towards a center of the unobstructed opening; and

a bottom section, comprising:

a housing, the housing at least partially containing:

a fuel reservoir for storing a fuel;

an actuator; and

an igniter; and

a passage connecting the bottom section to the top section,

wherein the fuel is configured to travel through the passage to the top section, and

wherein after exiting the passage, the fuel is configured to ignite via the igniter to obtain a flame directed out of the plurality of spouts towards the center of the unobstructed opening.

2. The lighter of claim **1**, wherein the plurality of spouts is disposed equidistantly along the inner wall.

3. The lighter of claim **1**, wherein the actuator is configured to actuate the igniter.

4. The lighter of claim **1**,

wherein the igniter is a piezoelectric igniter or a flint-and-wheel igniter.

5. The lighter of claim **1**, wherein the top section further comprises:

a first side wall and a second side wall extending from the outer wall,

wherein the first side wall is disposed opposite the second side wall.

6. The lighter of claim **5**,

wherein an inner diameter of one of the first side wall or the second side wall defines a diameter of the unobstructed opening, and

wherein the inner diameter of at least one of the first side wall or the second side wall is adjustable.

7. The lighter of claim **1**, wherein the fuel reservoir comprises a transparent or semi-transparent material.

8. The lighter of claim **1**, wherein the top section is shaped as a partial circle.

9. A lighter, comprising:

a bottom section, comprising:

a housing, the housing at least partially containing:

a fuel reservoir for storing a fuel;

an igniter for igniting the fuel to obtain a flame; and

an actuator for actuating the igniter; and

an enclosed top section coupled to the bottom section and defining an unobstructed opening therethrough, the enclosed top section comprising:

a plurality of spouts disposed along an inner wall of the enclosed top section,

wherein each spout of the plurality of spouts is configured to direct the flame towards a center of the unobstructed opening.

10. The lighter of claim **9**, wherein the enclosed top section is circular, elliptical, or semi-circular.

11. The lighter of claim **10**, wherein the enclosed top section comprises about a 60 gage diameter.

12. The lighter of claim **9**, wherein the bottom section further comprises an adjustment valve for adjusting an intensity of the flame.

13. The lighter of claim **12**,

wherein the adjustment valve is fluidly connected to the fuel reservoir, and

wherein the adjustment valve comprises a removable portion for adding additional fuel to the fuel reservoir.

14. A lighter, comprising:

a bottom section, comprising:

a housing, the housing at least partially containing:

a fuel reservoir for holding a fuel;

an igniter for igniting the fuel; and

an actuator for actuating the igniter;

a top section having an unobstructed opening therethrough, the top section comprising:

an outer wall; and

an inner wall comprising at least one spout,

wherein the inner wall and the outer wall define a cavity; and

a passage connecting the bottom section to the top section for providing the fuel from the fuel reservoir to the at least one spout, whereby the fuel is ignited by the igniter to obtain a flame,

wherein the flame exits through the at least one spout towards a center of the unobstructed opening.

15. The lighter of claim **14**, further comprising a removable cap fluidly connected to the fuel reservoir for refilling of the fuel reservoir.

16. The lighter of claim **14**,

wherein the inner wall defines an opening, and

wherein the at least one spout comprises a plurality of spouts directed towards the center of the opening.

17. The lighter of claim **16**,

wherein the top section further comprises a first side wall and a second side wall opposite the first side wall,

wherein the first side wall and the second side wall extend from the outer wall,

wherein at least one of the first side wall and the second side wall is adjustable to adjust a size of the opening.

18. The lighter of claim **14**, wherein the fuel reservoir is configured to be removable from the bottom section.

19. The lighter of claim **14**, wherein the bottom section is substantially rectangular and configured to be hand-held.

20. The lighter of claim **14**,

wherein the top section is shaped as a partial circle.

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