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JONES et al.(10) **Pub. No.: US 2017/0127720 A1**(43) **Pub. Date: May 11, 2017**(54) **DISPENSER AND DISPENSING SYSTEM****Publication Classification**(71) Applicants: **Elisabeth Helena Maria JONES**,
Johannesburg (ZA); **Ariel KISSOS**,
Johannesburg (ZA); **Nicholaas**
Christiaan ANDELA, Sandton (ZA)(51) **Int. Cl.**
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CPC **A24F 15/04** (2013.01)(72) Inventors: **Elisabeth Helena Maria JONES**,
Johannesburg (ZA); **Ariel KISSOS**,
Johannesburg (ZA); **Nicholaas**
Christiaan ANDELA, Sandton (ZA)(57) **ABSTRACT**

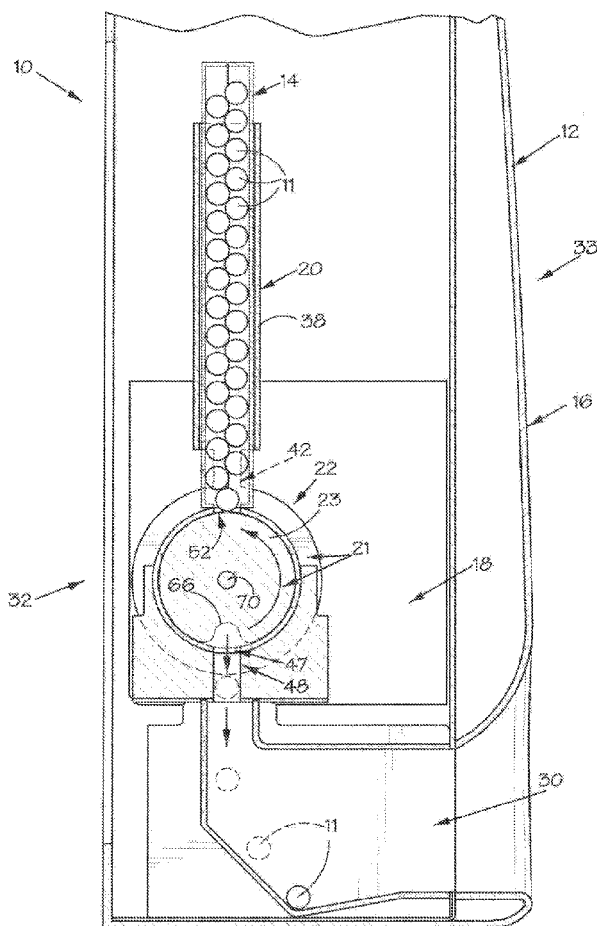
A cigarette dispensing system for dispensing single cigarettes, includes a dispenser and a disposable cartridge for containing the cigarettes. The dispenser includes a housing, a support structure, a cartridge holder, and a dispensing mechanism. The housing has a front side defining a collection receptacle from which dispensed cigarettes are collected and a rear side which has an actuator for operating the dispensing mechanism. The dispensing mechanism includes a cigarette guide and a rotatable dispensing drum rotatable in the guide. The drum defines cigarette receiving formation in which a cigarette is received from the cartridge and via rotation of the drum is deposited into a chute leading to the collection receptacle. The positions of the actuator and collection receptacle at opposite sides of the housing allow retail operators to exercise control over the dispensing of cigarettes thereby to ensure that cigarettes are not dispensed to customers such as underage youths.

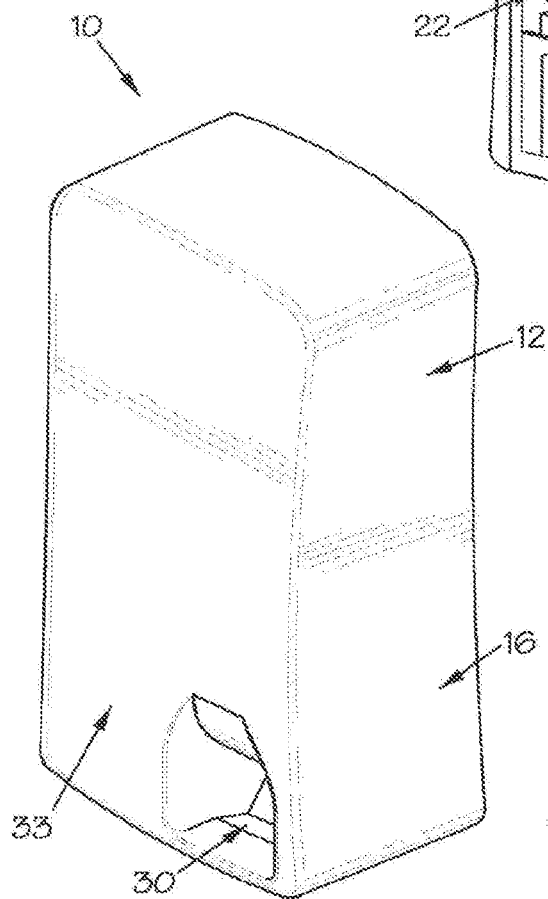
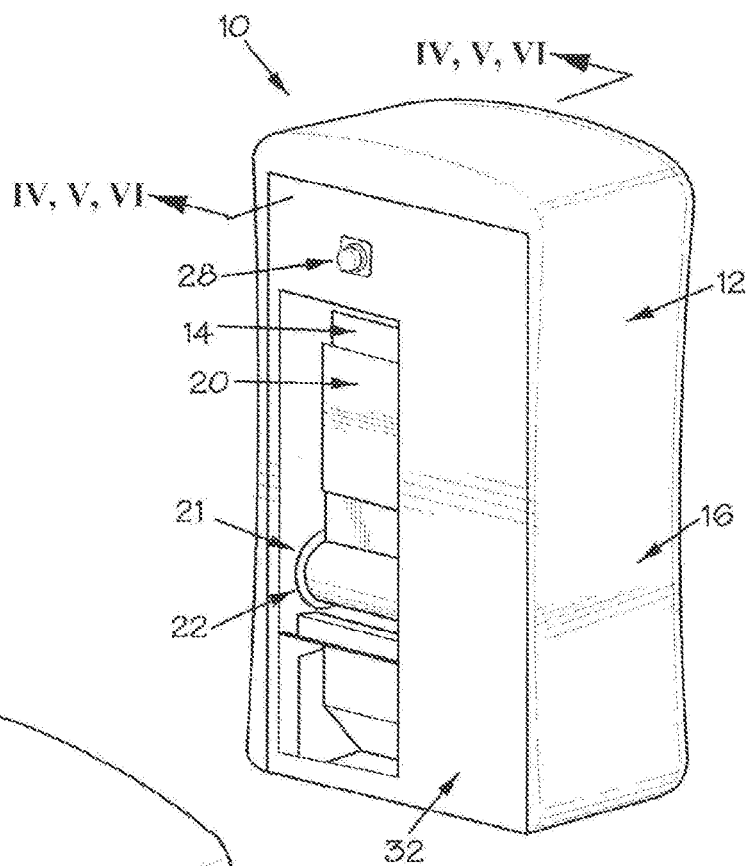
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§ 371 (c)(1),

(2) Date: **Dec. 23, 2016**(30) **Foreign Application Priority Data**

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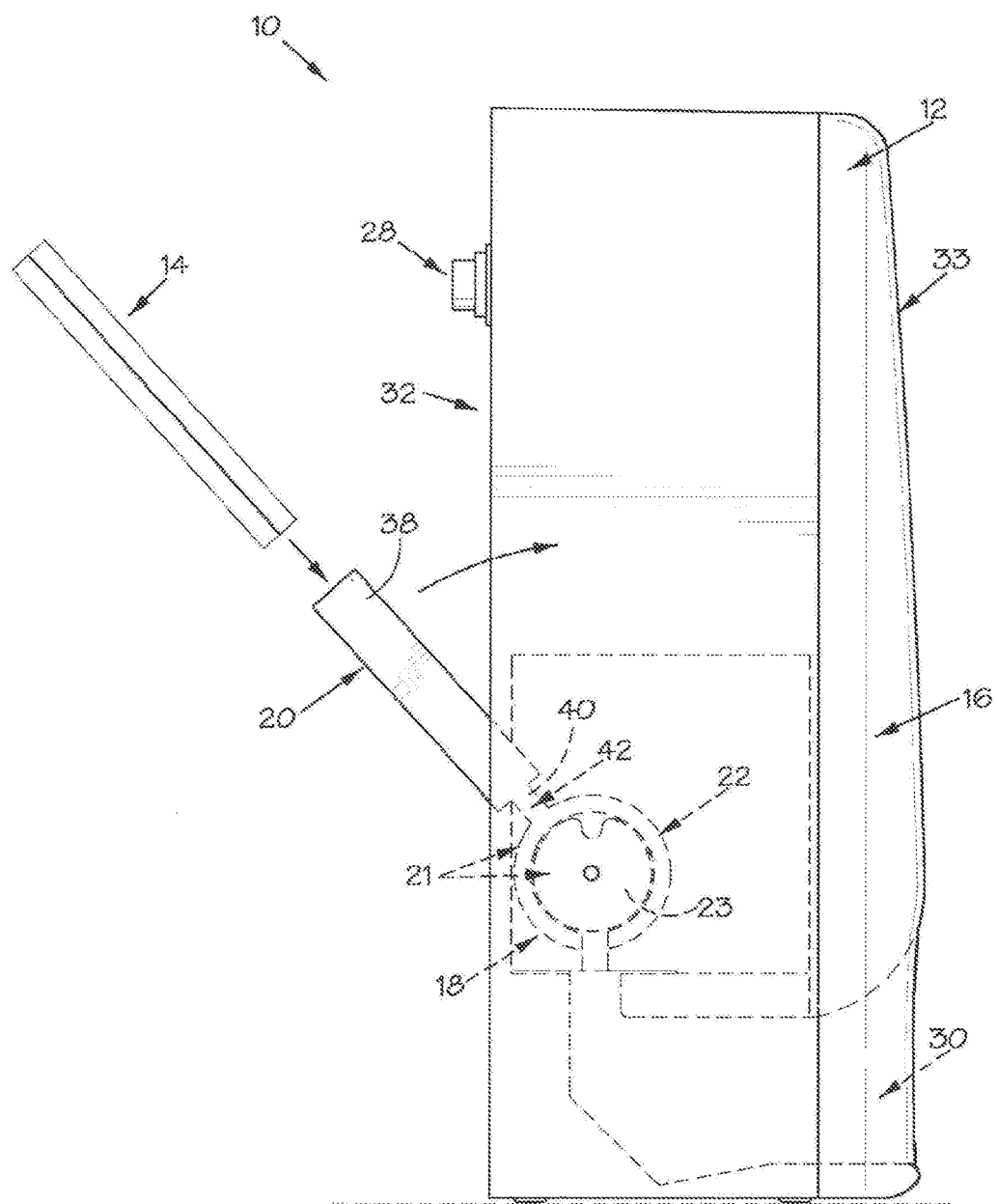


FIG 3

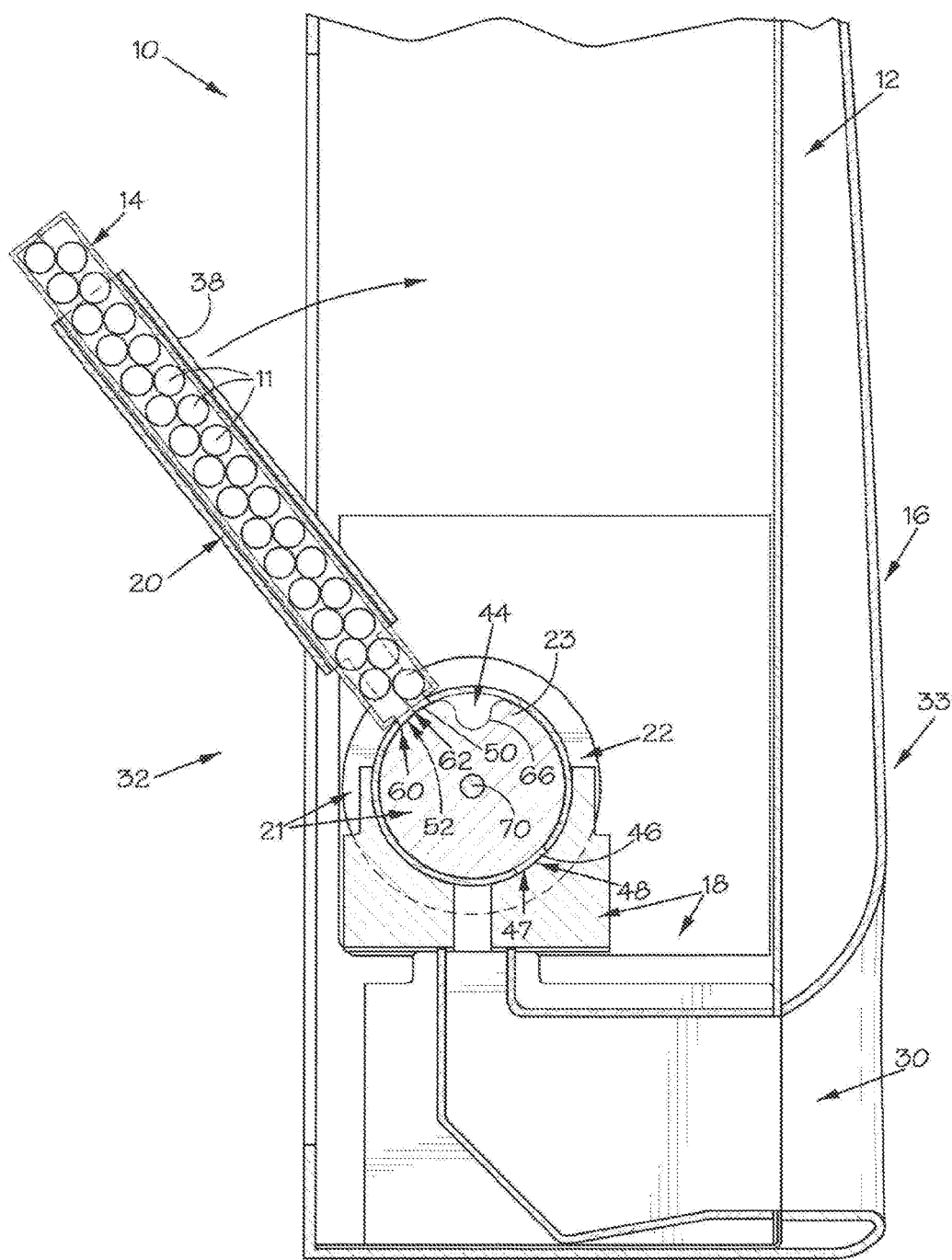


FIG 4

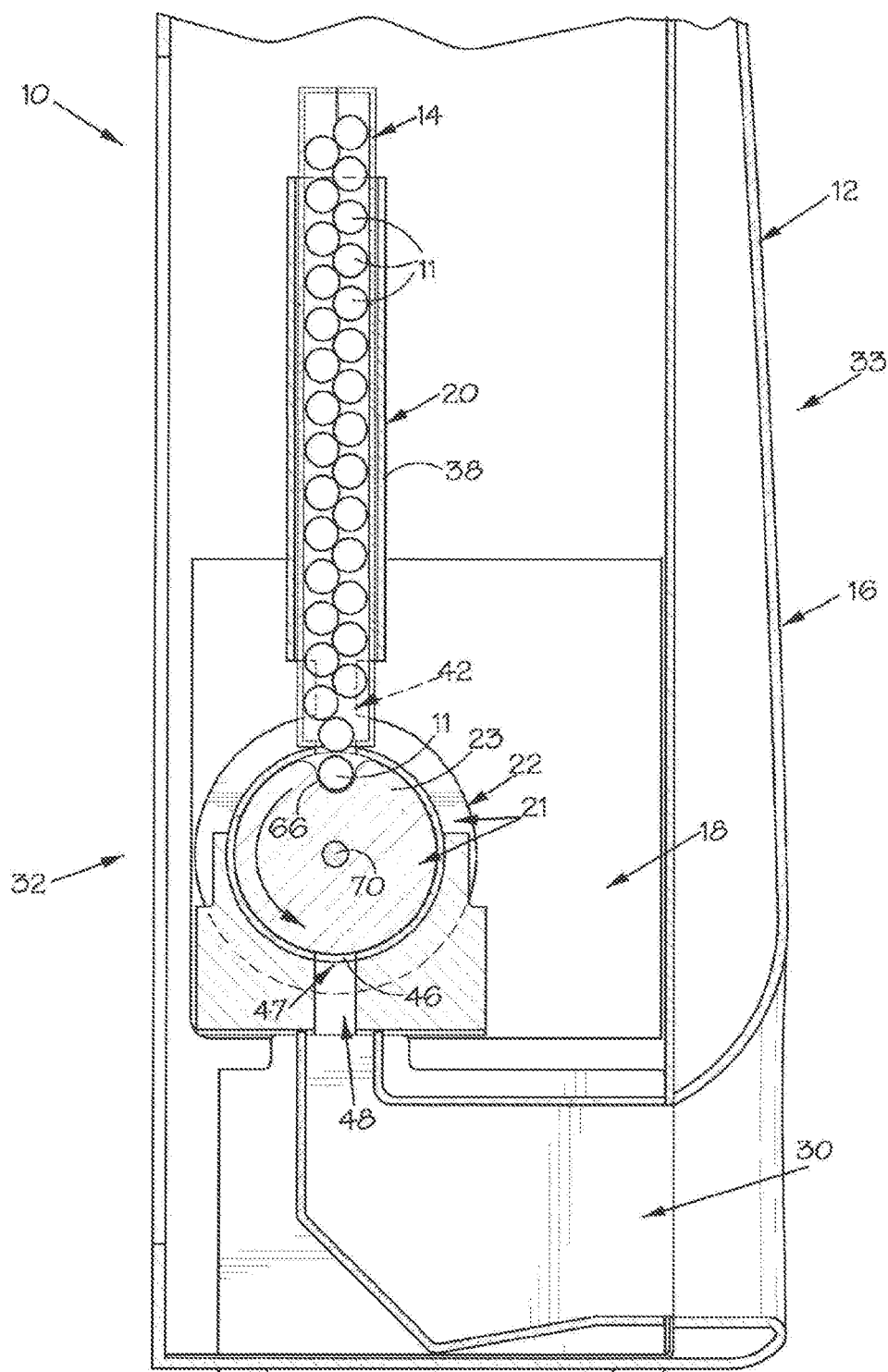


FIG 5

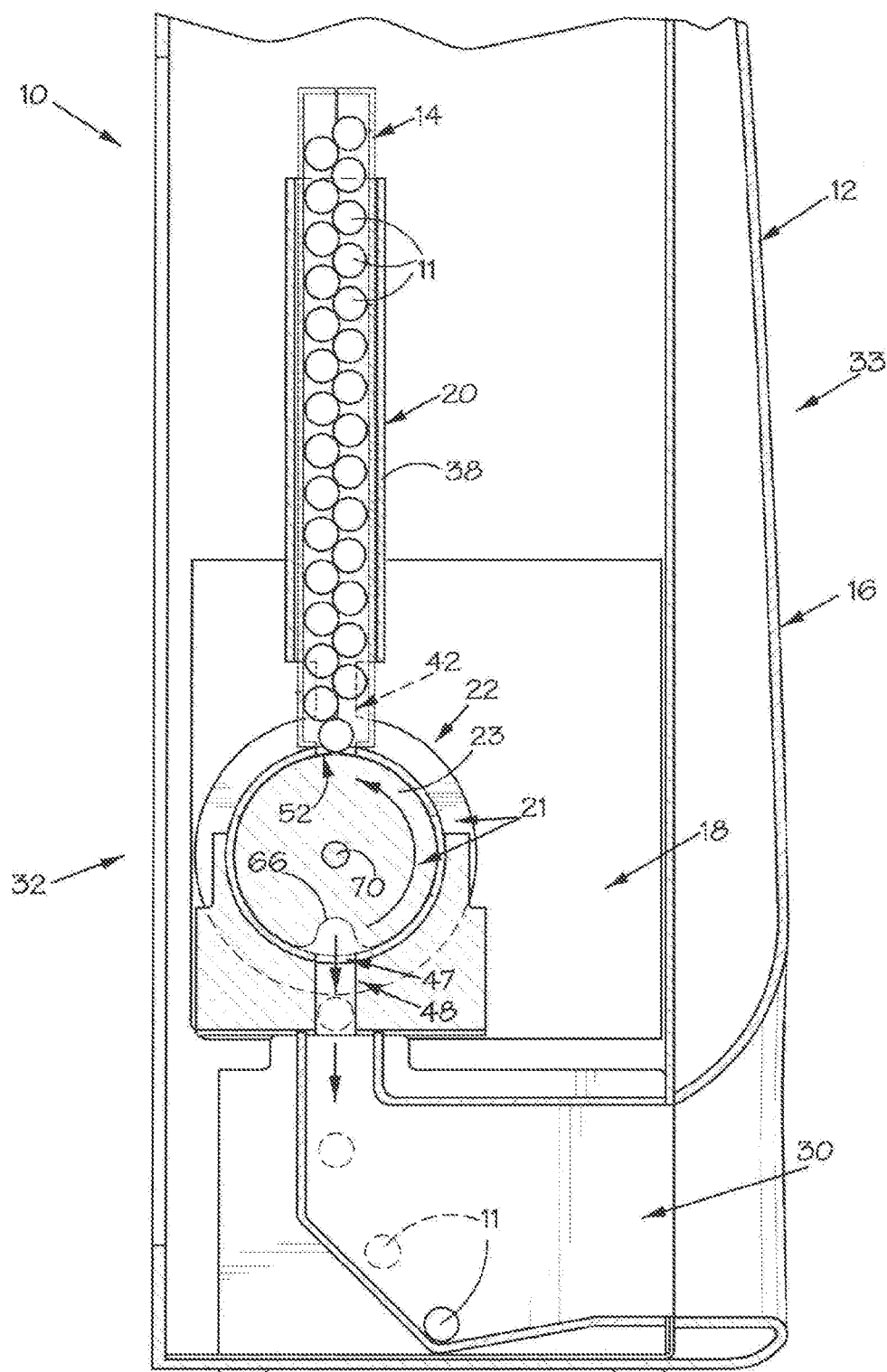


FIG 6

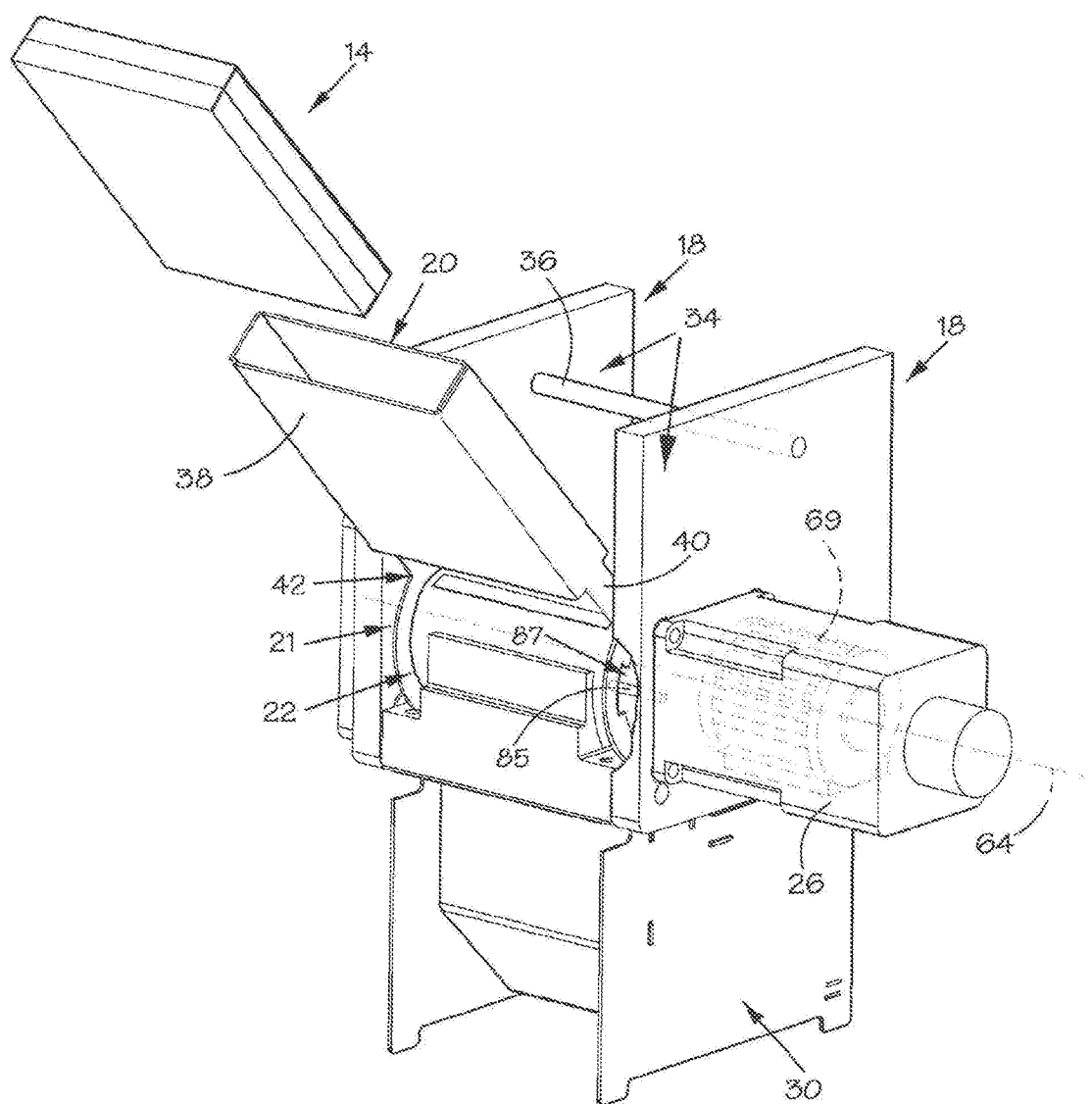
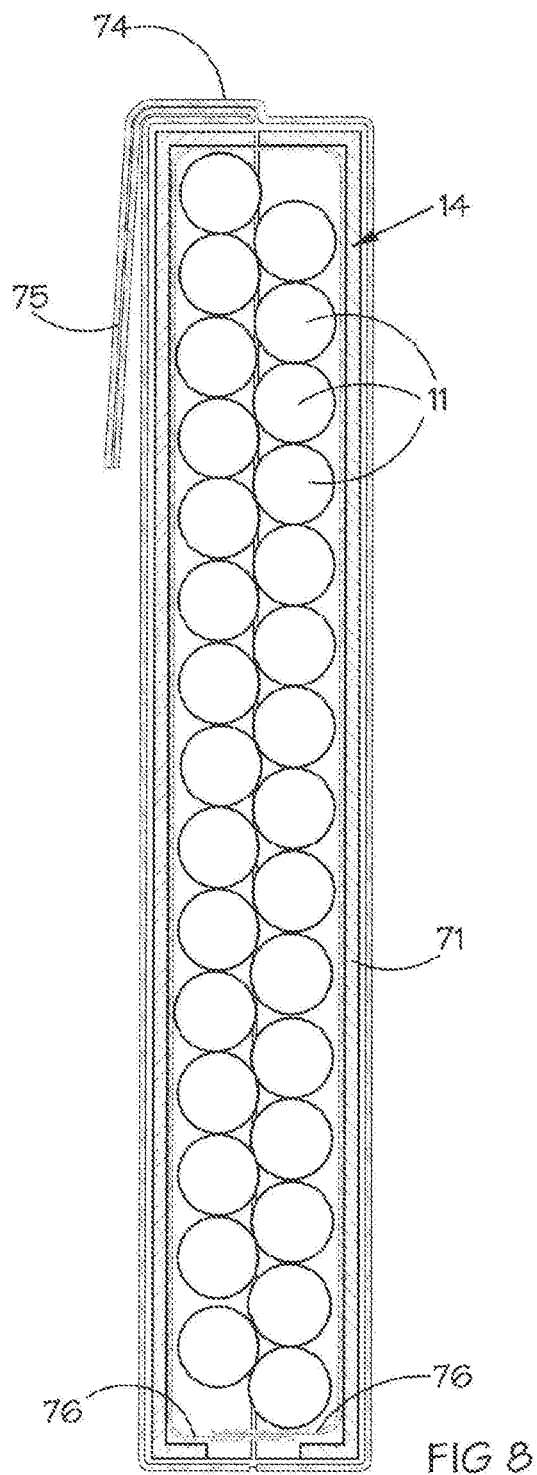
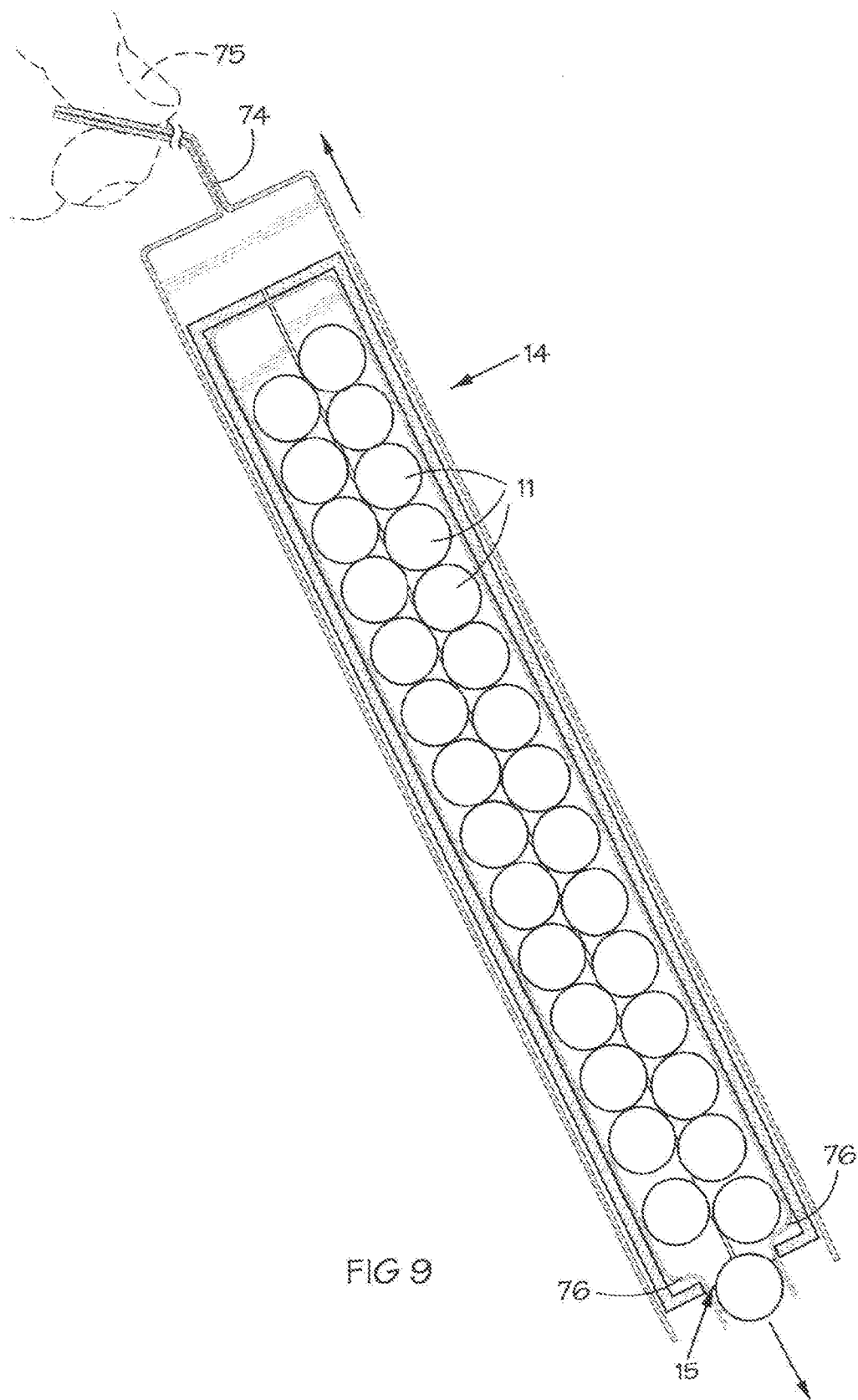


FIG 7





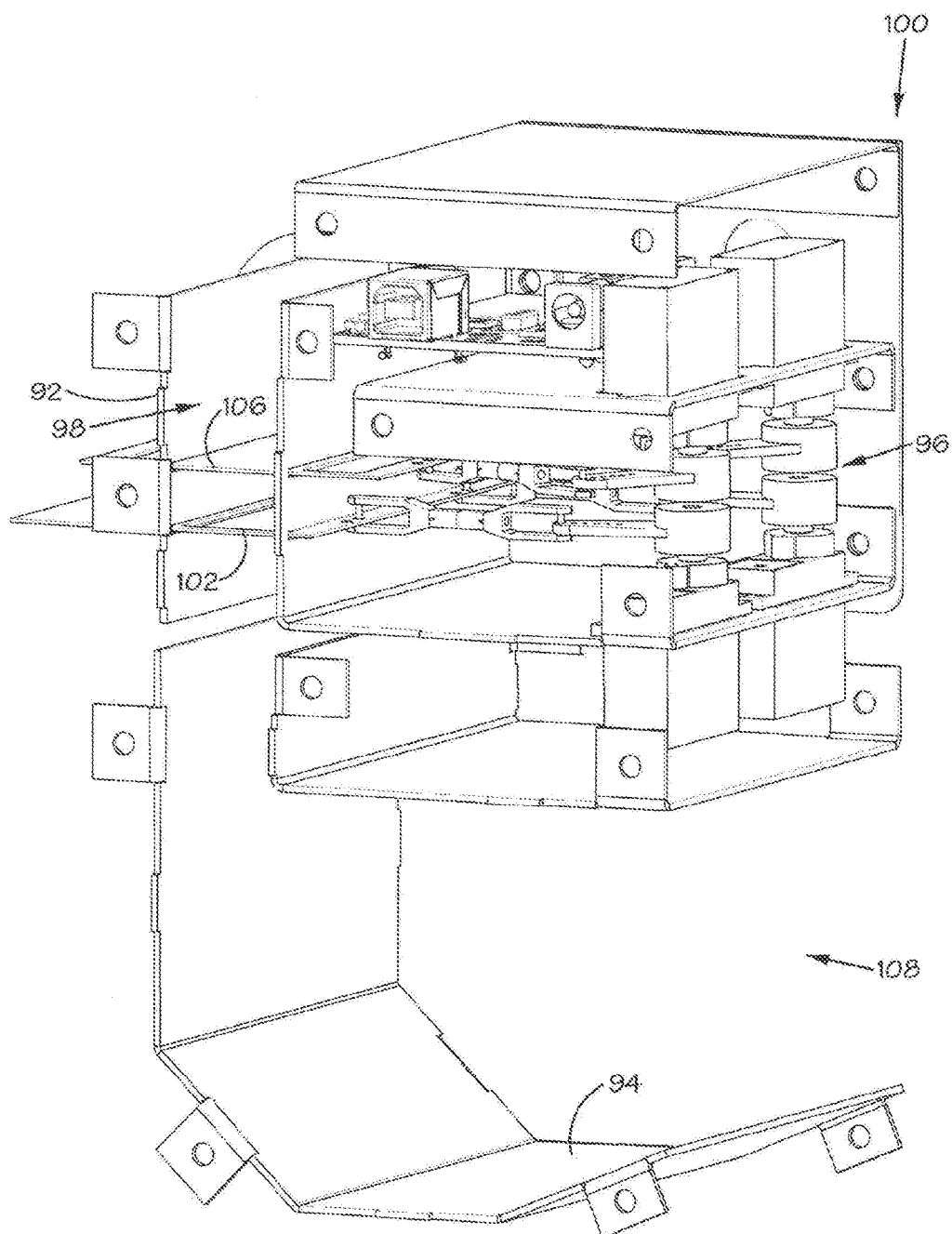


FIG 10

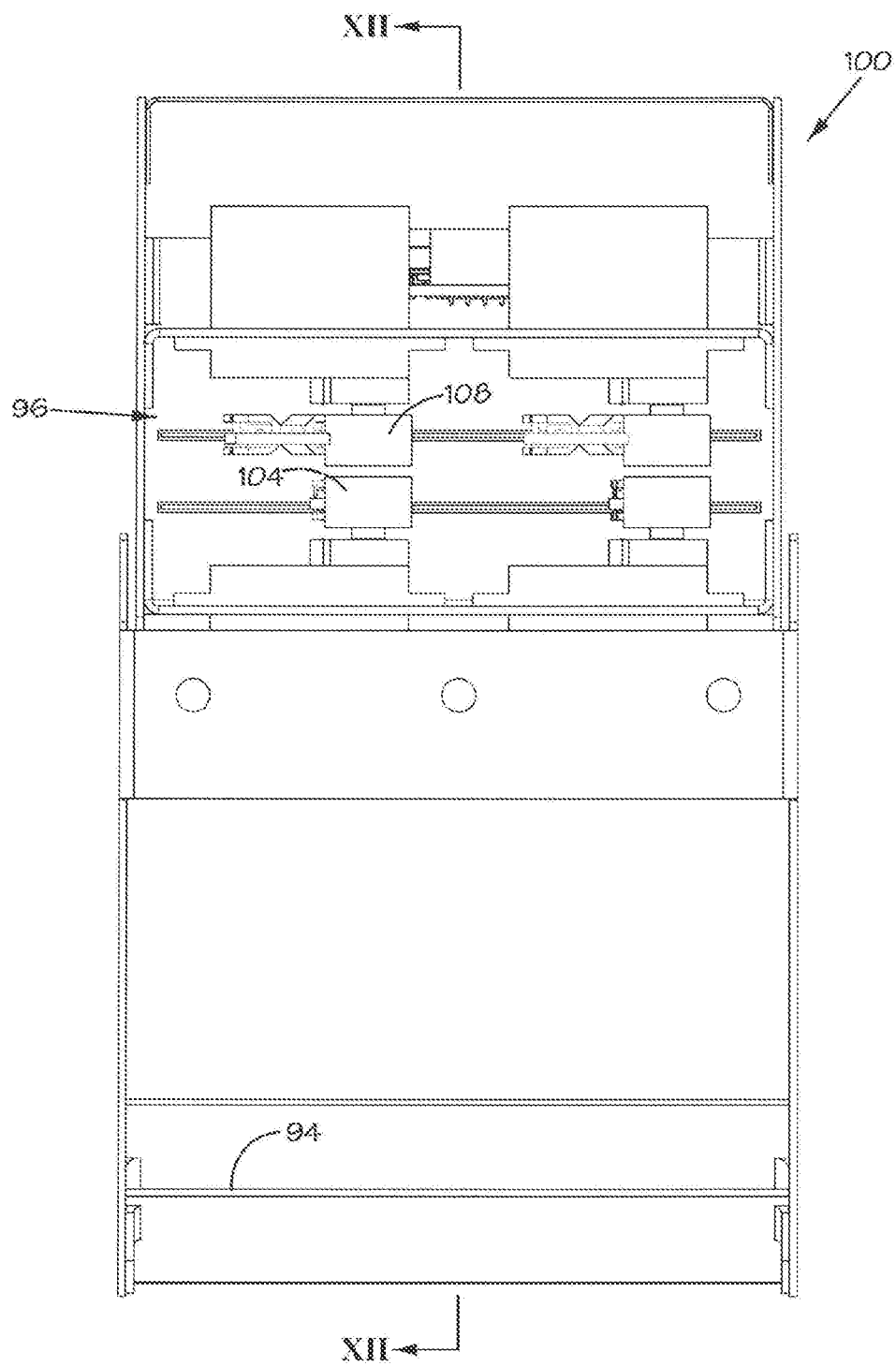


FIG 11

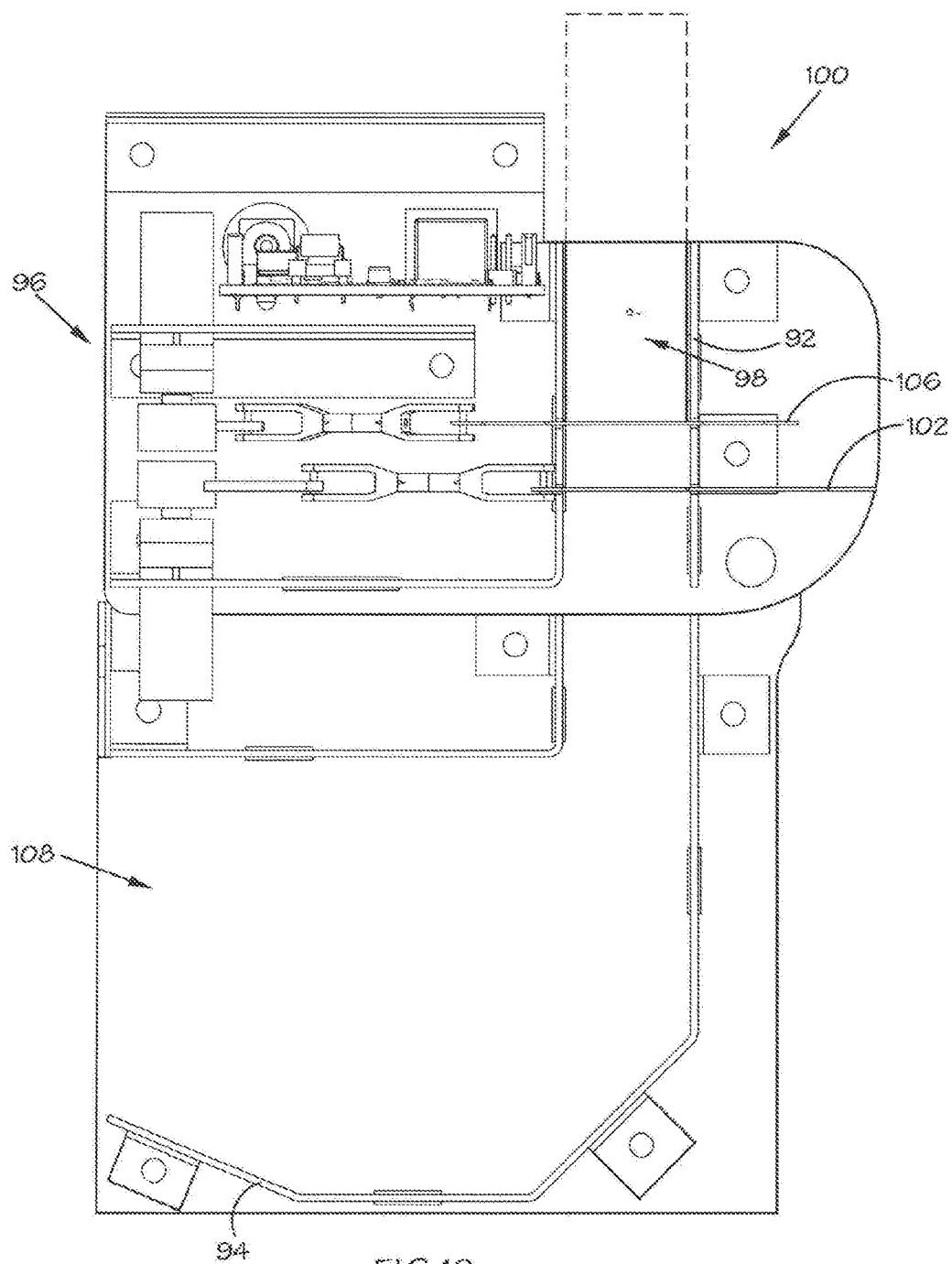


FIG 12

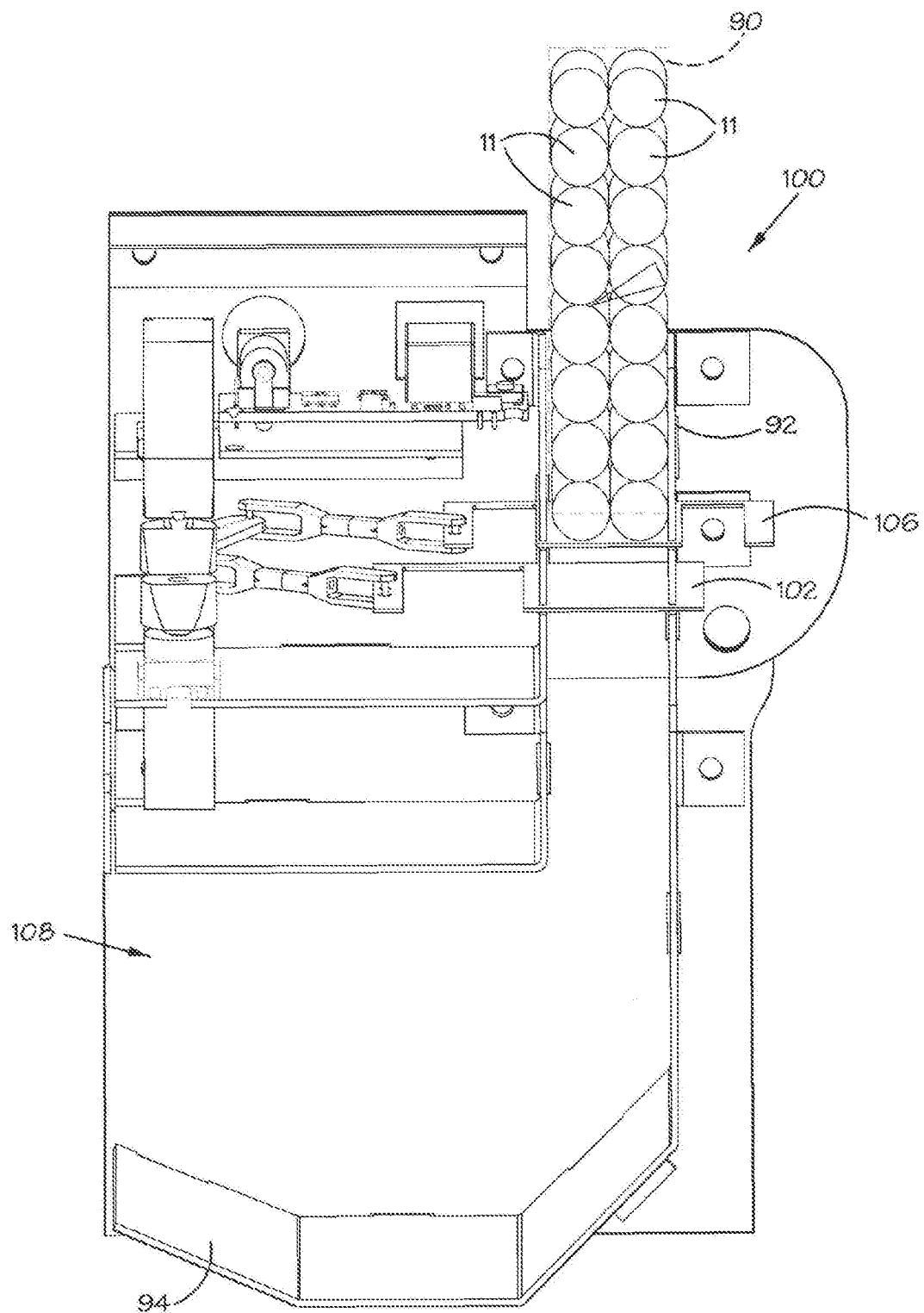


FIG 13A

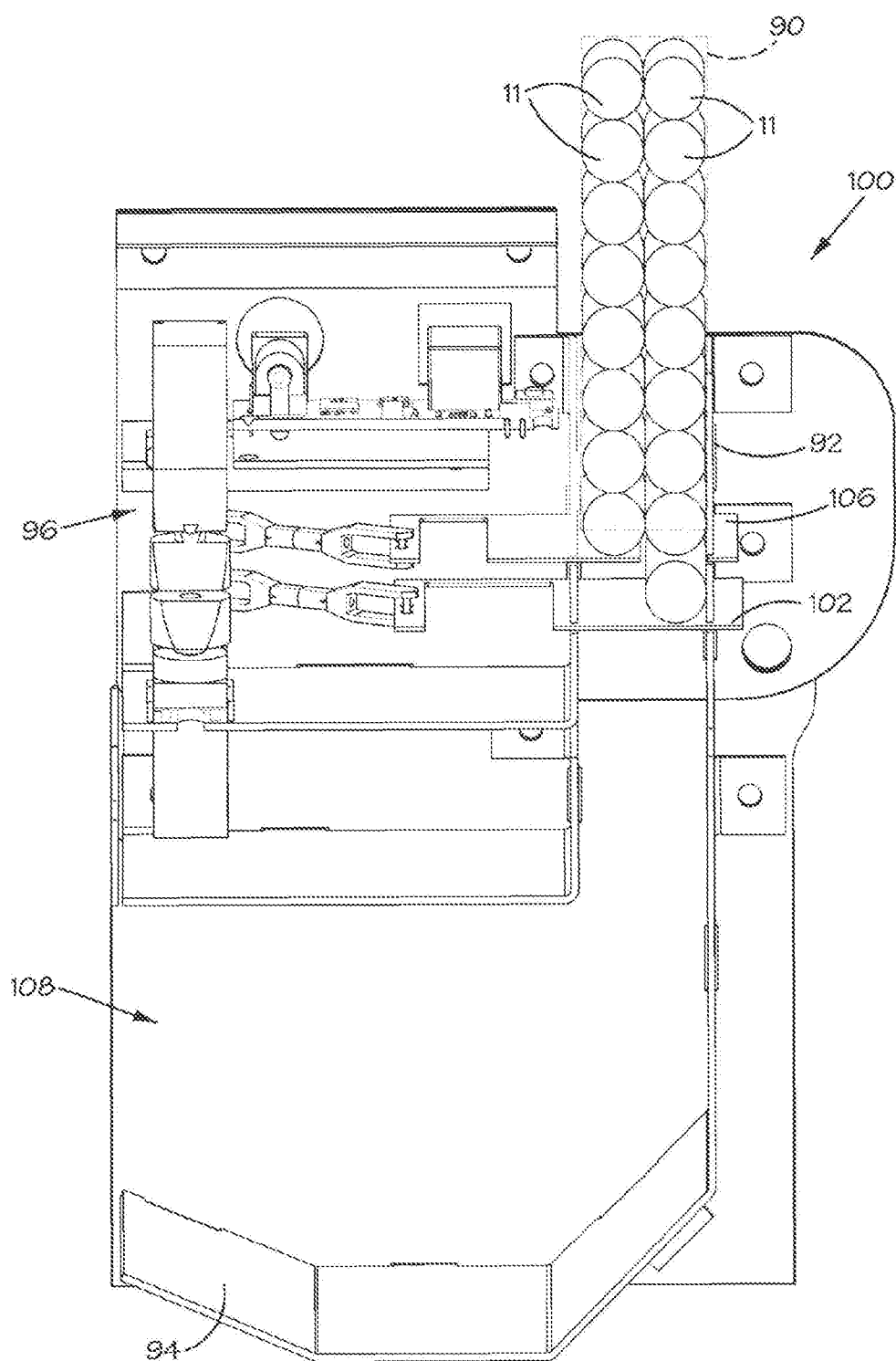
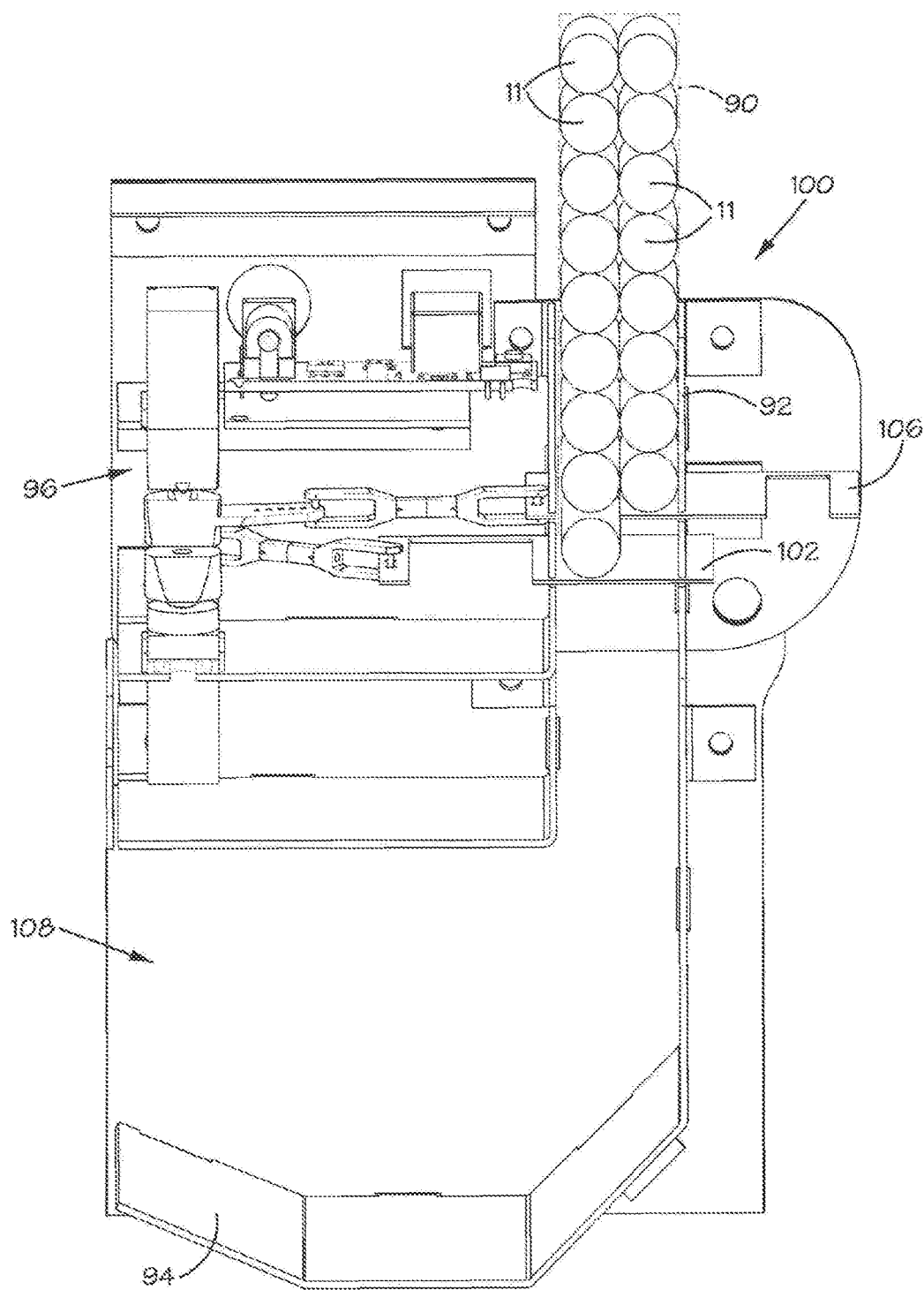


FIG 13B



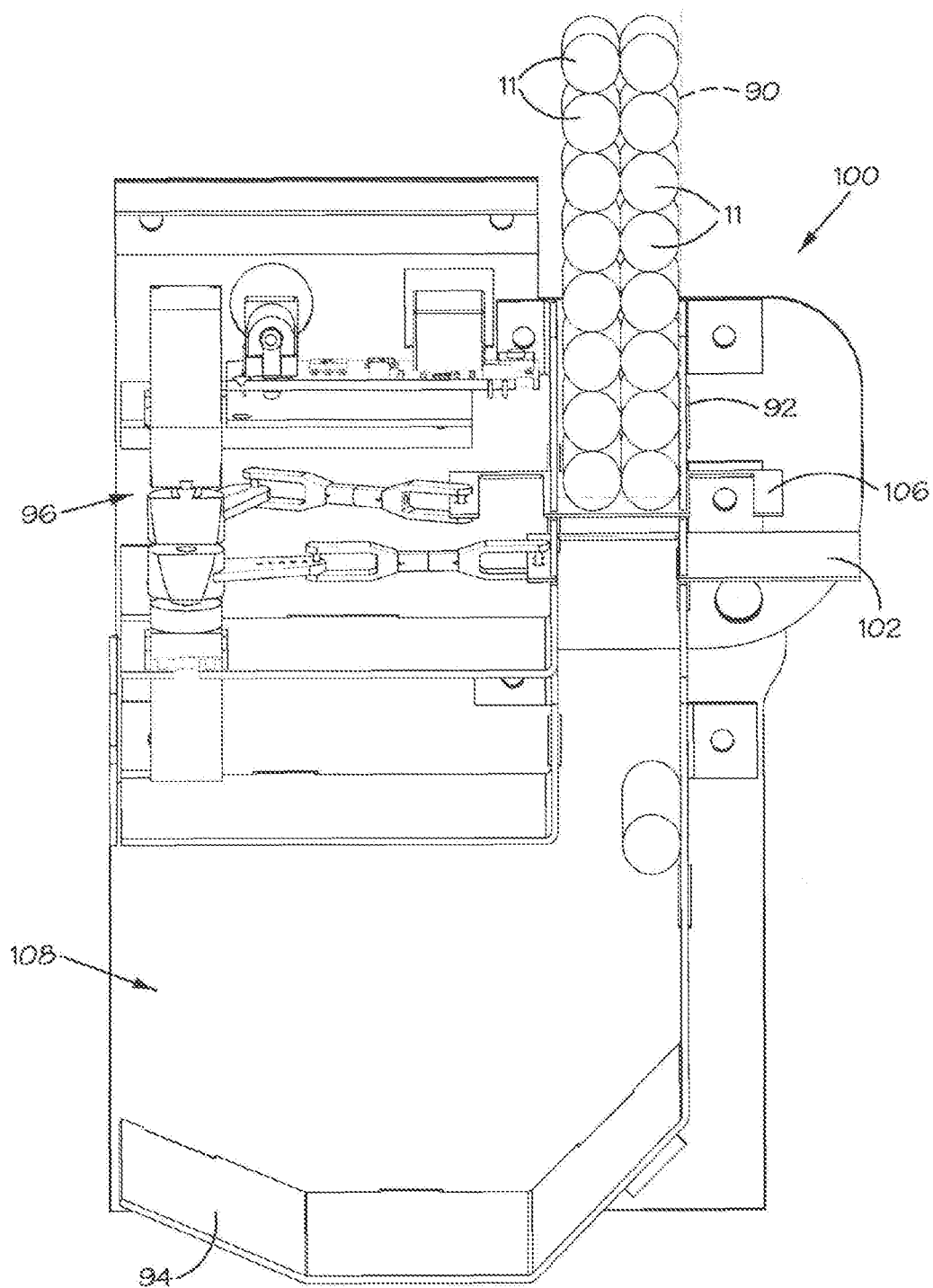


FIG 13D

DISPENSER AND DISPENSING SYSTEM**FIELD INVENTION**

[0001] This invention relates to a dispenser for dispensing elongate tubular articles and to a dispensing system for dispensing elongate tubular articles.

[0002] The dispenser and dispensing system in accordance with the invention are configured for dispensing elongate tubular articles such as single cigarettes, cigars and elongate tubular containers for example, of a type suitable for holding a cigar, containers for holding cosmetic and pharmaceutical materials, or the like. Accordingly, any reference herein to an "elongate tubular article" must be interpreted to mean a reference to an elongate tubular article such as, but not necessarily limited to, a single cigarette, a cigar, a container for holding an object such as a cigar, a container for holding a cosmetic or pharmaceutical material, or the like.

SUMMARY OF INVENTION

[0003] According to a first aspect of the invention there is provided a dispenser for dispensing elongate tubular articles, the dispenser including:

[0004] a dispenser housing which has a first major side and an opposite second major side;

[0005] an article holder which is disposed at the first major side of the dispenser housing and which is configured for receiving therein elongate tubular articles to be dispensed, the article holder having a dispensing opening at an end thereof, through which the articles are dispensed;

[0006] a manually-operable actuator which is disposed at the first major side of the dispenser housing and which is configured for dispensing one of the articles from the article holder, in use, in response to actuation of the actuator; and

[0007] a receptacle which is disposed at the second major side of the dispenser housing, for receiving one of the articles dispensed, in use, from the dispensing mechanism and from which a user may collect the dispensed article.

[0008] In a particular embodiment, a number of the articles to be dispensed may be contained in a disposable cartridge which is loaded into the article holder, the disposable cartridge having an outlet opening which is in register with the dispensing opening of the article holder.

[0009] The dispenser is configured to be used in a retail environment wherein the first major side of the dispenser housing is located adjacent an area occupied by a retail operator and wherein the second major side of the dispenser housing is located adjacent an area occupied by customers of the retailer. As such, in use, the dispenser is configured to permit the retail operator to exercise control over dispensing of articles thereby to ensure that articles are not dispensed to unsuitable customers, such as, for example, underage youths. In this regard, the Applicant envisages that the articles may be single cigarettes or containers for holding cigars or any other article which should not be dispensed to underage youths.

[0010] According to a second aspect of the invention there is provided a dispensing system for dispensing elongate tubular articles, the dispensing system including:

[0011] a disposable cartridge containing elongate tubular articles to be dispensed and having an outlet opening at an end thereof through which articles may pass, in use, out of the disposable cartridge; and

[0012] a dispenser including:

[0013] a) a housing;

[0014] b) an article holder which is supported relative to the housing and which is configured for holding the disposable cartridge therein;

[0015] c) a manually-operable actuator;

[0016] d) a dispensing mechanism which is supported relative to the housing and which is configured for dispensing one of the articles from the disposable cartridge, in use, in response to actuation of the actuator; and

[0017] e) a receptacle supported relative to the housing for receiving one of the articles dispensed, in use, from the dispensing mechanism and from which may collect the dispensed article.

[0018] The article holder may be operable to hold the disposable cartridge in an arrangement wherein the outlet opening of the cartridge is disposed adjacent an operative lower end of the article holder.

[0019] The disposable cartridge may include a cartridge body which has a box-like configuration. The cartridge body may be of a flexible sheet material. More specifically, the cartridge body may be of flexible cardboard.

[0020] In an embodiment wherein the elongate tubular articles to be dispensed, are in the form of single cigarettes, the disposable cartridge may further include a removable outer sheath which surrounds the cartridge body. The removable outer sheath may be of a sheet material. More specifically the removable outer sheath may be of cellophane. The disposable cartridge may further include a protective inner sheath located within the cartridge body and which surrounds the cigarettes contained within the cartridge body so as to ensure the freshness of the cigarettes. The removable outer sheath may define a grippable formation at an end thereof, which is located at the end opposite to the end at which the outlet opening of the disposable cartridge is located, the grippable formation permitting an operator to grip the grippable formation, in use, and pull the grippable formation so as to permit removal of the outer sheath, in use. More specifically, in use, the grippable formation permits the removal of the removable outer sheath particularly after the cartridge is loaded into the cartridge holder, in use, in a manner ensuring that cigarettes do not fall out of the outlet opening of the cartridge during loading of the article holder, in use.

[0021] The dispensing mechanism may include:

[0022] an annular article guide which is fixedly connected to the article holder and disposed, in use, at a location beneath the article holder and which is rotatably mounted relative to the housing such that the article holder and the annular article guide are rotatable between a dispensing position and a loading position wherein the article holder is accessible to an operator so as to permit the loading of a disposable cartridge into the article holder, the annular article guide defining an internal space therein; an outlet formation defining an article outlet which, when the annular article guide is in the dispensing position, leads out of a lower end of the article guide; and an inlet formation defining an inlet opening which, when the annular article guide is in the dispensing position, leads into an upper end of the article guide, the inlet opening being disposed adjacent the outlet opening of the cartridge and being dimensioned to permit passage of a single article which may pass,

in use, from the outlet opening of the disposable cartridge and through the inlet opening of the article guide; and

[0023] a rotatable dispensing drum which is rotatably received within the internal space of the annular article guide and which is rotatably about an axis of rotation about which the rotatable dispensing drum rotates, in use, the rotatable dispensing drum having at least one article receiving formation for receiving one of the articles therein,

[0024] the rotatable dispensing drum being displaceable between:

[0025] a first position wherein the rotatable dispensing drum is rotated to a position wherein the article receiving formation is in register with the inlet opening of the article guide; and

[0026] a second position wherein the rotatable dispensing drum is rotated to a position wherein the article receiving formation is in register with the article outlet of the article guide.

[0027] The dispenser may further include an electrically-powered motor which is configured and arranged for driving rotation of the rotatable dispensing drum.

[0028] The manually-operable actuator may be electrically connected to the motor and may be operable in response to actuation thereof, to electrically power the motor in order to drive rotation of the dispensing drum between its first position and its second position in order to dispense the article from the outlet of the guide.

[0029] The dispenser may include a support structure fixed relative to the housing.

[0030] The dispenser may include mounting means for mounting the dispensing mechanism to the support structure. The mounting means may include rotatable mounting means configured to permit rotational mounting of the annular article guide to the support structure.

[0031] According to a third aspect of the invention there is provided a dispenser, as defined and described hereinabove in accordance with the second aspect of the invention.

[0032] According to a fourth aspect of the invention there is provided a disposable cartridge, as described and defined hereinabove, in accordance with the second aspect of the invention.

[0033] According to a fifth aspect of the invention there is provided a dispenser for dispensing elongate tubular articles, the dispenser including:

[0034] an article holder which is configured for receiving therein, elongate tubular articles to be dispensed, the article holder defining holding chamber within which the articles are held and a dispensing opening through which articles can be dispensed from the holding chamber;

[0035] a receptacle which is disposed below the dispensing opening for receiving articles dispensed from the article holder;

[0036] a dispensing mechanism for dispensing articles from the article holder, the dispensing mechanism including:

[0037] a) a first gate member which is displaceable between a blocking position wherein the first gate member blocks the dispensing opening of the article holder and an open position wherein the first gate member permits articles to be dispensed through the dispensing opening of the article holder; and

[0038] b) a second gate member which is displaceable between a partial blocking position wherein the second gate member extends partially into the holding chamber so as to define an opening through which a single article only can

pass and a complete blocking position preventing any articles from proceeding to the dispensing opening of the article holder.

[0039] The dispenser may include a dispenser housing, the article holder being disposed at a first side of the dispenser housing. The receptacle may have a collection opening which is accessible at a second side of the dispenser housing, which is disposed opposite the first side of the dispenser housing. The dispenser is configured for use in a retail environment wherein the first side of the dispenser housing is located adjacent an area occupied by a retail operator and wherein the second side of the dispenser housing is located adjacent an area occupied by customers of the retailer. As such, in use, the dispenser includes a manually-operable activator for activating the dispensing mechanism which is located at the first side of the dispenser housing. As such, the dispenser is configured to permit the retail operator to exercise control over dispensing of articles thereby to ensure that articles are not dispensed to unsuitable customers, such as, for example, underage youths. In this regard, the Applicant envisages that the articles may be single cigarettes, cigars or containers for holding cigars or any other articles which should not be dispensed to underage youths.

BRIEF DESCRIPTION OF THE DRAWINGS

[0040] Further features of the invention are described hereinafter by way of a non-limiting example of the invention, with reference to and as illustrated in the accompanying schematic drawings. In the drawings:

[0041] FIG. 1 shows a perspective view of a rear side of a cigarette dispenser in accordance with the invention;

[0042] FIG. 2 shows a perspective view of a front side of a cigarette dispenser in accordance with the invention;

[0043] FIG. 3 shows a side view of the cigarette dispenser of FIG. 1, illustrating an article holder of the dispenser illustrated in a loading position;

[0044] FIG. 4 shows a sectional view of the cigarette dispenser of FIG. 1, sectioned along section lines IV-IV of FIG. 1, illustrating the article holder of the dispenser illustrated in the loading position;

[0045] FIG. 5 shows a sectional view of the cigarette dispenser of FIG. 1, sectioned along section lines V-V of FIG. 1, illustrating the article holder in a dispensing position and illustrating a rotatable dispensing drum of a dispensing mechanism of the dispenser in a first position;

[0046] FIG. 6 shows a sectional view of the cigarette dispenser of FIG. 1, sectioned along section lines VI-VI of FIG. 1 illustrating the article holder of the dispenser in the dispensing position and illustrating the rotatable dispensing drum in a second position;

[0047] FIG. 7 shows a perspective view of the cartridge holder and the dispensing mechanism of the dispenser of FIG. 1, illustrating mounting means of the cigarette dispenser and showing the article holder of the dispenser in the loading position, and being loaded with a disposable cartridge;

[0048] FIG. 8 shows a sectional view of the cartridge of FIG. 7, sectioned along section lines VIII-VIII of FIG. 7, illustrating the cartridge prior to being opened;

[0049] FIG. 9 shows a sectional view of the cartridge of FIG. 8, illustrating the cartridge being opened;

[0050] FIG. 10 shows a perspective view of another embodiment of a cigarette dispenser in accordance with the invention;

[0051] FIG. 11 shows a front view of the cigarette dispenser of FIG. 10;

[0052] FIG. 12 shows a sectional side view of the cigarette dispenser of FIG. 10, sectioned along section line XII-XII of FIG. 11; and

[0053] FIGS. 13A-13D, show the cigarette dispenser of FIG. 12, illustrating the modes of operation of the cigarette dispenser for dispensing cigarettes.

DETAILED DESCRIPTION OF THE DRAWINGS

[0054] With reference to FIGS. 1 to 9 of the drawings a dispensing system for dispensing elongate tubular articles in the form of a cigarette dispensing system in accordance with the invention, is indicated generally by the reference numeral 10. The cigarette dispensing system 10 is configured for dispensing elongate tubular articles in the form of single cigarettes 11 which are each individually sealed in a cellophane wrapping.

[0055] The cigarette dispensing system 10 includes a single cigarette dispenser 12 and a disposable cartridge 14 configured for containing cigarettes 11 to be dispensed and having an outlet opening 15 at an end thereof, through which cigarettes may pass, in use, out of the disposable cartridge 14, as will be explained in more detail hereinbelow.

[0056] The single cigarette dispenser 12 includes a housing 16; a support structure 18 fixed to the housing; an article holder comprising a cartridge holder 20 for holding the disposable cartridge 14; a dispensing mechanism 21 including an annular cigarette guide 22 and a rotatable dispensing drum 23 for dispensing cigarettes from the disposable cartridge 14; mounting means in the form of a mounting system for mounting the cartridge holder 20 and the dispensing mechanism 21 to the support structure 18; an electrically powered motor assembly 26; an actuator 28; and a cigarette receptacle 30.

[0057] The housing 16 is of a moulded plastics material and has a first major side in the form of a rear side 32 and an opposite second major side in the form of a front side 33.

[0058] The support structure 18 is fixedly mounted to the housing 16 and includes a pair of spaced apart support brackets 34 and a connecting rod 36 for connecting the brackets 34 a predetermined distance apart from one another.

[0059] The cartridge holder 20 is disposed at the rear side 32 of the housing 16 and is configured for receiving therein the disposable cartridge 14 containing cigarettes 11 to be dispensed. The cartridge holder 20 includes a cartridge holster 38 which is configured and dimensioned for slidably receiving the disposable cartridge 14 therein, as will be explained in more detail hereinbelow and a pair of spaced apart holster supports 40 extending from opposite short sides of the cartridge holster 38 and which are connected at operative lower ends 42 thereof to the annular cigarette guide 22, as best illustrated in FIGS. 3 and 7 of the drawings.

[0060] The dispensing mechanism 21 is configured for dispensing a single cigarette from the disposable cartridge 14 and is supported by the support structure 18 at a location beneath the cartridge holder 20, as will be explained in more detail hereinbelow. The annular cigarette guide 22 of the dispensing mechanism 21 is fixedly connected to the cartridge holder 20 as described hereinabove, and is disposed, in use, at a location beneath the cartridge holder 20 and is rotatable mounted relative to the housing 16 such that the cartridge holder 20 and the annular cigarette guide 20 are rotatable between a dispensing position, as illustrated in

FIGS. 1, 5 and 6 of the drawing and a loading position, as illustrated in FIGS. 3, 4 and 7 of the drawings, wherein the cartridge holder 20 is accessible to an operator so as to permit the loading of a disposable cartridge 14 into the cartridge holder 20. The annular cigarette guide 22 defines an internal space 44 therein; an outlet formation 46 defining a cigarette outlet 47, which when the annular cigarette guide 22 is in the dispensing position, leads out of a lower end 48 of the annular cigarette guide 22 and an inlet formation 50 defining an inlet opening 52 which, when the annular cigarette guide 22 is in the dispensing position, leads into an upper end 60 of the annular cigarette guide 22, the inlet opening 52 being disposed adjacent the outlet opening 15 of the disposable cartridge 14 and being dimensioned to permit passage of a single cigarette 11 which may pass, in use, from the outlet opening 15 of the disposable cartridge 14 and through the inlet opening 62 of the annular cigarette guide 22. The rotatable dispensing drum 23 of the dispensing mechanism 21 is rotatably received within the internal space 44 of the annular cigarette guide 22 and is rotatable about an axis of rotation 64 about which the rotatable dispensing drum 23 rotates, in use. The rotatable dispensing drum 23 has a cigarette receiving formation 66 for receiving a cigarette 11 therein, as best illustrated in FIG. 5 of the drawings and as will be explained in more detail hereinbelow. More particularly, the rotatable dispensing drum 23 is displaceable between a first position as illustrated in FIG. 5 of the drawings, and a second position, as illustrated in FIG. 6 of the drawings. More specifically, FIG. 5 of the drawings illustrates the first position wherein the rotatable dispensing drum 23 is rotated to a position wherein the cigarette receiving formation 66 is in register with the inlet opening 52 of the annular cigarette guide 22 and receives a cigarette therein, which passed, in use, through the inlet opening 52 of the annular cigarette guide 22 and into the cigarette receiving formation 66 of the dispensing drum 23. FIG. 6 of the drawings illustrates the second position wherein the rotatable dispensing drum 23 is rotated to a position wherein the cigarette receiving formation 66 is in register with the cigarette outlet 47 of the annular cigarette guide 22 and is operable to release the cigarette such that the cigarette passes through the cigarette outlet 47 of the annular cigarette guide 22.

[0061] The electrically powered motor assembly 26 is configured and arranged for driving rotation of the rotatable dispensing drum 23 and comprises a motor housing 68 which is fixedly mounted to the support brackets 34, as illustrated in FIG. 7 of the drawings; a motor 69 rotatably mounted within the motor housing 68 and a rotating motor drive shaft 70 (illustrated in section view in FIGS. 4, 5 and 6 of the drawings) which extends from the motor 69.

[0062] The mounting system includes the rotatable dispensing drum mounting system and the cartridge holder and annular cigarette guide mounting system. The rotatable dispensing drum mounting system is provided by the rotating motor drive shaft 70 which extends through an aperture (not shown) provided therefore in a particular one of the support brackets 34 to which the motor housing 68 is fixedly mounted, the motor drive shaft 70 being received within the rotatable dispensing drum 23 in an arrangement permitting the motor drive shaft 70 to drive rotation of the rotatable dispensing drum 23 about the axis of rotation 64.

[0063] With reference to FIG. 7 of the drawings, the cartridge holder and the annular cigarette guide mounting

system, is provided by a number of radially spaced mounting guide pins **85** which extend from the pair of support brackets **34** and which are received within a number of corresponding radially spaced grooves **87** which are provided on outer sides of the annular cigarette guide **22** and which are configured to slidably receive the mounting guide pins **85** therein, in an arrangement permitting the annular cigarette guide **22** and the cartridge holder **20** connected thereto to rotate, in use, so as to provide for rotational displacement of the cartridge holder **20** between the loading position and the dispensing position, as described and illustrated hereinabove.

[0064] The actuator **28** is disposed at the rear side **32** of the housing **16** and is operable in response to actuation thereof to electrically power the motor **69** in order to drive rotation of the rotatable dispensing drum **23** between the first position and the second position, in order to dispense the cigarette from the cigarette outlet **47** of the annular cigarette guide **22** in the manner described and illustrated hereinabove.

[0065] The cigarette receptacle **30** is best illustrated in FIGS. **2**, **4**, **5** and **6** of the drawings. The cigarette receptacle **30** is mounted to the support brackets **34** and supported beneath the dispensing mechanism **21**, as illustrated in FIG. **7** of the drawings. More specifically, the cigarette receptacle **30** is disposed at the front side **33** of the housing and is configured for receiving a cigarette dispensed, in use, from the dispensing mechanism **21** as best illustrated in FIG. **6** of the drawings and from which a user may collect the dispensed cigarette.

[0066] With reference to FIGS. **4**, **5**, **6**, **8** and **9** of the drawings, the disposable cartridge **14** includes a cartridge body **71**; a removable outer sheath **74**; and a protective inner sheath **76**. The cartridge body **72** has a box-like configuration and is of a flexible sheet material, such as, for example, cardboard. The removable outer sheath **74** surrounds the cartridge body **72** and is of sheet material, such as, for example, cellophane. The removable outer sheath **74** forms a hermetic seal to ensure the freshness of the cigarettes contained within the cartridge body **72** of the disposable cartridge **14**. The removable outer sheath **74** has a grippable formation **75** which is grasped by an operator, in use, and pulled as illustrated in FIG. **9** of the drawings in order to permit the removable outer sheath **74** which is removed in the manner illustrated in FIG. **9** of the drawings. More particularly, the grippable formation **75** is defined at an end of the outer sheath **74** which is located at the end opposite to the end at which the outlet opening **15** of the disposable cartridge **14** is located, the grippable formation permitting an operator to grip the grippable formation **75**, in use, and pull the grippable formation **75** so as to permit removal of the outer sheath **74**, in use. More specifically, in use, the grippable formation **75** permits the removal of the removable outer sheath **74** particularly after the disposable cartridge **14** is loaded into the cartridge holder **20**, in use, in a manner ensuring that cigarettes do not fall out of the outlet opening **15** of the disposable cartridge **14** during loading of the cartridge holder **20**, in use. The protective inner sheath **76** is located within the cartridge body **71** and surrounds the cigarettes contained within the cartridge body **71** so as to ensure the freshness of the cigarettes.

[0067] The applicant envisages that the disposable cartridge **14** thus ensures that the single cigarette dispenser **12** is operable to dispense "fresh" cigarettes which are particu-

larly kept fresh by the the removable outer sheath **74** and the protective inner sheath **76**. Furthermore, the applicant envisages that the cigarettes dispensed by the single cigarette dispenser **12** will be of high quality, as the cigarettes are particularly not handled by the hands of the operator, as the loading of the cigarettes, as described and illustrated hereinabove, does not require the operator to touch the cigarettes at any stage. This is greatly advantageous as a problem previously associated with the dispensing of single cigarettes is that the operator has previously been required to handle the cigarettes. This is undesirable because the cigarettes are fragile and are easily damaged. Furthermore oil and moisture from the operator's hands contaminates and damages the cigarettes. Furthermore, the handling of cigarettes by the operator is particularly unhygienic and may contribute to the spread of diseases or may be perceived to do so.

[0068] The applicant also envisages that the single cigarette dispenser **12** is advantageous as the single cigarette dispenser **12** is configured to be used in a retail environment wherein the rear side **32** of the dispenser housing **16** is located adjacent an area occupied by a retail operator and wherein the front side **33** of the dispenser housing **16** is located adjacent an area occupied by customers of the retailer. As such, in use, the single cigarette dispenser **12** is configured to permit the retail operator to exercise control over the dispensing of cigarettes, thereby to ensure that cigarettes are not dispensed to unsuitable customers, such as, for example, underage youths.

[0069] With reference to FIGS. **10** to **13** of the drawings, another embodiment of a dispensing system for dispensing elongate tubular articles, in the form of a cigarette dispensing system in accordance with the invention, is designated generally by the reference numeral **100**. The cigarette dispensing system **10** is configured for the dispensing elongate tubular articles in the form of single cigarettes **11** which are contained in a cartridge **90**.

[0070] The dispenser **100** comprises, broadly, an article holder in the form of a cartridge holder **92** for holding the cartridge **90**, a receptacle **94** which is disposed below the article holder for receiving articles dispensed from the article holder, and a dispensing mechanism generally designated by the reference numeral **96** for dispensing articles from the article holder.

[0071] The article holder defines a holding chamber **98** within which the cartridge **90** is received in a snug fit. The cartridge **90** has an openable lower end which can be opened to allow cigarettes contained therein to pass therethrough. The cigarettes are held in the cartridge in two columns as is shown in FIGS. **13A-13D**.

[0072] The dispensing mechanism includes a first gate member **102** which is acted upon by a series of levers connected to a servo motor and a second gate member **106** which is acted upon by a series of levers connected to a servo motor. The first gate member is displaceable between a blocking position (as is shown in FIGS. **13A** and **13D**) wherein the gate member **102** blocks the dispensing opening of the article holder and an open position wherein the gate member **102** permits articles to be dispensed through the dispensing opening of the article holder. The dispensing mechanism includes a second gate member **106** which is displaceable between a partial blocking position wherein the gate member **106** extends partially into the holding chamber **98** so as to define an opening through which a single article

only can pass (as is shown in FIGS. 13B and 13C) and a complete blocking position (as is shown in FIGS. 13A and 13D) preventing any articles from proceeding the dispensing opening of the article holder.

[0073] In use, in its open position, the gate member 102 allows articles to be dispensed from the article holder, while in the blocking position the gate member 102 closes off the dispensing article holder. The gate member 106 is in the form of a plate having cut-outs formed therein through which single cigarettes can pass when the cut-out is brought into register with a cigarette above it. With reference to FIG. 13A of the drawings, the gate member 102 is shown in its blocking position and the gate member 106 is in a complete blocking position preventing any cigarettes from proceeding to the dispensing opening of the article holder. In FIG. 13B the gate member 102 is in its blocking position, while the gate member 106 is displaced to the left in a partial blocking position permitting a cigarette in the right hand column to drop onto an upper side of the gate member 102. In order to dispense the cigarette, the gate member 106 is again displaced to the right into a complete blocking position and the gate member 102 is displaced to the left into its open position permitting the cigarette to drop into the receptacle 94 from which it can be collected. In FIG. 13C, the gate member 102 is shown in its blocking position, with the gate member 106 displaced to the right bringing the left hand cut-out into register with the lowermost cigarette in the left hand column thereby permitting the cigarette to drop onto the upper side of the first gate member 102. In similar fashion, the cigarette is permitted to, drop into the receptacle 94 by further displacement of the first and second gate members. FIG. 13D shows the gate member 102 in its open position and the gate member 106 in its complete blocking position.

[0074] As for the dispenser 10, the dispenser 100 includes a dispenser housing, with the article holder 92 being disposed at a first side of the dispenser housing. As such, the receptacle has a collection opening 108 which is accessible at an opposite side of the dispenser housing. The dispenser is configured for use in a retail environment where the first side of the dispenser housing is located adjacent an area occupied by a retail operator and wherein the opposite side of the dispenser housing is located adjacent an area occupied by customers of the retailer. As such, in use, the dispenser includes a manually-operable actuator for actuating the dispensing mechanism, which is located at the first side of the dispensing housing such that the dispenser is configured to permit the retail operator to exercise control over dispensing of articles. In this manner, articles such as cigarettes or cigars which are not to be dispensed to underage youths, can be controlled.

[0075] It will be appreciated that the exact configuration of the dispenser and dispensing system described hereinabove may vary greatly while still incorporating the essential features defined herein. More specifically, the Applicant envisages that the dispenser and dispensing system may be configured for dispensing other elongate tubular articles such as elongate tubular containers of a type suitable for holding a cigar, containers for holding cosmetic or pharmaceutical materials, or the like.

1. A dispensing system for dispensing elongate tubular articles, the dispensing system including:

a disposable cartridge containing elongate tubular articles to be dispensed and having an outlet opening at an end

thereof through which articles may pass, in use, out of the disposable cartridge; and

a dispenser including:

- a) a housing;
- b) article holder which is supported relative to the housing and which is configured for holding the disposable cartridge therein;
- c) a manually-operable actuator;
- d) a dispensing mechanism which is supported relative to the housing and which is configured for dispensing one of the articles from the disposable cartridge, in use, in response to actuation of the actuator; and
- e) a receptacle supported relative to the housing for receiving one of the articles dispensed, in use, from the dispensing mechanism and from which a user may collect the dispensed article.

2. The dispensing system as claimed in claim 1, wherein the article holder is operable to hold the disposable cartridge in an arrangement wherein the outlet opening of the cartridge is disposed adjacent an operative lower end of the article holder.

3. The dispensing system as claimed in claim 1, wherein the disposable cartridge includes a cartridge body which has a box-like configuration.

4. The dispensing system as claimed in claim 1, wherein the cartridge body is of a flexible sheet material.

5. The dispensing system as claimed in claim 4, wherein the cartridge body is of flexible cardboard.

6. The dispensing system as claimed in claim 1, wherein the elongate tubular articles to be dispensed, are in the form of single cigarettes, the disposable cartridge further including a removable outer sheath which surrounds the cartridge body.

7. The dispensing system as claimed in claim 6, wherein the removable outer sheath is of a sheet material.

8. The dispensing system as claimed in claim 7, wherein the removable outer sheath is of cellophane.

9. The dispensing system as claimed in claim 8, wherein the disposable cartridge further includes a protective inner sheath located within the cartridge body, and which surrounds the cigarettes contained within the cartridge body so as to ensure the freshness of the cigarettes.

10. The dispensing system as claimed in claim 6, wherein the removable outer sheath defines a grippable formation at an end thereof which is located at the end opposite to the end at which the outlet opening of the disposable cartridge is located, the grippable formation permitting an operator to grip the grippable formation, in use, and pull the grippable formation so as to permit removal of the outer sheath, in use.

11. The dispensing system as claimed in claim 1, wherein the dispensing mechanism includes:

an annular article guide which is fixedly connected to the article holder and disposed, in use, at a location beneath the article holder and which is rotatably mounted relative to the housing such that the article holder and the annular article guide are rotatable between a dispensing position and a loading position wherein the article holder is accessible to an operator so as to permit the loading of a disposable cartridge into the article holder, the annular article guide defining an internal space therein; an outlet formation defining an article outlet which, when the annular article guide is in the dispensing position, leads out of a lower end of the article guide; and an inlet formation defining an inlet

opening which, when the annular article guide is in the dispensing position, leads into an upper end of the article guide, the inlet opening being disposed adjacent the outlet opening of the cartridge and being dimensioned to permit passage of a single article which may pass, in use, from the outlet opening of the disposable cartridge and through the inlet opening of the article guide; and

a rotatable dispensing drum which is rotatably received within the internal space of the annular article guide and which is rotatably about an axis of rotation about which the rotatable dispensing drum rotates, in use, the rotatable dispensing drum having at least one article receiving formation for receiving one of the articles therein,

the rotatable dispensing drum being displaceable between:

a first position wherein the rotatable dispensing drum is rotated to a position wherein the article receiving formation is in register with the inlet opening of the article guide; and

a second position wherein the rotatable dispensing drum is rotated to a position wherein the article receiving formation is in register with the article outlet of the article guide.

12. The dispensing system as claimed in claim 1, wherein the dispenser further includes an electrically-powered motor which is configured and arranged for driving rotation of the rotatable dispensing drum.

13. The dispensing system as claimed in claim 12, wherein the manually-operable actuator is electrically connected to the motor and is operable in response to actuation thereof, to electrically power the motor in order to drive rotation of the dispensing drum between its first position and its second position in order to dispense the article from the outlet of the guide.

14. The dispensing system as claimed in claim 1, wherein the dispenser includes a support structure fixed relative to the housing.

15. The dispensing system as claimed in claim 14, wherein the dispenser includes mounting means for mounting the dispensing mechanism to the support structure.

16. The dispensing system as claimed in claim 15, wherein the mounting means includes rotatable mounting means configured to permit rotational mounting of the annular article guide to the support structure.

17. (canceled)

18. (canceled)

19. A dispenser for dispensing elongate tubular articles, the dispenser including:

an article holder which is configured for receiving therein, elongate tubular articles to be dispensed, the article holder defining holding chamber within which the articles are held and a dispensing opening through which articles can be dispensed from the holding chamber;

a receptacle which is disposed below the dispensing opening for receiving articles dispensed from the article holder;

a dispensing mechanism for dispensing articles from the article holder, the dispensing mechanism including:

a) a first gate member which is displaceable between a blocking position wherein the first gate member blocks the dispensing opening of the article holder and an open position wherein the first gate member permits articles to be dispensed through the dispensing opening of the article holder; and

b) a second gate member which is displaceable between a partial blocking position wherein the second gate member extends partially into the holding chamber so as to define an opening through which a single article only can pass and a complete blocking position preventing any articles from proceeding to the opening of the article holder.

20. The dispenser as claimed in claim 19, which includes a dispenser housing, the article holder being disposed at a first side of the dispenser housing.

21. The dispenser as claimed in claim 20, wherein the receptacle has a collection opening which is accessible at a second side of the dispenser housing, which is disposed opposite the first side of the dispenser housing.

22. The dispenser as claimed in claim 21, wherein the dispenser is configured for use in a retail environment wherein the first side of the dispenser housing is located adjacent an area occupied by a retail operator and wherein the second side of the dispenser housing located adjacent an area occupied by customers of the retailer.

23. The dispenser as claimed in claim 22, wherein the dispenser includes a manually-operable activator for activating the dispensing mechanism which is located at the first side of the dispenser housing.

24. A dispenser for dispensing elongate tubular articles, the dispenser including:

a dispenser housing which has a first major side and an opposite second major side;

an article holder which is disposed at the first major side of the dispenser housing and which is configured for receiving therein elongate tubular articles to be dispensed, the article holder having a dispensing opening at an end thereof, through which the articles are dispensed;

a manually-operable actuator which is disposed at the first major side of the housing;

a dispensing mechanism which is supported by the housing and which is configured for dispensing one of the articles from the article holder, in use, in response to actuation of the actuator; and

a receptacle which is disposed at the second major side of the dispenser housing, for receiving one of the articles dispensed, in use, from the dispensing mechanism and from which a user may collect the dispensed article.

25. The dispenser as claimed in claim 24, wherein a number of the articles to be dispensed are contained in a disposable cartridge which is loaded into the article holder, the disposable cartridge having an outlet opening which is in register with the dispensing opening of the article holder.

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