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(54) **FIREARM WITH REAL-TIME CARTRIDGE COUNTER**

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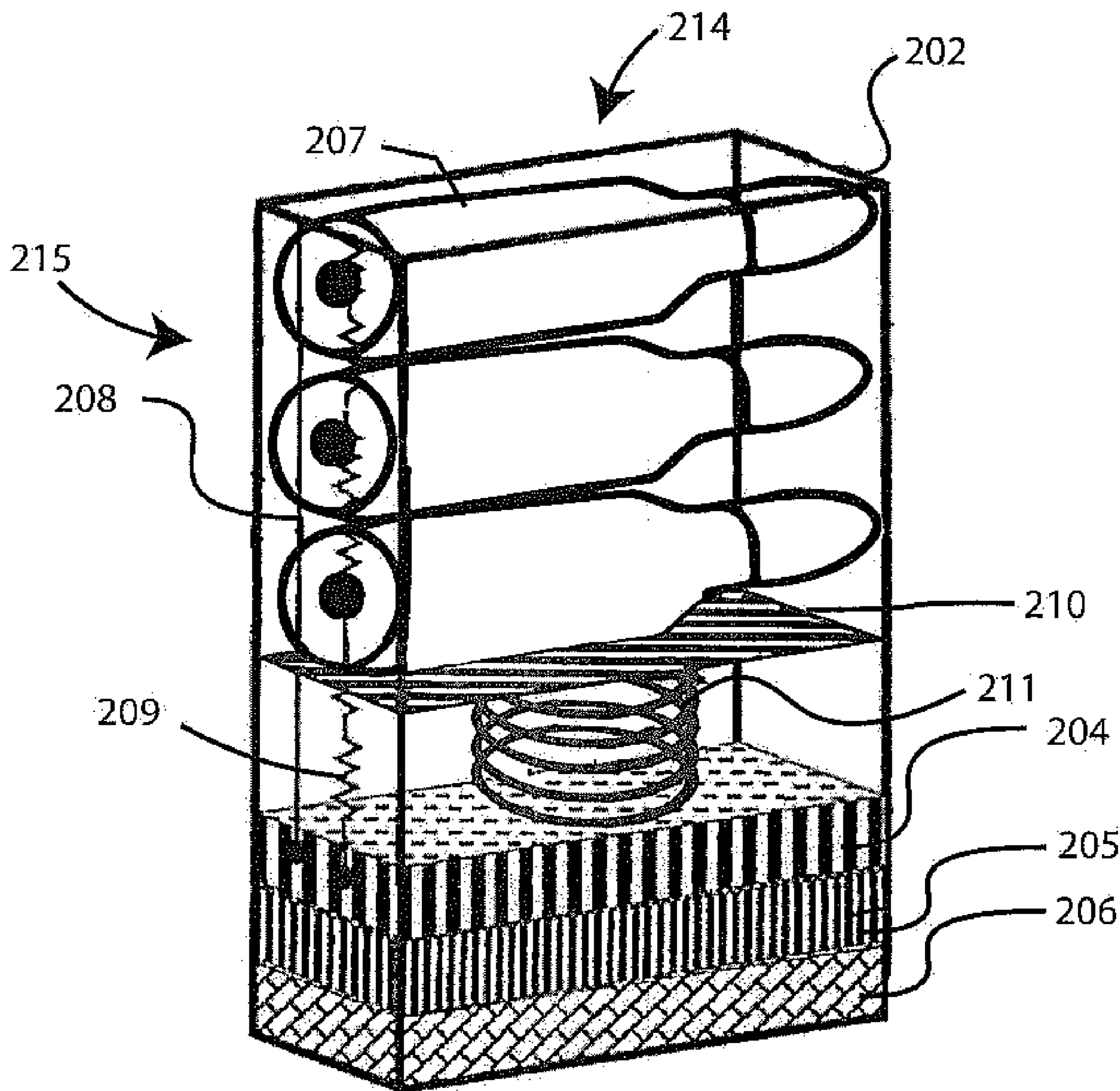
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(57) **ABSTRACT**

A firearm with a real-time cartridge counter display function, comprising a firearm body, a cartridge clip, a scope, and ammunition cartridge or cartridges loaded within the cartridge clip.



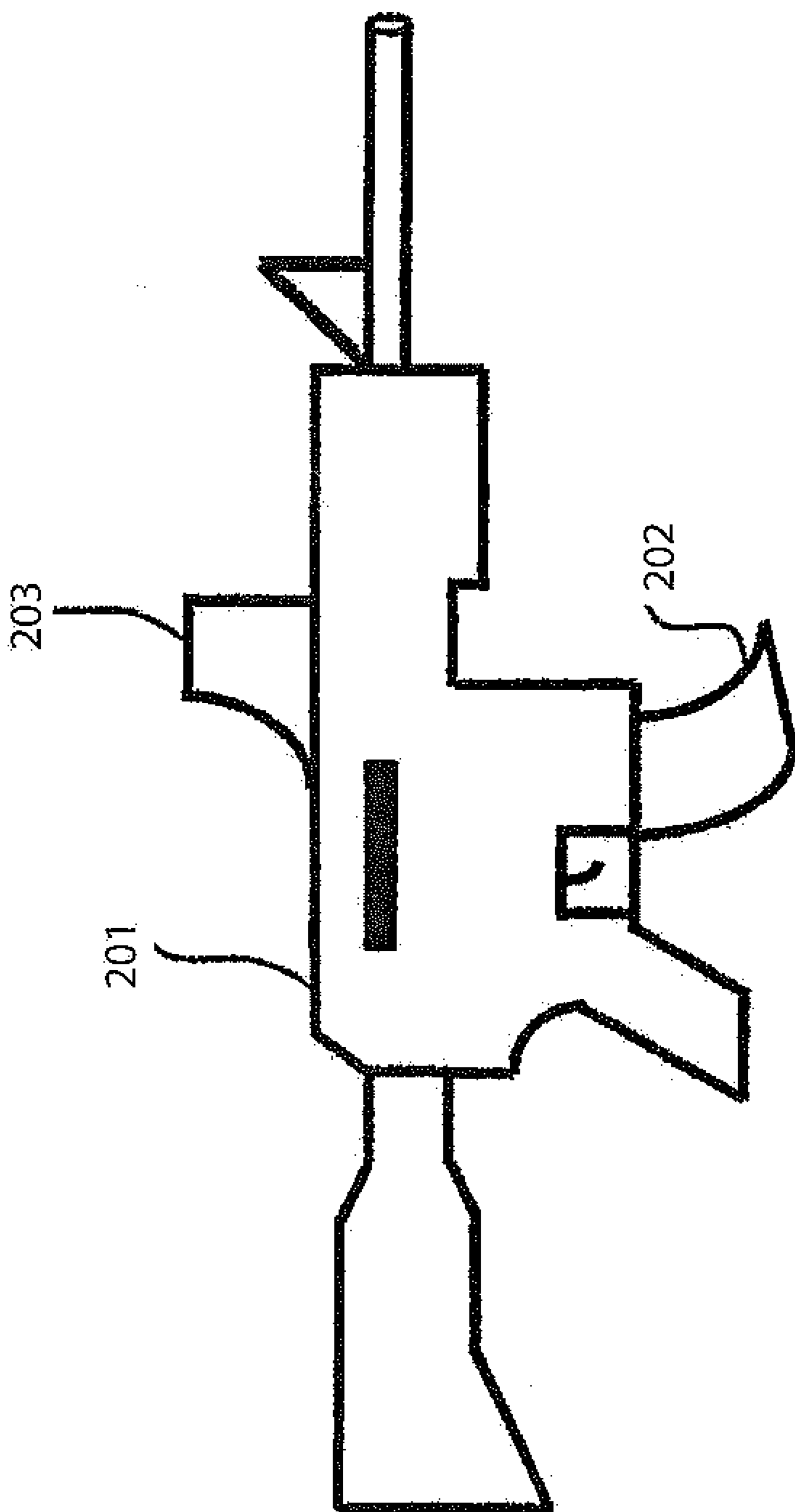


FIG. 1

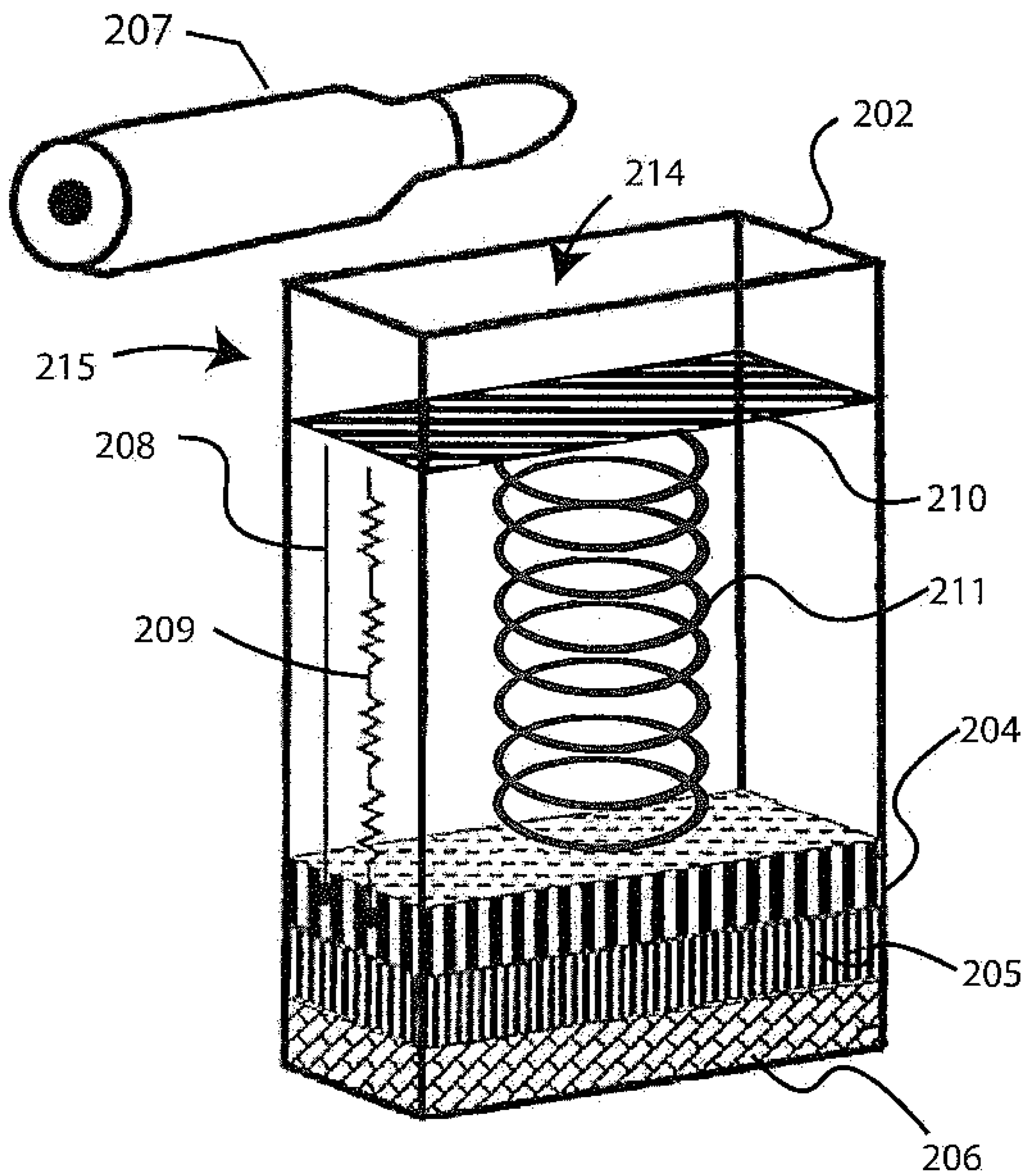


FIG. 2

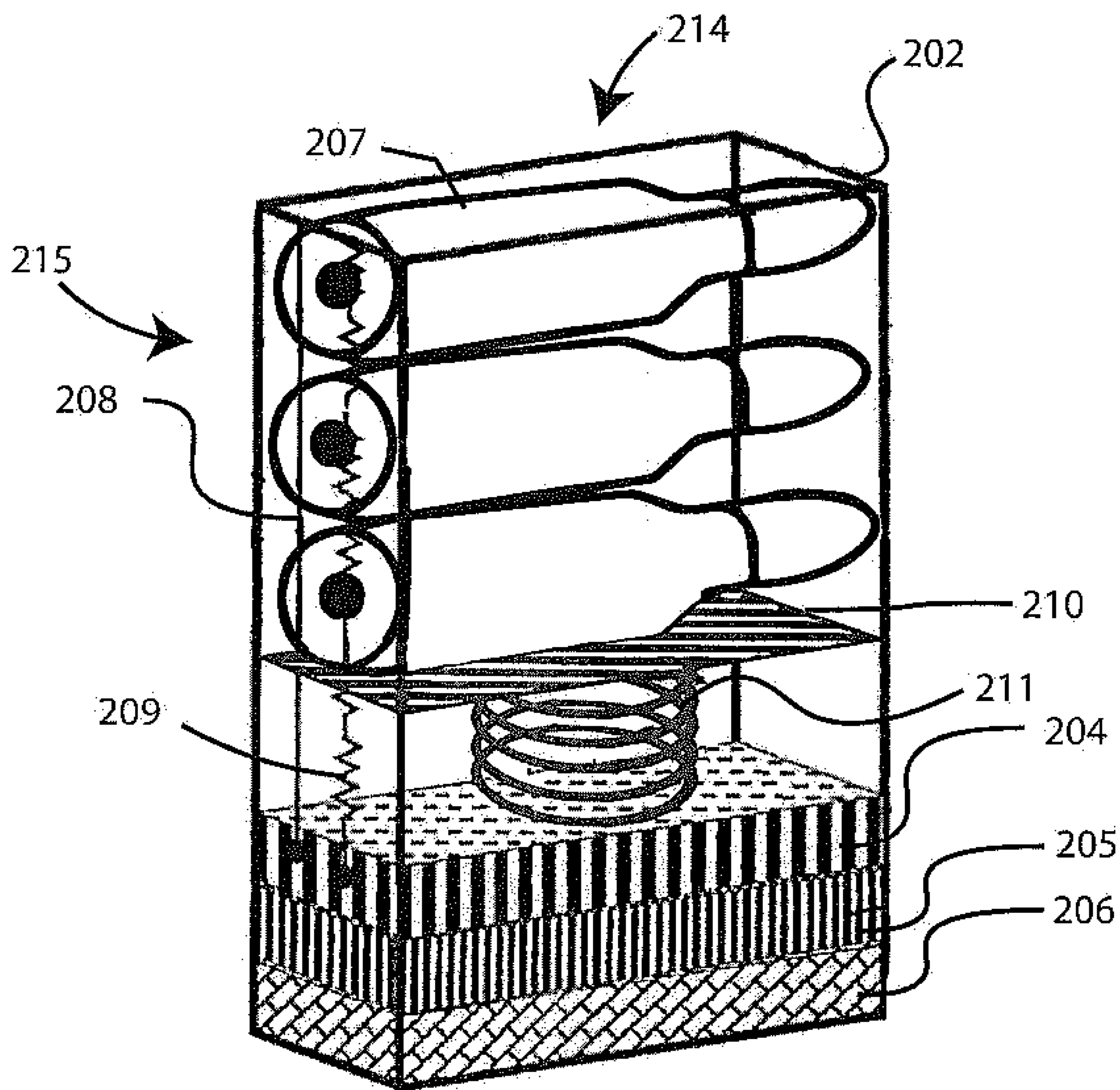


FIG. 3

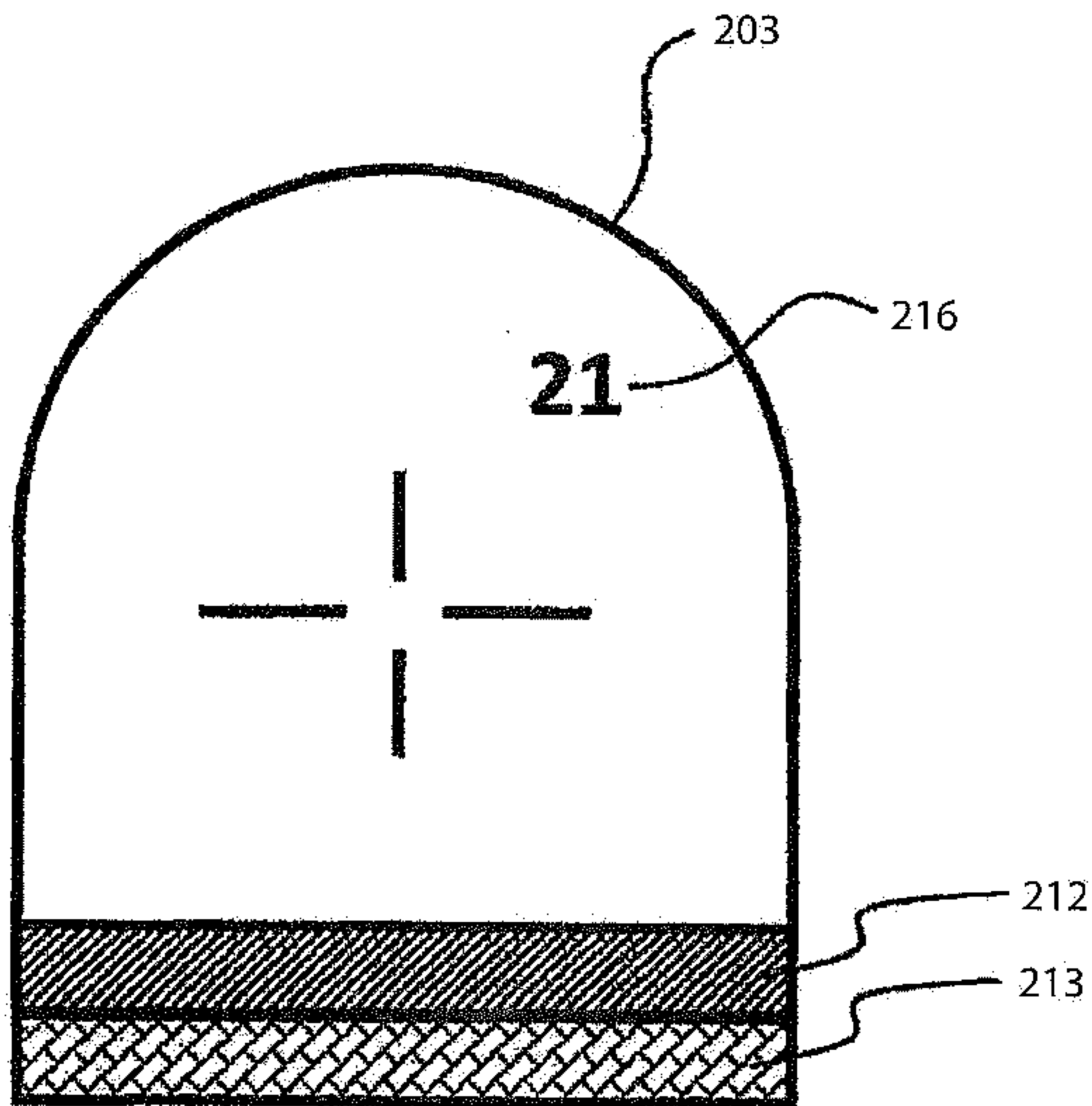


FIG. 5

FIREARM WITH REAL-TIME CARTRIDGE COUNTER

BACKGROUND

[0001] The purpose of this invention is to allow a shooter to continuously monitor the number of remaining rounds in a rifle clip without having to take his/her eyes off the target.

BRIEF DESCRIPTION OF THE DRAWINGS

[0002] Features and advantages of embodiments of the present disclosure will become apparent by reference to the following detailed description and drawings, in which like reference numerals correspond to similar, though perhaps not identical, components. For the sake of brevity, reference numerals or features having a previously described function may or may not be described in connection with other drawings in which they appear.

[0003] FIG. 1 is an external sideview of a firearm according to the present application.

[0004] FIG. 2 is a side view drawing of the internal workings of an ammunition cartridge according to the present application.

[0005] FIG. 3 is a side view drawing of the ammunition cartridge containing bullets with the base plate pushing down on the spring and against the resistors in the circuit.

[0006] FIG. 4 is a schematic drawing of an electrical circuit created by a conductor and a series of resistors in the ammunition cartridge of the firearm according to the present application.

[0007] FIG. 5 is a schematic drawing of an internal view of the scope of the firearm according to the present application.

DETAILED DESCRIPTION

[0008] The present application relates to a firearm that can continuously monitor and display the number of remaining rounds in a rifle clip

[0009] FIG. 1 is an external side view of a first embodiment of an entire firearm body 201 according to the present application. The firearm includes a Real Time Cartridge Counter (RTCC) system mounted on the firearm body 201, the RTCC system including a modified cartridge clip 202 insertable into the firearm body 201, and a sight 203 attached to the firearm body 201 and modified to display the number of rounds in the clip 202. Both the modified cartridge clip 202 and the sight 203 are attached to the firearm body 201.

[0010] FIG. 2 is a side view drawing of the internal workings of a modified ammunition cartridge clip 202. Ammunition cartridges 207 are pushed through an open end 214 of the clip 202 side by side in a row in a chamber 215 against the base plate 210 formed between the open end 214 and the base plate 210. The base plate 210 in turn is positioned against the top end of a spring 211. The spring 211 is positioned between the base plate 210 and an Ohm meter 204. Also positioned between the base plate 210 and the Ohm meter 204 are a conductor 208 and a series of resistors 209 which form an electrical circuit.

[0011] As shown in FIG. 3, ammunition cartridges 207 are placed against the base plate 210, and the base plate 210 pushes down on the Ohm meter 204 via the spring 211. When ammunition cartridges 207 are inserted into the clip chamber 215, the insertion of the ammunition cartridges 207 pushes the base plate 210 down against the spring 211. As

it is passed, the base plate 210 passes by and shorts out each resistor 209, one at a time. This results in one resistor 209 in the circuit being shorted out sequentially for each ammunition cartridge 207 entering the chamber 215 and pushing on the base plate 210. The sequential shorting out of each of the resistors 209, one resistor 209 at a time, causes a proportional decrease in the resistance in the circuit. By the same token, when the ammunition cartridges 207 are released from the clip chamber 215, the base plate 210 recoils back, pushed by the spring 211. This results in each of the resistors 202 being restarted, one resistor 209 at a time, and causing a proportional increase in the resistance in the circuit.

[0012] Accordingly, the Ohm meter 204 measures the resistors 209 and records the resistance change in the circuit. Positioned below the Ohm meter 204 is a wireless clip module 205 toward the base of the clip 202. The electrical resistance in the resistors 209 of the circuit, as measured by the Ohm meter 204, is transmitted by the wireless clip module 205.

[0013] FIG. 4 shows the details of the circuit created by the conductor 208 and the series of resistors 209. When there are no rounds of ammunition cartridges 207 in the clip 202, the base plate 210 of the clip 202 does not make contact with the circuit created by the conductor 208 and the series of resistors 209. Therefore, the resulting resistance measured by the Ohm meter 204 is infinite. This is shown in FIG. 4 as position P_0 for the base plate 210. With the insertion of a cartridge 207 into the clip 202, the position of the base plate 210 shifts, changing positions from P_0 to P_1 to P_N , as the number in the series of resistors 209 that are impacted increases. This results as the base plate 210 makes electrical contact with the conductor 208 and the series of resistors 209. The spring 211 in clip 202 is compressed as each additional cartridge 207 is added.

[0014] Denoting the total number in the series of resistors 209 as N , the Ohm meter 204 will measure the resistance of N times R where R is the resistance of each resistor 209 in the network, each resistor 209 having the same amount of resistance. R can be any value desired with $1 \text{ k}\Omega$ being a nominal choice. As more cartridges 207 are added to the clip 202, the total resistance is decreased as a result of the base plate 210 shorting the resistors in the series 209 that are to the left of the base plate in FIG. 3. As shown in FIG. 4, when the clip 202 is full, the base plate 210, in position P_N , will have shorted all the resistors in the series 209 except R_N , which is measured by Ohm meter 204. By the same token when there is a moving of one or more of the ammunition cartridges 207 out of the clip chamber 215 into the firearm body 201 for firing, there is a proportional amount of release of the pressing by the base plate 210 on each of the individual resistors in the series 209, resulting in an unshorting of each of the series of resistors 209. This causes an increase in resistance in the circuit measured by the Ohm meter 204. This increase in resistance, in turn, is transmitted by the Ohm meter 204 to the wireless clip module 205. The wireless clip module 205 then transmits the resistance measurement to the wireless scope module 212. The resistance measurement is interpreted by the wireless scope module 212 as an updated count of the ammunition cartridges 207 in the clip chamber 215 to the wireless scope module 212. The wireless scope module 212 then provides a real-time cartridge number display 216 in the scope 203.

[0015] The electrical resistance measurement is transmitted to the wireless scope module 212 in the sight 203 as shown in FIG. 5. The wireless scope module 212 transmits the measured electrical resistance to the display 216 in the scope 203, where it is displayed as the current number of ammunition cartridges 207 in the clip 202, as measured by the Ohm meter 204. The number of ammunition cartridges 207 in the clip 202 is communicated to the scope 203 by means of the wireless clip module 205 transmitting the resistance measurement of the Ohm meter 204 to the wireless scope module 212. The Ohm meter 204 and the wireless clip module 205 are powered by a clip battery 206 which is in the base of the clip 202 below the wireless clip module 205.

[0016] As referred to previously, FIG. 5 depicts the rifle scope 203 which contains a wireless scope module 212 used to receive counts of cartridges 207 from the clip 202 and is powered by a scope battery 213. The number of rounds in the clip 202 is displayed in the display 216 in the scope 203 so that the shooter has real-time awareness of remaining shots. This embodiment provides the shooter the ability to monitor remaining rounds without having to take her eyes off the target.

[0017] In a further detailed description, the present invention relates to a firearm 201 with a real-time cartridge counter display function, comprising a firearm body 201, a cartridge clip 202, a scope 203, and ammunition cartridge or cartridges 207 loaded within the cartridge clip 202. The scope 203 includes a display 216 displaying a current count of the ammunition cartridges 207 in the clip 202, a wireless receiver module 212 and a scope battery 213. Furthermore, the cartridge clip 202 includes an exterior portion and an interior portion with an open end 214 to the interior portion on one end of the exterior portion of the cartridge clip 202, through which open end 214 to the interior portion of the clip 202 ammunition cartridges 207 pass into and out of the clip 202. The cartridge clip 202 includes in its interior, in order of arrangement, the open end 214, a base plate 210, a spring 211, and an Ohm meter module 204.

[0018] In addition, between the base plate 210 and the Ohm meter module 204, parallel to the spring 211, the cartridge clip 202 also includes an electrical conductor 208 and a series of resistors 209, the resistors 209 being arranged sequentially between the base plate 210 and the Ohm meter 204, the electrical conductor 208 and the series of resistors 209 together creating an electrical circuit between the base plate 210 and the Ohm meter module 204. Furthermore, within the cartridge clip 202 is formed a clip chamber 215, the clip chamber 215 being a space between the open end 214 of the cartridge clip 202 and the base plate 210. The cartridge clip chamber 215 provides a space to fit a stack of the ammunition cartridges 207. In addition, when ammunition cartridges 207 are inserted into the clip chamber 215, the insertion of the ammunition cartridges 207 pushes the base plate 210 down against the spring 211 with the base plate 210 passing by and shorting out each resistor 209, one at a time, so that one resistor 209 in the circuit is thus shorted out sequentially for each ammunition cartridge 207 entering the chamber 215 and pushing on the base plate 210. The sequential shorting out of each of the resistors 209, one resistor 209 at a time, causes a proportional decrease in the resistance in the circuit. Furthermore, when ammunition cartridges 207 are released from the clip chamber 215, the base plate 210 recoils back, pushed by the spring 211, with

the base plate 210, thus restarting each of the resistors 209, one resistor 209 at a time, and causing a proportional increase in the resistance in the circuit. Finally, the proportional decrease and increase in the resistance in the circuit being displayed on the display 216 as increases and decreases in the number of ammunition cartridges occur in the clip 202 respectively.

[0019] In one embodiment of the firearm, the interior of the cartridge clip 202 also includes a wireless transmitter clip module 205 and a clip battery 206. The scope also includes a wireless receiver module 212 and a scope battery 213.

[0020] In a further embodiment of the firearm, when the chamber 215 is full of ammunition cartridges 207, the resistance is maximally decreased in the circuit. The maximally decreased resistance is measured by the Ohm meter module 204, and the measurement of the maximally decreased resistance is transmitted to the wireless clip module 205. The wireless clip module 205 then transmits the measurement of the maximally decreased resistance to the scope receiver module 212. Then the scope receiver module 212 communicates the maximally decreased resistance measurement to the display 216 to provide a real-time display 216 in the scope 203 of the number of cartridges 207 currently in the cartridge chamber 215 based on the number of resistors 209 in the clip 202 that have been knocked out.

[0021] In yet another embodiment of the firearm, when the open end 214 of the cartridge clip 202 is inserted into the firearm body 201, an ammunition cartridge 207 can be transported from the cartridge clip 202 into shooting position in the firearm body 201. Subsequently, an additional ammunition cartridge 207 can be transported into the shooting position in the firearm body 201 each time after the firearm 201 is fired, until all of the ammunition cartridges 207 are emptied out of the cartridge clip chamber 215. Furthermore, as the ammunition cartridges 207, one at a time, pass out of the chamber 215 into the firearm 201, the base plate 210 is pushed back toward the clip open end 214 by the spring 211. The traveling back of the base plate 210 causes a release of tension in the spring 211 which sequentially unshorts each resistor 209 in the circuit, thus restarting each resistor 209, resistor 209 by resistor 209, and sequentially reestablishing partial and then complete resistance in the circuit. This reestablished partial or complete resistance is then communicated to the Ohm meter 204 which transmits a reestablished partial or complete resistance measurement to the wireless clip module 205. The wireless clip module 205 then transmits the reestablished partial or complete resistance measurement to the wireless scope module 212. The wireless scope module 212 then communicates the reestablished partial or complete resistance measurement to the display 216 to provide a real-time display 216 in the scope 203. This display 216 corresponds to the partial or complete depletion of cartridges 207 in the clip chamber 215.

[0022] In still another embodiment of the firearm, when no ammunition cartridges 207 reside in the clip chamber 215, then all resistors 209 function in the electrical circuit. As a result, the electrical circuit transmits a current with maximum resistance to the Ohm meter 204. The Ohm meter 204 then transmitting the measurement of the maximum resistance to the wireless clip module 205 and the wireless clip module 205 communicating the maximum resistance measurement to the wireless scope module 212 in the scope 203.

The wireless scope module 212 then communicates the maximum resistance measurement to the display 216 to provide a real-time display 216 in the scope 203 of no cartridges 207 in the cartridge chamber 215.

[0023] In an additional embodiment of the firearm, the total number of resistors 209 is denoted as N, with the Ohm meter 204 measuring the resistance of N times R where R is the resistance of each resistor 209 in the circuit.

[0024] The present invention also relates to a method of displaying in a scope of a firearm a real-time count of ammunition cartridges 207 in a cartridge clip 202 of a firearm 201, comprising the following steps.

[0025] The first step of the method is providing a firearm 201 comprising a firearm body 201, a cartridge clip 202, a scope 203, and ammunition cartridges 207 stored within the cartridge clip 202, and wherein, the scope 203 includes a display 216 in the scope 203 which displays the current count of the ammunition cartridges 207 in the clip 202. Furthermore, the clip 202 includes, in order of placement in the cartridge clip 202, an open end 214, a base plate 210, a spring 211, and an Ohm meter module 204. Also, between the base plate 210 and the Ohm meter module 204, parallel to the spring 211. The cartridge clip 202 also includes a conductor 208 and a series of resistors 209 which together create an electrical circuit between the base plate 210 and the Ohm meter module 204. Finally, within the cartridge clip 202 is formed a clip chamber 215, the clip chamber 215 being a space between the open end 214 of the cartridge clip 202 and the base plate 210. Furthermore, the space in the cartridge clip chamber 215 fits a stack of one or more ammunition cartridges 207.

[0026] The second step of the method is loading the clip chamber 215 with one or more ammunition cartridges 207. And, when the ammunition cartridges 207 are loaded into the clip chamber 215, the insertion of the ammunition cartridges 207 pushes the base plate 210 down against the spring 211 with the base plate 210 passing by and shorting out each resistor 209, one at a time. Each resistor 209 in the circuit is thus shorted out sequentially for each ammunition cartridge 207 entering the chamber 215 and pushing on the base plate 210. The sequential shorting out each of the resistors 209 one at a time causes a proportional decrease in the resistance in the circuit. The proportional decrease in the resistance in the circuit is displayed on the display 216 as increases in the number of ammunition cartridges 207 in the clip 202.

[0027] The third step is inserting the cartridge clip 202 at the open end 214 into the firearm body 201. This results in transport of ammunition cartridges 207, one at a time, into the firearm body 201. Thus, when the open end 214 of the cartridge clip 202 is inserted into the firearm body 201, an ammunition cartridge 207 can be transported from the cartridge clip 202 into shooting position in the firearm body 201. Subsequently, an additional ammunition cartridge 207 can be transported into the shooting position in the firearm body 201 each time after the firearm 201 is fired until all of the ammunition cartridges 207 are emptied out of the cartridge clip chamber 215 into the firearm body 201.

[0028] The fourth step of the method is firing one cartridge 207 at a time from the firearm 201. And, when the ammunition cartridges 207 are released from the clip chamber 215, the base plate 210 recoils back with each released cartridge 207. The recoil causes the sequential, restarting of each of the resistors 209, one at a time, causing a proportional

increase in the resistance in the circuit. Therefore, the proportional increase in the resistance in the circuit is displayed on the display 216 as decreases in the number of ammunition cartridges 207 in the clip 202.

[0029] In an embodiment of the method, the interior of the cartridge clip 202 also includes a wireless transmitter clip module 205 and a clip battery 206. The scope also includes a wireless receiver module 212 and a scope battery 213.

[0030] In another embodiment of the method, the loading step is conducted in such a way that when the stack of ammunition cartridges 207 is inserted into the clip chamber 215, the stack pushes the base plate 210 down against the spring 211 with the base plate 210 passing by and shorting out, one at a time, each resistor 209. Thus, one resistor 209 in the circuit is thus shorted out sequentially for each ammunition cartridge 207 entering the chamber 215 and pushing on the base plate 210. Each inserted ammunition cartridge 207 causes the base plate 210 to push against the spring 211, toward the Ohm meter module 204. In addition, the sequential shorting out of each of the resistors 209 causes a proportional decrease in the resistance in the circuit. Therefore, when the chamber 215 is full of ammunition 207, the resistance is maximally decreased. The maximally decreased resistance is measured by the Ohm meter module 204, and the measurement of the maximally decreased resistance is transmitted to the wireless clip module 205. The wireless clip module 205 then transmits the measurement of the maximally decreased resistance to the scope receiver module 212. The scope receiver module 212 communicates the maximally decreased resistance measurement to the display 216 to provide a real-time display 216 in the scope 203 of the number of cartridges 207 currently in the cartridge chamber 215 based on the number of resistors 209 that have been shorted out.

[0031] In still another embodiment of the method, the firing step is conducted in such a way that wherein, each time the firearm 201 is fired, the wireless transmitter clip module 205 communicates the current number of ammunition cartridges 207 in the clip 202 to the wireless receiver module 212 in the scope 203. The scope 203 then displays the current count of the ammunition cartridges 207 in the clip 202. Furthermore, as the ammunition cartridges 207, one at a time, pass out of the chamber 215 into the firearm 201, the base plate 210 is pushed back toward the clip open end 214 by the spring 211. The traveling back of the base plate 210 causes a release of tension in the spring 211 which sequentially unshorts each resistor 209 in the circuit. This sequential unshorting of each resistor 209 thus restarts each resistor 209 and sequentially increases resistance in the circuit in steps. In addition, the increasing resistance is then communicated to the Ohm meter 204 which transmits an increased resistance measurement to the wireless clip module 205. The wireless clip module 205 then transmits the increased resistance measurement to the wireless scope module 212. The wireless scope module 212 then communicates the decreased resistance measurement to the display 216 to provide a real-time display 216 in the scope 203 of the remaining number of cartridges 207 in the cartridge chamber 215 proportional to the number of resistors 209 that are still shorted out. Finally, when no ammunition cartridges 207 reside in the clip chamber 215 then all resistors 209 function in the circuit. As a result, the circuit transmits a current with maximum resistance to the Ohm meter 204. The Ohm meter 204 then transmits the measurement of the

current with maximum resistance to the wireless clip module 205. The wireless clip module 205 communicates the maximum resistance measurement to the wireless scope module 212 in the scope 203. The wireless scope module 212 then communicates the maximum resistance measurement to the display 216 to provide a real-time display 216 in the scope 203 of no cartridges 207 in the cartridge chamber 215.

[0032] In another embodiment of the method, the total number of resistors 209 is denoted as N, the Ohm meter 204 measuring the resistance of N times R where R is the resistance of each resistor 209 in the circuit.

[0033] While several embodiments have been described in detail, it will be apparent to those skilled in the art that the disclosed embodiments may be modified. Therefore, the foregoing description is to be considered exemplary rather than limiting.

What is claimed is:

1. A firearm with a real-time cartridge counter display function, comprising a firearm body, a cartridge clip, a scope 203, and ammunition cartridge or cartridges loaded within the cartridge clip;

wherein the scope includes a display displaying a current count of the ammunition cartridges in the clip, a wireless receiver module and a scope battery;

and wherein the cartridge clip includes an exterior portion and an interior portion with an open end to the interior portion on one end of the exterior portion of the cartridge clip, through which open end to the interior portion of the clip ammunition cartridges pass into and out of the clip; and wherein the cartridge clip includes in its interior, in order of arrangement, the open end, a base plate, a spring, and an Ohm meter module;

and wherein, between the base plate and the Ohm meter module, parallel to the spring, the cartridge clip also includes an electrical conductor and a series of resistors, the resistors being arranged sequentially between the base plate and the Ohm meter, the electrical conductor and the series of resistors together creating an electrical circuit between the base plate and the Ohm meter module;

and wherein, within the cartridge clip is formed a clip chamber, the clip chamber being a space between the open end of the cartridge clip and the base plate; the cartridge clip chamber providing a space to fit a stack of the ammunition cartridges;

and wherein, when ammunition cartridges are inserted into the clip chamber, the insertion of the ammunition cartridges pushes the base plate down against the spring with the base plate passing by and shorting out each resistor, one at a time, so that one resistor in the circuit is thus shorted out sequentially for each ammunition cartridge entering the chamber and pushing on the base plate, the sequential shorting out of each of the resistors, one resistor at a time, causing a proportional decrease in the resistance in the circuit;

and wherein, when ammunition cartridges are released from the clip chamber, the base plate recoils back pushed by the spring, thus restarting each of the resistors, one resistor at a time, and causing a proportional increase in the resistance in the circuit;

the proportional decrease and increase in the resistance in the circuit being displayed on the display as increases and decreases in the number of ammunition cartridges in the clip respectively.

2. The firearm of claim 1, wherein the interior of the cartridge clip also includes a wireless transmitter clip module and a clip battery; and wherein the scope also includes a wireless receiver module and a scope battery.

3. The firearm of claim 2, wherein, when the chamber is full of ammunition cartridges, the resistance is maximally decreased in the circuit, the maximally decreased resistance being measured by the Ohm meter module, and the measurement of the maximally decreased resistance being transmitted to the wireless clip module, the wireless clip module then transmitting the measurement of the maximally decreased resistance to the scope receiver module; then the scope receiver module communicating the maximally decreased resistance measurement to the display to provide a real-time display in the scope of the number of cartridges currently in the cartridge chamber based on the number of resistors in the clip that have been knocked out.

4. The firearm of claim 2, wherein, when the open end of the cartridge clip is inserted into the firearm body, an ammunition cartridge can be transported from the cartridge clip into shooting position in the firearm body, and subsequently, an additional ammunition cartridge can be transported into the shooting position in the firearm body each time after the firearm is fired, until all of the ammunition cartridges are emptied out of the cartridge clip chamber;

and wherein, as the ammunition cartridges, one at a time, pass out of the chamber into the firearm, the base plate is pushed back toward the clip open end by the spring, the traveling back of the base plate causing a release of tension in the spring which sequentially unsorts each resistor in the circuit, thus restarting each resistor, resistor by resistor, and sequentially reestablishing partial and then complete resistance in the circuit, which reestablished partial or complete resistance is then communicated to the Ohm meter which transmits a reestablished partial or complete resistance measurement to the wireless clip module which then transmits the reestablished partial or complete resistance measurement to the wireless scope module, which then communicates the reestablished partial or complete resistance measurement to the display to provide a real-time display in the scope corresponding to the partial or complete depletion of cartridges in the clip chamber.

5. The firearm of claim 2, wherein, when no ammunition cartridges reside in the clip chamber, then all resistors function in the electrical circuit, as a result, the electrical circuit transmits a current with maximum resistance to the Ohm meter, the Ohm meter then transmitting the measurement of the maximum resistance to the wireless clip module and the wireless clip module communicating the maximum resistance measurement to the wireless scope module in the scope, the wireless scope module then communicating the maximum resistance measurement to the display to provide a real-time display in the scope 203 of no cartridges in the cartridge chamber.

6. The firearm of claim 2, wherein the total number of resistors is denoted as N, the Ohm meter measuring the resistance of N times R where R is the resistance of each resistor in the circuit.

7. A method of displaying in a scope of a firearm a real-time count of ammunition cartridges in a cartridge clip of a firearm, comprising the steps of:

a) providing a firearm comprising a firearm body, a cartridge clip, a scope, and ammunition cartridges stored within the cartridge clip, and wherein, the scope includes a display in the scope which displays the current count of the ammunition cartridges in the clip; wherein the clip includes, in order of placement in the cartridge clip, an open end, a base plate, a spring, and an Ohm meter module;

wherein, between the base plate and the Ohm meter module, parallel to the spring, the cartridge clip also includes a conductor and a series of resistors which together create an electrical circuit between the base plate and the Ohm meter module;

and wherein, within the cartridge clip is formed a clip chamber, the clip chamber being a space between the open end of the cartridge clip and the base plate, the space in the cartridge clip chamber fitting a stack of one or more ammunition cartridges;

b) loading the clip chamber with one or more ammunition cartridges;

and wherein, when the ammunition cartridges are loaded into the clip chamber, the insertion of the ammunition cartridges pushes the base plate down against the spring with the base plate passing by and shorting out each resistor, one at a time, so that each resistor in the circuit is thus shorted out sequentially for each ammunition cartridge entering the chamber and pushing on the base plate, the sequential shorting out each of the resistors one at a time causing a proportional decrease in the resistance in the circuit, the proportional decrease in the resistance in the circuit being displayed on the display as increases in the number of ammunition cartridges in the clip.

c) inserting the cartridge clip at the open end into the firearm body; resulting in transport of ammunition cartridges, one at a time, into the firearm body;

and wherein, when the open end of the cartridge clip is inserted into the firearm body, an ammunition cartridge can be transported from the cartridge clip into shooting position in the firearm body, and subsequently, an additional ammunition cartridge can be transported into the shooting position in the firearm body each time after the firearm is fired until all of the ammunition cartridges are emptied out of the cartridge clip chamber into the firearm body;

d) firing one cartridge at a time from the firearm;

and wherein, when the ammunition cartridges are released from the clip chamber, the base plate recoils back with each released cartridge, the recoil causing the sequential, restarting of each of the resistors, one at a time, causing a proportional increase in the resistance in the circuit;

the proportional increase in the resistance in the circuit being displayed on the display as decreases in the number of ammunition cartridges in the clip.

8. The method of claim 7, wherein the interior of the cartridge clip also includes a wireless transmitter clip module and a clip battery; and wherein the scope also includes a wireless receiver module and a scope battery.

9. The method according to claim 8 wherein the loading step is conducted in such a way that when the stack of ammunition cartridges is inserted into the clip chamber, the stack pushes the base plate down against the spring with the

base plate passing by and shorting out, one at a time, each resistor so that one resistor in the circuit is thus shorted out sequentially for each ammunition cartridge entering the chamber and pushing on the base plate, causing the base plate to push against the spring, toward the Ohm meter module;

and wherein, the sequential shorting out of each of the resistors causing a proportional decrease in the resistance in the circuit, so that when the chamber is full of ammunition, the resistance is maximally decreased, the maximally decreased resistance being measured by the Ohm meter module, and the measurement of the maximally decreased resistance being transmitted to the wireless clip module; the wireless clip module then transmitting the measurement of the maximally decreased resistance to the scope receiver module, the scope receiver module communicating the maximally decreased resistance measurement to the display to provide a real-time display in the scope of the number of cartridges currently in the cartridge chamber based on the number of resistors that have been shorted out.

10. The method of claim 8 wherein the firing step is conducted in such a way that wherein, each time the firearm is fired, the wireless transmitter clip module communicates the current number of ammunition cartridges in the clip to the wireless receiver module in the scope, so that the scope displays the current count of the ammunition cartridges in the clip;

and wherein as the ammunition cartridges, one at a time, pass out of the chamber into the firearm, the base plate is pushed back toward the clip open by the spring, the traveling back of the base plate causing a release of tension in the spring which sequentially unshorts each resistor in the circuit, thus restarting each resistor and sequentially increasing resistance in the circuit in steps;

and wherein, the increasing resistance is then communicated to the Ohm meter which transmits an increased resistance measurement to the wireless clip module, which then transmits the increased resistance measurement to the wireless scope module, which then communicates the decreased resistance measurement to the display to provide a real-time display in the scope of the remaining number of cartridges in the cartridge chamber proportional to the number of resistors that are still shorted out;

and wherein, when no ammunition cartridges reside in the clip chamber then all resistors function in the circuit, and, as a result, the circuit transmits a current with maximum resistance to the Ohm meter, and wherein, the Ohm meter then transmits the measurement of the current with maximum resistance to the wireless clip module and the wireless clip module communicating the maximum resistance measurement to the wireless scope module in the scope, the wireless scope module then communicating the maximum resistance measurement to the display to provide a real-time display in the scope of no cartridges in the cartridge chamber.

11. The method of claim 8, wherein the total number of resistors is denoted as N, the Ohm meter measuring the resistance of N times R where R is the resistance of each resistor in the circuit.