

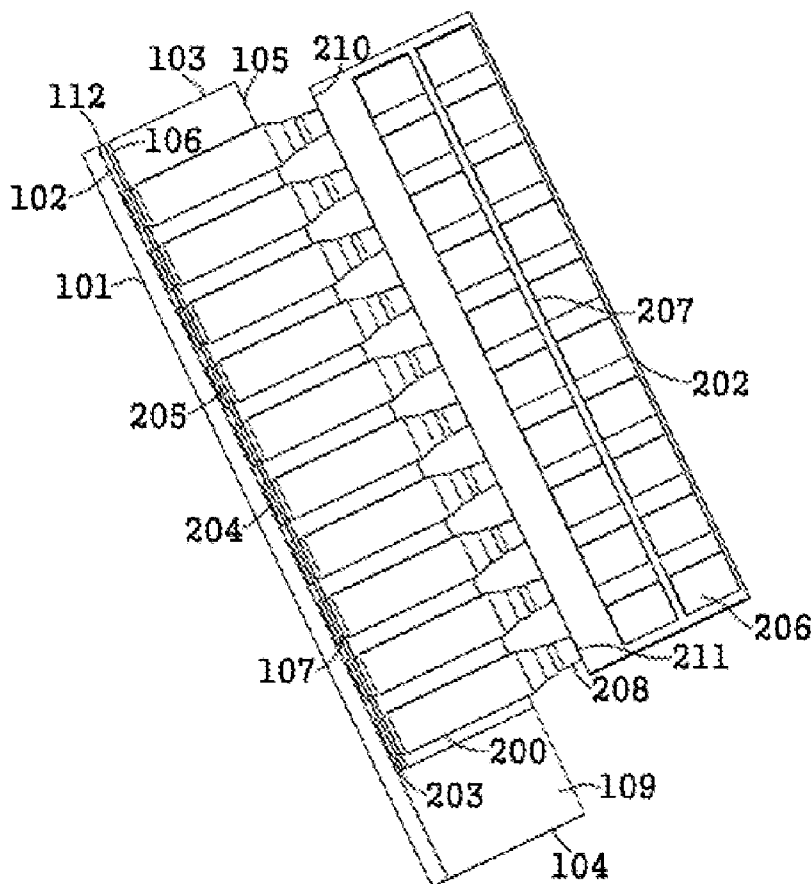


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(19) **United States**(12) **Patent Application Publication**
Kim(10) **Pub. No.: US 2012/0222343 A1**(43) **Pub. Date: Sep. 6, 2012**(54) **SYSTEMS AND METHODS FOR
EXTRACTING AMMUNITION FROM A
CARRIER FOR LOADING ONTO A
MAGAZINE SPEED LOADING TOOL**(76) Inventor: **Raymond Kyungjune Kim,**
Federal Way, WA (US)(21) Appl. No.: **13/038,762**(22) Filed: **Mar. 2, 2011****Publication Classification**(51) **Int. Cl.**
F41A 9/83 (2006.01)(52) **U.S. Cl.** **42/88**(57) **ABSTRACT**

Systems and methods for extracting cartridges from a carrier for loading onto a magazine speed loading tool are disclosed herein. Apparatuses described herein includes a cartridge carrier that is configured to host ammunition cartridges, a load-

ing medium tool that is configured to transition the transfer of cartridges from a cartridge carrier onto a magazine speed loading tool and a comb shaped tool configured to eject cartridges from a carrier into a magazine speed loading tool. In an apparatus that configured to transition the transfer of cartridges from a carrier onto a magazine speed loading tool is a routing channel that is defined by three sides of the apparatus. The routing channel is configured to receive and route cartridges extracted from a carrier. Two parallel sides of the routing channel are configured to suspend a cartridge carrier a specified length from the routing channel and transfer halts to forward momentum to the carrier to eject cartridges from the carrier. The apparatus also includes extractor ledges, defined by obstructions on a plane parallel to the plane of the routing channel which run the same length as the routing channel. The extractor ledges are configured to strip ammunition from cartridge carriers. A funnel in the routing channel coupled with a proximal end of the routing channel is configured to consolidate ammunition extracted and placed onto the routing channel into a single row and pass it through the proximal end of the routing channel for dispensing into a magazine speed loading tool.



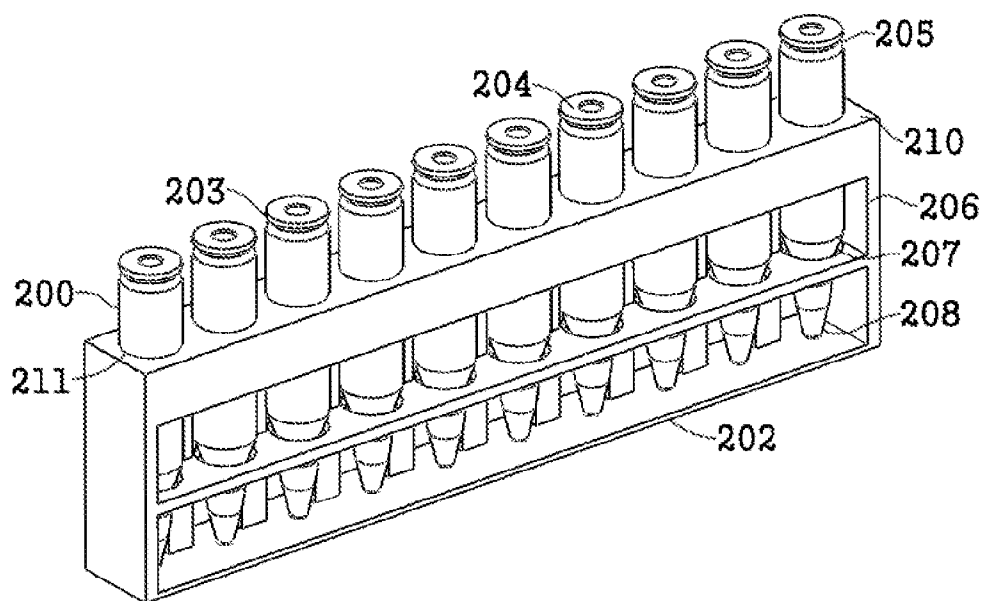


FIG. 1A

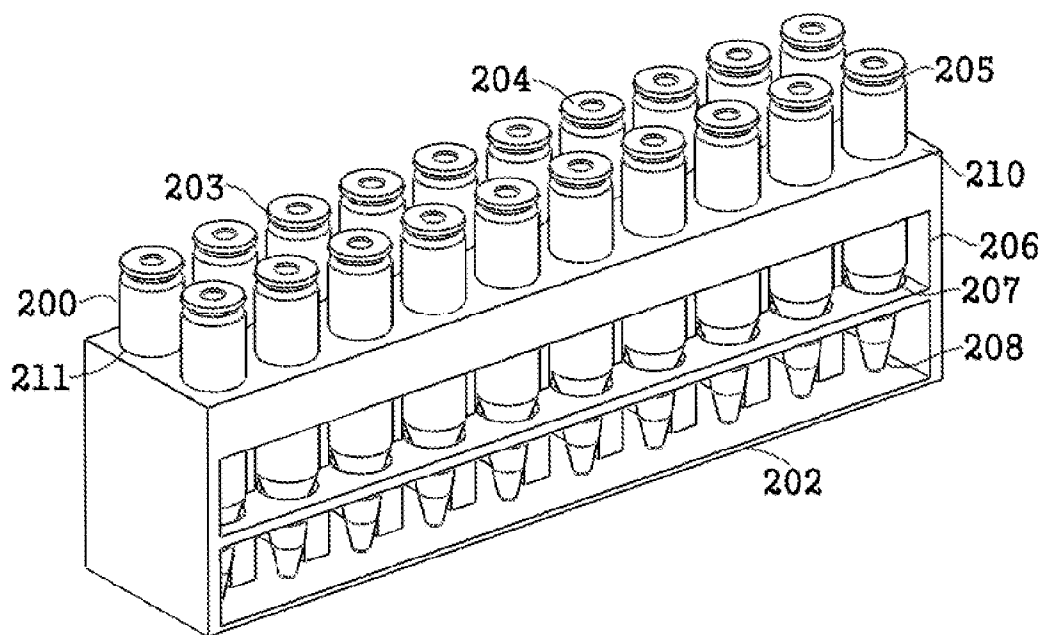


FIG. 1B

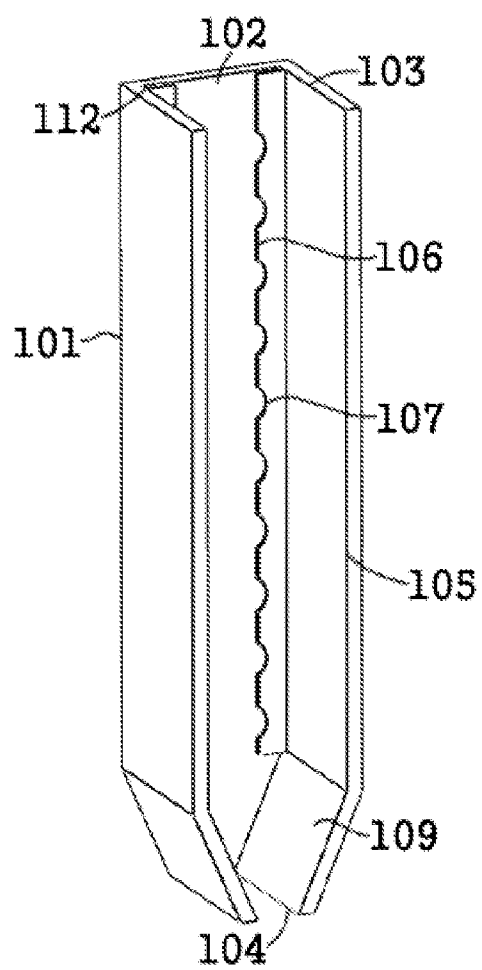


FIG. 2A

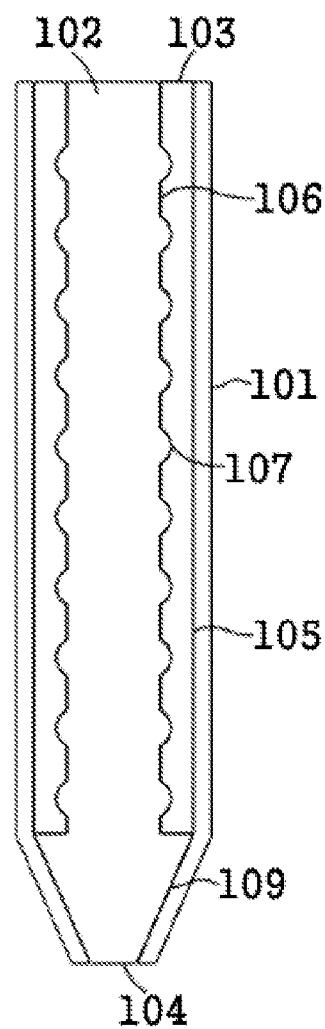
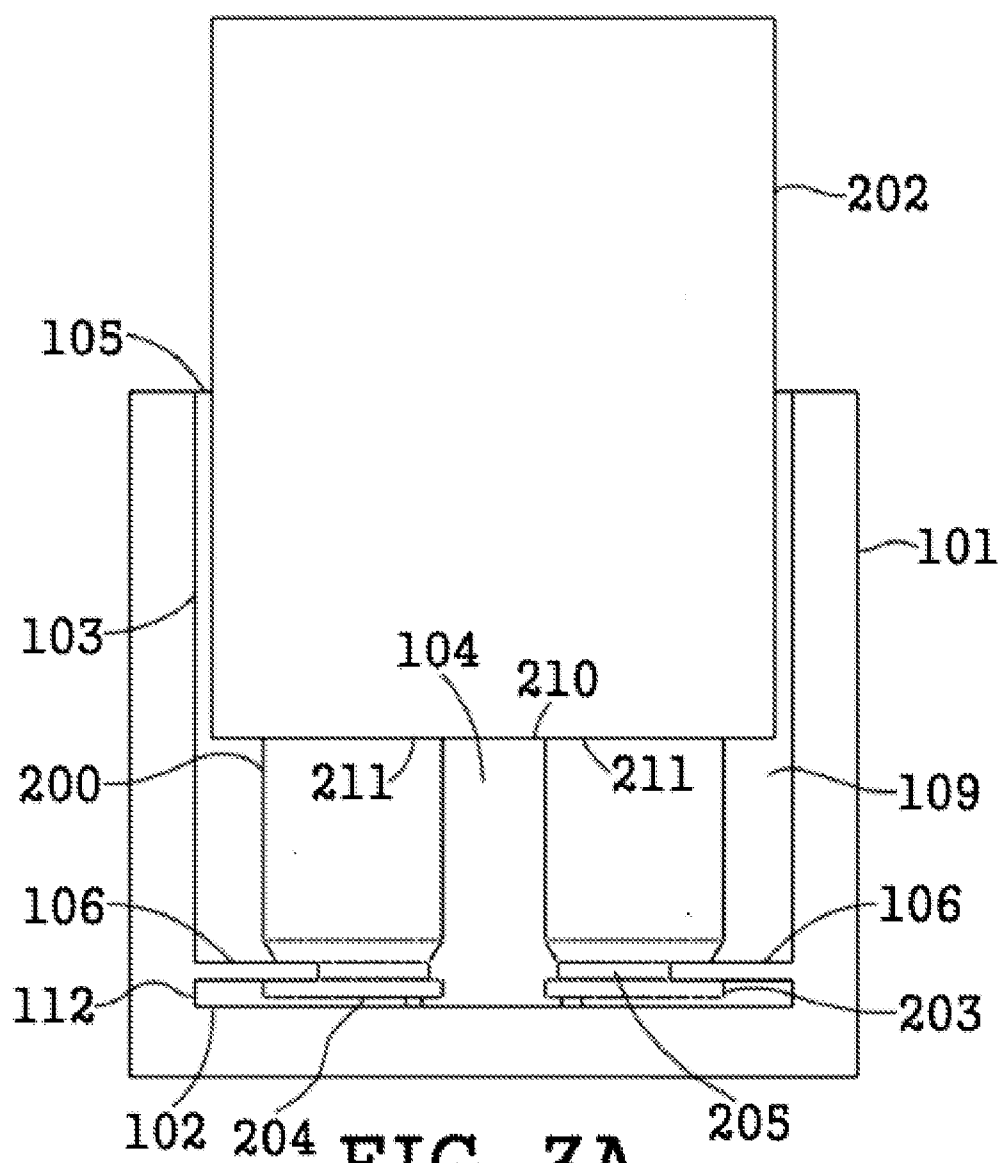


FIG. 2B



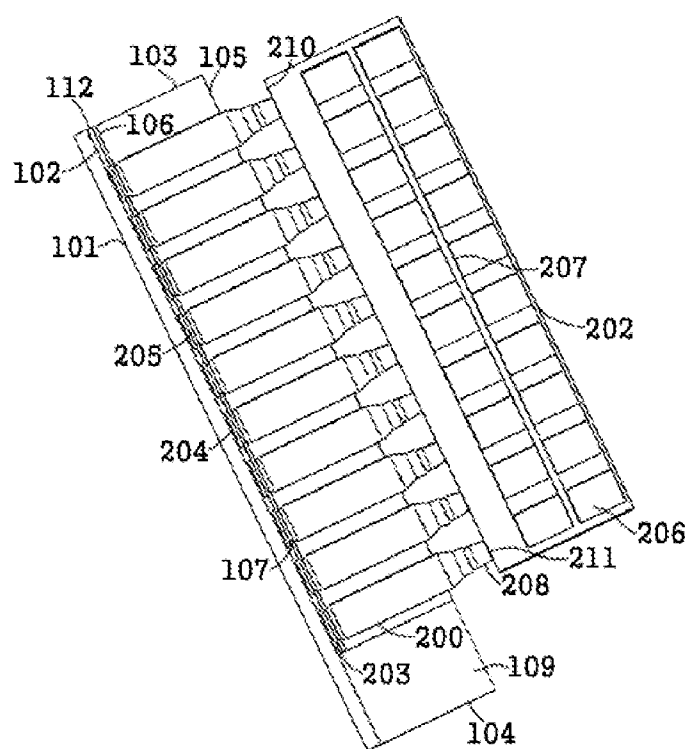


FIG. 3B

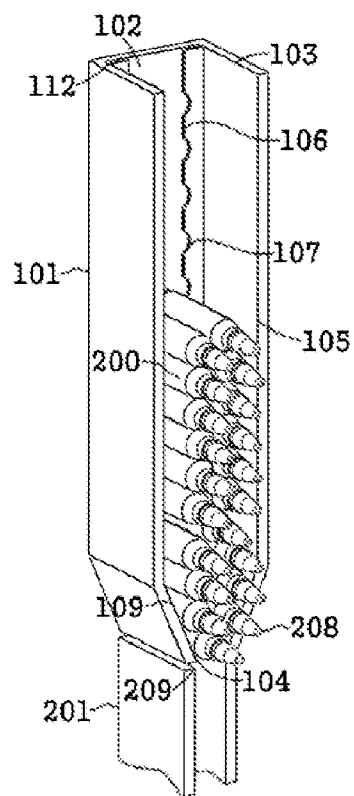


FIG. 3C

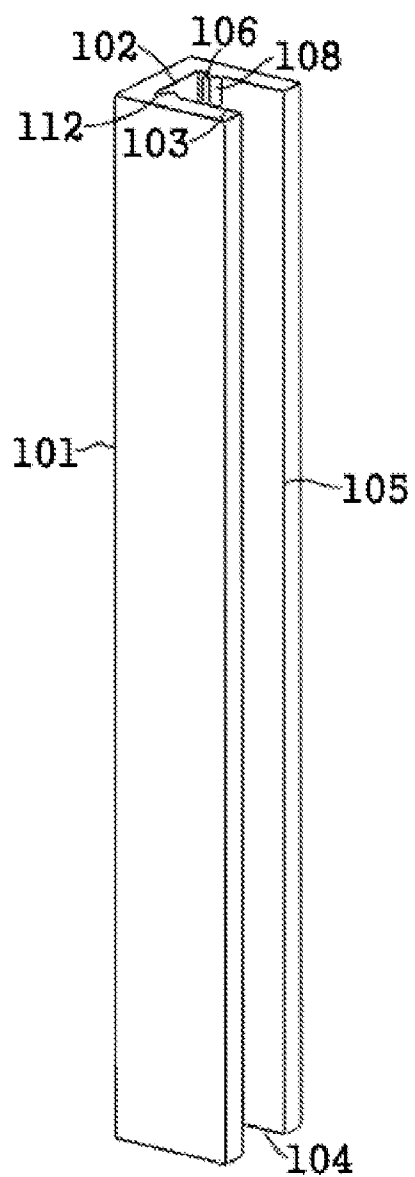


FIG. 4

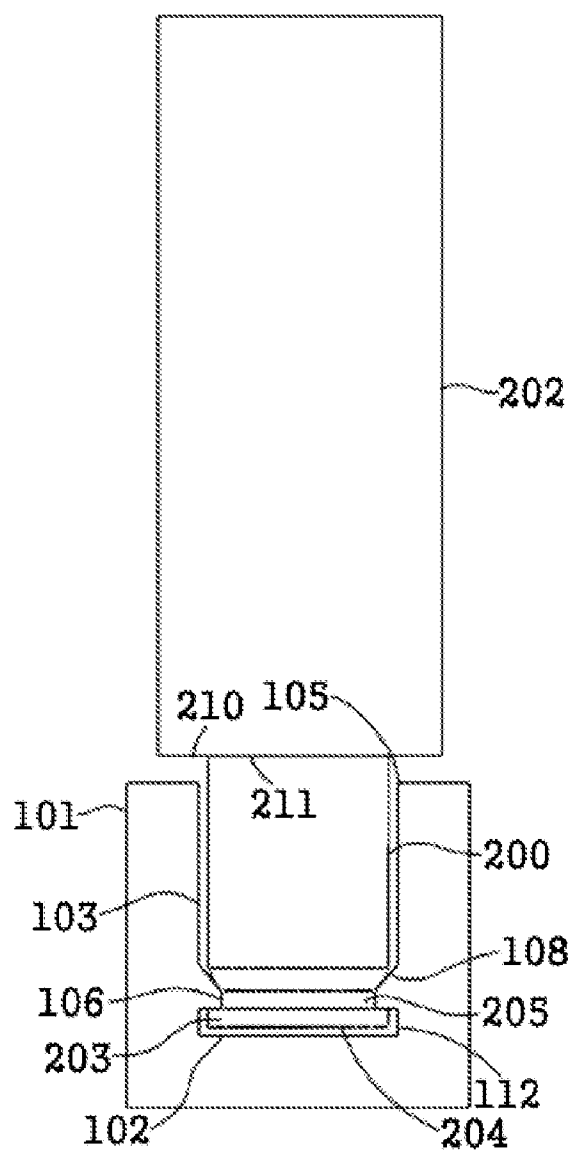


FIG. 5A

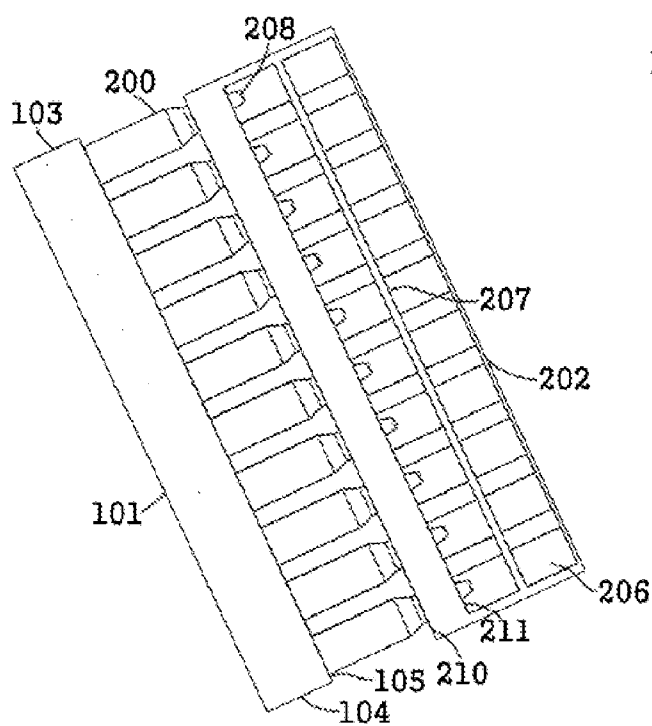


FIG. 5B

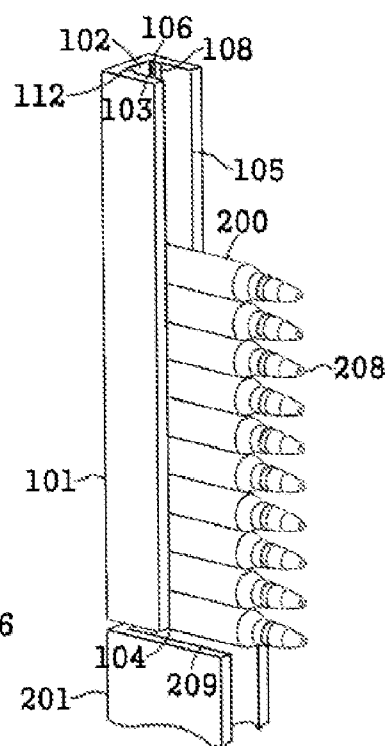


FIG. 5C

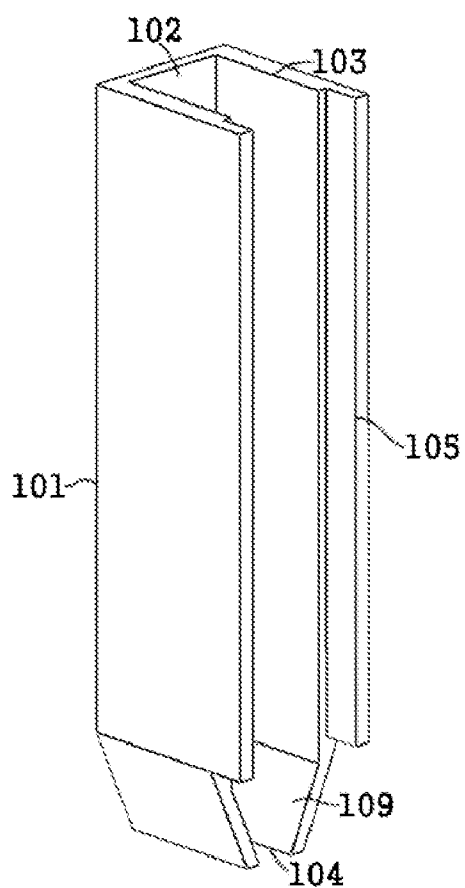


FIG. 6

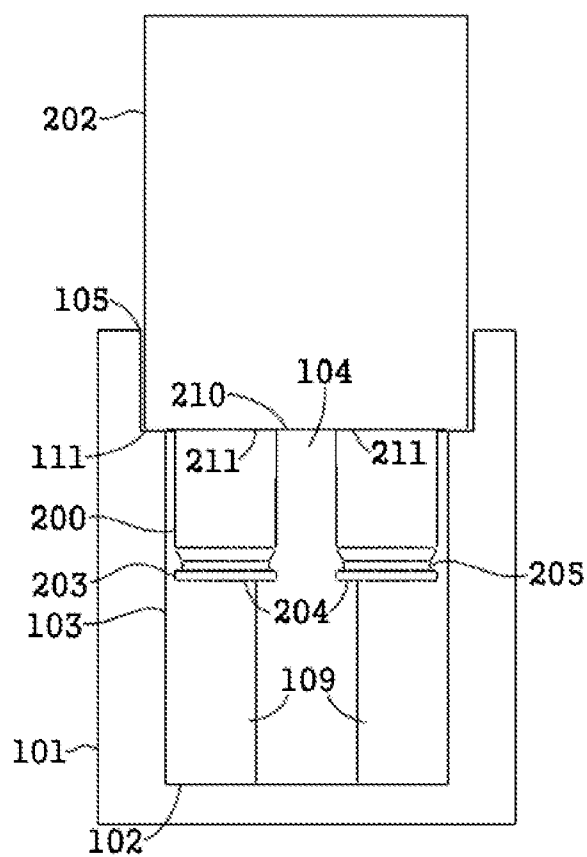


FIG. 7A

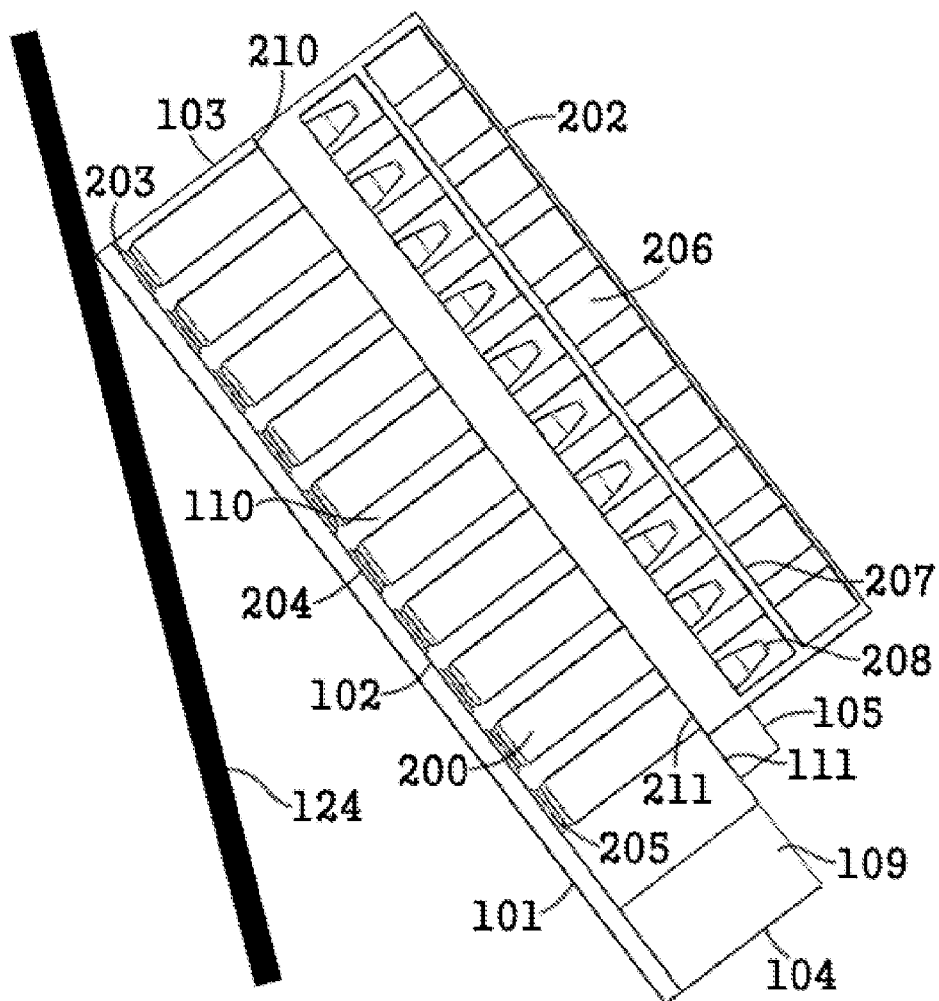


FIG. 7B

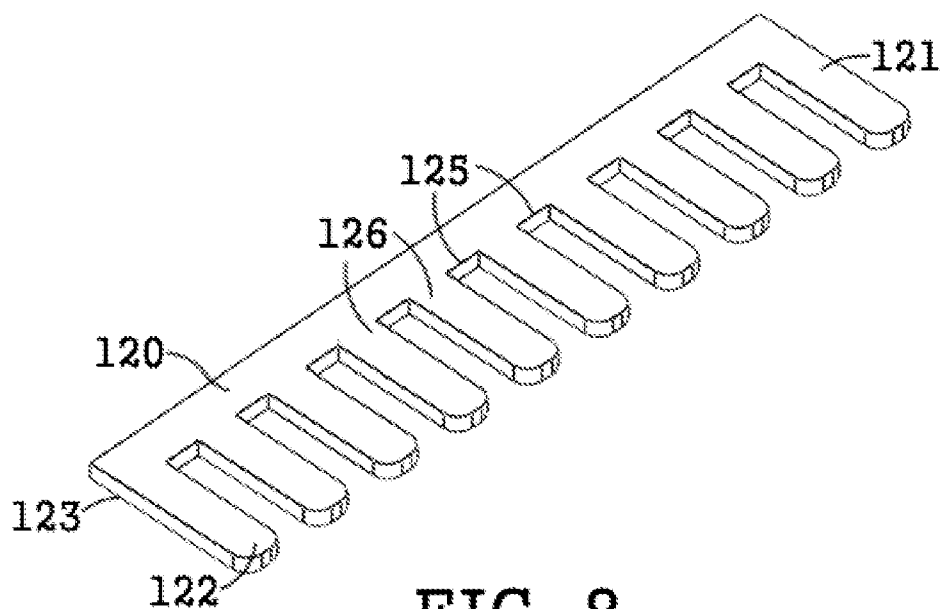


FIG. 8

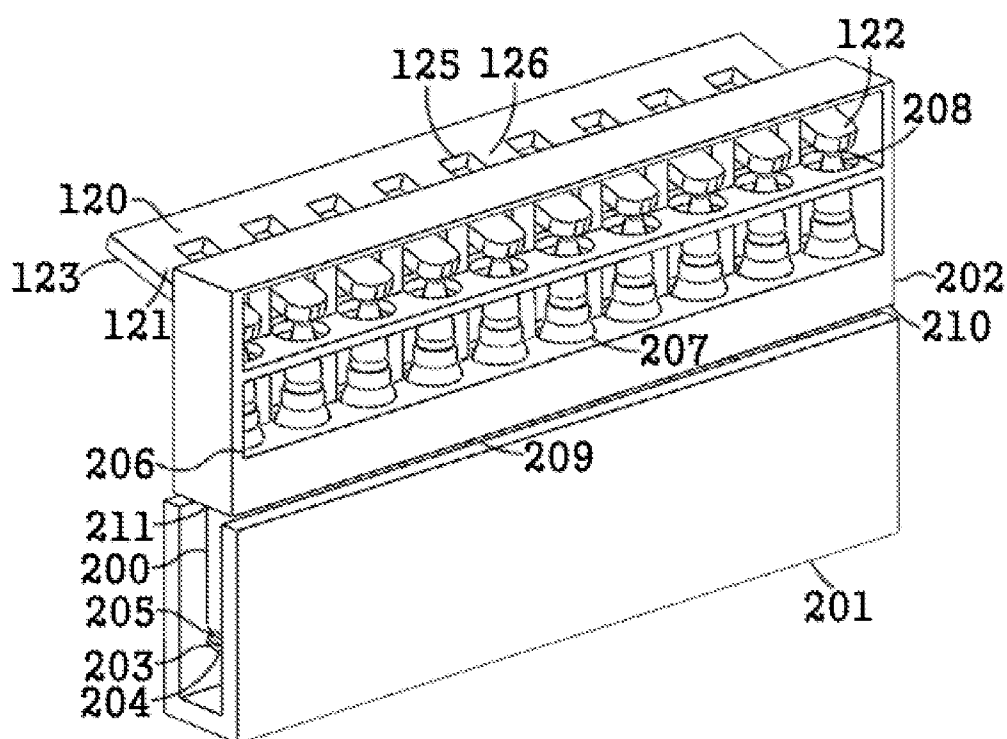


FIG. 9

SYSTEMS AND METHODS FOR EXTRACTING AMMUNITION FROM A CARRIER FOR LOADING ONTO A MAGAZINE SPEED LOADING TOOL

BACKGROUND OF THE INVENTION

[0001] Loading ammunition from a clip is a common means for quickly loading ammunition cartridges into an ammunition magazine. However, commercially purchased ammunition is more commonly packaged in carriers which hold cartridges in stacked configurations of single or multiple parallel rows. Aside from loading individual cartridges into the magazine manually, the quickest method for loading ammunition from these carriers into a magazine is to transfer ammunition from a carrier onto a magazine speed loading tool for loading into a magazine. Though loading cartridges from a magazine speed loading tool into a magazine is quick, the process for transferring cartridges from a carrier into a speed loading tool is not, often requiring that individual cartridges be moved by hand one at a time from a carrier into the speed loading tool. Currently, there exists very few means for placing ammunition directly onto a speed loader quickly in bulk for loading into a magazine.

BRIEF DESCRIPTION OF THE DRAWINGS

[0002] The preferred and alternative embodiments of the present invention are described in detail below with reference to the following drawings.

[0003] FIG. 1A is side angle views of typical single row carrier with perforations loaded with cartridges;

[0004] FIG. 1B is side angle views of typical multiple row carrier with perforations loaded with cartridges;

[0005] FIG. 2A is a side angle view of a loading medium tool for extracting multiple rows of cartridges simultaneously;

[0006] FIG. 2B is a front view of the loading medium tool for extracting multiple rows of cartridges simultaneously;

[0007] FIG. 3A is a top down view of a cartridges in a carrier inserted onto a loading medium tool configured for extracting multiple rows of cartridges simultaneously;

[0008] FIG. 3B is a side cross section view of a cartridges being held on the loading medium tool configured for multiple rows by extractor ledges as the carrier is lifted away from the cartridges;

[0009] FIG. 3C is a side view of the loading medium tool configured for multiple rows transferring cartridges into the loading opening of a typical magazine speed loading tool;

[0010] FIG. 4 is a side angle view of a loading medium tool configured for extracting single rows of cartridges

[0011] FIG. 5A is a top down view of a cartridges in a carrier inserted onto a loading medium tool configured for extracting single rows of cartridges;

[0012] FIG. 5B is a side view of a cartridges being held on the loading medium tool configured for single rows by extractor ledges as the carrier is lifted away from the cartridges;

[0013] FIG. 5C is a side angle view of the loading medium tool configured for single rows transferring cartridges into the loading opening of a typical magazine speed loading tool;

[0014] FIG. 6 is a side angle view of the loading medium tool configured to extract cartridge by inertia;

[0015] FIG. 7A is a top down view of a carrier with ammunition placed onto the inertial extraction loading medium tool;

[0016] FIG. 7B is a side cross section view of the inertial extraction loading medium tool being hit against a foreign surface to extracted cartridges from the carrier by inertia;

[0017] FIG. 8 is a side angle view of an extraction comb; and

[0018] FIG. 9 is a side angle view of cartridges on a carrier being urged from the carrier by the extraction comb and ejected into the loading opening of a typical magazine speed loading tool.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0019] The prior art method for loading cartridges stored in an cartridge carrier requires taking out individual cartridges from the cartridge carrier and loading them one by one into a magazine or onto a magazine speed loading tool for loading into a magazine. As this is time and labor intensive, it is an object of an embodiment of the present invention to provide a system by which the cartridges contained on an ammunition carrier can be transferred in mass from an ammunition carrier onto a magazine speed loading tool, which in turn loads the cartridges into a magazine. As some magazine speed loading tools require that cartridges be placed in a single row configuration on the magazine speed loading tool to facilitate the urging cartridges from the magazine speed loading tool into a magazine, it is also an object of an embodiment of the present invention to provide a system by which cartridges on a carrier are consolidated into a single row for placing onto a magazine speed loading tool.

[0020] An example embodiment of the present invention is a process by which the ammunition on a carrier is placed onto a loading medium tool and is stripped off its carrier by the loading medium tool for placing onto a magazine speed loading tool. Cartridges are stripped from the carrier by being placed on ledges on the loading medium tool which protrude into the extraction indentations of cartridges to hold the rims of the cartridges in place on the loading medium tool while the carrier is lifted away from the cartridges. The ledges restrict the perpendicular movement of cartridges to the plane of a routing channel, which runs lengthwise on the loading medium tool and guides cartridges through a consolidating funnel and out of the loading medium tool for dispensing onto a speed loading tool. The extraction ledges may further contain arced cut outs which assist the extraction ledges in wrapping partially around the cartridge indentations for greater surface area contact between the extraction ledges and cartridge rims. Once all the cartridge indentations on the carrier have been placed onto the ledges, the cartridges are angled parallel to the ground or diagonal to the ground with their flat primer sides facing toward the ground. As the cartridges are held between the extraction ledges and routing channel, the carrier supporting them is lifted away, allowing cartridges to roll down the extraction ledges by force of gravity onto the support of the routing channel. The routing channel guides cartridges toward the consolidating funnel and a bottom end opening on the loading medium tool. The consolidating funnel consolidates the cartridges into a single row configuration and the cartridges then exit through the bottom end opening and are dropped into the loading opening of a magazine speed loading tool.

[0021] Another example embodiment of the present invention is a process by which ammunition on a carrier is transferred onto a loading medium tool, by force of inertia, for loading onto a magazine speed loading tool. This is accom-

plished with the assistance of the walls on the loading medium tool which couple with and suspend a carrier with ammunition a specific length away from a routing channel. The routing channel, which runs lengthwise in the loading medium tool, hosts and guides ammunition through the loading medium tool to a bottom end opening on the loading medium tool. The walls of the loading medium tool suspend a carrier with cartridges from the routing channel to such a length as to allow a cartridge to move away from the friction hold support of the carrier and come into contact with the routing channel at one end of the cartridge while its weight is still supported by the carrier at the opposite end of the cartridge. Cartridges exit from the carrier and come into contact with the routing channel by overcoming the friction applied onto them by the carrier. This friction is overcome by applying forward momentum to the cartridges in conjunction with ceasing momentum in the carrier and routing channel. This is accomplished by applying rapid forward acceleration onto the loading medium tool, carrier and cartridges, and then bringing an abrupt stop in forward momentum to the carrier and loading medium tool only. This is preferably accomplished by hitting a loading medium tool hosting a carrier with ammunition against a foreign surface with the repository channel between the cartridges and the foreign surface. The impact of the loading medium tool with the foreign surface causes a sudden halt in the forward momentum of the loading medium tool, which transfers to the tangent carrier, but only partially to the cartridges. The cartridges, still having forward inertial momentum, overcome the friction applied onto them by the carrier and move in the direction of the foreign surface until stopped by the routing channel. The support of the weight of the cartridges still lies on the carrier, as ends of cartridges are still in the carrier, and is only transferred onto the routing channel by lifting the carrier away from the cartridges. Once the carrier is lifted away and support of the cartridges lies on the routing channel, the routing channel guides the cartridges toward a consolidating funnel and bottom end opening on the loading medium tool with the assistance of gravity as the loading medium tool is angled diagonally or perpendicularly to the ground. Cartridges passing through the consolidating funnel are consolidated into a single row configuration and exit through the bottom end opening into a magazine speed loading tool coupled with the loading medium tool.

[0022] Another example embodiment of the present invention is a process by which the cartridges on a carrier are pressed out of the carrier onto a magazine speed loading tool by urging the ends of the cartridges placed into the carrier out of the carrier, accessing these ends through perforations in the carrier. This is accomplished with the assistance of a comb shaped tool which contains teeth that correspond to perforations on the carrier. The comb teeth are inserted into the carrier perforations where they press the inserted cartridge ends toward the openings through which the cartridges were inserted into the carrier. This is done by overcoming the friction forces placed onto the cartridges by the carrier. Once the friction forces are overcome, the cartridges eject from the carrier directly onto magazine speed loading tool placed adjacent to the carrier.

[0023] In reference to example embodiments disclosed in FIGS. 1A and 1B, an ammunition carrier **202** is a generally elongated rectangular box shaped container embedded with multiple cartridge holding compartments **207**. The cartridge holding compartments are accessed by hole openings **211**

located on a top face side **210** of the carrier **202** and are configured to host and grip cartridges **200** in the carrier **202** by friction. The hole openings **211** are generally lined in rows on the top face side **210**, and carriers **202** often host single or multiple rows of hole openings **211**, organized in a parallel configuration. The carrier **202** also contains perforations **206** on its sides, other than the top face side **210**, which expose the tips **208** or flat primer sides **204** of cartridges **200** through the sides of the carrier **202**.

[0024] In reference to example embodiments disclosed in FIGS. 2A and 2B, the loading medium tool **101** is a generally elongated rectangular box shaped container that defines a routing channel **102** running lengthwise through it, which serves to direct and dispense cartridges **200** onto a magazine speed loading tool **201**. A top opening **103** and bottom opening **104** are located on opposite ends of the loading medium tool **101**. Openings **103**, **104** are tangent to both ends of the routing channel **102**. The top opening **103** preferably allows for the insertion of cartridges **200** on a carriers **202** while the bottom opening **104** preferably allows for the dispensing of cartridges **200** out of the loading medium tool **101**. Loading medium tool **101** defines a consolidating funnel **109** in the routing channel **102**, which is positioned between the top opening **103** and bottom opening **104**. The consolidating funnel **109** consolidates multiple rows of cartridges **200** placed into the routing channel **102** into a single row for passage through the bottom opening **104** and loading into the loading opening **209** of a magazine speed loading tool **201** coupled with the bottom opening **104**. In an embodiment, the consolidating funnel **109** comprises two non-parallel, non-tangent planar slopes which narrow toward a common focal point, whose broad opening widens in the routing channel **102** to the same width as the top opening **103** and whose narrow opening is coupled to the bottom opening **104**. Loading medium tool **101** defines a side opening **105** in the routing channel **102**, which is positioned between openings **103**, **104**. The side opening **105**, located opposite of the routing channel **102**, allows for the insertion and extraction of carriers **202** with or without cartridges **200** into and out of the loading medium tool **101**. Loading medium tool **101** defines extractor ledges **106** in the routing channel **102**, which are positioned between the routing channel **102** and side opening **105** on a plane parallel to the routing channel **102**. The extractor ledges **106** run parallel to one another throughout the length of the loading medium tool **101** and host cartridges **200** in the space between the extractor ledges **106**. The extractor ledges **106** protrude into the indentations **205** of hosted cartridges **200** which fastens cartridge rims **203** in a space between the extractor ledges **106** and the routing channel **102** known as the rim gap **112**. This fastening prevents perpendicular movement of cartridges **200** to the plane of the routing channel **102**. In an embodiment, the extractor ledges **106** contain arced cutouts **107**, which correspond to the extraction indentations **205** on cartridges **200** and allow the extractor ledges **106** wrap partially around the curvature of the extraction indentations **205**. This assists the extractor ledges **106** in forming greater surface area contact with cartridge rims **203**, so as to allow the extractor ledges **106** to better ground cartridges **200** to the routing channel **102** during the stripping of cartridges **200** from a carrier **202**.

[0025] In reference to example embodiments disclosed in FIGS. 3A, 3B and 3C, a system and method for transferring cartridges **200** from a carrier **202** onto a loading medium tool **101** for loading onto a magazine speed loading tool **201**

involves fastening multiple rows of cartridges 200 onto extractor ledges 106 on the loading medium tool 101 and pulling the carrier 202 from the cartridges 200 to separate them by overcoming the friction hold applied onto the cartridges 200 by the cartridge holding compartments 207 of the carrier 202. A carrier 202 with cartridges 200 is placed onto the routing channel 102 through the top opening 103 of the loading medium tool 101 with the flat primer sides 204 of the cartridges 200 facing into the routing channel 102. The cartridges 200 are placed onto the extractor ledges 106, with the extractor ledges 106 protruding into the indentations 205, and travel in contact with the extractor ledges 106 as they are slid down the routing channel 102 on the carrier 202. Once all of the extraction indentations 205 are slid onto the extractor ledges 106, arced cutouts 107 on the extractor ledges 106, which correspond to the extraction indentations 205, fasten partially around the curvatures of the extraction indentations 205, allowing the extractor ledges 106 to form a greater surface area hold on the cartridge rims 203. The extractor ledges 106 hold the rims 203 of cartridges 200 in the rim gap 112 between the extractor ledges 106 and the routing channel 102 and prohibit perpendicular movement of the cartridges 200 to the plane of the routing channel 102. While the cartridge rims 203 are held by the extractor ledges 106, the loading medium tool 101 hosting the carrier 202 with cartridges 200 is angled to be diagonal or near perpendicular with the ground with the flat primer sides 204 of cartridges 200 facing into the ground. The carrier 202 is lifted away through the side opening 105 as the cartridges 200, restricted from perpendicular movement to the plane of the routing channel 106, stay in place on the loading medium tool 102. The ammunition cartridges 200, now no longer supported by the carrier 202, roll parallel to the plane of the routing channel 102 by influence of gravity, losing tangency with the arced cutouts 107 and extractor ledges 106, and fall toward the consolidating funnel 109 and bottom opening 104 of the routing channel 102. Passing through the consolidating funnel 109, the cartridges 200 consolidate into a single row and pass through the bottom opening 104 where it is dropped into the loading opening 209 of a magazine speed loading tool 201.

[0026] In reference to example embodiments disclosed in FIGS. 4, 5A, 5B and 5C, a system and method for transferring cartridges 200 from a carrier 202 onto a loading medium tool 101 for loading onto a magazine speed loading tool 201 involves fastening a row of cartridges 200 onto extractor ledges 106 on the loading medium tool 101 and pulling the carrier 202 from the cartridges 200 to separate them by overcoming the friction hold applied onto the cartridges 200 by the cartridge holding compartments 207 of the carrier 202. Single rows of cartridges 200 in a carrier 202 are inserted through the top opening 103 or side opening 105 of the loading medium tool 101, with the cartridge flat primer sides 204 pointed into the routing channel 102, onto the extractor ledges 106 in such a manner as to allow the extractor ledges 106 to protrude into the cartridge indentations 205. A row of cartridges 200 in a carrier 202 is placed onto the extractor ledges 106 through the top opening 103 by sliding the extraction indentations 205 of the cartridges 200 between two extractor ledges 106, which pin the cartridge rims 203 between the extractor ledges 106 and the routing channel 102. A row of cartridges 200 in a carrier 202 is placed onto the extractor ledges 106 through the side opening 105 by urging the rims 203 of the cartridges 200 against the extractor ledges

106 until they flex, creating a wider gap of spacing between each extractor ledge 106 to allow passage for the rims 203 between the extractor ledges 106. The extractor ledges 106 are assisted in flexing by slopes 108 on the extractor ledges 106, located on the sides of the extractor ledges 106 closest to the side opening 105. The slopes 108 translate the directional movement of the cartridge rims 203 toward the routing channel 102 into sideways movement for the extractor ledges 106, allowing them to flex to create a wider gap between each other. After the rims 203 move past the extractor ledges 106, the extractor ledges 106 contract back to their original positions and fasten around the extraction indentations 205, trapping the extraction indentations 205 between the extraction edges 106 with the cartridge rims 203 in the rim gap 112 between the extractor ledges 106 and the routing channel 102. Once the extraction indentations 205 on the row of cartridges 200 are placed onto the extractor ledges 106, fastening the cartridges 200 in place on the loading medium tool 101, the carrier 202 supporting the cartridges 200 is lifted away from the cartridges 200, transferring the support of the cartridges on the routing channel 102. The loading medium tool 101 is then angled to be diagonal or perpendicular with the ground, urging the cartridges 200 on the routing channel 102, by force of gravity, to fall through the bottom opening 104 where it is dropped into the loading opening 209 of a magazine speed loading tool 201.

[0027] In reference to example embodiments disclosed in FIGS. 6, 7A, and 7B, a system and method for transferring cartridges 200 from a carrier 202 onto a loading medium tool 101 for loading onto a magazine speed loading tool 201 involves applying forward inertia and momentum onto cartridges 200 to dislodge the cartridges 200 from the friction hold applied onto them by the cartridge holding compartments 207 of the carrier 202. In order to apply forward inertia onto cartridges 200, a carrier 202 with cartridges 200 is suspended a specific length of distance from the routing channel 102, known as the exit gap 110, with the flat primer sides 204 of the cartridges 200 facing into the routing channel 102. The exit gap 110 is defined by the distance between the routing channel 102 and the carrier 202 which allows cartridges 200 to move out of the carrier 202 beyond the friction hold applied onto the cartridges 200 by cartridge holding compartments 207 while prohibiting cartridges 200 from moving out to such an extent that the weight of the cartridges 200 are no longer supported by the carrier 200 through the cartridge tips 208, which are still in the carrier 202. A set of multiple suspending walls 111, which protrude from and run perpendicular to the routing channel 102 assist in suspending the carrier 202 with cartridges 200 from the routing channel 102 by supporting the top face side 210 of the carrier 202 while leaving an unobstructed path for cartridges 200 to move onto the routing channel 102. The suspending walls 111, while maintaining the distance between the carrier 202 and the routing channel 102, also prohibit the lateral movement of the carrier 202 along a plane parallel to the plane of the routing channel 102. Forward inertia and momentum is applied onto the cartridges 200 by rapidly accelerating the assembly composed of the loading medium tool 101 and carrier 202 with cartridges 200 and bringing the medium loading tool 101 and carrier 202 to an abrupt stop. In an embodiment, the assembly is hit against a foreign surface 124 to accomplish this, with the medium loading tool 101 coming into contact with the foreign surface 124 while the routing channel 102 is between the cartridges 200 and the foreign surface 124 and the cartridges 200 are

between the routing channel 102 and carrier 202. The abrupt halt in movement to the loading medium tool 101 and routing channel 102, which is transferred to the carrier 202 by the suspending walls 111, is weakly transferred to the cartridges 200 by the friction hold of the cartridge holding compartments 207 of the carrier 202. The residual forward momentum, or inertia, in the cartridges 200 overcomes the friction hold of the cartridge holding compartments 207 and ejects cartridges 200 from the carrier 202 over the entire length of the exit gap 110 onto the routing channel 102. The cartridge tips 208 which still remain in the carrier 202 allow for the support of the weight of the cartridges 200 to remain on the carrier 202. The loading medium tool 101 and carrier 202 with cartridges 200 are then sloped diagonal or near perpendicular to the ground, with the cartridge flat primer sides 204 facing toward the ground and the carrier 202 is lifted away from the cartridges 200. This shifts the support of the cartridges 200 from the carrier 202 onto the routing channel 102 where, by influence of gravity, the cartridges 200 move toward to the consolidating funnel 109 and bottom opening 104 of the loading medium tool 101. The cartridges 200, passing through the consolidating funnel 109, consolidate into a single row and pass through the bottom opening 104 where they are dropped into the loading opening 209 of a magazine speed loading tool 201.

[0028] In reference to example embodiments disclosed in FIG. 8, an extraction comb 123 is a generally elongated rectangular bar 120 with multiple prongs 121 protruding from it on a long side 125. The prongs 121, which are also generally elongated rectangular bars, are coupled to long side 125 at a prong proximal ends 126 and run perpendicular to the rectangular bar 120. The prongs 121 are spaced to correspond with the perforations 206 on cartridge carriers 202 and on the ends of the prongs 121 opposite to the prong proximal ends 126 are teeth 122 for urging the tips 208 of cartridges 200 out of carriers 202.

[0029] In reference to example embodiments disclosed in FIG. 9, a system and method for stripping cartridges 200 from a carrier 202 onto a magazine speed loading tool 201 involves urging cartridges 200 out of the carrier 202 by urging the ends of the cartridges 200 placed into the carrier 202. This is accomplished by inserting the teeth 122 of an extraction comb 123 through the perforations 206 on a carrier 202 to urge the tips 208 of the cartridges 200 in the carrier 202 toward the hole openings 211 of the carrier 200. The force of the comb teeth 122 pressing the cartridge tips 208 toward the hole openings 211 overcomes the friction imposed on the cartridges 200 by the cartridge holding compartments 208. This allows the cartridges 200 to eject from the carrier 200 through the hole openings 211 into the loading opening 209 of a magazine speed loading tool 201, positioned beneath the hole openings 211, adjacent to the cartridge flat primer sides 204, to receive the ejected cartridges 200.

[0030] While the preferred embodiment of the invention has been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. Accordingly, the scope of the invention is not limited by the disclosure of the preferred embodiment.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for transferring ammunition from a carrier onto a magazine speed loading tool, comprising:

urging cartridges out of a carrier onto a loading medium tool by overcoming the friction hold applied onto the cartridges by the carrier;

routing cartridges urged onto the loading medium tool through a set of funnels to consolidate them into a single row, then dispensing them onto a magazine speed loading tool.

2. The method of claim 1, wherein cartridges are urged out of the carrier via propelling them out of the carrier by applying high forward acceleration onto the carrier and cartridges and applying an abrupt termination in momentum only to the carrier.

3. The method of claim 2, wherein the high forward acceleration and abrupt termination of momentum is applied onto the carrier by hitting it against a foreign surface.

4. The method of claim 1, wherein cartridges are urged out of the carrier by urging the ends of the cartridges placed into the carrier toward the openings through which they were inserted into the carrier, accessing these cartridge ends through a separate opening in the carrier.

5. The method of claim 1, wherein cartridges are urged out of the carrier by coupling the cartridges onto the loading medium tool and pulling the carrier away from the cartridges.

6. A loading medium tool, the loading medium tool comprising:

one or more ammunition cartridges, the ammunition cartridge further comprising:

a projectile bullet at a proximal end of the cartridge;

propellant configured to propel the projectile bullet in a firearm;

a primer located at a distal end of the cartridge configured to detonate the propellant;

a casing to house the primer, propellant and projectile bullet;

a rim located at a distal end of the cartridge; and

an indentation on the casing located between the rim and the projectile bullet configured to assist a firearm in extracting a cartridge from the firearm barrel;

an ammunition carrier, the ammunition carrier further comprising:

a tray, configured to contain one or more ammunition cartridges in a single or multiple row configuration;

cartridge holding compartments imbedded in the tray and exposed on a side of the tray, configured to host and maintain cartridges in the tray by exerting friction onto the cartridge projectile bullet, casing, indentation or rim; and

perforations, located on the sides of the tray on which the cartridge holding compartments are not located, configured to expose the ends of the cartridges which are inserted into the tray;

a proximal opening, located at a proximal end of the loading medium tool, configured as an inlet for the indentations of cartridges on a carrier to be placed onto the extractor ledges;

extractor ledges, located on the loading medium tool on a plane between the routing channel and the side opening that is parallel to the plane of the routing channel, configured to fasten into cartridge indentations and obstruct the perpendicular movement of cartridge rims to the plane of the routing channel;

a side opening, located between the proximal and distal ends, configured as an inlet for cartridges extracted from

the carrier to pass into the routing channel or as an inlet for cartridge indentations to be placed onto the extractor ledges;

suspension walls, running perpendicular to the routing channel, configured to support and suspend the carrier a specific length from the routing channel when transferring cartridges from the carrier into the medium loading tool;

a routing channel, defined by a wall of the loading medium tool which runs between the proximal and distal openings, configured to receive cartridges extracted from the carrier and direct them through the consolidating funnel to the distal opening;

a consolidating funnel, located on the routing channel between the proximal and distal openings, configured to consolidate ammunition in the routing channel into a single row configuration;

a distal opening, located at a distal end of the loading medium tool, configured to receive cartridges consolidated into a single row through the consolidating funnel and dispense them into the loading opening of a magazine speed loading tool; and

a magazine speed loading tool, coupled to the distal opening, configured to receive cartridges from the routing channel through a loading opening on the magazine speed loading tool.

7. The system of claim 6, wherein cartridges are transferred from a carrier onto the routing channel by fastening the indentations of the cartridges onto the extractor ledges and pulling the carrier away from the cartridges.

8. The system of claim 6, wherein the extractor ledges contain arced cutouts that allow the extractor ledges to wrap partially around the curvature of the cartridge indentations to enable the extractor ledges to form greater surface area contact with the cartridge indentations and rims.

9. The system of claim 6, wherein the locations of the arc shaped cutouts on the extractor ledges correspond with the indentations of the cartridges in the carrier.

10. The system of claim 6, wherein the extractor ledges flex to create a wider gap between one another to accommodate the passage of cartridge rims between the extractor ledges but retract back to their original positions upon the passage of the rims to fasten into the indentations of the cartridges.

11. The system of claim 11, wherein slopes on the extractor ledges facilitate the flexing of the extractor ledges.

12. The system of claim 6, wherein cartridges are transferred from a carrier onto the routing channel by coupling the carrier with cartridges onto the suspending walls and apply-

ing rapid acceleration and abrupt deceleration to the loading medium tool and carrier with cartridges to allow the continued momentum in the cartridges to dislodge the cartridges from the carrier.

13. The system of claim 12, wherein acceleration and deceleration are created by hitting the loading medium tool hosting a carrier with cartridges against a foreign surface in such a configuration that the cartridges lie between the carrier and routing channel and the routing channel lies between the cartridges and the foreign surface.

14. The system of claim 6, wherein the partition of space between the routing channel and a hosted carrier with cartridges created by the suspending walls allows sufficient room for a cartridge to partially eject from the carrier, but not to such an extent that the weight of the cartridge is no longer supported by the carrier through a cartridge end.

15. The system of claim 6, wherein cartridges in a carrier are placed into the loading medium tool with the primers and distal ends of the cartridges facing into the routing channel.

16. The system of claim 6, wherein the consolidating funnel is two non-parallel, non-tangent planar slopes which narrow toward a common focal point, whose narrow opening is coupled to the distal opening of the loading medium tool and whose broad opening widens to the width of the proximal opening in the loading medium tool.

17. The system of claim 6, wherein the suspending walls are angled to the routing channel to slant a hosted carrier and cartridges so that cartridges come into contact with the routing channel at an angle.

18. The system of claim 6, wherein cartridges placed onto the routing channel are urged through the consolidating funnel to be consolidated into a single row and is further urged through the distal opening to be dispensed into a magazine speed loading tool.

19. A method for transferring ammunition from a carrier onto a magazine speed loading tool, comprising:

urging a cartridge out of a carrier onto a magazine speed loading tool by urging the end of the cartridge that is inserted into the carrier out the opening through which it is inserted into the carrier, accessing the inserted end of the cartridge through an unobstructed opening in the carrier.

20. The method of claim 19, wherein multiple inserted ends of cartridges are urged out of the carrier simultaneously by an apparatus with multiple ends, which correspond to the ends of the cartridges, inserted through an unobstructed opening in the carrier to access the inserted cartridge ends.

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