REMARKS

Applicant hereby amends Claims 7 and 20. In view of the following discussion, all of pending Claims 7-18, 20, 22-28 and 29-33 are in condition for allowance.

I. Examiner Interview

Applicant notes with appreciation the Examiner Interview of May 28, 2008 and the detailed discussion of Applicant’s position as to the prior art and claims. Specifically, Applicant’s undersigned representative pointed out that the claims define that the weapon is maintained in the active state “exclusively dependent” upon the strength of the signal.

The claims were discussed relative to both the Reiner ‘642 patent and the corresponding published application identified as the Reiner ‘976 application, which contains different disclosure than the ‘642 patent. Funfgelder was also discussed.

II. Section 112 Objections

With respect to the Section 112 rejections in the latest Office Action, reconsideration is requested:

Office Action - Paragraph 1

This drawing objection was previously addressed in Applicant’s May 14, 2007 response by submission of a substitute drawing sheet for Figure 1. The amendments and the comments below as to Figure 1 were made in this prior response but were not acknowledged in the June 20, 2007 Office Action. Consideration is now requested.

Repeating as to the Paragraph 1 rejection, the manner in which the weapon is placed in the activated/deactivation state is asserted in the Office Action as being objectionable and requiring amendment of the drawings. Accordingly, Figure 1 and specification Paragraph 29 were amended in the May 14, 2007 response to diagrammatically represent an electromechanical locking mechanism 26. This amendment does
not add new matter since an electromechanical locking mechanism of this type is known for weapons. For example, the Reiner references simply refer to locking devices 14 which are diagrammatically illustrated in the same manner as Applicant’s substitute Figure 1.

Approval of Figure 1 is requested.

Office Action - Paragraph 3

It is not understood why this enablement objection was only first raised in the June 20 Office Action after a number of several prior Office Actions. Further, the June 20 Office Action was made final, and Applicants were not provided any opportunity to address this rejection.

Despite the foregoing, placing the weapon in an active state or deactivated is clearly enabled by the specification, and the knowledge of the skilled artisan. In this regard, specification Paragraph 29 teaches the weapon has a microprocessor which is configured to activate the weapon where the weapon is placed in the activated state by unlocking of an electromechanical locking mechanism or similar safety mechanism.

Paragraph 13 further discloses that electromechanical locking is carried out through an electromagnetic mechanism or through activation of the electronics during electronic ignition in weapons of this type. Thus, specific examples of activation mechanisms are provided and further specifics are not required to enable the skilled artisan, who would have knowledge of these mechanisms and their use in weapons.

In further support, Applicants note the discussion below of MPEP §2164.08 which is applicable here.

Office Action - Paragraph 4

As to Paragraph 4, Applicant reiterates the prior arguments as to this issue. Claims 26 and 31 are objected to based upon the recitation in these claims that the name or picture of the authorized user is to be displayed on an
indicator of the identification unit. Applicants respectfully disagree.

These claims recite the step of displaying the name or the picture of the authorized user on the identification mechanism. Pursuant to MPEP §2164.08, this section, as argued previously, sets forth that “not everything necessary to practice the invention need be disclosed” and in fact it is best to omit some information. “All that is necessary is that one skilled in the art be able to practice the claimed invention, given the level of knowledge and skill in the art.” The skilled artisan would readily understand how to practice the claimed invention based upon the specific disclosures of the specification.

More particularly, the disclosures of Paragraphs 26 and 28 define that there are three interconnected structural components comprising the identification mechanism 2 which “includes a sensor for detecting an identification code, namely a fingerprint reader 5”, a microprocessor 9 which is included on a printed circuit 8, and an LCD indicator 12 which is “controlled by” the microprocessor 9. These components are specifically recited in Paragraph 26.

Further, Paragraph 28 defines that the microprocessor 9 has a store. This store has the fingerprint pattern of the authorized person, or other identification, stored therein. This clearly defines that the identification mechanism 2 senses a characteristic of the authorized user wherein the microprocessor serves as a comparator which compares the input fingerprint with the stored fingerprint and effects matching therebetween. Hence, the microprocessor 9 is able to identify the authorized person through the comparison and matching of the input and stored fingerprint. Clearly, an identification of an authorized user is accomplished.

Next, it is possible to use this authorization routine to effect display of the name or picture of the authorized user of the weapon on the display 12. In particular, Paragraph 26 states that the LCD indicator and the other electronic
components of the identification mechanism are controlled by the microprocessor 9. In this regard, the identification mechanism 2 further includes the function key 13 as part of the identification mechanism wherein the function key is configured to indicate the name or picture of the authorized user of the weapon on the display 12. Thus, the identification mechanism 2, including the function key 13 thereof, is operatively connected to the microprocessor 9, which microprocessor 9 in turn is connected to the display 12. It is believed that the skilled artisan would readily appreciate that the name or picture would be in the store of the microprocessor 9 and the function key 13 would be configured and cooperate with the microprocessor 9 so that the name or picture is displayed through the microprocessor 9 on the display 12. This is believed to be clearly within the realm of skill of the artisan, and it is unclear how this disclosure would not enable a skilled artisan to connect a function key with a microprocessor and a display to effect the display of a picture or name of the authorized user that has been identified by the microprocessor 9 during the comparison process.

Further, the standard is not that the specification would teach every exact detail, but only that the specification teach the skilled artisan how to make and use the scope of the claimed invention without "undue experimentation". MPEP §2164.08. Hence, the standard of enablement being applied against Claims 26 and 31 is not believed to be in conformance with established standards of enablement, and the objection to such claims is believed improper. Withdrawal of the objection to Claims 26 and 31 is respectfully requested.

Office Action - Paragraph 5
Claim 30 is rejected as failing to comply with the written description requirement. Applicants respectfully disagree with the statement in the Office Action that "there is no such disclosure in either the original specification or
drawings.” Applicants cite Paragraphs 4, 5, 7, 8 and 9 in support.

Paragraph 4 of the specification refers to prior art which requires a coded signal that is continuously communicated in coded form wherein receipt of the continuously coded signal is required. This system can be overcome or paralyzed as disclosed in Paragraph 5 by a strong interfering transmitter which interferes with the continuously coded signal and overpowers same so as to disable the weapon from firing.

Paragraph 7 further discloses that the present invention, after the initial unlock code is received, exclusively depends on the signal strength which must be continuously received at a level that is at least as great as the signal strength which occurs at the maximum usable distance between the user and weapon. Thus, when the signal strength is at or above this minimum signal strength, the weapon is maintained in the active state.

As disclosed in Paragraph 8, "maintaining the readiness of the weapon to fire is therefore exclusively dependent upon signals received by the receiver having a field strength which corresponds "to the minimum field strength defined at the maximum distance between the transmitter and receiver". The weapon remains activated when the field strength is equal to or greater than the field strength at the minimum level.

Paragraph 9 further defines that "the readiness of the weapon to fire cannot be disturbed by an interfering transmitter" since only the strength or the field strength of the received signals is important. Paragraph 9 further discloses that the weapons can "no longer be rendered functionless with a strong interfering transmitter". Thus, the skilled artisan will readily appreciate that an interfering transmitter cannot overpower the signal, wherein an increase in signal strength would not render the weapon of the invention useless since the signal strength would at all times be above the minimum required signal strength.
Thus, the subject matter of Claim 30 is clearly within the scope of the invention as possessed by the inventors and as disclosed in the application. Claim 30 is believed to be fully supported by the disclosure. Claim 30, however, was also amended to provide alternate language which may be more acceptable to the Examiner wherein the additional insert specifically conforms to the disclosure of Paragraph 9.

Based on the foregoing, Applicants respectfully contest the objection to Claim 30, and reserve the right to appeal such objection.

II. Prior Art Rejections

As to the prior art, Claims 7-11, 13, 14, 17, 18, 20, 22, 29 and 32 are rejected as being anticipated by the Reiner '642 patent. To respond to this rejection, Applicant makes the following points, and in doing so, reiterates many comments from its prior response.

A. As argued in the May 14, 2007 response, the Reiner '642 patent must be interpreted in combination with its published application, namely Published US Patent Application No. 2002/0032976 A1 (herein the Reiner '976 application).

Both the Reiner '642 patent and the Reiner '976 application are of record.

The Reiner system does not disclose applicant’s claimed invention since Reiner does in fact require continuous transmission of identification codes 30 which are continuously checked upon each transmission to confirm the presence of an authorized user. This is a first condition of having the weapon activated and this first condition must continue to exist for the weapon to remain activated.

Simultaneously, with this continual verification of an authorized user, distance monitoring between the weapon and identification device also occurs which is a second condition necessary for the weapon remaining in the activated state.

To fully appreciate the requirement that two separate conditions, namely 1) authorization code and 2) distance, must
continue to be satisfied even after initial activation of the weapon, the '976 application needs to be considered along with the similar, but different text of the '642 patent.

The '976 application is believed closest to the original PCT disclosure and contains important differences as to the Reiner '642 patent. Most notably, patented Claim 5 actually conforms to published Claim 10 of the '976 Application. This claim 10 includes the same claim language and application Paragraph 13 contains the same discussion of this claim language as that discussed below relative to patent Claim 5.

Additionally, the Reiner '976 application also includes application Claims 12 and 41 which are discussed in application Paragraph 41. All of these claims clearly disclose that the identification codes 30, 36 are continuously transmitted which is important since it indicates the first condition of valid identification codes 30 is required simultaneously with the second condition of valid distance measurement.

B. Applicants claimed invention does not require the simultaneous existence of two valid conditions namely, proper authorization and proper distance measurement. Rather, Claims 7, 20 and 29 explicitly preclude requiring the simultaneous receipt of a valid authorization code and a proper distance measurement.

Applicant's invention generally relates to the method of controlling the activation/deactivation of a weapon while avoiding interfering transmissions which would overpower a signal from an identification unit of a user. This objective is accomplished by using the identification mechanism or unit to initially identify an authorized user, and then send an activation code to the weapon which activation code is received and causes activation of the weapon to permit firing.

After the weapon is made active, however, the requirement for activation is no longer needed. Rather, the receiver on the weapon exclusively monitors the signal strength of a continuous signal transmitted by the identification mechanism
wherein the weapon processor maintains the weapon active
"exclusively dependent" upon the signal strength from the
continuous signal sent by the identification mechanism and
without regard to the activation code or activation signal.

As such, the weapon of the claimed invention first
receives the activation code from the identification mechanism
to make the weapon active, and thereafter, the processor on
the weapon exclusively monitors the strength of the signals
being received without regard to the content of the signals,
i.e. frequency, coding, etc. and maintains the weapon active
so long as the signal is at a level above a minimum signal
strength.

Hence, if a powerful interfering transmitter enters the
weapon zone, the interfering signal generated thereby would
only add to the total signal strength which would continue to
stay above the minimum signal strength and the interfering
transmitter would not interfere with continuing activation of
the weapon.

The specific claim language is discussed as follows:
Independent Claim 7: defines that an activation code is
sent and then the continuous signal is transmitted. Receipt
of the activation code causes the weapon to initially be
placed in the active state, and then the strength of the
continuous signal received by the weapon receiver is
monitored. The claimed method maintains the weapon in this
active state "exclusively dependent [emphasis added] upon the
monitored strength of the continuous signal being at or above
a minimum signal strength". The remainder of Claim 7 further
clarifies the meaning of "exclusively dependent" by precluding
such things as the frequency of the continuous signal or the
presence or absence of the activation code.

Thus, signal strength is the sole determinant of the
maintaining step. This is not true in Reiner as discussed
below which requires simultaneous existence of the first and
second conditions.
Independent Claim 20: This claim defines transmitting a coded activation signal with the activation code followed by transmitting an uncoded signal. Upon receipt of the coded activation signal, the weapon is placed in the active state. However, the signal strength of the uncoded signal is monitored and the weapon is maintained in the active state "exclusively dependent" [emphasis added] upon the uncoded received at the weapon being at or above the minimum strength, regardless of the signal frequency or the presence of an interference signal. Thus, since the weapon is maintained active exclusively dependent upon the signal strength, this precludes the requirement of having a proper coded signal monitored simultaneous with the signal strength.

In accord with the discussion below, Reiner does not disclose a method of maintaining the weapon active exclusively dependent upon the strength of an uncoded signal received by the weapon.

Independent Claim 29: Here again, this claim defines an activation code and a continuous signal after the activation code, wherein the weapon is placed in the activated state if the activation code is received, but the weapon is maintained in the activated state exclusively dependent upon the signal strength of the continuous signal being at or above a minimum strength and regardless of signal frequency or the presence of a code therein. This thereby allows for avoiding of deactivation by an interfering signal.

C. Claims 7, 20 and 29 all use the phrase "exclusively dependent" when referring to the signal strength. This phrase distinguishes over Reiner when fully considered.

The term "exclusively dependent" is used in the specification in Paragraph 8 which describes the invention. Further, this terminology does not read on Reiner since it precludes simultaneous monitoring of both (1) a proper activation code and (2) an adequate signal strength which is required in Reiner to maintain the weapon active.
If necessary for appeal, Applicants attach hereto dictionary definitions for "exclusive", i.e. not shared with any others, and "dependent", forced to rely on something else. Thus, Claims 7, 20 and 29 maintain the weapon in the firing state in dependence on only one exclusive factor, namely the strength of the signal.

This prevents overpowering transmitters from drowning out an activation code and causing unwanted deactivation of the weapon which is the very problem of Reiner, and the very problem avoided by Applicant's claimed invention.

D. The Reiner system (as disclosed in the '642 patent and '976 application) completely differs from Applicant’s claimed arrangement since Reiner requires continuous receipt of both (1) the acceptable identification code, and (2) adequate distance.

As discussed below, the two conditions must be present simultaneously and continuously in Reiner.

First Condition/Continuous Receipt of Acceptable Identification Code:

The first condition required in Reiner is continuous receipt of a proper identification code 30, 36. In this regard, Claim 5 of the Reiner '642 patent expressly discloses that the transmission and/or receiving unit (19, 219) of the user (17, 217) is "designed for the continual or continually consecutive, intermittent signal transmission". This thereby does teach that the codes 30 are sent continuously or essentially continuously. In support, Col. 5, lines 32-35 of the Reiner '642 patent discusses Claim 5 and further states that this provides advantages yet "performs an authorized user check without any loss of security, if the checking intervals are kept correspondingly short."

Additional support is provided from the published US application corresponding to the Reiner '642 patent, namely
the Reiner '976 application). It is noted that Claims 12 and
41 disclose that "the transmission and/or receiving unit (20)
in the region of the firearm (2, 4) is designed for the
continual and/or continually consecutive, intermittent
emission of identification codes (30, 36) [emphasis added]."
Notably the language of application claims 10, 12 and 41
substantially track each other, and hence are believed to
expressly disclose that the identification codes 30 are
transmitted continuously or at least substantially
continuously through a "continuously, consecutive intermittent
signal".

The skilled artisan would have knowledge of both the
Reiner '642 patent and the corresponding published '976
application so as to use both documents to interpret the scope
of disclosure of the Reiner art.

Hence, the coded signals 30 are in fact sent continuously
even after the weapon is activated.

First Condition/This First Condition also Requires Continuous
Recognition of the Identification Codes:

Since the coded signals 30 are continuously sent, they
are tested each time for proper recognition or authentication.
If not authentic or proper, the test would fail and the gun
would not operate.

As to such signals 30, all of Col. 10 and through Col.
11, lines 1-3 of the '642 patent describe how these
identification code signals are transmitted, possibly
encrypted and decrypted, and then compared (after being
decrypted) to determine if the identification code 30 matches
a code 36 in the memory unit. The following citations to this
disclosure are from the '642 patent for reference purposes.

As noted previously, the Reiner disclosure does disclose
multiple repeated transmissions. In this regard, Col. 10,
lines 34-37 disclose that the "encoding code" and "decoding
code" vary from "one transmission to the next". It is
believed clear that the encoding and decoding codes are in

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fact encryption and decryption algorithms and the reference to a signal being "encoded or even uncoded" in Col. 10, lines 57-62 is really a description of the unique activation code 30 being encrypted or not.

Col. 10 further discloses that when the code 30 is received, it is compared for a match with stored codes 36. This comparison is done each time a code is received, and since transmission of the code 30 is sent by a continual or continually consecutive, intermittent signal transmission, the code 30 would be checked substantially continually and would need to continually match the code 36 for the release element 15 to be active and remain active.

Section E, below, discusses how these identification codes 30 are always coded, and the reference to encoding and decoding merely refer to encryption or decryption of a signal that always has a unique identification code, whether encrypted/encoded or decrypted/decoded.

Second Condition/Adequate Distance:

While columns 10 and 11 of Reiner discuss distance, this does not eliminate the fact that the code 30 continues to be transmitted even when distance is monitored.

In further support, Col. 11, lines 18-23 of the '642 patent disclose that distance protection can be provided by limiting the transmission range, which also indicates that continuous transmissions would be required for this option to work. Since this passage is talking about the transmissions relating to the identification code 30, this necessarily indicates that the identification code 30 continues to be monitored and authenticated, i.e. the first condition, simultaneously while the signal strength might be used to monitor distance, i.e. the second condition.

Additionally, it appears there may be secondary distance measuring devices 37 but this does not negate the continued transmission and monitoring of the code 30 which is expressly disclosed in the Reiner '976 application as being continuous (as disclosed in Claims 10, 12 and 13). Hence, Reiner
clearly discloses repeated transmission of the code 30, such that the distance measurement is a secondary condition that is simultaneous tested while the code 30 is still being transmitted and itself tested as the first condition.

The First and Second Conditions Must Coexist Such That The Reiner Weapon is Not Maintained Active Exclusively Dependent Upon Distance:

Clearly then, the code 30 transmission must coexist with the distance test which distinctly differs from applicant's claimed invention. Hence, Reiner does not maintain the weapon in a firing state exclusively dependent upon the distance test, since it also requires simultaneous performance of the identification code test.

In further support of the continuous transmission of the code 30, patent Claim 7 and application Claim 13 recite that the range of transmission of the identification codes is greater than the distance or the distance range. Application paragraph 16 discusses application Claim 13 and states that "an authorized user can be identified without however deactivating the locking device e.g. for removal of the firearm and/or for firing a shot, and only when the authorized user is located with the distance range e.g. to the firearm can the locking device be deactivated". This clearly indicates that the identification code and distance measuring are two different processes that occur and may occur at different distance parameters. In particular, the code comparison and authentication would be occurring even when beyond the distance range.

At no point is Reiner believed to disclose that the continuous tracking of the identification code 30 would be terminated or disregarded, and the system would rely solely upon the distance measuring to maintain the firearm active.

As such, the Reiner documents do not anticipate Applicant's claimed invention.
B. Office Action Paragraph 9 Incorrectly States that A Signal is Transmitted That Includes An Activation Code or May Be Uncoded

The identification code 30 referenced in Column 10, lines 1-4 is always coded to indicate that an authorized user has the weapon. The encoding/decoding of Col. 10, lines 57-62 merely refers to whether the identification code 30 is an encrypted coded signal or an decrypted coded signal, and in no case is the identification code 30 made uncoded since this would eliminate the unique signature which makes 30 an identification code.

This discussion is also amplified by Section D above which discusses the encryption/decryption in more detail.

Therefore, the code of the identification code 30 and the encryption/decryption are two distinctly different things like apples and oranges. Paragraph 14 of the Office Action, also intermingles apples and oranges in the incorrect statement that Col. 10, lines 56-62 “provides for both coded and uncoded signals”, which really means encrypted/decrypted but does not teach that identification 30 does not always have a unique signature.

F. Office Action Paragraph 23 includes statements that do not take into account the differences in so-called ranging signals, and the different, continuous identification codes.

As discussed above, the point of Applicant’s argument is that the transmission of ranging signals and identification codes are two different things, which must occur simultaneously and must be satisfied after weapon activation for the Reiner weapon to remain in a firing state.

It is in an incomplete statement that “once the gun is authorized, the only way to deactivate the weapon is to take it out of range of the user”. This is not correct since the weapon can also be deactivated by disrupting or overpowering the transmission and authentication of the identification codes 30.
G. Funfgelder Also Simultaneously Requires A Positive Code Comparison and Maintaining Adequate Difference to Maintain the Weapon Active

As to Funfgelder, this reference fails to cure the deficiencies of Reiner discussed above. In particular, this reference is now cited under Section 102 as an anticipatory reference for the pending claims even though such was not the case through multiple Office Actions.

In this regard, Claim 1 of Funfgelder requires that "the object is activated or remains activated [emphasis added] for each positive code comparison and [emphasis added] if a predetermined distance is maintained". The disclosure also discloses that "locking of the weapon is cancelled only so long as the signal", namely the coded signal is received. Hence, this system also requires two simultaneous conditions, namely 1) continuous receipt of a coded signal and 2) proper distance. Funfgelder therefore can be overpowered by an interfering transmitter which overpowers the coded signal and prevents successful receipt of this signal. While the distance test may be adequate, the overpowering disruption of the coded signal could then cause unwanted lockout of the weapon.

Funfgelder therefore differs from Applicant's claimed invention which does not require a continuous coded signal and instead, maintains the weapon active exclusively dependent upon the signal strength. As such, Funfgelder does not anticipate Applicant's claimed invention.

H. Office Action Paragraph 24 Alleges Applicant's Analysis is "Backwards"

Applicants analysis is believed valid in that: Funfgelder requires simultaneous detection of 1) a coded signal, and 2) an adequate distance; Funfgelder does not disclose maintaining a weapon active "exclusively dependent" upon signal strength without regard to other factors such as the presence of an
activation code; and Claims 7, 20 and 29 recite such step of maintaining the weapon active "exclusively dependent" on the signal strength, such that the prior art (including Funfgelder and Reiner) fail to disclose all features of applicant's claimed invention.

The Office Action includes the statement as to Funfgelder that "the coded signal is the activation signal while the distance-measuring signal is not coded" which statement fails to address the maintaining step of the Applicant's claims and the "exclusively dependent" feature thereof, which feature is not present in this prior art. Specifically, Funfgelder requires that the distance-measuring signal and identification code continually coexist, and the object remains activated only for each positive code comparison simultaneously with maintenance of a predetermined distance.

I. The Remaining Obviousness Rejections Fail Due to the Deficiencies of Reiner and Funfgelder.

As to the obviousness rejections of Claims 12, 24, 15, 25, 33 and 23, all of these references require Reiner as disclosing the basic invention of the independent claims. In that Reiner is defective and does not disclose the features of the independent claims, Reiner is not believed effective as the primary reference for the obviousness rejections, and withdrawal of such rejections is respectfully requested.

Based on the foregoing, all of the claims are believed in condition for allowance. It is believed that prosecution will be advanced by conducting a further Examiner Interview, and the undersigned requests same once the Examiner has had an opportunity to review this Response.

Respectfully submitted,

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*limited recognition number

Encl: Pages 257 and 330 of New Webster's Dictionary and Thesaurus

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NEW WEBSTER'S DICTIONARY AND THESAURUS
of the English Language

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