United States District Court,
C.D. California.

James F. McNULTY, Jr,
Plaintiff.
v.
TASER INTERNATIONAL INC., et al,
Defendants.
Richard Bass,
Involuntary Plaintiff.
v.
Taser International Inc., et al,
Defendants.

No. SACV 01-0395 DOC

July 29, 2002.

Owner of patent for stun gun sued competitor for infringement. On cross-motions for summary judgment, the District Court, Carter, J., held that: (1) "trigger means" referred to switch which itself mechanically provided connection between power supply and oscillator; (2) "disabling means" meant electronic means for overriding circuit connection created by trigger means after predetermined time period; (3) patent was not infringed by accused device whose trigger activated preset sequence of charge activation and deactivation; and (4) patent was not infringed by accused device whose circuit could be disconnected either mechanically or without reference to how long trigger button was depressed.

Plaintiff's motion denied; defendant's motion granted.

5,193,048. Construed, Not Infringed.

James F. McNulty, Jr., Calimesa, CA, Pro se.

Thomas G. Watkins, III, Cahill Sutton & Thomas, Phoenix, AZ, Dimitrios C. Rinos, Rinos & Martin, Santa Ana, CA, Carol Ann Rohr, Santa Monica City Attorney, Santa Monica, CA, Maxine J. Lebowitz, Robert John Chavez, Ford Walker Haggerty & Behar, Long Beach, CA, Gregory M. Kunert, Richards Watson & Gershon, Los Angeles, CA, Kimberly Hall Barlow, Jones & Mayer, Fullerton, CA, for Defendants.

ORDER

MARKMAN HEARING CLAIM INTERPRETATION AND ORDER DENYING PLAINTIFF'S MOTION FOR SUMMARY ADJUDICATION AND GRANTING DEFENDANT'S MOTION FOR SUMMARY JUDGMENT

CARTER**, District Judge.**

Before the Court is Plaintiff James F. McNulty's motion for summary adjudication of the issue of patent infringement and Defendant Taser International Inc.'s cross-motion for summary judgment. Beginning on March 19, 2002, the parties presented evidence in a proceeding commonly known as a *Markman* hearing to facilitate claim construction of claim 39 of United States Patent 5,193,048 ('048 patent). After the close of the *Markman* hearing the Court requested that both parties file motions for summary judgment. The parties had presented extensive evidence at the *Markman* hearing regarding both the proper interpretation of the patent and the alleged infringement of the '048 patent by Defendant's products. Therefore, the parties agreed that motions for summary adjudication of infringement would be appropriate and would allow the Court to determine both the claim interpretation and the infringement issue at the same time. The parties waived their rights to additional oral argument. Thus, upon consideration of all papers submitted in this matter, the evidence and oral argument presented at the *Markman* hearing, and for the reasons set forth below, the Court DENIES Plaintiff's motion for summary judgment and GRANTS Defendant's motion for summary judgment.

I. BACKGROUND

Plaintiff James F. McNulty, Jr. filed his original complaint in this action on April 9, 2001, alleging infringement of patent '048. The '048 patent refers to a nonlethal device with an electric charge that causes a contact shock, commonly referred to as a type of stun gun. Patent '048 was issued to Dennis R. Kaufman and William A. Keeley in March 1993 and was subsequently assigned to Richard Bass. Currently, Bass' company, Electronic Defense Technologies, manufactures stun guns (some of which use the '048 patent), including a model with the product name UltronII. FN1

FN1. Mr. Kaufman currently acts as a consultant for Electronic Defense Technologies.

Plaintiff's rights to the '048 patent were acquired pursuant to a license agreement with Bass, which became effective upon both parties' signatures, on February 7, 2001. Plaintiff paid $1000 in exchange for an exclusive, but limited, right in the '048 patent. The grant applies only when the patent is used in conjunction with one of two other specified patents. Bass retains all rights when the '048 patent is used in any other manner. This Court previously found that Plaintiff is an exclusive licensee, and not an assignee, under the agreement and ordered Bass joined as an involuntary plaintiff to effectuate the suit. (Order Jan. 7, 2002).

Subsequent to the license agreement, and in accordance with its express terms, Plaintiff granted a sublicense in the '048 patent to Barnet Resnick on February 15, 2001. In the agreement, Plaintiff reserved the right to prosecute actions against infringers and agreed to a specific formula for sharing any payments received from such litigation. Resnick has not joined the suit voluntarily and the Court previously denied a motion to join him involuntarily. (*See* Order Jan. 7, 2002).

Defendant Taser International, Inc. (Taser) is a corporation that manufactures stun gun products that Plaintiff contends infringe '048 patent. Specifically, Plaintiff alleges that three of Taser's products, the U34000, the M-18L and the M-26, infringe claim 39 of the '048 patent.

II. LEGAL STANDARD

[1] Claim interpretation is a matter of law, Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed.Cir.1995) (en banc), and is thus amenable to summary judgment, Phonometrics Inc. v. N. Telecom Inc., 133 F.3d 1459, 1463 (Fed.Cir.1998). The Court may resolve a claim interpretation dispute pursuant to a traditional summary judgment motion, even though the analysis involves both issues of law and questions of fact. Id. at 1463-64. Many recent courts, however, have chosen to have a claim interpretation hearing, or *Markman* hearing, to facilitate the claim interpretation process. *E.g.,* Ethicon Endo-Surgery, Inc. v. United States Surgical Corp., 93 F.3d 1572, 1577 (Fed.Cir.1996). This Court conducted a *Markman* hearing from March 19, 2002 to March 21, 2002.

The parties were given the opportunity to present evidence related to Defendant's products, in addition to evidence that only applies to claim interpretation. The parties have now filed summary judgment motions to resolve both the claim interpretation and the issue of infringement in one ruling by the Court. Thus, the standard for summary judgment motions applies. Summary judgment is proper if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c).

III. CLAIM INTERPRETATION

A. Governing Law

[2] [3] [4] A patent infringement analysis involves two separate steps: (1) interpretation of the asserted claims, and (2) comparing the claims to the accused device. Markman, 52 F.3d at 976. Three principal sources are used in claim interpretation, the claims, the specification, and the prosecution history. Id. at 979 (quoting Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed.Cir.1991)). Claim interpretation begins with the language of the claim. K-2 Corp. v. Salomon S.A., 191 F.3d 1356, 1362 (Fed.Cir.1999). As a general rule, terms in a claim are to be given their ordinary and accustomed meaning. *Id*. The terms must, however, be read in the context of the patent specification. *E.g.,* Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc., 261 F.3d 1329, 1338 (Fed.Cir.2001) (quoting Markman, 52 F.3d at 979). The specification includes a written description of the invention which explains the invention and defines key terms. Markman, 52 F.3d at 979. Additionally, the court should also consider the prosecution history, which is the "undisputedpublic record" of the patent. Markman, 52 F.3d at 980. If there is a meaning set out in these intrinsic materials that varies from the ordinary meaning for the terms, that definition will control. K-2 Corp., 191 F.3d at 1362-63.

[5] Extrinsic evidence, such as expert testimony and learned treatises, may also be helpful to understand a patent's underlying scientific principles and give meaning to technical terms and terms of art. Seymour v. Osborne, 78 U.S. 516, 546, 11 Wall. 516, 20 L.Ed. 33 (1870). This evidence is received at the discretion of the court and is not controlling. *See id.; see also* Biovail Corp. Int'l v. Andrx Pharm., Inc., 239 F.3d 1297, 1300 (Fed.Cir.2001). After examining all relevant intrinsic and extrinsic evidence, the court then pronounces, as a matter of law, the meaning of the terms in each asserted claim. Markman, 52 F.3d at 981 (citing Loom Co. v. Higgins, 105 U.S. 580, 586, 15 Otto 580, 26 L.Ed. 1177 (1881)).

B. Claim 39 and Figure 5

Claim 39 of patent '048, the basis for Plaintiff's infringement action, is as follows:

An electrical shock device comprising:

a housing containing a power supply and an electronic circuit forming the electrical shock device;

trigger means on the housing for selectively connecting the power supply to the electronic circuit when in a first position; and

means for disabling the electronic circuit when the trigger means is continuously operated in said first position for a first predetermined time period.

Further narrowing the Court's inquiry, only the second and third claim limitations are disputed in this case.

Title 35 of the United States Code, section 112, paragraph 6 states that "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof ...." These are typically referred to as "means-plus-function" claims. Both parties concede, and it is evident to the Court, that the second and third limitations in claim 39 are means-plus-function claim elements. *See, e.g.,* Signtech USA, Ltd. v. Vutek, Inc., 174 F.3d 1352, 1356 (Fed.Cir.1999) (noting that "typically, if the word 'means' appears in a claim element in combination with a function it is presumed to be a means-plus-function element to which s. 112, para. 6 applies"). Section 112, paragraph 6 further provides that "such claim shall be construed to cover the corresponding structure, material, or acts described in the specification or equivalents thereof." 35 U.S.C. s. 112, para. 6. Thus, a proper inquiry in this case must go beyond the language of claim 39 to consider the stun gun structure as set forth in the patent specification. *See id.; see also* Markman, 52 F.3d at 979-80 (pointing to the importance of patent specifications in claim interpretation).

1. Figure 5

The patent specification for the '048 patent includes, among other drawings, a circuit diagram depicting the preferred embodiment of the patented device. Drawing sheet 4 of patent '048, labeled "Figure 5," contains the preferred embodiment (Figure 5). The Federal Circuit has noted that "although patentees are not necessarily limited to their preferred embodiment, interpretation of a means-plus-function element requires [the] court to consult the structure disclosed in the specification, which often ... describes little more than the preferred embodiment." Signtech USA, 174 F.3d at 1356 (citations omitted). Figure 5 illustrates the key components of the structure of patent '048. Therefore, Figure 5 is a valuable tool, although not a dispositive source, in this Court's claim interpretation process. *See generally* 35 U.S.C. s. 112; Markman, 52 F.3d at 979-80.

The first key component is the power supply, designated BT1, that consists of a 9 volt battery for powering the operation of the stun gun. The positive side of BT1 is only directly connected to one aspect of the stun gun, the low battery indicator, which is not part of claim 39. The remaining part of the stun gun is connected to the positive side of BT1 through a mechanical switch, designated SW1.

Mechanical switch SW1 is the second notable component. It is referred to by the parties as the "trigger," as it "closes," when pressed, to connect the electronic circuit and thus activate the stun gun. When "open" it disconnects the electronic circuit. There must be a complete circuit, a closed loop, for the current to flow and thus SW1 is the key to allowing current to flow throughout the electronic circuit. The parties dispute, however, exactly what type of mechanical switch Figure 5 shows as the preferred embodiment of patent '048. According to Plaintiff's expert, Gerald Felper, from Figure 5 it is unclear what sub-category of

mechanical switch that SW1 represents, but it could indicate a "hard-on" mechanical switch. (Mar. 19, 2002 a.m. Tr. at 20, ll. 12-16.) Plaintiff later compared the schematic of SW1 in Figure 5 with schematics of some of Defendant's products that indicate a hard-on or "throw" switch using the same designation. (*See* Ex. 20 (switch SW1).) A hard-on mechanical switch stays closed, or connected, after it is initially pressed, until there is another action to open, or disconnect, it. FN2 Thus, a hard-on switch has two positions and will stay either on or off depending on whether it is in the first or second position. FN3 (*See* Mar. 19, 2002 a.m. Tr. at 90.)

FN2. A typical light switch may be considered a hard-on or throw switch.

FN3. *See* infra Part III.C.1 (discussion and definition of first and second positions).

Defendant argues that SW1 is not a hard-on switch but is rather a momentary switch. This is another type of mechanical switch. It must be continuously pressed in order for it to stay closed, or connected. FN4 (Id.) Mr. Felper testified that SW1 in Figure 5 may represent either a momentary or a hard-on switch. (Mar. 19, 2002 a.m. Tr. at 20.)

FN4. The operating button on a drill or electric toothbrush is a momentary switch, where the user must keep his or her finger on the button to continue the operation.

The third type of mechanical switch is a "push button" switch. Defendant's schematics show a push button switch using an inverted "T" symbol that is not found in Figure 5. A push button switch is pressed once and is released. The switch then closes and immediately opens, it does not stay closed. It is only closed long enough to signal another switch or activate another operation. The Court concludes that SW1 is not a push button switch. That is consistent with the language of claim 39, as detailed below, and with the schematic designation. Push button switches are universally designated with the inverted "T" as in Defendant's schematic, (*see* Exhibit 19 (switch S1)), and not the swing designation of Figure 5.

The third relevant component of patent '048 is the oscillator. Claim 39 refers to an "electronic circuit" and both parties agree that this specifically refers to an oscillator within the stun gun that is used to drive the primary winder of the transformer. FN5 The transformer is designated T1 and it is the transformer FN6 that generates the charge used to shock the subject. One important aspect of the oscillator is Q1, the transistor. A transistor is a type of electronic switch that also "opens" and "closes" to disconnect and connect, respectively, the electronic circuit. Current flows from the power supply to the top of the coil of the transformer and into the transistor. The current flows from the base of the transistor and then to the collector and through the emitter of the transistor when the transistor is closed or connected. When the transistor is closed, the current can flow from the positive side of the power supply through the transistor and back to the negative side of the power supply or vice versa.FN7 The closure of SW1 activates the closing of Q1. When SW1 is in the first position, it sends a signal to Q1 that also closes Q1, allowing the current to flow through and the oscillator to operate.

FN5. The patent specification supports the parties' interpretation. For example, the background of the invention states that the inverter transformer, which is used to generate the high voltage for contact, "is driven by a standard relaxation oscillator circuit which is activated upon closure of a trigger switch." U.S.

Patent 5,193,048 (Patent '048) at Col. 1, ll. 46-51 (issued Mar. 9, 1993). Other portions of the specification designate SW1 as the trigger switch, Patent '048 at Col. 4, ll. 32-35, and elaborate upon the parameters of the oscillator circuit, Patent '048 at Col. 4, ll. 46-54, supporting the assumption that the "electronic circuit" that is connected to the power supply by the trigger is the oscillator.

FN6. Specifically, the invertor transformer in cooperation with the output transformer and the spark gap device.

FN7. There appears to be some convention about referring to current flow as positive to negative or vice versa. Making a definitive distinction is immaterial to this case.

The other relevant switch in the preferred embodiment is U1, an electric switch that is an integrated switching circuit. Integrated switching circuits are more complicated than simple mechanical switches, and U is commonly used to designate them on a schematic. In this case, U1 is more specifically a 555 timer switch that operates to turn on and off the oscillator. U1, like Q1, receives a signal from SW1 when SW1 is closed. U1 measures the length of time that it receives voltage from the power supply, through the connected SW1, and after a predetermined time period it disables the oscillator. Specifically, after the set amount of time, U1 activates terminal Q of U1 which shorts diode D7, grounding Q1. Grounding Q1 opens Q1, interrupting the current and thereby disabling the oscillator. As mentioned above, the oscillator does not operate, or oscillate, when Q1 is open. The oscillator circuit is therefore disabled, cannot drive the primary winder of the transformer, and no charge is generated. The stun gun ceases to shock the subject. This device was created to prevent overzealous operators from prolongedly shocking the recipient of the charge. *See, e.g.,* Patent '048 at Col. 2, ll. 28-32, Col. 2, ll. 63-68, and Abstract ("To preclude overzealous application of the device, the oscillator is disabled after a second predetermined time period.").

In sum, the user of the stun gun presses and thus closes the trigger termed SW1, which connects the positive side of the power supply BT1 with the oscillator circuit by also closing transistor Q1. The oscillator drives the primary winder of transformer T1 which, in combination with the spark gap device, generates the charge used to shock the subject. At the same time, the closure of SW1 also sends a signal to U1 by allowing voltage from the power supply to flow to U1. After a predetermined amount of time, with SW1 closed, U1 activates Q and Q grounds Q1, opening the transistor. By opening Q1, U1 disables the oscillator, preventing a charge, and the operator cannot continue to shock the subject.

2. UltronII

In addition to Figure 5, the parties presented a working stun gun as an illustration of the preferred embodiment of patent '048. Both parties introduced a stun gun with the product name UltronII that was purchased from Electronic Defense Technologies and submitted foundational evidence that this gun is an accurate representation of Figure 5. The versions submitted by Plaintiff and Defendant are not identical. (*Compare* Ex. 23 (Plaintiff's UltronII) *with* Ex. 279 (Defendant's UltronII).)

Mr. Felper received the UltronII, submitted by Plaintiff, from Electronic Defense Technologies and spoke with Mr. Kaufman, the original owner of the '048 patent. Designated Exhibit 23, this UltronII stun gun has a hard-on mechanical switch at the trigger. The stun gun stays on, or active, after the trigger is pressed, even if

the trigger is released, until the trigger is pressed again. Pressing the trigger puts SW1 in the first position. If allowed to run for more than fifteen seconds, the disabling device in the gun is activated and the charge is interrupted for a set interval. After the set time period, approximately eight seconds in the demonstration, the oscillator again drives the primary winder and a charge is created. This continues until the trigger is pressed again, putting it in the second position. According to Mr. Felper, Mr. Kaufman stated that more than one model of the UltronII was made because some customers preferred a momentary switch. (Mar. 19, 2002 a.m. Tr. at 89.) Mr. Felper opened up and examined the electronic circuitry of an identical stun gun that he received at the same time from Mr. Kaufman and testified that it accurately represents the Figure 5 preferred embodiment. (Mar. 19, 2002 a.m. Tr. at 88.)

Defendant also ordered its version of the UltronII from Electronic Defense Technologies. (Ex. 279.) This version has a momentary switch. The user must continually press the trigger to keep the power running through the circuit and to keep the trigger in the first position. If the user releases the trigger, SW1 opens and Q1 is disconnected, thus the oscillator is not connected to the power supply and the circuit does not oscillate. This resets the timer on U1 and the user can then immediately repress the trigger to create a charge that will again last for up to fifteen seconds as long as the user continues to hold the trigger. According to Defendant, it did not receive a choice when it ordered the UltronII and was not informed that there might be another option. (Mar. 19, 2002 p.m. Tr. at 29.) Defendant's expert, Maxwell Neirheim, testified that he opened and examined an identical UltronII that was ordered at the same time and that it represents the preferred embodiment set forth in Figure 5.

The Court accepts both versions of the UltronII as accurate representations of Figure 5. The Court finds that the structure set forth in Figure 5 supports either a hard-on mechanical switch or a momentary mechanical switch in the place of SW1. The use of either mechanical switch allows the user of the stun gun to control when the power supply is connected to the electronic circuit and thus is consistent with the language of claim 39.FN8 Additionally, this is consistent with the schematic designation, as the same designation was used in Defendant's schematic for the U34000 stun gun, Exhibit 19, to designate S2 which both parties agree is a hard-on switch. Plaintiff's expert acknowledged that a "momentary" switch could also be used in the UltronII to represent the preferred embodiment. (Mar. 19, 2002 a.m. Tr. at 20.)

FN8. "Trigger means on the housing for *selectively connecting* the power supply to the electronic circuit when in a first position." (emphasis added)

Either switch results in similar functioning by the operator of the gun. As long as the user maintains the trigger in the closed position, there is a charge until it is disabled and, after a set interval, it restarts. With either switch, the operator can prevent disabling by moving the switch to the open position and then back to closed. With the momentary switch, the user can immediately restart the charge by letting go of the trigger and then repressing it. (*See* Ex. 279.) With the throw switch, the user can turn the trigger off and then on again to restart the timing. (*See* Ex. 23.) Such an insubstantial variation leads the Court to conclude that the two versions of the UltronII are structurally equivalent, as that term is used in 35 U.S.C. s. 112.

C. Trigger Means

"[T]rigger means on the housing for selectively connecting the power supply to the electronic circuit when in the first position."

1. "On the housing" and "when in the first position"

[6] First, is an examination of the parameters that are imposed by the terms "on the housing" and "when in a first position." "On the housing" can be given its ordinary and customary meaning, such that it is the portion of the device that houses the internal electrical components. Reference to the first provision of claim 39 explains that the housing holds the power supply and electric circuit which constitutes the electric shock device. The description of the preferred embodiment further specifies that the housing has a pistol grip and a trigger switch and that the trigger switch is located on the housing "situated to receive an operator's index finger." Patent '048 at Col. 3, ll. 46-50. Also extending from the housing are the contact probes used to charge or stun the subject. Patent '048 at Col. 3, ll. 50-54. Thus, it is clear that the housing is the exterior of the device and that the trigger is located on that housing such that the operator physically touches the trigger to connect the power supply to the electronic circuit.

[7] The parties agree that "first position" refers to the closed position that connects the circuit. The open, or disconnected, position can thus be termed the "second position," although a "second position" is not directly referenced in claim 39. It is only when SW1 is in the first position that the stun gun creates the charge used to apply a shock because it is only then that there is a complete circuit for current to flow.

2. "Selectively connecting"

[8] Next, is the meaning of the term "selectively connecting." There are two areas of dispute in relation to this term, connecting and selectively. The Court first considers the meaning of "connecting" within the context of the '048 Patent.

Defendant argues that in order to connect the power supply to the electronic circuit, the trigger means must be physically positioned between the power supply and the oscillator. Defendant even seems to contend that the trigger must be positioned between the positive side of the power supply, as in Figure 5, and the oscillator. Plaintiff disagrees, pointing to a functional equivalent to show that Defendant's interpretation is falsely limited. Plaintiff's expert proposed an alternate schematic and testified that it is the equivalent of the preferred embodiment. (*See* Ex. 16.)

In the Exhibit 16 schematic, the positive side of the power supply is connected directly to T1 and to the collector of Q1. SW1 is positioned after T1 and Q1, thus-if flowing from negative to positive-the current would flow from the power supply, through the transformer and then through the SW1 switch. (Ex. 16). As with Figure 5, when SW1 is closed, the circuit oscillates. The current does not flow through the oscillator until SW1 is closed, as in Figure 5. In this example, SW1 does not literally provide the connecting piece between the oscillator and the positive side of the power supply, as depicted in Figure 5. Plaintiff argues, however, that SW1 still "selectively connects" the power supply to the electronic circuit as stated in claim 39 because the closure of SW1 connects the oscillator by closing Q1 and thus allowing the current to run through the entire circuit. When SW1 is open, like in Figure 5, the oscillator does not operate.

The Court agrees that this is an equivalent to the structure of Figure 5, as that term is used in section 112. The difference between placing SW1 between the power supply and the oscillator on the negative side of the power supply and the positive side is immaterial in regard to this claim. In either case, SW1, the trigger switch, connects the power supply to the electronic circuit when it is closed by completing the circuit and allowing current to flow. Thus, "connecting" refers to completing the circuit that includes the power supply and the oscillator.

[9] " *Selectively* connecting" refers to the user's control, through operation of the "trigger means *on the housing* " of the connection of the circuit to the power supply. The term "selectively" clearly implies that the user selects when the electronic circuit is closed or connected. This is not limited to the initial connection but applies to subsequent openings and closings of the circuit. Plaintiff argues that the patent essentially claims a means for "selectively putting it into the first position" and thus it refers only to the ability to activate the circuit and not any ability to deactivate, or disconnect it. (*See* Mar. 20, 2002 p.m. Tr. at 33.) The "first position" language, however, merely identifies when the circuit is connected and does not modify what the operator selects or controls.

Although Plaintiff refers to the written specification as evidence, further examination of the patent reveals little support for Plaintiff's definition in either the specification or the preferred embodiment. Plaintiff argues that nowhere in the patent does it say that the switch must be held down by an operator and, thus, it must be that it can also be closed by an internal switch. According to Plaintiff, because an operator cannot directly control an internal switch and, importantly, cannot open an internal switch once it has been activated, it must not be that the operator selectively disconnects the circuit as well. Yet the patent states that the disabling device is triggered "each time the activator switch is pressed continually for 15 seconds" and that "upon continuous application of the activator switch," the circuit will restart. Patent '048 at Col. 2, ll.65-69, Col. 3, ll.1-2. These explanations plainly suggest that the operator selects whether or not the circuit is connected to the battery supply through his/her use of the trigger means, either by holding down the trigger or flipping it on and off.

The Court's interpretation is also buttressed by the language in the disabling means claim limitation. It refers to a "trigger means" that is "continuously operated" in the first position. The language implies that the user is controlling whether or not the trigger means remains in the closed position. The user is the one who "continuously operate[s]" the trigger means. This is verified by the written description which repeatedly refers to overzealous operation by the stun gun user as the impetus behind the need for a disabling means at all. *See* Patent '048 at Abstract, Col. 2, ll. 27-32. The clear inference is that the disabling means is activated when the user of the stun gun keeps the trigger switch closed, connecting the power supply to the circuit, for a continuous time period. Therefore, it must be that "selectively" refers to the user's ability to choose when to connect, and disconnect, the circuit.

3. Summary of Trigger Means

[10] The parameters of the "trigger means" claim limitation are shown by reference to another of Plaintiff's alternative schematics. Mr. Felper testified that Exhibit 18 shows a "functional equivalent" to the Figure 5 structure. (Mar. 19, 2002 a.m. Tr. at 58.) In Exhibit 18, a mechanical "push button" switch SW1 sends a signal to switch S (a RS flip-flop switch) which then closes the transistor, Q1. Until Q1 is closed, the oscillator is not connected to the BT1 power supply. Mr. Felper testified that this simply uses two switches, SW1 and S, in places of the single mechanical switch of Figure 5. (Mar. 19, 2002 a.m. Tr. at 60-61.) SW1 does not have to stay closed in Exhibit 18, the oscillator stays functioning because the RS flip-flop switch stays closed, after it is activated by SW1, until it is disabled. (Mar. 19, 2002 a.m. Tr. at 61.)

Claim 39, however, explicitly refers to a trigger means located "on the housing" that connects the power supply to the electronic circuit "when in a first position." SW1 may selectively connect the power supply to the oscillator but the connection is not determined by when SW1 is in the first position. Instead, the circuit and the power supply are connected when an internal, electronic switch is in the first, or closed, position. The electronic switch is clearly not "on the housing." Thus, the use of SW1 to activate an internal, electronic

switch that then remains in the first position to connect the two key components is not the same structure as that which is disclosed in Figure 5. Further, it is more than an insubstantial variation. Not only does the structure in Exhibit 18 necessarily violate either the element of "on the housing" or "in the first position" (depending upon whether the Court focuses on SW1 or the internal switch) but it also does not literally meet the "selectively connecting" language which means that the operator controls the connection. Although SW1 as a push button switch may ultimately connect the circuit, but it does not disconnect the circuit. In Mr. Felper's example, a second press of the push button switch would not reverse the process and disconnect the circuit. *See supra* Part III.C.2.

Thus, the "trigger means" refers to a mechanical switch that itself provides the connection between the power supply and the oscillator by completing the circuit. The trigger means must be "on the housing" to be operated directly by the user. The user then can "selectively" connect and disconnect the power supply to the electronic circuit by closing and opening the trigger. A mechanical switch that activates an electronic switch that closes to complete the circuit is not an equivalent as the term is used in section 112. However, both a momentary switch and a hard-on switch may be drawn from Figure 5 or act as an equivalent. With either switch, the user can selectively control the connection, the trigger means is located on the housing, and there is a connection only when the switch is closed.

D. Disabling Means

[11] "[M]eans for disabling the electronic circuit when the trigger means is continuously operated in said first position for a first predetermined time period."

The analysis of this claim limitation is relatively straightforward. When the "trigger means," as defined above, is closed for a set period of time, the electroniccircuit is disabled. In Figure 5, U1 is the disabling means. When SW1 is closed, U1 is connected to the power supply. When U1 receives the electronic current it starts timing and after a set period of time of continuously receiving the electronic current, Q of U1 is activated. Q grounds the transistor, Q1, which opens, thereby disconnecting the oscillator. This essentially overrides the connection created by SW1 and the oscillator cannot function. No charge is generated and the user is prevented from continuing to shock the subject.

"When the trigger means is continuously operated in said first position" signals when and how the disabling means is activated. The trigger means must remain closed and, as the trigger means is located "on the housing" and is "continuously operated," the clear implication is that the user must be controlling whether the switch is closed, and thus whether there is a connection and a charge. *See supra* Part III.C.2.

The clause "for a first predetermined time period" indicates that the amount of time before the disabling device is triggered is preset by the manufacturer and is not controlled by the operator. Plaintiff's expert, for example, explained that the manufacturer sets the time on the UltronII and that the only way to change the timing would be to open the housing and alter the electronic circuitry.

IV. INFRINGEMENT

A. Literal Infringement and the Doctrine of Equivalents

Patent laws are intended to "promote the Progress of Science and useful Arts" by rewarding invention with a temporary monopoly. U.S. Const. art. I, s. 8, cl. 8; Festo v. Shoketsu Kinzoku Kogyo Kabushiki, 535 U.S. 722, ----, 122 S.Ct. 1831, 1836, 152 L.Ed.2d 944 (2002). Patent laws thus attempt to maintain the delicate

balance "between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations and new ideas beyond the inventor's exclusive rights." Festo, 535 U.S. at ----, 122 S.Ct. at 1837; *see also* Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 146, 109 S.Ct. 971, 975, 103 L.Ed.2d 118 (1989) ("From their inception, the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.").

[12] [13] In a literal infringement analysis the court first interprets the asserted claims to determine their meaning and scope and then determines whether the claims read on the accused product. Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed.Cir.1995). "To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly." *Id*. Additionally, an examination of a means-plus-function claim is guided by section 112 of the Patent Act. Because a literal reading of means-plus-function language "could encompass any conceivable means for performing the function," the court must construe the patent in light of the patent specification. Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1042 (Fed.Cir.1993). This limits patent protection to the structure specified in the patent and its equivalent. *Id*. Thus, "for a means-plus-function limitation to read on an accused device, the accused device must employ means identical to or the equivalent of the structures, material, or acts described in the patent specification. The accused device must also perform the identical function as specified in the claims." *Id*.

[14] [15] Recognizing that limiting patents to their literal terms diminishes their value, patent protection has been extended by a judicially-created doctrine, the doctrine of equivalents, to include substantially equivalent devices. This is one effort to maintain the balance between protecting inventors and encouraging further innovation. Traditionally, a three-part test is used, which considers whether the accused device performs substantially the same function, in substantially the same way, with the same result. *E.g.,* Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608, 70 S.Ct. 854, 856, 94 L.Ed. 1097 (1950). In a fairly recent decision, the Supreme Court synthesized the doctrine of equivalents analysis into a single question: "Does the accused product or process contain elements identical or equivalent to each claimed element of the patented invention?" Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 40, 117 S.Ct. 1040, 1054, 137 L.Ed.2d 146 (1997). The Court noted that "[a]n analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element." *Id*.

[16] The case law reflects a tension between the doctrine of equivalents and the statutory language controlling means-plus-function claims, which also references equivalents. *E.g.,* Valmont, 983 F.2d 1039. The Federal Circuit has cautioned that the section 112 reference to "equivalents" should not be confused with the doctrine of equivalents which has a different purpose and application. *Id*. at 1043. The doctrine of equivalents generally applies where the accused device incorporates only an insubstantial change that adds nothing of significance to the patented invention. *Id*. And, as set forth above, it involves an equitable three-part test. Section 112 "equivalents" refers only to those devices that have an insubstantial change in structure compared to the structure found in the specifications, in this case Figure 5 and the accompanying written description. *Id*. Thus, "if the required function is not performed *exactly* in the accused device, it must be borne in mind that section 112, paragraph 6, equivalency is not involved." Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 933 (Fed.Cir.1987) (en banc). It may be said that section 112 limits the potential breadth of protection related to means-plus-function claims, while the doctrine broadens protection

for all patent claims in the name of equity.

The doctrine of equivalents should not, however, be applied to a non-pioneer invention so as to "erase a plethora of meaningful structural and functional limitations of the claim on which the public is entitled to rely in avoiding infringement." Pennwalt, 833 F.2d at 935 (quoting Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528 (Fed.Cir.1987)). The doctrine of equivalents in a mean-plus-function claim therefore also requires an element-by element comparison. *See* Pennwalt, 833 F.2d at 935.

B. U34000

A U34000 device was submitted into evidence as Exhibit 24. As a practical matter, it operates as follows: The operator must close two separate mechanical switches to activate a charge. The operator first disarms the safety and then presses the trigger. Regardless of how long the trigger is held down, the device goes through a preset sequence with the charge activated and deactivated for set intervals.FN9 The sequence restarts only if you pull the trigger again. The only way to stop the sequence is to rearm the safety; the trigger does not interrupt the charge.

FN9. The sequence runs for just over thirty seconds: seven seconds on, half second off, five seconds on, half second off, five seconds on, half second off, and then two seconds on. (Mar. 19, 2002 p.m. Tr. at 31-32.)

Exhibit 19 is the schematic for the U34000 stun gun. S1 and S2 are mechanical switches; S1 is the trigger and S2 is the safety switch. U10, U28, U6A, and U6B are electronic switches and Q1 is an electronic switch, a transistor as in Figure 5. A momentary closing of S1 causes U6B to continuously switch off Q2, which closes transistor Q1 and, as in Figure 5, connects the oscillator that drives transformer T1 to create the charge. (*See generally* Ex. 19; Mar. 19, 2002 a.m. Tr. at 73-75.) Closing S2, the safety switch, connects the primary winder of T1 to the power supply and the oscillator is turned on. The safety switch is a hard-on switch that stays in closed in first position until it is pressed again, or opened by the user. Thus, the oscillator runs continuously at low voltage whenever the safety switch is on.

The trigger switch initiates operation of a factory preset countdown timer. The disabling time is set by manufacturer. The trigger switch does not connect the power supply to the oscillator but the high voltage circuit, that is used to shock the subject, only runs during the preset time period that is initiated with the trigger switch. There is no separate disabling circuit that shuts down the high voltage generating oscillator. Instead, the high voltage oscillator only runs for a set period of time after the trigger is pulled.

1. Trigger Means

[17] Defendant's position is that the "trigger means" in this gun does not selectively connect the power supply to the electronic circuit because none of the power runs directly through the trigger switch. The current runs through the circuit whenever you activate the safety switch and the trigger switch just initiates the high voltage charge. The trigger does not need to stay closed, in the first position, for the power supply to stay connected to the oscillator, for the oscillator to operate, and the charge to be generated. A simulation, using an open model of the U34000 with wires in the place of the switch, showed that the wires do not have to stay together to continue the charge. (*See* Mar. 19, 2002 p.m. Tr. at 23-24.) In fact, the current cannot run through the trigger switch because it is not sturdy enough to handle the high voltage current. According to Defendant, in the U34000 it is not the trigger (S1) that connects the power supply to the electronic circuit by completing the circuit. Instead the safety switch (S2) connects the power supply to the circuit. When the

safety switch is closed, it allows current to flow, albeit at a very low level.

Plaintiff argues, however, that it is S2 in combination with S1 and the resulting switches that are the "trigger means" analogous to SW1 in Figure 5. FN10 In fact, Plaintiff argues that the U34000 uses a combination of six switches, two mechanical and four electronic, to perform the "trigger means" function that Figure 5 only uses one mechanical switch to accomplish. FN11 (Mar. 19, 2002 a.m. Tr. at 62 (pointing to S1, S2, U10, U28, U6B, and Q2).)

FN10. Mr. Felper, for instance, testified that S2 does not enhance the function of the "trigger means," but can stop the function if the user puts the safety back on, i.e. if the user opens it. He concluded that the "trigger means" is "functionally equivalent" to Figure 5. The Court assumes this is because with use of the two switches the user can both initiate the connection and the disconnection.

FN11. Plaintiff points out that it was commonly known from 1997 to 2001 that a mechanical throw switch and a 555 timer switch could be combined into a microprocessor and that one skilled in the art could replace a mechanical switch with an electronic switch.

As its initial finding, the Court agrees that S1 alone does not fit the definition of "trigger means." The trigger does not connect the oscillator to the power supply, instead it simply initiates the high voltage current. It is the safety switch, S2, that allows the user to selectively connect the power supply to the circuit. Thus, when focusing solely on the trigger, it is clear that the U34000 does not infringe the '048 patent, as S1 is neither structurally or functionally equivalent to the trigger means in the '048 patent. The Court, however, considers Defendant's analysis of the trigger switch alone to be too narrowly focused. Just because S1 is termed the "trigger" does not mean it is the only switch that can fulfill the "trigger means" function.

First, the safety switch may fit the definition for "selectively connecting" the power supply to the electronic circuit. When the safety switch is closed, in the first position, it connects the oscillator to the power supply, as in Figure 5. It may be "selective" because the user can rearm the safety, putting it in the second position, and thus disconnect the power supply from the electronic circuit. There is a cognizable argument that S2 is a "trigger means" as defined in claim 39. As determined above, it is irrelevant which side of the power supply that the switch is situated.

Plaintiff, however, has argued that S2 alone is not the "trigger means" but that S1 and S2, in the place of the single mechanical switch SW1, constitute the "trigger means." FN12 According to Plaintiff, although S2 connects the power supply to an electronic circuit, it is not until the user places S1, the "trigger," in the first position that the power supply is connected to the material electronic circuit, the oscillator that drives the primary winder of the transformer, as in Figure 5. Thus, Plaintiff contends that S1 and S2 together are the "trigger means." Closing S1 provides the voltage that carries current through the stun gun that results in the charge. Without S1, the current is too low to drive the primary winder and generate a charge.

FN12. The reason for Plaintiff's argument that S2 alone is not the "trigger means" is evident in the "disabling means" discussion. *See* infra Part IV.B.2.

There are two potential problems with this theory. Defendant presented evidence that Q1-the transistor on

the oscillator that drives the transformer in the U34000-is, in fact, connected to the power supply when S2 is in the first position, regardless of S1. This is a material difference. Assuming that is not the case, however, the Court is still concerned that while the combination of S1 and S2 may connect the power supply to the relevant oscillator, they do not "selectively connect" while in the *first position*. The trigger switch, S1, is a push button switch that is only closed for a fraction of a second to initiate the operation. Although closing S1 sends a signal to close electronic switches and complete the circuit needed for a connection, S1 itself does not complete the circuit as does SW1 in Figure 5. No power runs through S1, except for the fraction of a second its closed. S1 does not remain in the first position and the power supply and electronic circuit, even assuming Plaintiff's argument is correct, are still connected when S1 is not in the first position. The oscillator still operates, and is intended to operate, when S1 is in the second position. This is in direct contrast to the language of the "trigger means" which is for "selectively connecting the power supply to the electronic circuit when in a *first position*."

Although S2 is in the first position, Plaintiff's argument is that both S1 and S2 are the trigger means. It is only S2's position in the first position that "selectively" connects the power supply. After S1 is pushed once, the user may again close S1 or leave it in the second position with no effect at all on the connection of the power supply to the electronic circuit. Thus, S1 and S2 do not meet the literal definition of "trigger means."

This leads to the third option, presented by Plaintiff, that the "trigger means" constitutes S1, S2 and a number of electronic switches that collectively operate to act as SW1 in Figure 5. The focus in this example would be that S2 provides low level power and S1 provides the signal that connects the relevant oscillator to the power supply. Plaintiff argues that S2 and S1 signal several internal, electronic circuits to close and thus complete the connection. The internal circuits, or switches, remain closed even after S1 reverts to the second position, as described above. In fact, they remain closed for a predetermined time period, the run cycle of the U34000. The flaw in this theory is the very problem discussed in regard to Plaintiff's Exhibit 18, discussed above. *See supra* Part III.B.3. The user does not have control over the internal switches and is thus one step removed from "selectively connecting" the components, which are also not on the housing as required by the claim limitation language.

Although the Court has laid out its initial concerns with finding infringement of "trigger means," the Court will not make a definitive determination of what constitutes the trigger means in Defendant's product. Applying the three identified possibilities-S2 alone, S1 and S2, and S1, S2 and the electronic switches-to the disabling means shows that under any interpretation, the U34000 does not infringe claim 39.

2. Disabling Means

[18] The Court now considers each of the asserted representations of the "trigger means" in the U34000 in relation to the disabling means claim limitation.

First, if S2, the safety switch, is the "trigger means," then there is no infringement of the disabling means. The interruption of the operation of the oscillator is unrelated to how long the safety is closed. S2 simply allows power to flow to the electronic circuit. The safety can remain closed for seconds, minutes, even weeks, without ever interfering with the operation of the oscillator. The only result, according to testimony, is that keeping the safety closed will eventually run down the battery. There is no logical argument that the continuously operating the safety in the closed position triggers the disabling device. Therefore, there is no literal infringement and no infringement through the doctrine of equivalents, as it does not operate in substantially the same way to achieve the same result.

Second, if both S1 and S2 comprise the "trigger means" there is similarly no infringement. Again, the key is that whether the oscillator is disabled is unrelated to how long either S2 or S1 is closed. S1, the trigger switch, is a push button switch. It is only closed for a fraction of a second, as explained above. *See supra* Part IV.B. The "disabling means" specifically refers to a situation where the "trigger means" is "continuously operated in the first position." The first position is closed. That means that S1 and S2 must be closed to activate the operation that interferes or "disables" the oscillator. S1 is never continuously closed. If the user holds down the trigger, it does not keep S1 closed. Similarly, if the user simply pushes the trigger and releases, S1 does not remain closed. The only thing that is continuously operated in the first position is S2, the safety. The language, however, is explicit: "continuously operated in said first position *for a first predetermined time period*." The disabling function, or interference with the oscillator, is not dependent upon *how long* S2 is closed.FN13

FN13. Plaintiff attempts to discount the importance of the trigger means being in the "first position" to activate the disabling means. He argues that the U34000 is functionally equivalent to the preferred embodiment because the disabling means is actually controlled by the oscillator, i.e. the disabling device knows when to time off by receiving a signal that the oscillator is running or operating. However, that is an inaccurate representation of Figure 5. In Figure 5, the disabling device's signal to time off comes from the closing of SW1 and the resulting connection to the power supply. It begins timing when SW1 is closed and it receives the current. It does not receive its signal based upon whether or not the oscillator is operating. Although the oscillator is running at the same time that the disabling device receives current from the power supply-because SW1 is closed and the oscillator is also now connected through Q1 to the power supply-that is not what signals the disabling device to start timing. The "first position" plainly refers to the SW1 and, thus, U34000 and the preferred embodiment are not functionally equivalent.

In sum, there is no disabling circuit that is triggered by continuously operating either of the switches in the first position. Rather, the high voltage oscillator simply stops when its preset time period has run. Unlike the preferred embodiment, the user's action does not directly trigger an interruption in the charge, as the time of the charge is regulated by a preset feature. There is no literal infringement. There is also no infringement based upon the doctrine of equivalents because the disabling means does not function in substantially the same way in the U34000 as in the preferred embodiment.

Third and finally, even if the Court considers S1, S2 and the electronic switches to act as the trigger, the same analysis applies and there is no infringement. Again, the interruption in the charge does not occur because the user does not continuously operate any of the switches (or all of the switches) in the first position. Although the internal electronic switches may remain in the first position, those switches are not on the housing and are not continuously operated by the user. Plaintiff's argument that the user "selectively" controls the internal switches with a combination of S1 and S2 is tenuous and, ultimately, unconvincing. The language is clear that the disabling means is triggered by the user's direct operation and the patent reflects that its purpose is to prevent the overzealous user from prolongedly shocking the subject. Disabling occurs when the "trigger means" is continuously operated in the first position and, as the "trigger means" provision clearly states the "trigger means" is "on the housing." This shows that the user must, through a switch on the housing, directly control whether or not the switches are in the closed position and current flows, generating the charge. Therefore, there is no literal infringement.

This combination of switches similarly does not result in infringement via the doctrine of equivalents. The

"disabling means" in this case is simply that the high voltage circuit generating the charge is only activated for a set period of time, not that it is disrupted if the user chooses to continue operation, and connect the power supply to the circuit, for greater than the set period of time. That is a fundamental difference and shows that the trigger means and disabling means in the U34000 do not act in substantially the same way nor do they achieve the same result as the structure of patent '048.

3. Conclusion

The Court finds that the U34000 is neither structurally nor functionally equivalent.First, the structure of the device varies by more than an insubstantial amount. Second, the doctrine of equivalents requires the Court to make an objective inquiry on an element-by-element basis. Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. at 1054. If a single element fails to meet the test, then the accused product does not infringe under the doctrine. *See id*. The disabling means in the U34000 is not triggered in a way that is functionally equivalent to patent '048 and, thus, there is no functional equivalence.

C. M-26 and M-18L

A M-18L model was submitted into evidence as Exhibit 24. The M-26 is nearly identical, with the same circuitry and only a difference in power, 26 watts as opposed to 18 watts. (Mar. 19, 2002 p.m. Tr. at 31-32, 35-36.) As a practical matter, the M-Series devices operate as follows: The operator must close two separate mechanical switches to activate the charge. The user first disarms the safety and then pulls the trigger. Regardless of how long the trigger is held, whether it is for a fraction of a second or ten seconds, the charge runs for five seconds. To reactivate the charge, the operator must pull the trigger after the five second sequence is complete.

Exhibit 20 is the M-Series schematic. The trigger switch is designated JP1 and is a mechanical push button switch. SW1 is the safety switch and it is a mechanical throw switch. U2 is an integrated circuit, a microprocessor. Closing the safety, SW1, connects the positive side of the power supply to the circuit. JP1, when momentarily closed, sends a signal to U2 and U2 then sends signal to U5 to transistor Q1 that drives T1. A signal comes from a timing switch, that is preset by the manufacturer, within U2 to disable the oscillator after the set time is complete. The trigger JP1 is what signals U2 timing to begin. Thus, like the U34000, the M-Series requires two manual operations to operate the device and create a charge; the user must close both SW1 and JP1.

1. Trigger Means

Like the U34000, the trigger in the M-Series devices does not selectively connect the power supply to the oscillator. In the M-Series devices, the power supply is permanently connected to the high voltage generating circuit. Thus, neither the safety, SW1, nor the trigger, JP1, connects the power supply to the electronic circuit when in the first position. (*See* Mar. 20, 2002 a.m. Tr. (oscilloscope reading demonstration).) The trigger merely activates the high voltage circuit. At the hearing, Defendant demonstrated that the charge runs for five seconds no matter how long the trigger switch is closed, whether it is as short as a fraction of a second or as long as ten seconds. In other words, the charge runs for five seconds after initiation regardless of the trigger position. Once the five second sequence is finished, the user must repull the trigger to reactivate the charge and it will again run for five seconds. This is unlike the preferred embodiment, where the charge will restart after a set disabling period if the user continues to hold the trigger, SW1, closed.

An analysis of this device follows a similar path, and reaches the same ultimate result, as the analysis of the U34000 above. As a preliminary note, in the M-Series the power supply is directly connected to the electronic circuit and, thus, neither the trigger nor the safety literally connects the power supply to the electronic circuit. Plaintiff argues, however, that "connect" simply means that there is a complete circuit with current flowing and the oscillator operating and not physically bridging a gap between the power supply and the circuit. Plaintiff states that this type of connection does not occur until both switches, the safety and the trigger, have been closed. This is a reasonable definition. This distinction, however, is ultimately irrelevant. Assuming, *arguendo,* that Plaintiff is correct, an analysis of the possible "trigger means" in the M-Series devices still runs into the same problems as with the U34000.FN14 Therefore, without reiterating the U34000 "trigger means" analysis, the Court identifies the same three possible ways that the M-Series may fulfill the "trigger means" claim limitation. The "trigger" may be: (1) the safety alone, SW1; (2) the safety and the trigger, SW1 and JP1; or (3) the safety, trigger and internal switches, U2, U5 and Q1. Applying any of these possibilities, these devices, like the U34000, fail to meet the "disabling means" claim limitation.

FN14. Plaintiff again argues that the "trigger means" is made up of a number of mechanical and electronic switches.

2. Disabling Means

Defendant explains the difference between the M-Series and the preferred embodiment as follows: The M-Series trigger activates the high voltage circuit with a timer that counts up for five seconds. It only operates for five seconds, cannot be varied by operation of the trigger, and is never disabled. In contrast, the '048 patent device operates as long as the trigger is closed but is overridden, or disabled, if the user operates the device for an excessive amount of time. The user selects the duration of the charge up to a set point. This is a useful, albeit simplistic, comparison of the two devices and illustrates the absence of a "disabling means" equivalent in the M-Series devices.

As with the U34000, none of the possible trigger interpretations also satisfies the "disabling means" claim limitation. Once again, the key issue is that the actions of the operator of do not determine when, and if, the charge is interrupted or the circuit is disconnected. When applying SW1, the safety, as the "trigger means," it is clear that whether or not it is in the "first position" does not signal a disabling device or otherwise interrupt operation. The safety has no impact upon the timing of operation of the circuit. In contrast, JP1 does affect the timing of the circuit but it merely initiates the timing sequence. As Defendant showed at the hearing, JP1 could be closed for a mere fraction of a second and the "disabling device" would still be effective after five seconds. It is clear that any "disabling means" in the M-Series devices is not linked to the "continuous operation" of either SW1 or JP1 in the first position.

Finally, a consideration of the mechanical switches and the electronic switches as the "trigger means" leads to the same result. Although the internal electronic switches may remain in the first position, those switches are not on the housing and are not continuously operated by the user. Once both the safety and the trigger are activated, the operator no longer controls the "continuous" operation of the device. Plaintiff's argument that the user "selectively" controls the internal switches with a combination of the safety and the trigger was previously rejected. The only way that the operator can influence the operation is by rearming the safety. This is not the form of selective control that patent '048 contemplates. In sum, there is no structural equivalent in the M-Series of a disabling means that is activated "when the trigger means is continuously operated" in a closed position and, therefore, there is no literal infringement.

As with the U34000, the combination of switches does not result in infringement via the doctrine of equivalents. The "disabling means" in this case is simply that the high voltage circuit generating the charge is only activated for a set period of time, not that it is disrupted if the user chooses to continue operation, and connect the power supply to the circuit, for greater than the set period of time. That is a fundamental difference and shows that the trigger means and disabling means in the M-Series devices do not act in substantially the same way nor do they achieve the same result as the structure in patent '048.

3. Conclusion

The Court finds that the M-Series devices are neither structurally nor functionally equivalent. First, the structure of the accused device varies by more than an insubstantial amount. Second, the disabling means in the M-18L and the M-26 is not triggered in substantially the same way nor does it have the same result and, thus, they are not functional equivalent to patent '048.

V. DISPOSITION

For the reasons set forth above, the Court DENIES Plaintiff James F. McNulty's motion for summary adjudication and GRANTS Defendant Taser International, Inc.'s motion for summary judgment. The Court finds that Defendant's accused devices do not infringe United States Patent No. 5,193,048.

IT IS SO ORDERED.

C.D.Cal.,2002.
McNulty v. Taser Intern. Inc.