

United States Court of Appeals for the Federal Circuit

02-1620

JAMES F. MCNULTY, JR.,

Plaintiff-Appellant,

and

RICHARD BASS,

Involuntary Plaintiff,

v.

TASER INTERNATIONAL, INC.,

Defendant-Appellee,

and

COUNTY OF LOS ANGELES, CALIFORNIA,
ONTARIO CITY OF CALIFORNIA and
CITY OF BUENA PARK, CALIFORNIA,

Defendants.

DECIDED: July 7, 2004

Before LOURIE, GAJARSA, and PROST, Circuit Judges.

PER CURIAM.

James F. McNulty, Jr. (“McNulty”), appeals the order of the United States District Court for the Central District of California granting summary judgment of noninfringement of United States Patent

No. 5,193,048 (the “’048 patent”) in favor of Taser International Inc. (“Taser”). McNulty v. Taser Int’l, Inc., 217 F. Supp. 2d 1058 (C.D. Cal. 2002). We affirm.

I. BACKGROUND

McNulty is the exclusive licensee of the ’048 patent, which is entitled “Stun Gun with Low Battery Indicator and Shutoff Timer.” McNulty, 217 F. Supp. 2d at 1061. The ’048 patent is currently assigned to Richard Bass, whose company, Electronic Defense Technologies, manufactures products incorporating the patented subject matter. Id. at 1060. Although McNulty has granted a sublicense under the ’048 patent, he has reserved the right to prosecute infringement actions. Id. at 1061. McNulty asserted in the District Court for the Central District of California that three of Taser’s products—the U34000, the M18-L, and the M26—infringe claim 39 of the ’048 patent. Claim 39 describes:

An electrical shock device comprising:

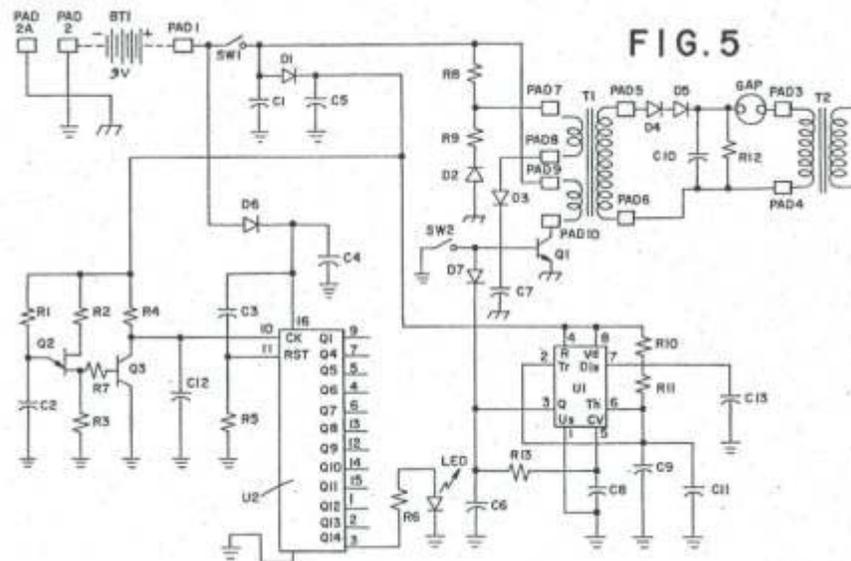
a housing containing a power supply and an electronic circuit forming the electrical shock device;

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.

’048 patent, col. 12, ll. 38-46.

The district court held a Markman hearing, during which it determined that only the second and third claim limitations of claim 39 were at issue. McNulty, 217 F. Supp. 2d at 1061. At the close of the hearing, the district court requested that the parties each file a motion for summary judgment. The district court subsequently addressed both the claim construction and the motions for summary judgment in the order appealed.



The district court began its opinion by identifying the second and third limitations of claim 39 as means-plus-function limitations, pursuant to 35 U.S.C. § 112, paragraph 6. *Id.* at 1062. Recognizing that when construing a means-plus-function claim, the corresponding structure must be identified in the patent specification, the district court identified the circuit schematic embodied in Figure 5 of the '048 patent, reproduced below, as illustrating the “key components of the structure” of the '048 patent. *Id.* at 1062-63. The district court identified SW1, referred to by the parties as the “trigger,” as a notable component of the circuit and explained that SW1 was a mechanical switch, although the precise type of mechanical switch was not clear from the schematic. *Id.* at 1063. Although it did not expressly state so, the district court appears to have concluded by this point in its analysis that switch SW1 from the schematic in Figure 5 was the “trigger means” in claim 39.

The district court then construed the “trigger means” limitation, identifying three parameters imposed by the claim. First, the claim required the trigger means to be “on the housing.” The district court construed this requirement according to its ordinary and customary meaning, with the “housing” being the “portion of the device that houses the internal electrical components.” *Id.* at 1066. Second, the district court explained that the “‘first position’ refers to the closed position that connects the circuit.” *Id.* Third, the district court addressed the “selectively connecting” requirement of claim 39 in

two parts. “Connecting,” the district court explained, meant completing the circuit that included the power supply and the electronic circuit such that current could flow. Id. at 1066-67. “Selectively connecting,” the district court continued, “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.” Id. at 1067. Throughout its construction of the claims, the district court referred to SW1 to support its discussion.

In response to an argument from McNulty, the district court denied that the trigger means could be an electronic, rather than a mechanical, switch. Id. at 1068. Under McNulty’s proposed equivalent, a mechanical switch on the housing operated an electronic switch (a flip-flop), which in turn caused operation of the stun gun. This arrangement failed to meet the claimed limitations for three reasons according to the district court. First, the flip-flop switch was not “on the housing” as required in claim 39. Id. Second, connection of the power supply to the electronic circuit did not depend on the trigger means being in a “first position,” but rather on the closing of the internal electronic switch. Id. Finally, the internal electric switch described by McNulty failed to “selectively connect” the power supply and the electronic circuit because, although placing the trigger means in the “first position” connected the circuit, releasing the trigger means did not disconnect it. Id. “Thus,” the district court concluded:

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.

Id. (emphasis added). The mechanical switch, according to the district court, could be either a momentary or hard-on switch.

The district court next construed the “means for disabling the electronic circuit when the trigger means is continuously operated in said first position for a predetermined time period,” an analysis that it found straightforward. Id. Again referring to Figure 5, the district court identified integrated circuit chip timer U1 as the “means for disabling.” Id. at 1069. The disabling means, the district court explained, was only active when the trigger means was “continuously operated in said first position,”

with “first position” having already been construed as the trigger being in the “on” position. Thus, the district court concluded, the “means for disabling” operated to disable the device after a predetermined time period only while the operator held the trigger means in the closed (or first) position. Id.

With claim construction complete, the district court addressed infringement beginning with Taser’s U34000 device. Id. at 1070-75. The district court noted that to activate the U34000, the operator had to close two separate mechanical switches—the safety and the trigger. Id. at 1070. The safety switch physically connected the power supply to the electronic circuit, while the trigger switch discharged the device. When the safety was armed and the trigger pulled, the U34000 would then discharge according to a preset sequence.^[1]

McNulty presented two theories of infringement, both of which the district court rejected. The first was that both the safety switch and the trigger switch comprised the “trigger means” of claim 39. The problem with this argument, the district court explained, was that, although the two switches worked in conjunction to connect the circuit, they did not do so while the switches were in a first position as required by the claim. Id. at 1072. Rather, while the safety switch remained in a “first position,” the trigger switch, although initiating operation of the device when placed in the first position, did not affect connection of the power supply to the electronic circuit once that initiation was complete. Id. Since both switches were not in the “first position,” the requirements of claim 39 were not satisfied.

McNulty’s second argument derived from the first, and included the trigger, the safety, and several additional electrical switches internal to the device that remained closed after the power supply and the electronic circuits were connected. Id. at 1073. The district court rejected the inclusion of electronic circuits for reasons it stated previously, i.e., that they were not located “on the housing.” Id. Although it declined to definitively identify the “trigger means” in Taser’s devices, the district court concluded that, “under any interpretation, the U34000 does not infringe claim 39.” Id.

The district court also found that the disabling means claim limitation was not satisfied. Id. Regardless of one’s interpretation of the trigger means, the district court explained, any disabling means present in the U34000 did not depend on any of the “trigger means” identified by McNulty being in a

first position. *Id.* at 1073-74. Rather, once the programmed discharge sequence of the U34000 commenced, the position of the “trigger means” could change without consequence. The absence of structural or functional equivalents to the disabling means claim limitation, the district court concluded, provided an additional reason that the U34000 did not infringe the ’048 patent either literally or under the doctrine of equivalents.

Taser’s M-26 and M-18L devices function largely the same as the U34000. Each required the user to close a safety switch and press a trigger switch to operate the devices. Once done, the devices would run for a preset period of 5 seconds, after which the user had to repull the trigger to reactivate the charge. *Id.* at 1075. The district court explained that, due to the similarity, the “analysis of this device follows a similar path and reaches the same ultimate result.” *Id.* Thus, in its analysis of both the “trigger means” and the “disabling means,” the district court invoked the same analysis relied on for the U34000, described above.

The district court accordingly granted summary judgment of noninfringement, both literal and under the doctrine of equivalents. McNulty timely appealed, and we have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

II. DISCUSSION

We review a district court’s grant of a motion for summary judgment *de novo*, by reapplying the standard for summary judgment. *Kemco Sales Inc. v. Control Papers Co.*, 208 F.3d 1352, 1359 (Fed. Cir. 2000). Summary judgment is appropriate when, with the evidence of the nonmoving party accepted as true and all justifiable inferences drawn in his favor, there is no genuine issue of material fact. *Fed. R. Civ. P.* 56(c); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986).

Infringement involves a two-step inquiry. The first step is a proper construction of the meaning and scope of the claims. *Anchor Wall Sys. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1306 (Fed. Cir. 2003). Claim construction is a question of law, reviewed by this court *de novo*. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998) (*en banc*). The second step requires a

comparison of the properly construed claims to the accused device. Anchor Wall Sys., 340 F.3d at 1306. A summary judgment on the issue of literal infringement is proper “when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device.” Bai v. L & L Wings, 160 F.3d 1350, 1353 (Fed. Cir. 1998).

Whether an element of a claim is to be interpreted according to 35 U.S.C. § 112, paragraph 6, is a question of law, reviewed de novo. Kemco Sales, 208 F.3d at 1360. If a district court determines that section 112, paragraph 6 applies, the claim is in means-plus-function format, and the further determinations of the claimed function and structure in the specification corresponding to the claimed function are also questions of law that we review de novo. Id.

McNulty argues that the district court erred in requiring the current from the power supply to the electronic circuit to flow through the trigger means. The district court also erred, McNulty continues, in its construction of “selectively connecting.” Although the electrical discharge sequences of the Taser devices proceed according to a predetermined sequence after the trigger on the Taser devices is released, McNulty explains, continued operation of the trigger causes the discharge sequence to repeat. Therefore, an operator of a Taser device cannot interrupt the discharge sequence, but can control whether that sequence will repeat. Although imprecise, McNulty concludes, it is still a selective disconnection.

Construction of a means-plus-function limitation requires a court to first identify the claimed function, and then to determine what structure disclosed in the specification performs those functions. Omega Eng’g, Inc. v. Raytek Corp., 334 F.3d 1314, 1322 (Fed. Cir. 2003). The district court identified SW1 in FIG. 5 of the ’048 patent as the structure corresponding to the “trigger means” referenced in claim 39. McNulty’s arguments do not challenge this correspondence, but instead dispute the district court’s determination as to the limitations on that structure and the functions that it is to perform.

The function of the trigger means is to “connect[] the power supply to the electronic circuit when in a first position.” ’048 patent, col. 12, ll. 41-43. The plain language of the claim, therefore, suggests

that the power supply and the electronic circuit are connected only when the trigger means is in the first position, which the parties agree is the position when SW1 of Figure 5 is closed.^[2] “Selectively” modifies the “connecting . . .” phrase, and reflects the option available to the operator as to whether or not to activate the device. The written description of the ’048 patent reinforces the correctness of this interpretation, explaining that “[t]he electrical diagrammatic representation of trigger switch 14 is shown as switch SW1, wherein closure of the switch SW1 connects power source BTI with the inverter transformer TI.” ’048 patent, col. 4, ll. 32-35; see also id. at col. 1, ll. 61-63 (“The circuit thus operates to produce the high voltage for so long as the trigger switch is operated.” (emphasis added)). As the appendices submitted by the parties present no prosecution history suggesting a contrary interpretation, we agree with the district court that “selectively connecting . . .” requires that the connection between the electronic circuit and the power supply occur when the trigger means is in the first position and that the operator of the device be able to use the trigger means to select when the power supply and the electronic circuit are connected.

Without addressing the district court’s discussion of the variety of switches contemplated by the schematic in FIG. 5, we must affirm its result. An equivalent under section 112, paragraph 6, is described as a structure performing an identical function in substantially the same way with substantially the same result. Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1267 (Fed. Cir. 1999). Infringement of a means-plus-function claim under the doctrine of equivalents differs from literal infringement of a means-plus-function claim only in that the identical function is not required. See Kemco Sales, 208 F.3d at 1364 (“If an accused structure is not a 35 U.S.C. section 112, paragraph 6 equivalent of the disclosed structure because it does not perform the identical function of that disclosed structure and hence does not literally infringe, it may nevertheless still be an ‘equivalent’ under the doctrine of equivalents. Thus, if one applies the traditional function-way-result test, the accused structure must perform substantially the same function, in substantially the same way, to achieve substantially the same result, as the disclosed structure.” (footnotes omitted)).

The Taser devices, once activated, continue to operate according to a pre-programmed discharge sequence regardless of the position of the devices’ triggering mechanisms. See McNulty, 217 F. Supp.

2d at 1070 (discussing the timing of the discharge sequence for the U34000); *id.* at 1075 (describing the 5-second discharge of the M-series models). In other words, whether the operator continues to hold the trigger mechanism or presses and releases the mechanism immediately does not matter—the Taser devices continue to discharge until they have completed their sequences. McNulty does not dispute this finding. No structure in the Taser devices, therefore, performs the function of the trigger means of claim 39 because the power supply and the electronic circuit are not “selectively connect[ed]” by a trigger means when in a first position. [3] Accordingly, we agree with the district court that the summary judgment of no literal infringement was appropriate.

We also agree with the district court that summary judgment of no infringement under the doctrine of equivalents was appropriate. “It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 29 (1996). As the district court explained, once the discharge sequence in the Taser devices is initiated, it will run its full course without regard to the position of the trigger mechanism. As explained in connection with our discussion of literal infringement, *supra* at 10-11, the Taser devices lack structure that performs the literal function of “selectively connecting the power supply to the electronic circuit when in a first position.”

As explained above, however, McNulty argues that the operator’s ability to continually depress the trigger on the Taser devices and cause the discharge sequence to repeat qualifies as “selective connection.” Taser disputes this argument in its reply brief, explaining that the district court determined that the discharge sequence did not repeat without the trigger being released and repulled. Although this issue is disputed on appeal, it does not appear to have been disputed at the summary judgment hearing. In fact, the district court inquired as to this very issue during the hearing, and apparently resolved it.[4] Although the hearing transcript does not clearly indicate the district court’s conclusion, the summary judgment opinion does. *See McNulty*, 217 F. Supp. 2d at 1071 (explaining that “[t]he sequence [of the U34000] restarts only if you pull the trigger again”); *id.* at 1075 (“Once the five second sequence [of the M-series devices] is finished, the user must repull the trigger to reactivate the charge and it will again

run for five seconds.”). The operator of one of the Taser devices, therefore, may initiate the device’s discharge sequence using the trigger mechanism but has no control over when the sequence will conclude. Furthermore, once initiated, the position of the trigger is irrelevant. To find an equivalent under these circumstances would read the functional requirements of the “trigger means” limitation entirely out of claim 39, a result the doctrine of equivalents will not permit. Id.

III. CONCLUSION

Accepting all of McNulty’s evidence as true and drawing all inferences in his favor, we agree with the district court that there is no genuine issue of material fact and that Taser’s U34000 and M-series products do not infringe the “trigger means” limitation of claim 39 in the ’048 patent. Accordingly, the decision of the district court is affirmed.

No costs.

[1] According to the district court, “[r]egardless of how long the trigger is held down, the device goes through a preset sequence with the charge activated and deactivated for set intervals. The sequence restarts only if you pull the trigger again.” McNulty, 217 F. Supp. 2d at 1070. The sequence of the U34000 was seven seconds on, half second off, five seconds on, half second off, five seconds on, half second off, and finally, two seconds off. Id. at 1070 n.9.

[2] The district court, agreeing with both of the parties, concluded that the “electronic circuit” referred to in claim 39 was the “classic relaxation oscillator” discussed in the written description of the ’048 patent. See McNulty, 217 F. Supp. 2d at 1063 n.5 (citing the ’048 patent, col. 4, ll. 32-35). We agree with the district court’s construction.

[3] We recognize that McNulty’s disagreement over what constitutes the “triggering means” in the Taser devices has some bearing on this conclusion. At a minimum, however, the physical trigger that an operator uses to activate the device must be a part of the “triggering means.” Even if the triggering means permitted multiple components as McNulty argues, the fact that the trigger itself can be in either the first or second position once depressed violates the requirement that the “trigger means” be in the first position while the power supply and electrical circuit are connected.

[4] The district court inquired:

Court: Does that mean that if I compress the trigger and hold it down, that the unit runs for five seconds? Will it then regenerate, even if I’ve not released the

trigger, and run for another five seconds?

Witness: No. On this particular unit, when you hold the trigger, again, it's the initiation of a process. It will run for five seconds regardless of the length of time the trigger is held.

Court: No. That's not my question.

I'll answer it myself (demonstrating).

So, therefore, if I compress the trigger and leave pressure on the trigger, it will run for five seconds, stop for a period of time, and then run another five seconds.

Witness: It should only run one five-second cycle.

Court: How do I reactivate it?

Witness: Release and repull the trigger.

Court: All right.

Br. of Appellee at 73-74.