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IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF ARIZONA

TASER International, Inc., Plaintiff, vs. Stinger Systmes, Inc., Defendant.	No. CV07-42-PHX-JAT **ORDER**

Currently before the Court is TASER International, Inc.'s ("Taser") Motion for Contempt and Application for Order to Show Cause. (Doc. 262.) After reviewing the parties' briefs and holding a contempt hearing, the Court issues the following Order.

I. Background

Taser is the owner of all right, title, and interest in United States Patent No. 6,999,295 (the "'295 patent"), which issued on February 14, 2006 and will expire on February 11, 2023. By order dated March 31, 2010, the Court found that, as a matter of law, the S-200 Electronic Control Device ("ECD") manufactured and sold by Stinger Systems, Inc. ("Stinger") literally infringed claims 2 and 40 of the '295 patent. (Doc. 211.) In that same order, the Court denied summary judgment to Stinger on its claims of patent invalidity or unenforceability. (*Id.*)

On August 30, 2010, a stipulated final judgment was entered in this action (Doc. 260), accompanied with a final injunction (Doc. 259). In the final injunction, the Court enjoined

Stinger and its officers, agents, servants, employees, and attorneys from making, using, offering to sell, or selling the S-200 ECDs and all other products that are only colorably different from the S-200 ECDs in the context of claims 2 or 40 of Taser's '295 patent. (Doc. 259.)

After the Court awarded partial summary judgment to Taser on infringement, but before entry of the final injunction, Robert Gruder, former president of Stinger, put Stinger into insolvency proceedings in Florida state court, assigning Stinger's assets for sale for the benefit of its creditors. Karbon Arms LLC ("Karbon Arms") purchased Stinger's assets. Mr. Gruder also owns and controls Karbon Arms. Mr. Gruder and Karbon Arms do not dispute that they are bound by the injunction entered in this case, even though neither is specifically named in the final injunction.

In its Motion for Contempt and Application for Order to Show Cause, Taser alleges that after purchasing Stinger's assets, Karbon Arms began producing the Karbon MPID, which "[a]part from a few cosmetic changes [was] essentially the same as the Stinger S-200." (*Id.*) Taser therefore asks the Court to find Mr. Gruder and Karbon Arms in contempt for manufacturing and selling the Karbon MPID in violation of the injunction. (*Id.*)

II. Legal Standard

The Court has wide discretion in determining whether a party has defied a court order. *In re Crystal Palace Gambling Hall*, 817 F.2d 1361, 1364 (9th Cir. 1987). And the Court can hold in civil contempt a party who has disobeyed a specific and definite court order by failing to take all reasonable steps within the party's power to comply. *In re Dual-Deck Video Cassette Recorder Antitrust Litigation*, 10 F.3d 693, 695 (9th Cir. 1993); *see also* 18 U.S.C. §401 ("A court of the United States shall have power to punish by fine or imprisonment, or both, at its discretion, such contempt of its authority . . . as . . . disobedience or resistance to its lawful writ, process, order, rule, decree, or command.").

A party's contempt does not have to be willful, and no good faith exception exists. *In re Dual-Deck*, 10 F.3d at 695. But the Court will not hold a party in contempt if the party's behavior appears to be based on a good faith and reasonable interpretation of the Court's

order. *Id.* Substantial compliance with the Court's order is a defense to civil contempt, and substantial compliance "is not vitiated by a few technical violations where every reasonable effort has been made to comply." *Id.* (internal citations omitted). Nor will the Court hold a party in contempt if the party is unable to comply with the court order. *In re Crystal Palace*, 817 F.2d at 1365.

The Supreme Court has warned that contempt "is a severe remedy, and should not be resorted to where there is a fair ground of doubt as to the wrongfulness of the defendant's conduct." *Cal. Artificial Stone Paving Co. v. Molitor*, 113 U.S. 609, 618 (1885); *see also MAC Corp. of Am. v. Williams Patent Crusher & Pulverizer Co.*, 767 F.2d 882, 885 (Fed. Cir. 1985) (citing *Cal. Artificial Stone Paving Co.*, 113 U.S. at 618). In order to enforce an injunction in a patent case, the party seeking to do so "must prove both that the newly accused product is not more than colorably different from the product found to infringe and that the newly accused product actually infringes." *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869, 882 (Fed. Cir. 2011) (en banc).

Applying the "more than colorable differences" test, a court must first compare the features that were found infringing to those of the newly accused product. *Id.* "If those differences between the old and the new elements are significant, the newly accused product as a whole shall be deemed more than colorably different from the adjudged infringing one, and the inquiry into whether the newly accused product actually infringes is irrelevant. Contempt is then inappropriate." *Id.* (citing *Arbek Mfg., Inc. v. Moazzam*, 55 F.3d 1567, 1570 (Fed. Cir. 1995) ("[t]he modifying party generally deserves the opportunity to litigate the infringement questions at a new trial.")) However, if a court finds that only colorable differences exist, it then must determine whether the newly accused product infringes the relevant claims. *Id.* at 883.

The patentee has the burden of proving that the accused product violates the injunction "by clear and convincing evidence, a burden that applies to both infringement and colorable differences." *Id.* Finally, the court may consider the important patent policy of encouraging legitimate design-around efforts as a means to spur innovation. *Id.*

III. Findings and Conclusions

A. General ECD Technology

ECDs, popularly known as "stun guns," are battery-operated units that employ electrical current to temporarily immobilize a human or animal. Upon activation, two dart electrodes, each of which is tethered to a wire connected to the electrical circuitry of the ECD, are ejected from the weapon. The darts are intended to create contact points with a living target.

The darts often lodge in the target's clothing which produces an air gap between the electrodes and the target. A lack of direct contact between the electrode and the target's skin is undesirable because it produces a high impedance. A high impedance, which is generally defined as the absence of charged particles, reduces the amount of effective current that is transferred to the target. The less current that is transferred to the target, the less effective the ECD is at immobilizing the target. Ionization accelerates the available electrons in the air and breaks down the high impedance, enabling a smaller voltage application over a larger current flow.

An alternating voltage ("AC voltage") has both positive and negative polarities. A unipolar voltage ("DC voltage") has either a positive or negative polarity, but not both. A rectifier, which consists of one or more diodes,[1] is an electrical circuit component that converts an AC voltage into a DC voltage.

The two types of rectifier circuits are "half-wave" and "full-wave" rectifiers. The half-wave rectifier, or "single-ended" rectifier, is the simpler of the two because it can be built with a single diode (however, it is also operable with more than one diode, including series-connected chain diodes). The half-wave rectifier allows only the positive or negative

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[1]A diode is a semiconductor device. An ideal diode allows current to flow only in one direction and blocks any current flowing in the opposite direction. Diodes can be connected in a series so that the resulting chain of diodes acts as a single diode. Diodes that are connected in a series are useful for high-voltage applications, such as ECDs. Ultimately, whether a series-connected chain of diodes or a single diode is used, the function of diodes is to allow current to flow in one direction, but not the other.

portion (depending on the direction of the diode) of the AC voltage to flow through it and blocks the other portion. Thus, the half-wave rectifier only allows half of the source voltage waveform to pass through it (whether that is the positive or negative portion of the voltage); hence the term "half-wave" rectifier.

The full-wave rectifier, or "bridge" rectifier, allows both the positive and negative portion of the AC voltage from the source voltage waveform to pass through it. Thus, it allows the "full wave" to pass. The full-wave rectifier inverts either the negative portion or the positive portion of the source voltage waveform (depending on the configuration) so that the output is either positive or negative – a single polarity. Because a full-wave rectifier passes the entire source voltage waveform, it is usually much more effective in transmitting power from a source.

Further, an ECD utilizing a full-wave rectifier can operate in a fly-back mode and a direct or non-flyback mode. In "flyback" mode, the voltage on the secondary winding of the ECD's transformer[2] can exceed the transformer turns ratio.[3] In "non-flyback" or "direct" or "direct-drive" mode, the voltage on the secondary winding is equal to the voltage on the primary winding multiplied by the turns ratio.

An ECD with a half-wave rectifier, however, operates in a flyback mode, but cannot operate in non-flyback or direct drive mode. When a transformer operates in non-flyback or direct drive mode, the polarity of the voltage on the transformer's secondary winding is negative. (Declaration of Thomas V. Saliga in Support of Response in Opposition to Motion for Contempt, Doc. 272, ¶4.) A full-wave rectifier can reverse any voltage with negative polarity on the secondary winding to positive polarity and thereby preserve the polarity of

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[2]A transformer is a device used to transfer a voltage from one circuit to another. Two coils or windings are wrapped around a transformer core.

[3]In classic operation, current flowing through the primary winding of a transformer causes a corresponding current to flow in the secondary winding. The number of turns of the secondary winding around the transformer core divided by the number of turns of the primary winding around the transformer core is known as the transformer turns ratio.

the electrodes fired at the ECD's target. (Id. ¶5.)

Unlike a full-wave rectifier, which allows for a positive output voltage regardless of whether the input voltage is positive or negative, a half-wave rectifier can only operate if the input voltage is positive. (Id. ¶7.) Because the input voltage on the secondary winding is negative in non-flyback or direct drive mode and a half-wave rectifier cannot reverse that polarity, a half-wave rectifier does not allow operation in non-flyback or direct drive mode.

When Taser filed the original complaint, Stinger was using a version of the S-200 that employed a half-wave rectifier (the "older version"). However, during the litigation process, Stinger began using full-wave rectifiers in the S-200 circuitry (the "newer version"). By the time the parties filed their summary judgment motions, Stinger was using the newer version of the S-200. Like the older version of the S-200, the Karbon MPID employs a half-wave rectifier.

B. The Injunction Covers Only the Newer Version of the S-200

Perhaps realizing it would have difficulty meeting its burden of proving that the Karbon MPID, which uses a half-wave rectifier, is not more than colorably different from the newer version of the S-200, which used a full-wave rectifier, Taser attempts to argue that the Court found both the older version of the S-200, which also used a half-wave rectifier, and the newer version infringing. If the Court adjudged both versions of the S-200 infringing, then the injunction covers both versions, and Taser has an easier burden of proving contempt because both the older version of the S-200 and the Karbon MPID use half-wave rectifiers.

But Taser's Motion for Partial Summary Judgment and the Court's summary judgment order make clear that the version of the S-200 being considered by the Court at the summary stage, and therefore the device that the Court found infringing, was the newer, full-wave rectifier, version of the S-200. In his infringement analysis, which Taser submitted in support of its Motion for Partial Summary Judgment, Dr. Jeffrey Rodriguez, Taser's expert, offered the following description of the S-200, "The induced voltage on the secondary is of negative polarity, but a *bridge rectifier* circuit on the secondary reversed the voltage so that

the polarity at the electrodes remains positive." (The Report Concerning Infringement by Jeffrey Rodriguez, Ph.D., Doc. 180-1, p. 9 ¶17)(emphasis added). Taser does not dispute that the older version of the S-200 did not have a bridge rectifier. Dr. Rodriguez therefore could not have been analyzing the older version.

Further, in its summary judgment order, the Court cites to Mr. Saliga's deposition testimony, which describes the two modes of operation of the S-200 as flyback and direct drive. (Doc. 211, p. 62.) Karbon Arms and Mr. Gruder have established, through the Declaration of Thomas V. Saliga (Doc. 272) and the testimony of Dr. Val DiEuliis at the contempt hearing, and Taser does not dispute that an ECD with a half-wave rectifier cannot operate in non-flyback or direct drive mode. The portion of Mr. Saliga's deposition testimony relied on by the Court therefore could not have referred to the older version of the S-200. In the summary judgment order, the Court also cited Dr. Rodriguez's description of the "second mode" of the S-200 wherein the output voltage is directly related to output on the primary by the transformer turns ratio, or the "direct drive" mode. (Doc. 211, p.62.) Again, the older version of the S-200 could not operate in direct drive or non-flyback mode.

After reviewing the parties' summary judgment briefing and the Court's summary judgment order, the Court concludes that the only version of the S-200 that the Court found infringed claims 2 and 40 of the '295 patent was the newer, full-wave rectifier, version of the S-200. Because the Court made infringement findings only on the newer version of the S-200, the injunction does not also cover the older version of the S-200. In making its decision on contempt, the Court therefore will compare the newer version of the S-200 with the Karbon MPID to determine whether Mr. Gruder and Karbon Arms have violated the injunction.

C. Colorably Different

Taser has the burden of proving by clear and convincing evidence that the Karbon MPID is not more than colorably different from the newer version of the S-200. *See TiVo*, 646 F.3d at 882. In applying the "more than colorable differences" test, the Court must initially focus on the differences between the features of the S-200 that led to a finding of

infringement and the modified features of the Karbon MPID. *See id.* The Court's primary focus is on whether the Karbon MPID is sufficiently different from the product previously found to infringe, the newer version of the S-200, that it raises a "fair ground of doubt as to the wrongfulness of the defendant's conduct." *Id*.

Taser argues that the Karbon MPID is not more than colorably different from the S-200 because both have power supplies that operate in dual modes by generating a high voltage to overcome any high impedance air gaps (the "high voltage" mode), then generating a much lower voltage designed to incapacitate a target (the "lower voltage" mode). But Taser's focus on the voltages generated by the alleged dual modes, rather than the distinct modes of circuit operation themselves, is misplaced.

In finding infringement, the Court emphasized that dual-mode operation requires something more than just a high voltage burst followed by a lower voltage burst and discussed the S-200's ability to operate in flyback and non-flyback modes. "First, . . ., the '295 patent does not merely teach the output of high voltage followed by a low voltage. . . The claimed invention is not merely a low voltage output, but a distinct manner of circuit operation which generates the low voltage output more efficiently, thereby alleviating the inefficiencies present during the low voltage output phase of single-mode guns." (Doc. 211, p. 57.) Further, as discussed above, the Court relied on both Dr. Rodriguez' report and Mr. Saliga's testimony to identify the two distinct manners of circuit operation in the S-200 as a first flyback mode and a second non-flyback or direct drive mode. "Additionally, Dr. Rodriguez' conclusions are supported by the deposition testimony of Mr. Saliga, who not only describes two modes of operation—flyback and direct drive—but distinguishes them by noting that in the direct-drive mode, the transformer does not have to 'kick-up' the voltage." (Doc. 211, p. 62).

Taser has failed to meet its burden of proving that the Karbon MPID is not more than colorably different from the S-200 because the Court found the S-200 infringed the '295 patent primarily because the S-200 operated in a first flyback mode that generated a higher voltage followed by a second non-flyback or direct drive mode that generated a lower

voltage. And as previously stated with respect to the older version of the S-200, Karbon, through Dr. DiEuliis' testimony at the contempt hearing and the Mr. Saliga's deposition testimony, clearly established that a half-wave rectifier is not capable of operating in non-flyback mode. Taser made no arguments to the contrary in either its briefing or at the contempt hearing.

It is the presence of a half-wave rectifier that makes the Karbon MPID more than colorably different from the S-200. Most importantly, this feature limits the power supply of the MPID to operating in a single mode: flyback mode. Though the MPID may exhibit varied voltage outputs while operating in flyback mode, the device is nonetheless limited to this single manner of circuit operation. As the finding that the S-200 was a dual mode, rather than a single mode, device was precisely the finding on which the Court ultimately determined that the S-200 infringed, the MPID's single-mode operation unquestionably equates to more than a colorable difference from the S-200.

Specifically, the S-200's utilization of a full-wave rectifier allowed it to reverse any voltage with negative polarity to positive polarity, thus preserving the polarity of the electrodes that were fired at the target. This capability allowed the device to operate in both flyback and non-flyback modes and made the device much more effective in transmitting power from the source.

The Karbon MPID has no such capability. In an apparent effort to "design-around" the '295 patent, Mr. Saliga replaced the full-wave bridge rectifier with a half-wave rectifier. Making this change limited the efficiency of the Karbon MPID. Whereas the S-200 allowed positive output voltage whether the input was positive or negative, the Karbon MPID only allows operation if the input voltage is positive. Further, the polarity of the voltage on the secondary winding of the transformer is positive only when the transformer operates in flyback mode. The Karbon MPID therefore cannot operate in direct drive or non-flyback mode because use of the half-wave rectifier prohibits operation when there is negative polarity on the secondary winding.

Even though both the Karbon MPID and the S-200 effectively ionize the air gap so

that current can be transferred to the target, the circuitry and operation of the devices are clearly different. As a result, the Court finds that Taser has failed to prove by clear and convincing evidence that the Karbon MPID is not more than colorably different from the S-200. Because the Court has found that Taser did not satisfy its burden of proving no more than colorable differences, the Court need not decide whether the Karbon MPID actually infringes the '295 patent.

Accordingly,

IT IS ORDERED Denying Taser's Motion for Contempt and Application for Order to Show Cause (Doc. 262).

DATED this 18th day of January, 2012.

James A. Teilborg
United States District Judge