

**UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF ILLINOIS**

TRIUNE STAR, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Case No. 07-1256
	)	
THE WALT DISNEY COMPANY, WDIG )	)	
MOBILE, LLC (D/B/A DISNEY MOBILE), )	)	
PANTECH & CURITEL COMMUNICATIONS, )	)	
INC., PANTECH CO. LED., PANTECH )	)	
WIRELESS, INC., LG ELECTRONICS, and )	)	
LG ELECTRONICS MOBILECOM USA, INC., )	)	
	)	
Defendants.	)	

**ORDER**

This matter is now before the Court on a Motion for Summary Judgment by Defendants LG and Pantech, as well as WDIG Mobile’s Motion for Summary Judgment and corresponding Motions for Sanctions. For the reasons set forth below, LG and Pantech’s Motion for Summary Judgment [#49] is granted, and WDIG Mobile’s Motion for Summary Judgment [#50] is granted. The Motions for Sanctions [#63] and [#65] are also granted.

**BACKGROUND**

On September 19, 2000, the United States Patent and Trademark Office issued Patent No. 6,122,521 (the “521 patent”) for a “Telecommunications Locating System.” Plaintiff, Triune Star, Inc. (“Triune”), is the assignee of this patent and therefore is the owner of all right, title, and interest in the ‘521 patent. This action arises out of the WDIG Mobile, LLC, d/b/a Disney Mobile (“WDIG Mobile”) program, which operated from

mid-2006 until December 31, 2007, when it ceased operations. The WDIG Mobile program utilized several models of LG and Pantech mobile phones. Triune accuses the mobile phones used in the WDIG Mobile program, including Pantech Models DM-P100 and DM-P205 and LG Models DM-L200 and DM-L210, of infringing "at least claims 7 and 9" of the '521 patent.

Triune's patent application was not allowed as originally submitted. On October 28, 1998, the U.S. Patent and Trademark Office ("PTO") indicated that claims 3 and 11, two of the dependent claims in the application, "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." These claims stated as follows:

3. A system is defined in claim 1 wherein the video means is a miniature infrared camera.
11. A system is defined in claim 8 wherein the video means is a miniature infrared camera.

Thus, claims 3 and 11 indicate the particular subset of cameras that corresponds to the "video means" referred to in claim 1. In response, Triune amended independent claims 1 and 8 of its patent application:

1. A telecommunications locating system for persons and things comprising
  - (1) a remote unit adapted to be carried on a person or thing, said remote unit comprising:
    - (a) a receiver for receiving navigational signals from satellites in orbit about the earth and being adapted to generate position information signals indicative of the position of the remote unit;

- (b) a video means in the form of a miniature infra-red camera for generating signals representing a visual image of the area in the vicinity of the remote unit

\* \* \*

- 8. A remote unit for use in a telecommunications locating system for persons and things comprising:
  - (a) a receiver for receiving navigational signals from satellites in orbit about the earth and being adapted to generate position information signals indicative of the position of the remote unit;
  - (b) a video means in the form of a miniature infra-red camera for generating signals representing a visual image of the area in the vicinity of the remote unit

\* \* \*

Response to 28 Oct. 1998 Office Action at 1-6 (emphasis in original). With these amendments, Triune included the following remarks:

In the outstanding office action, the Examiner indicated that claims 3 and 11 would be allowable if re-written in independent form. Claims 1 and 8 have accordingly been amended to incorporate the subject matter of claims 3 and 11 respectively, and therefore it is respectfully submitted that this application is now in condition for allowance. A notice to that effect is respectfully solicited.

Id., at 5-6.

Following the amendments, Triune's patent '521 patent issued with a total of nine claims. Claims 1 and 7 are independent claims, with Claims 2 - 6 depending on Claim 1, and Claims 8 - 9 depending on Claim 7. It is undisputed that a "miniature infra-red camera" is a limitation of all the claims of the issued '521 patent.

Triune contends that the phrase “miniature infra-red camera” refers to “a camera that has a spectral response sufficient to capture visible images of the area in the vicinity of the remote unit” and “does not limit . . . the claim to a camera having a spectral response limited to the infrared range of wavelengths.” The ‘521 patent states that it is preferred to use “a miniature infrared camera marketed by TVX International and TVX, Inc.” Triune admits that the TVX camera referenced in the patent specifications is not a solely an infrared camera and does not contain an infrared blocking filter, but does include an infrared flash or strobe and is capable of producing a pictorial image based on radiation in the infrared portion of the electromagnetic spectrum.

Infrared photography is not equivalent to taking conventional photographs with a conventional camera. This is because infrared radiation and visible light differ in that visible light has waves with higher frequency and shorter wavelengths than infrared radiation. The waves in the visible light portion of the electromagnetic spectrum are visible to the naked eye, while the waves in the infrared portion are invisible to the naked eye. An infrared camera is designed to produce and capable of producing a pictorial image based on radiation in the infrared portion of the electromagnetic spectrum; it is not designed to produce a pictorial image based on visible light. A conventional visible-light camera includes an IR cut filter to almost completely inhibit or block infrared radiation from reaching the image sensor.

The LG models DM-L200 and DM-L210 include the CMMG-V068 camera module built into the phone. This camera includes an IR cut filter between the lens and image sensor but does not include an IR pass filter, which is normally found in infrared

cameras. Triune admits that the CMMG-V068 camera module is designed to produce images based on visible light, produces color images, and does not include an infrared light source.

The Pantech models DM-P100 and DM-P205 use the LTC TX215C camera module manufactured by Lite-On Technology Corp. and the Patron PN320 camera modules respectively. These cameras also include an IR cut filter between the lens and image sensor but do not include an IR pass filter. Triune also concedes that the LTC TX215C camera module and Patron PN320 camera module are designed to produce images based on visible light, produce color images, and do not include an infrared light source.

On September 28, 2007, Triune brought this suit alleging that Defendants have infringed the '521 patent by making, having made, using, offering for sale and/or selling cellular telephones embodying the invention of the '521 patent and that such actions were undertaken without authority or license from Triune despite Defendants' knowledge of the '521 patent. The Walt Disney Company was previously dismissed from this suit, and the remaining Defendants have moved for summary judgment on the question of non-infringement. The Defendants also request that sanctions be imposed against Triune for failure to conduct a reasonable pre-suit investigation and the pursuit of a frivolous lawsuit. All motions are now fully briefed, and this Order follows.

### **LEGAL STANDARD**

Summary judgment should be granted where “the pleadings, depositions, answers to interrogatories and admissions on file, together with the affidavits, if any, show 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). The moving party has the responsibility of informing the Court of portions of the record or affidavits that demonstrate the absence of a triable issue. Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986). The moving party may meet its burden of showing an absence of disputed material facts by demonstrating “that there is an absence of evidence to support the non-moving party’s case.” Id. at 325. Any doubt as to the existence of a genuine issue for trial is resolved against the moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986); Cain v. Lane, 857 F.2d 1139, 1142 (7<sup>th</sup> Cir. 1988).

If the moving party meets its burden, the non-moving party then has the burden of presenting specific facts to show that there is a genuine issue of material fact.

Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986).

Federal Rule of Civil Procedure 56(e) requires the non-moving party to go beyond the pleadings and produce evidence of a genuine issue for trial. Celotex, 477 U.S. at 324.

Nevertheless, this Court must “view the record and all inferences drawn from it in the light most favorable to the [non-moving party].” Holland v. Jefferson Nat. Life Ins. Co., 883 F.2d 1307, 1312 (7<sup>th</sup> Cir. 1989). Summary judgment will be denied where a reasonable jury could return a verdict for the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986); Hedberg v. Indiana Bell Tel. Co., 47 F.3d 928, 931 (7<sup>th</sup> Cir. 1995).

## **DISCUSSION**

### **I. Motions for Summary Judgment**

In order to demonstrate patent infringement, a plaintiff must prove by a preponderance of the evidence “the presence of every element [of a claim] or its

substantial equivalent in the accused device.” Zygo Corporation v. Wyko Corporation, 79 F.3d 1563, 1568 (Fed.Cir. 1996). This inquiry involves a two-step process:

The court must first interpret the claim and determine the scope and the meaning of the asserted patent claims, and then compare the properly construed claims to the allegedly infringing device. The first step, claim construction, is a matter of law . . . . The second step is a factual question . . . . To prove infringement, the patentee must show that the accused device meets each claim limitation, either literally or under the doctrine of equivalents.

Liquid Dynamics Corporation v. Vaughan Company, Inc., 355 F.3d 1361, 1367 (Fed. Cir. 2004).

The meaning of the claims in a patent is an issue of law. Markman v. Westview Instruments, Inc., 517 U.S. 370, 391 (1996). It is well-settled that in construing the claims of a patent, courts look first to the intrinsic evidence in the record, such as the plain language of the patent itself, the claims, the specification, and the prosecution history. Id. Claim terms are given their “ordinary and customary meaning as understood by one of ordinary skill in the art.” Id., *citing* Dow Chem. Co. v. Sumitomo Chem. Co., 257 F.3d 1364, 1372 (Fed.Cir. 2001). When the claims themselves lack sufficient clarity to determine their scope, courts look to the written description “to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning.” Id., *citing* Vitronics Corp. v. Conceptron, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The specification is essentially a written description of the invention that is complete enough to allow the invention to be made and used and is often “the single best guide to the meaning of a disputed term.” Id.

Finally, the prosecution history contains the prior art and the applicant's acquiescence to that prior art, which indicates "the scope of the claims, or in other words, what the claims do not cover." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F.3d 1359, 1367-68 (Fed.Cir. 2003), *citing* Autogiro Co. of America v. United States, 181 Ct.Cl. 55, 65, 384 F.2d 391 (1967). "[W]here the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender." Id., at 1368, *citing* Omega Engineering Inc. v. Raytek Corp., 334 F.3d 1314, 1324 (Fed.Cir. 2003). Extrinsic evidence is only considered when the patent and intrinsic evidence do not provide a clear answer. Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1302 (Fed.Cir. 1997).

Once the claim is properly construed, courts apply the claim to the accused devices to determine whether there has been infringement. "Literal infringement is found where the accused device falls within the scope of the asserted claims as properly interpreted." Lantech, Inc. v. Keip Machine Co., 32 F.3d 542, 547 (Fed.Cir. 1994). Every limitation must be present in the accused device in order to establish literal infringement. General Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 981 (Fed. Cir. 1997); Rohm & Haas v. Brotech Corp., 127 F.3d 1089, 1092 (Fed.Cir. 1997).

Here, the parties dispute the meaning of Claims 7 and 9 of the '521 Patent. As issued, Claim 7 refers to "[a] remote unit for use in a telecommunications locating system for persons and things comprising . . . a video means in the form of a miniature infra-red camera for generating signals representing a visual image of the area in the vicinity of the remote unit . . . ." Claim 9 then references "[a] system as defined in claim



7 wherein said receiver for receiving navigational signals is a global positioning satellite receiver.” The bone of contention is the meaning of the phrase “a video means in the form of a miniature infra-red camera.”

The plain and customary meaning of this phrase clearly incorporates a video mechanism that includes a miniature infrared camera. Plaintiffs have conceded that an infrared camera is designed to produce a pictorial image based on radiation in the infrared portion of the electromagnetic spectrum. Beyond that, however, the language itself lacks sufficient definiteness and clarity to ascertain the scope of the claims or what precisely is meant by an “infrared camera.” Accordingly, the Court must consider other intrinsic evidence.

The detailed description of the invention further states:

A number of video means can be used for this purpose, including miniaturized video cameras. It is preferred, however, in the practice of the present invention to use a miniature infrared camera built into a computer chip and marketed by TVX International and TVX, Inc. The TVX system acts as a wide angle or fish eye camera, recording images which are converted by means of a processing unit into digital form for storage in a memory and/or to the microprocessor.

Although reference is made to other miniaturized video cameras, this description specifies the use of the TVX camera which involves a miniature infrared camera built into a computer chip that functions as a wide angle camera to record images.

This brings us to the prosecution history. In a May 29, 1998, Office Action Summary, the examiner rejected the claims initially presented by Triune as unpatentable over prior art. This prior art disclosed a telecommunication locating system comprised of a remote unit to be carried on a person that included a receiver for

generating position information signals, a video means for generating signals representing a visual image of the area in the vicinity of the remote unit, and a transmitting means for sending the position and visual image signals, as well as a base unit for receiving such signals.

The examiner noted that the combination of the prior art “does not specifically show the remote unit is a miniature infrared camera or a wrist watch. However, the claimed limitations is very well-known and a user preference as evidenced by Yamashita.”

Triune sought reconsideration. Triune maintained that the video display contained in prior art was merely the display of a map, as opposed to its device's ability to transmit a visual image of the location using a miniature camera to photograph the surrounding environment where the remote unit is located. Triune further argued that the reliance on the Yamashita patent was misplaced, as that device was capable only of receiving signals and could not transmit them.

The reviewer found Triune's arguments unpersuasive. However, in the Office Action dated October 28, 1998, the examiner indicated that dependent claims 3 and 11 “would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.” In response, Triune amended independent claims 1 and 8, which ultimately issued as claims 1 and 7 of the '521 patent, to include the “miniature infrared camera” limitations of the original claims 3 and 11 to require “a video means in the form of a miniature infra-red camera for generating signals representing a visual image of the area in the vicinity of the remote unit.” With these

amendments, the Patent and Trademark Office issued a notice of allowance for Triune's patent application, which ultimately issued as the '521 patent.

Defendants contend that the dictionary definition of an infrared camera is a special camera designed to take photographs based solely on infrared radiation rather than visible light and offer expert opinion indicating that such a camera must include an infrared pass filter but does not include an infrared cut filter. Triune responds that nothing in the patent specifications limits the device to a camera solely capable of recording in the infrared range, arguing that it has through its specification crafted a special definition of the term "infrared" that differs from its common meaning and expands the term to include any video means that generates "signals representing a visual image of the area in the vicinity of the remote unit." As is often the case, the Court finds that the proper construction of the claims lies somewhere between the two versions cited by the parties.

The Court agrees that nothing in the intrinsic evidence indicates that the miniature camera must operate solely in the infrared spectrum as suggested by Defendants. That being said, the inclusion of the requirement of a miniature infrared camera cannot be meaningless or as all inclusive as Triune would suggest.

While it is improper to read limitations from specifications into a claim, written descriptions of preferred embodiments "can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed."

Markman, 52 F.3d at 979; SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 1344 (Fed.Cir. 2001). It is undisputed that the TVX camera specified in the detailed description of the patent does not operate solely in the

infrared spectrum, but is capable of generating images in both the infrared and visible light spectrums. This is consistent with the lack of any language in the claim itself, specifications, or prosecution history limiting the camera to a device that operates solely in the infrared spectrum and is capable of producing only infrared images. It is also undisputed that the TVX camera includes an infrared flash or strobe to facilitate its ability to generate images in the infrared spectrum.

When read in light of the specifications and prosecution history, the Court must conclude that the reference to a “miniature infrared camera” in Claims 7 and 9 envisions a miniature camera that is capable of operating and generating images in at least the infrared spectrum. There is no limitation requiring the camera to only operate in the infrared spectrum or precluding a camera that is also capable of operating and generating images in the visible light spectrum as well.<sup>1</sup>

The Court must now apply these construed claims to the allegedly infringing devices to determine whether there has been infringement. Triune concedes that the use of a miniature infrared camera is a limitation of all of the claims of the ‘521 patent as issued. It is undisputed that the LG and Pantech models at issue in this case do not contain infrared cameras. They are designed to produce images based only on visible light and do not contain any infrared light source or infrared pass filter that would enable them to operate in the infrared portion of the spectrum; to the contrary, they each contain an infrared cut filter that almost completely blocks infrared radiation from

---

<sup>1</sup> The Court need not consider the expert opinions and other extrinsic evidence offered by Defendants as the intrinsic evidence is dispositive of the proper claim construction in this case.

reaching the image sensor. Accordingly, no reasonable factfinder could conclude that the allegedly infringing devices embody the requirement of Claims 7 and 9 of a video means consisting of a miniature infrared camera. Defendants therefore did not literally infringe the '521 patent as a matter of law.

Having failed to establish literal infringement, Triune alternatively would attempt to rely on the doctrine of equivalents. The doctrine of equivalents is intended to prevent competitors from pirating the essence of an invention while narrowly avoiding the literal language of the claims. Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 856-57 (Fed.Cir. 1988). To prevail under this doctrine, the holder of the patent must show that the allegedly infringing device performs substantially the same function, in substantially the same way, and with substantially the same result as the patented invention. Graver Tank & Manufacturing Co. v. Linde Air Products Co., 339 U.S. 605, 608 (1950).

However, the doctrine of equivalents is the exception rather than the rule and cannot be used in a way that essentially ignores claim limitations. London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538 (Fed.Cir. 1991). Prosecution history estoppel precludes the use of the doctrine of equivalents to re-expand a claim that was voluntarily narrowed by amendment during the course of prosecuting the patent application in order to obtain the issuance of the patent. Honeywell International, Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1139-40 (Fed.Cir. 2004). Yet that is precisely what would happen if the doctrine were applied in the manner suggested by Triune in this case.

The prosecution history reveals that Triune's submission originally presented a wider variety of options for the "video means," including miniature video cameras generically. This submission was rejected twice as unpatentable in light of prior art using "a video means for generating signals representing a visual image of the area in the vicinity of the remote unit" and "a wireless image transfer from a digital still video camera to a networked computer." Triune argued that the inclusion of the miniature camera to photograph the area in which the remote device was located was a significant advance in the art that was not disclosed by prior art. The reviewer disagreed, finding that the base claims were still rejected as the broadest claimed limitations still did not call for the use of a video means that would represent a significant advance in the art. The reviewer did note that the application would be acceptable if amended to convert the dependent claims to specify a miniature infrared camera as the video means in an independent claim.

Thus, it would appear that it was the specification of the miniature infrared camera as an independent claim that advanced the art and allowed the application to overcome the obviousness objection. Triune's disavowal of the broader construction featuring any miniature video camera to obtain the patent narrowed the meaning of the claim congruent with the scope of the surrender. Festo, 344 F.3d at 1368; Omega Engineering, 334 F.3d at 1324. The amendments Triune made during the prosecution of the '521 patent therefore narrowed the scope of the '521 patent and were a substantial factor in the patentability of Triune's invention. Id., at 1366-67.

The application of the doctrine urged by Triune would negate the requirement that the video means be a miniature camera capable of operating and generating

images in at least the infrared spectrum. This would create a broad range of equivalents that would effectively eliminate an element of Claims 7 and 9. Accordingly, the Court must conclude that Triune's conduct during the prosecution of the '521 patent operates as an estoppel that prevents Triune from using the doctrine of equivalents to avoid the limitations posed by these amendments in this case. Id.

## II. Motions for Sanctions

Defendants seek the imposition of sanctions pursuant to Fed. R. Civ. P. 11 and 28 U.S.C. § 1927. Rule 11(b) states in relevant part:

By presenting to the court a pleading, written motion, or other paper – whether by signing, filing, submitting, or later advocating it – an attorney . . . certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances:

(2) the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law;

(3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery . . . .

Fed. R. Civ. P. 11(b) (emphasis added). Moreover, in a patent case, the Federal Circuit has held that the rule:

[M]ust be interpreted to require the law firm to, at a bare minimum, apply the claims of each and every patent that is being brought into the lawsuit to an accused device and conclude that there is a reasonable basis for a finding of infringement of at least one claim of each patent so asserted.

View Engineering, Inc. v. Robotic Vision Systems, Inc., 208 F.3d 981, 986 (Fed.Cir. 2000).

Defendants argue that a reasonable pre-suit investigation would have revealed that none of the allegedly infringing devices contain a miniature infrared camera as required in Claims 7 and 9 of the '521 patent and therefore could not have infringed Triune's patent as a matter of law. They further contend that Triune's proposed construction of the claims requiring the use of a miniature infrared camera is legally frivolous and essentially attempts to read the word "infra-red" out of the claims in the '521 patent. The Court agrees.

In this litigation, Triune has alternatively construed the term "infra-red" as either: (1) "the mechanism by which the portions of the camera function" or (2) "a camera that has a spectral response sufficient to capture visible images of the area in the vicinity of the remote unit." These interpretations effectively broaden the meaning of the claim to any camera, which would render the term "miniature infrared camera" meaningless and fail to address the limitations posed by prior art.

In light of the fact that the examiner required the addition of the infrared specification to advance the art and overcome the obviousness objection based on prior art consisting of "a video means for generating signals representing a visual image of the area in the vicinity of the remote unit" and "a wireless image transfer from a digital still video camera to a networked computer," neither of Triune's constructions pass the red face test. There is simply no valid or remotely reasonable basis for ignoring the substantive addition that the specification of an infrared camera made to the claims in Triune's patent.



Given the undisputed facts in this case, the intrinsic evidence of record, the Court's construction of the claims of the '521 patent, and the finding of noninfringement as a matter of law, the Court must conclude that any reasonable pre-suit investigation would have revealed that the allegedly infringing devices did not contain any type of miniature infrared camera and therefore could not have literally infringed Triune's patent. Likewise, in light of the prosecution history and the doctrine of prosecution history estoppel, there is no nonfrivolous argument for the finding of infringement after applying the doctrine of equivalents.

Triune's response to the request for sanctions misses the point, giving the oblique response that Triune has not needlessly multiplied these proceedings but has "done all that it can to limit the scope of this litigation until the claim construction issue . . . is resolved." Triune then reiterates its response to the Motions for Summary Judgment, focusing on the argument that Defendants' proposed construction of the claims is unsupportable, and suggests that there is a reasonable basis for a different interpretation of the claims that allows them to ignore the word "infrared." The Court rejected this position as untenable previously in this Order, finding that while there is a reasonable basis for a different construction of the "miniature infrared camera" requirement in Claims 7 and 9 than the one advocated by Defendants, the construction advocated by Triune did not come close to establishing a reasonable interpretation.

The imposition of Rule 11 sanctions is therefore appropriate in this case against both Triune and its counsel, who represented Triune during the prosecution of the '521 patent and were directly involved in the amendment of the claims in question to require a miniature infrared camera in order to overcome the obviousness objection. The direct

involvement of Triune's counsel in the prosecution and amendment of the claims in question negates any reasonable suggestion that Triune's position was merely erroneous rather than frivolous.

Defendants ask the Court to award all costs, attorney fees, and other expenses incurred in defending this baseless action. Triune's response centers on why it believes that its position is reasonable but does not offer any equitable factors for consideration. Accordingly, the Court awards reasonable costs and attorneys' fees in favor of the Pantech, LG, and WDIG Mobile Defendants and against both Triune and its counsel. These Defendants shall submit appropriately documented Bills of Costs and fee petitions within 14 days of the entry of this Order. Triune will have 14 days from Defendants' filings in which to file any response, and the Defendants will have 7 days from the filing of Triune's response in which to file any reply brief.

### **CONCLUSION**

For the reasons set forth above, LG and Pantech's Motion for Summary Judgment [#49] is granted, and WDIG Mobile's Motion for Summary Judgment [#50] is granted. The Motions for Sanctions [#63] and [#65] are also granted. Final judgment will be entered once the appropriate amount of sanctions has been determined.

ENTERED this 24<sup>th</sup> day of November, 2008.

s/ Michael M. Mihm  
Michael M. Mihm  
United States District Judge