

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NORTH CAROLINA  
ASHEVILLE DIVISION  
CIVIL CASE NO. 1:10-CV-159-MR**

**SOCIEDAD ESPANOLA de  
ELECTROMEDICINA Y CALIDAD, S.A.,**

**Plaintiff,**

**vs.**

**BLUE RIDGE X-RAY COMPANY, INC.,  
DRGEM USA, INC. and DRGEM  
CORPORATION,**

**Defendants.**

**MEMORANDUM ORDER  
AND OPINION**

**THIS MATTER** is before the Court on the parties' cross motions for summary judgment. [Docs. 86; 91].

**FACTUAL AND PROCEDURAL BACKGROUND**

This is an action for patent infringement brought by Sociedad Espanola de Electromedicina Y Calidad, S.A. (Sedecal) against Blue Ridge X-Ray Company, Inc. (Blue Ridge X-Ray), Drgem USA, Inc. (Drgem USA), and Drgem Corporation (Drgem Corp.).<sup>1</sup> [Doc. 1].

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<sup>1</sup> This action was originally brought by two plaintiffs, Sedecal and Sedecal USA, Inc. (Sedecal USA). [Doc. 1]. By First Amended Complaint filed on November 1, 2010, Sedecal, USA was removed as a plaintiff.

Sedecal is a Spanish corporation which designs and sells X-ray and digital radiography equipment for use in the medical industry. [Doc. 49 at 3]. The First Amended Complaint alleges one claim for patent infringement based on Patent No. 6,642,829 (the '829 Patent), a patent for a high voltage transformer owned by Sedecal pursuant to assignment from the inventor, a Sedecal employee. [Doc. 21 at 4].

Drgem USA is a Florida corporation and a subsidiary of Drgem Corp., a South Korean corporation. [Id. at 2]. Drgem Corp. is alleged to have manufactured, sold, and exported for sale X-ray generator products which infringe one or more claims of the '829 Patent. [Id.]. Drgem USA is alleged to have infringed the patent by selling these allegedly infringing Drgem products to Blue Ridge X-Ray. [Id. at 4-5].

Blue Ridge X-Ray is a North Carolina corporation doing business in Arden, North Carolina, which sells X-ray and digital radiography equipment, including Sedecal and Drgem products. [Id.]. Blue Ridge X-Ray is alleged to have infringed the '829 Patent by selling and importing for sale the allegedly infringing Drgem products. [Id. at 4].

For relief, Sedecal seeks a declaration of infringement, injunctive relief against further infringement, and damages. [Id. at 6-7]. Sedecal's

sole claim is pursuant to the Patent Act, 35 U.S.C. §§ 1, *et seq.* [Id.]. There are no state law claims or licensing issues. [Id.].

In their Answer and Counterclaims, the Defendants have raised the affirmative defenses of patent invalidity and failure to mark the products with the patent, thus depriving the Plaintiff of any right to damages pursuant to 35 U.S.C. § 287. [Doc. 27]. They also counterclaimed for a declaration of non-infringement and invalidity. [Id.].

The parties proceeded in accord with all stages of the Amended Utility Patent Claim Construction Scheduling Order. [Doc. 37]. A Markman<sup>2</sup> hearing was conducted on February 21, 2012 [Doc. 58] and the Court entered a Claim Construction Order thereafter on August 15, 2013. [Doc. 62].

The Defendants have filed a motion for summary judgment seeking an “Order granting summary judgment in defendants’ favor on plaintiff’s claim of patent infringement and on defendants’ counterclaim for declaratory judgment of noninfringement.” [Doc. 86 at 1]. Plaintiff, too, has filed a motion for summary judgment on the issue of the validity of the ‘829 patent. [Doc. 91 at 2].

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<sup>2</sup> Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

## **STANDARD OF REVIEW**

The parties have submitted cross-motions for summary judgment under Federal Rule of Civil Procedure 56. Summary judgment is proper “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(a). A fact is “material” if it “might affect the outcome of the case.” N&O Pub. Co. v. RDU Airport Auth., 597 F.3d 570, 576 (4<sup>th</sup> Cir. 2010). A “genuine dispute” exists “if the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). Upon review of the record before the Court, the Court concludes that the issues are adequately presented therein, and that no genuine dispute as to any material fact exists. Accordingly, summary judgment is an appropriate means by which to resolve the issues presented by the parties.

## **DISCUSSION**

There are two motions for summary judgment pending before the Court: one regarding the ‘829 Patent’s validity and one regarding the question of infringement of the Patent. The validity issue hinges on whether

Sedecal's patent describes a mechanism that is operational.<sup>3</sup> The infringement issue pertains to the undisputed facts in this matter concerning the differences between Sedecal's claimed transformer and the Defendants' accused infringing products. The Court will address these issues in turn.

**I. The Validity Issue.**

At the center of this case is the issue of whether the claims listed in Sedecal's '829 patent definitively define an operational art form, a high voltage electrical transformer, which allegedly has been infringed by the Defendants. Sedecal asserts that the '829 Patent Claims define a functional art form and that the Defendants have infringed the '829 Patent by manufacturing and selling X-ray equipment incorporating a transformer mimicking Sedecal's invention. Sedecal seeks a declaration of patent validity as well as damages and equitable relief for infringement. Defendants deny Sedecal's allegations, contending that Sedecal's patent is invalid because the transformer described therein is nonfunctional.

The Federal Declaratory Judgment Act provides that a federal district court "may declare the rights and other legal relations of any interested

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<sup>3</sup> Three bases were presented for invalidity. Some have been withdrawn. [Doc. 95-1]. The only one at issue here is whether Sedecal's claimed device is operational. [Docs. 91; 92 at 15-24; 95 at 5-25].

party seeking such declaration, whether or not further relief is or could be sought.” 28 U.S.C. § 2201(a). The Fourth Circuit has explained that a “declaratory judgment action is appropriate ‘when the judgment will serve a useful purpose in clarifying and settling the legal relations in issue, and ... when it will terminate and afford relief from the uncertainty, insecurity, and controversy giving rise to the proceeding.’” Centennial Life Ins. Co. v. Poston, 88 F.3d 255, 256 (4th Cir. 1996) (quoting Aetna Cas. & Sur. Co. v. Quarles, 92 F.2d 321, 324 (4th Cir. 1937)). In determining patentability, absence of utility and lack of enablement are closely related grounds for rejecting a patent. Process Control Corp. v. Hydrex Corp., 190 F.3d 1350, 1358 (Fed. Cir. 1999). Therefore, with regard to the art defined in the ‘829 Patent, two statutory provisions are implicated by the Defendants’ primary argument that Sedecal’s transformer is non-functional, 35 U.S.C. §§ 101 and 112 (“utility” and “enablement”).

The enablement requirement of 35 U.S.C. § 112, ¶ 1 requires that the specification adequately discloses to one skilled in the relevant art how to make, or in the case of a process, how to carry out, the claimed invention without undue experimentation. The utility requirement of 35 U.S.C. § 101 mandates that any patentable invention be useful and, accordingly, the subject matter of the claim must be operable.

Process Control, 190 F.3d at 1358 (citations and footnote omitted).

Claim 1 of the ‘829 Patent sets forth that Sedecal’s device contains

two each of the following elements: a rectifier, a filter, a resistive divider, a high voltage switch, and a magnetic core. [Doc. 21-1 at 6]. Further, Claim 1 explains that one each of “said rectifiers, filters, resistive dividers, high voltage switches, [and] magnetic cores, are arranged in two differentiated groups ... [with] ... a first group comprising positive voltage elements and a second group comprising negative voltage elements[.]” Id. This language was not contested at the Markman hearing. [Doc. 62 at 9]. The plain meaning of this language – specifically that Sedecal’s device contains two magnetic cores – dictates the result on the invalidity issue. This Court held in its Claim Construction Order that the two magnetic cores referred to in Claim 1 are separated into “two different chambers that are insulated from each other.” [Doc. 62 at 30]. This construction would appear to be dispositive of the question of operability and thus validity. Sedecal’s counsel conceded as much at the Markman hearing.

[Mr. Rademaker:] I believe that’s where [the Defendants] are at, to say that the chambers must be completely isolated – now, they just say “isolated” – but completely isolated and sealed off so there’s no fluid flow, there’s no – it wouldn’t be a transformer anymore, frankly.

[Doc. 58 at 73].

On summary judgment, however, Sedecal largely seeks to re-argue claim construction. The Court concluded in the Claim Construction Order,

without objection from either party, that the language of Claim 1 dictates that the claimed device has two magnetic cores, not one. [Doc. 62 at 9]. The Court further held that the two cores are separated into “two different chambers that are insulated from each other.” [Id. at 30].

Sedecal, however, even after the Markman hearing, continues to argue that the two magnetic cores are connected by “yokes.” [Doc. 92 at 20]. More precisely, and despite the uncontested claim language specifying two separate cores, Sedecal now insists that its transformer actually contains only **one** closed ring magnetic core. This single core, according to Sedecal, has two “legs” with each “leg” being situated in one of the “two differentiated groups” described in Claim 1. [Id. at 21-22]. There is nothing in the ‘829 Patent claims that describes any such feature of the claimed device as having core “legs” or “yokes” or indicates that the device contains anything less than two magnetic cores. Obviously, Sedecal would prefer it if Claim 1 of the ‘829 Patent stated that the elements identified therein as 7 and 7’ were “legs” of a single closed ring magnetic core (and not separate magnetic cores themselves), but that is not supported by the language of the claims. This Court “may not redraft claims to cure a drafting error made by the patentee, whether to make them operable or to sustain their validity.” Lucent Techs. v. Gateway, Inc., 525

F.3d 1200, 1215 (Fed. Cir. 2008).

Even though Claim 1 unquestionably identifies two complete magnetic cores of unknown geometry, Sedecal attempts to persuade the Court that Claim 1 does not really mean what it says. Notwithstanding that the term of art “core legs” appears nowhere in Claim 1, Sedecal attempts to support its construction by citing to snippets of the defense expert’s deposition arguing that said expert agrees that “[t]he claimed magnetic cores 7 and 7’ are legs of a single, full magnetic core of the transformer assembly.” [Doc. 92 at 23]. A fair reading of such expert’s testimony, however, discloses that Sedecal has taken the defense expert’s statements out of context. See Doc. 95 at 23 (“Mr. Hopkinson did not agree that the ‘829 patent uses the term ‘magnetic core’ to refer to a “leg” of a continuous magnetic core. Rather, Mr. Hopkinson testified that the ‘829 patent claims [ ] ‘a pair of cores.’ ”). [Id. at 23-26]. “The construction that stays true to the claim language and [that] most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” Renishaw P.L.C. v. Marposs Societa’ per Axioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998). That is what this Court endeavored to do in the Claim Construction Order, and any decision on summary judgment must be based thereon.

It is understandable that Sedecal takes the position that its patent

**must** describe a single magnetic ring core element contained in its transformer. Sedecal's experts and the Defendants' expert opined that the transformer claimed in the '829 patent will not function otherwise. Mr. Philip Hopkinson, expert for the Defendants, was asked during his deposition about the shape of a transformer magnet core. He responded saying, "[i]t could be round, it could be rectangular, but it always has to have a continuum to be a core. So a core must be connected all the way around for flux to flow because flux has to return on itself. How is it going to do that if we don't have a continuum?" [Doc. 93-6 at 18]. Likewise, Mr. Oscar Khutoryansky, Sedecal's expert testified at the Markman hearing that, "[a] person of ordinary skill in the art would understand that ... the magnetic core ... will always be formed as a continuous loop in a high voltage transformer[.] This closed loop structure is necessary because magnetic flux must have closed circuit continuity." [Doc. 46-2 at 4]. Consequently, no factual dispute exists; the parties' experts agree that a high voltage transformer's magnetic core must be circuitous for the transformer to function. Another one of Sedecal's experts, Dr. Melvin Siedband, opined as follows:

Q. Let me ask you this question. Are the magnetic cores elements of each group?

A. I believe that to be the case, yes.

Q. Could a high voltage transformer such as one described in the '829 patent be functional if the magnetic core carried voltage?

A. It goes against common sense. It's a metal core. It's made of long steel. It's a conductor. Conductors conduct. Ideally there's no voltage across it. It's like a big short-circuit. So it is my belief that common sense experience[...] and] I also believe the language of the claim all go[es] against saying that this core can have a voltage or a voltage can exist across the core. I cannot accept that.

Q. If voltage existed across the core, would the device function?

A. If voltage existed across the core, it probably wouldn't work as a core, so I didn't think the device could function. I don't know. I don't think. My experience, and the cores I have seen, just couldn't happen.

[Doc. 94-7 at 12 (objections omitted)].

Despite Sedecal's arguments to the contrary, Claim 1 of the '829 Patent does not describe a single closed ring magnetic core. Claim 1 describes **two** magnetic cores. Based on that construction, it is undisputed that the '829 Patent claims describe a device that does not function. As the Court stated in Raytheon Co. v. Roper Corp., 724 F.2d 951 (Fed. Cir. 1983):

Because it is for the invention as claimed that enablement must clearly exist, and because the impossible cannot be enabled, a claim containing a limitation impossible to meet may be held invalid under § 112. Moreover, when a claim requires a means for accomplishing an unattainable result, the claimed invention

must be considered inoperative as claimed and the claim must be held invalid under either § 101 or § 112 of 35 U.S.C.

Id. at 956. There is no reason for this Court to hold otherwise with regard to the claimed device described in the '829 Patent. It has been correctly pointed out that operability is ordinarily a question of fact for the jury. [Doc. 95 at 7]. In this case, however, there is no dispute as to any material fact. The '829 Patent claims have been construed to call for two separate cores. Sedecal's experts concede that if these two cores called for in Claim 1 are separated rather than connected, then the claimed device is not operational. Hence, no genuine issue of material fact exists as to the validity of the '829 Patent. The undisputed facts show that the device as described in the '829 Patent's Claims, as those Claims have been construed in this Court's Claim Construction Order, will not operate. Thus, the Court must conclude as a matter of law that the '829 Patent is invalid.

## **II. The Infringement Issue.**

Defendants contend alternatively that the claims underlying the '829 Patent differentiate Sedecal's invention from the transformer incorporated into their accused products in two significant ways: (1) Sedecal's transformer possesses "two different chambers that are insulated from each other" by "one solid insulating barrier[.]" and the Defendants' transformer does not [Doc. 62 at 30]; and (2) Sedecal's transformer

contains two magnetic cores and the Defendants' transformer contains only one. Defendants seek, as an alternative to a declaration of the invalidity of the '829 patent, a declaration of non-infringement due to the differences they say exist between the parties' two transformers.

With regard to an infringement analysis, a two-step process is employed when courts make such a determination. Markman v. Westview Instr., Inc., 52 F.3d 967, 976 (Fed. Cir. 1995). First, a court must construe the asserted claims to ascertain their meaning and scope. Id. This Court has accomplished step one with its Claim Construction Order previously entered. Second, a court must compare the properly construed claims with the allegedly infringing product. Id. "If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law." Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1247 (Fed. Cir. 2000). Further, if an accused product does not infringe an independent claim, it also does not infringe any claim depending thereon. Wahpeton Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1553 (Fed. Cir. 1989).

The Court ruled in its Claim Construction Order that Sedecal's transformer possesses "two different chambers that are insulated from each other" by "one solid insulating barrier[.]" rejecting Sedecal's arguments to the contrary. [Doc. 62 at 30]. Examining the Defendants'

transformer, the Court notes that the two regions of the accused products' transformer (comparable to the two separate compartments described in Sedecal's transformer) are not "insulated" from one another because they open directly into one another. Further, the lack of any physical barrier between portions of the two regions of the accused products' transformer confirms that they are not "insulated" chambers, especially given that oil is able to flow freely throughout the entire housing. Accordingly, the Defendants' transformer contained in the accused products has just one single chamber whereas the transformer claimed in Sedecal's '829 Patent has two separate chambers that are insulated from each other by one solid insulating barrier.

As to the Defendants' second differentiation argument, the number of magnetic cores contained in each party's respective device, the Court's Claim Construction Order resolved this dispute in favor of the Defendants. The '829 Patent Claims have been construed to call for two separate cores. The Defendants' transformer, contained within the accused products, has only one magnetic core.

Accordingly, based upon the Court's comparison of each party's respective device, the Defendants' transformer contained in the accused products has just one single chamber whereas the transformer claimed in

Sedecal's '829 patent has two separate chambers that are insulated from each other by one solid insulating barrier. Further, the Court's Claim Construction Order held that the language of Claim 1 dictates that the claimed device has two magnetic cores, unlike Defendants' transformer which has only one. There being no factual dispute as to the presence of these differences, the Defendants' transformer contained within the accused products does not infringe any claim of Sedecal's '829 Patent, and thus even if the '829 Patent were valid, the Defendants are entitled to summary judgment.

### **CONCLUSION**

Based on the foregoing, the Court concludes that Sedecal's claimed transformer in its '829 patent fails to comply with the statutory requisites of utility and enablement and that Defendants' motion for summary judgment on the issue of patent invalidity should be granted.

### **ORDER**

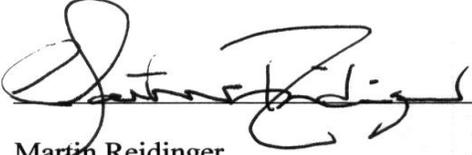
**IT IS, THEREFORE, ORDERED** that the Defendants' Motion for Summary Judgment [Doc. 86] is hereby **GRANTED**, and, as for the Plaintiff's Motion for Summary Judgment [Doc. 91], there is no genuine issue of material fact and thus the granting of summary judgment is appropriate and that such summary judgment is **GRANTED** in favor of

Defendants and is **DENIED** as to the Plaintiff.

**IT IS FURTHER ORDERED AND DECLARED** that the Plaintiff's transformer claimed in its patent does not function and thus fails to comply with 35 U.S.C. §§ 101 and 112, rendering Patent No. 6,642,829 invalid.

**IT IS SO ORDERED.**

Signed: September 20, 2014

  
Martin Reidinger  
United States District Judge

