

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF VIRGINIA
ABINGDON DIVISION**

ELECTRO-MECHANICAL CORPORATION,)	
)	
)	
Plaintiff,)	Case No. 1:11CV00071
)	
v.)	OPINION AND ORDER
)	
POWER DISTRIBUTION PRODUCTS, INC., ET AL.,)	By: James P. Jones
)	United States District Judge
)	
Defendants.)	

James P. Murphy, McAndrews, Held & Malloy, Chicago, Illinois, Brady J. Fulton, Northup, McConnell & Sizemore, Asheville, North Carolina, and Kurt J. Pomrenke, Curcio Stout & Pomrenke, PC, Bristol, Virginia, for Plaintiff; John D. Luken, Tammy L. Imhoff, Monika J. Hussell, Robert M. Stonestreet, and Olen L. York, III, Dinsmore & Shohl LLP, Cincinnati, Ohio, and Charleston, West Virginia, and Eric R. Thiessen, McElroy, Hodges, Caldwell & Thiessen, Abingdon, Virginia, for Defendants.

In this patent infringement case, the defendants have moved for summary judgment based on alleged invalidity of the patent, and the plaintiff has moved for partial summary judgment on the issue of infringement of one of the patent’s twenty-seven claims. Additionally, the defendants have moved to exclude the testimony of the plaintiff’s damages expert and also seek partial summary judgment as to the proper measure of damages. The plaintiff likewise has moved to exclude the testimony of the defendants’ expert witness. I find that there are disputed issues of material fact that preclude the entry of summary judgment in

favor of the plaintiff. I will grant the defendants' motion with respect to claims 12, 16, 18, 19, and 21, which the plaintiff does not contest, but I will deny the defendants' motion with respect to all other claims because there are disputed issues of material fact. Additionally, I find that the testimony of the plaintiff's expert meets the requirements for admissibility under the Federal Rules of Civil Procedure and the relevant Supreme Court precedent. I find that the defendant's expert has misconstrued one claim term, and his testimony will be limited to exclude use of that improper definition. In all other respects, however, the testimony of the defendant's expert meets the requirements for admissibility under the Federal Rules of Civil Procedure and the relevant Supreme Court precedent.

Therefore, I will deny the plaintiff's motion for summary judgment, and I will grant in part and deny in part the defendants' motion for summary judgment. I will also deny the plaintiff's motion in limine to exclude the testimony of the defendants' expert witness, and I will grant in part and deny in part the defendants' motion in limine.

I

The patent at the center of this dispute, U.S. Patent No. 7,277,294 ("the '294 patent"), is entitled "Contactor Draw Out Tray" and owned by the plaintiff, Electro-Mechanical Corporation ("EMC"). In its Complaint, EMC claims that

defendants Power Distribution Products, Inc., Becker Mining America, Inc., and SMC Electrical Products, Inc., (“the defendants”) willfully infringed the patent and induced infringement by others, all in violation of 35 U.S.C.A. § 271 (West 2001 & Supp. 2012).

The '294 patent sets forth inventions relating to a contactor draw out tray typically used as part of a power distribution system for longwall underground coal mining. Longwall mining involves the extraction of coal contained in large rectangular blocks. A cutting machine runs back and forth along the coal face, working under a canopy of movable roof supports. After a section of coal from the block has been mined and removed, the roof supports are moved closer to the newly cut face and the roof in the mined out area is allowed to collapse.

Excavation of the coal in the panel can be an essentially continuous operation, provided that the mining and electrical equipment is fully operational. A power distribution system for such a mining operation typically receives electricity from an off-site source such as an electric power utility, and then provides the electricity in a usable form to the various different pieces of mining equipment. Historically, the repair and maintenance of such power distribution systems presented a difficult task because of the rugged and demanding environments where the equipment is normally employed. As the Background of the Invention in the '294 patent explains:

Due to the extensive size of such equipment, it is impractical to evacuate defective equipment to the surface in order to provide a clean environment for the technician to effectuate the necessary repairs. Accordingly, repairs are made on site, thereby providing further opportunity for the infiltration of contaminants into the system as the technician must open the various access panels, leaving them open for extended periods of time. Moreover, the technician is left to effectuate the repairs in the austere environment. In such conditions . . . repairs remain a time consuming, labor intensive proposition. Similarly, because the equipment remains in an inoperable condition for an extended period of time, there is a concomitant loss in productivity as the equipment reliant on the electrical power is rendered useless.

('294 patent, col. 1, ll. 27-42.)

It is claimed that the inventions of the '294 patent provide significant improvements over prior longwall power distribution systems because they allow for quick repairs to the electrical equipment on site at the mining operation. The '294 patent includes contactor draw out trays that are removable. Because the contactor draw out trays are quickly and easily removed, and their components easily accessible, repairs can be made more rapidly, significantly reducing the down time of the mining equipment and increasing the overall efficiency of the mining operation.

The '294 patent contains twenty-seven claims, with eleven independent claims and sixteen dependent claims. The claims describe different aspects of the contactor draw out tray. The structure itself is made up of a movable frame carried or supported by a stationary frame, and a disconnect mechanism mounted to the

movable frame that provides selective electrical connectivity through the apparatus for downstream distribution of electricity to equipment.

Claim 1 is representative and it claims the following invention:

1. An apparatus for use in an electrical distribution system comprising in combination:
 - a. a stationary frame supporting one or more main bus input terminals and one or more of power output terminals in spaced relation to each other such that no electrical connection is made between said main bus input terminals and said power output terminals;
 - b. a movable frame slidably carried on said stationary frame and supporting one or more main bus input connectors and one or more power output connectors positioned for mating engagement with said main bus input terminal and said power supply output terminal upon selective movement of said movable frame along said stationary frame; and
 - c. a disconnect mechanism mounted to said movable frame and visible from the exterior of the apparatus, said disconnect mechanism providing selective electrical connection between said main bus input connectors and said power output connectors, said disconnect mechanism being operable from outside said apparatus, wherein said disconnect mechanism selectively operates between an open position and a closed position such that in said open position said main bus input terminal connector is electrically disconnected from said power supply output connector.

('294 patent, col. 7, ll. 20-44.) The remaining claims outline various versions of the structure described in Claim 1. In an earlier ruling, I construed a number of the

claim terms following a so-called *Markman* proceeding. *Electro-Mechanical Corp. v. Power Distribution Prods., Inc.*, No. 1:11CV00071, 2012 WL 2924001 (W.D. Va. July 18, 2012).

The parties have filed summary judgment motions as well as motions in limine to exclude from trial certain expert opinion testimony. All of the pending motions have been briefed and orally argued. They are now ripe for decision.

II

Summary judgment is only appropriate when there is “no genuine issue of material fact,” given the parties’ burdens of proof at trial. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986); *see* Fed. R. Civ. P. 56(a). In determining whether the moving party has shown that there is no genuine issue of material fact, a court must assess the factual evidence and all inferences to be drawn therefrom in the light most favorable to the non-moving party. *See Ross v. Commc’ns Satellite Corp.*, 759 F.2d 355, 364 (4th Cir. 1985), *overruled on other grounds*, *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989).

A

In their Motion for Summary Judgment, the defendants argue that the allegedly infringed patent claims are invalid because they are indefinite, anticipated by prior art, and/or obvious.¹

All issued patents are presumed valid, 35 U.S.C.A. § 282 (West 2001 & Supp. 2012), and a party challenging the validity of a patent has the burden of proving invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2242 (2011). In order to be valid, patent claims must “particularly point[] out and distinctly claim[] the subject matter which the inventor . . . regards as the invention.” 35 U.S.C.A. § 112(b) (West 2001). Whether a claim is sufficiently definite is a question of law. *IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377, 1380 (Fed. Cir. 2005). “A claim is considered indefinite if it does not reasonably apprise those skilled in the art of its scope.” *Id.* at 1383-84. Generally, a claim is indefinite “only if reasonable efforts at claim construction prove futile.” *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). The Court of Appeals for the Federal Circuit has provided helpful guidance on the issue of indefiniteness:

¹ EMC's Complaint alleges infringement of twenty-two of the patent's twenty-seven claims. EMC has filed a Preliminary Identification of Patent Claims to be Asserted at Trial (ECF No. 117) in which it represents that it will assert infringement of only five claims at trial: Claims 4, 14, 17, 22, and 27. EMC expressly reserves its right to modify this list of claims. Therefore, I do not limit my discussion to the validity of the five identified claims, but discuss all twenty-two claims that EMC asserted in its Complaint.

We have not insisted that claims be plain on their face in order to avoid condemnation for indefiniteness; rather, what we have asked is that the claims be amenable to construction, however difficult that task may be. If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite. If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds.

Id. A claim is not indefinite simply because its embodiments may be inoperable.

Id. at 1382.

Additionally, an invention is not patentable if “the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.” 35 U.S.C.A. § 102(a) (West 2001). In other words, an invention must be novel; it is not patentable if it was anticipated by a prior patent or unpatented device. *See Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008).

Anticipation is a fact question. *IPXL Holdings*, 430 F.3d at 1380. “In deciding the issue of anticipation, the trier of fact must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference.” *Lindermann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

A claim is invalid due to anticipation “if each and every limitation is found either expressly or inherently in a single prior art reference.” *IPXL Holdings*, 430 F.3d at 1381 (internal quotation marks and citation omitted). “In order to anticipate a claimed invention, a prior art reference must enable one of ordinary skill in the art to make the invention without undue experimentation.” *Impax Labs., Inc. v. Aventis Pharms., Inc.*, 545 F.3d 1312, 1314 (Fed. Cir. 2008). The prior art “must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN*, 545 F.3d at 1369 (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). “Arranged as in the claim” means that the prior art must “show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order.” *Net MoneyIN*, 545 F.3d at 1370. “[D]ifferences between the prior art reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation.” *Id.* at 1371.

Even where a particular element is not disclosed in the prior art, however, the prior art may still anticipate the claimed invention if the missing element “is necessarily present in the thing described in the reference” and a person of ordinary skill would recognize its necessary presence. *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1380 (Fed. Cir. 2002) (internal quotation marks and citation omitted).

This is known as inherency. To establish inherency, the party challenging the patent must show that the missing element is necessarily present, not just probably or possibly present. *Id.*

Finally, patents should only be issued for inventions that are non-obvious. 35 U.S.C.A. § 103 (West 2001 & Supp. 2012). A patent is not warranted where “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C.A. § 103(a). Obviousness is ultimately a question of law, and an expert witness’s opinion that a patent is nonobvious is not sufficient on its own to preclude summary judgment. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 426-27 (2007).

Courts apply the so-called *Graham* factors to determine obviousness:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966). The Federal Circuit has held that a court must apply all of the *Graham* factors before reaching a

conclusion as to obviousness. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012). Objective indicia of nonobviousness are particularly important and can help to prevent hindsight bias. *Id.* at 1370.

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416. Thus, “[i]f a person of ordinary skill can implement a predictable variation,” or “if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way,” the variation or technique probably is not patentable. *Id.* at 417.

On the other hand, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *Id.* at 416. “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *Id.* at 418. The fact-finder should identify a reason that a person of ordinary skill would have combined the elements as they are combined in the patent at issue. *Id.* “[W]hether there is a reason to combine prior art references is a question of fact.” *Kinetic Concepts*, 688 F.3d at 1367. Nevertheless, that issue may be addressed on summary judgment in appropriate circumstances. *Wyers v. Master Lock Co.*, 616 F.3d 1231 (Fed. Cir. 2010).

The Supreme Court has instructed that courts must consider “interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art” when determining obviousness. *KSR*, 550 U.S. at 418.

The defendants contend that Claims 23-27 of the '294 patent are indefinite, essentially because they are inconsistent with the rest of the '294 patent.² In the words of the defendants, “these ‘feeder circuit’ claims describe a contactor separate from the disconnect mechanism, not a contactor that is a component of the disconnect mechanism,” as described in Claim 4. (Mem. Law Supp. Defs.’ Mot. Summ. J. 24). Claims 23-27 also indicate that the disconnect mechanism is a separate component on the movable frame. Claim 1 is silent as to whether the disconnect mechanism includes one or more contactors; presumably, then, the disconnect mechanism may, but is not required to, include a contactor. The “feeder circuit” claims, however, describe a contactor that is separate from, rather than a part of, the disconnect mechanism. No other part of the patent describes a contactor that is a separate component from the disconnect mechanism, and no other part of the patent describes a disconnect mechanism without a contactor. Therefore, the defendants argue that Claims 23-27 are indefinite “because a

² In the interest of brevity, I do not include the full text of each patent claim in this opinion.

contactor separate from the disconnect mechanism is not depicted in the disclosure or drawings,” and thus one skilled in the art would not know how to practice these claims. (Mem. Law Supp. Defs.’ Mot. Summ. J. 25.) EMC counters that the court has previously construed the terms “disconnect mechanism” and “contactor,” which weighs against a finding of indefiniteness. EMC further argues that the ’294 patent clearly describes the relationship between the disconnect mechanism and any contactors, and one skilled in the art would understand the scope of the claims despite the fact that the drawings do not depict a contactor separate from the disconnect mechanism.

I find that the defendants have not satisfied the very high standard for indefiniteness. At this point in the litigation, following the *Markman* proceeding in which I construed a number of essential claim terms, I cannot say that the claims are so indefinite and ambiguous that they are incapable of construction. Therefore, I hold that Claims 23-27 do not fail for indefiniteness.

The defendants’ indefiniteness arguments with respect to Claims 5 and 6 are based on similar inconsistencies:

Claim 5 requires that the contactor be “selectably closeable” when the disconnect mechanism is in the closed position; however, the contactor must be closed for the disconnect mechanism to be closed, and therefore cannot be “selectably closeable.” . . . Claim 6 requires that the contactor not be closeable when the disconnect mechanism is in the open position; however, the contactor must be closeable when the disconnect mechanism is in the open position or the circuit will never close.

(Mem. Law Supp. Defs.’ Mot. Summ. J. 26-27.) EMC responds that these arguments go to functionality, not definiteness.

Again, I find that the defendants have not met the high standard for showing that these claims are indefinite. As noted above, the fact that a claim’s embodiments may be inoperable does not render the claim indefinite. I hold that claims 5-6 are sufficiently definite.

The defendants also contend that claims 1, 4, 7-11, 13-15, 20, 23, and 25 are invalid because they are anticipated by prior art. They specifically compare these claims to U.S. Patent No. 3,274,356 (“the ‘356 patent”) and to an unpatented device developed in 1993 by a predecessor of defendant SMC Electrical Products, Inc. (“1993 SMC Unit”).

The defendants assert that the only elements of Claim 1 that are missing from the ‘356 patent are the “spaced relation” element and the visibility of the disconnect mechanism. According to the defendants and their expert witness, David Podobinski, these elements are inherent in the ‘356 patent. The defendants further argue that the 1993 SMC Unit anticipates Claim 1.

In response, EMC argues that the defendants have not shown that the two missing elements are necessarily present, and thus inherent, in the ‘356 patent. In particular, EMC contends that the combination of elements in the ‘356 patent that the defendants assert are a “disconnect mechanism” does not provide the same

visual confirmation of power disconnect that the visible disconnect mechanism in Claim 1 provides, which is essential for safety. EMC argues that the 1993 SMC Unit does not anticipate Claim 1 because the 1993 SMC Unit's disconnect mechanism was not mounted on a movable frame, but rather in a stationary compartment.

I find that disputed issues of material fact exist with respect to the anticipation of Claim 1. The Federal Circuit has set a high bar for anticipation — in order to anticipate, the prior art must be nearly identical to the claim at issue. Anticipation is a fact issue, and the defendants must prove by clear and convincing evidence that every element of Claim 1 appears in the prior art as arranged in the claim. Although there are strong similarities between the two patents, I find that the defendants have not established as a matter of law that the undisputed facts show clearly and convincingly that the '356 patent anticipates Claim 1. In particular, the jury will have to determine, based on conflicting evidence from witnesses skilled in the art, whether the “spaced relation” element and the visibility of the disconnect mechanism are inherent in the '356 patent. Additionally, the defendants cannot show as a matter of law that the 1993 SMC Unit anticipates Claim 1 because there is a dispute of fact as to whether the 1993 SMC Unit's disconnect mechanism was mounted on a movable frame. The defendants' expert witness, Dr. Podobinski, states in his report that the 1993 SMC Unit had a

disconnect mechanism that was mounted on a movable frame. However, the plaintiff's expert witness, Thomas Novak, states that the 1993 SMC Unit's disconnect mechanism was mounted in a stationary compartment and not on a movable frame. This dispute of material fact precludes summary judgment on anticipation by the 1993 SMC Unit. Thus, the defendants' motion for summary judgment as to the issue of anticipation of Claim 1 must be denied.

Claims 4, 7, 8, 9, 10, and 11 are all dependent on Claim 1. The defendants argue that all of these claims are anticipated by the '356 patent, the 1993 SMC Unit, or both. Because I find that disputed issues of material fact exist with respect to whether Claim 1 is anticipated by the '356 patent or the 1993 SMC Unit, I likewise find that disputed issues of material fact preclude summary judgment on anticipation of Claims 4, 7, 8, 9, 10, and 11.

Claim 13 is an independent claim, but it is similar to Claim 1. It does not include Claim 1's language indicating that the disconnect mechanism selectively operates between an open and closed position, and it adds the element of "a control panel for monitoring an electrical condition of said apparatus." The defendants argue that Claim 13 is anticipated by the 1993 SMC Unit. EMC counters that the 1993 SMC Unit does not anticipate Claim 13 for the same reason it does not anticipate Claim 1; according to EMC, the 1993 SMC Unit's disconnect mechanism was not mounted on a movable frame, but rather in a stationary

compartment. EMC also argues that the the defendants have failed to prove by clear and convincing evidence that the 1993 SMC Unit teaches the control panel as arranged in Claim 13.

As explained above, I find that the defendants are not entitled to summary judgment on the issue of anticipation of Claim 13 because there is at least one dispute of material fact — namely, whether the disconnect mechanism of the 1993 SMC Unit was mounted on a movable frame. Claims 14 and 15 depend on Claim 13, and the defendants also argue that Claims 14 and 15 are anticipated by the 1993 SMC Unit. For the same reason, I find that summary judgment on the anticipation of Claims 13 and 14 is not warranted.

Claim 20 is similar to Claim 1, but it contains a more detailed “spaced relation” element. As with Claim 1, the defendants assert that the only elements of Claim 20 that are missing from the '356 patent are the “spaced relation” element and the visibility of the disconnect mechanism. According to the defendants and Dr. Podobinski, these elements are inherent in the '356 patent. With respect to the more specific spaced relation element of Claim 20, the defendants assert that the '356 patent expressly teaches this element.

EMC argues that the defendants have not shown that the two missing elements are necessarily present, and thus inherent, in the '356 patent. In particular, EMC asserts that the combination of elements in the '356 patent that the

defendants assert constitutes a “disconnect mechanism” does not provide the same visual confirmation of power disconnect that the visible disconnect mechanism in Claim 20 provides, which is essential for safety. EMC also notes that Claim 20’s “spaced relation” element requires spacing “according to a set of desired operating parameters for said electrical distribution system.” According to EMC, even if general spacing were inherent in the ’356 patent, the specified spaced relation described in Claim 20 is not inherent.

I find that the question of inherency of the “spaced relation” and visible disconnect mechanism elements in the ’356 patent is a disputed issue of fact that must be decided by the jury. Again, although there are strong similarities between Claim 20 and the ’356 patent, I find that the defendants have not met their burden of showing that the undisputed facts prove by clear and convincing evidence that the ’356 patent anticipates Claim 20. Therefore, summary judgment on anticipation of Claim 20 must be denied.

As indicated above, the defendants argue that Claims 23 and 25 are indefinite. In the alternative, the defendants argue that if these claims are not indefinite, they are anticipated by the ’356 patent. In particular, the defendants assert that the ’356 patent must anticipate Claims 23 and 25 if the court finds that the separate contactor described in Claims 23-27 is a part of the disconnect mechanism. EMC counters that the defendants have not sufficiently explained

how the '356 patent teaches the elements of Claims 23 and 25, and therefore the defendants have not established the anticipation of these claims by clear and convincing evidence. EMC also points to the expert report of Dr. Novak, who opines that a circuit breaker cannot be a contactor, and therefore the '356 patent does not contain all of the elements of Claims 23 and 25.

Once again, I find that disputed issues of material fact preclude summary judgment on the anticipation of these claims. Anticipation is a question of fact, and the jury must weigh the testimony and credibility of the expert witnesses, who are skilled in the art, in determining whether the '356 patent teaches all of the elements of Claims 23 and 25. Therefore, summary judgment is not appropriate on the issue of anticipation of these claims.

Finally, the defendants argue that all of the patent claims are invalid because their features would have been obvious to one of ordinary skill in the art based on prior patents, prior unpatented power cell devices, and federal Mine Safety and Health Administration regulations. Despite EMC's statement to the contrary, there does not appear to be a genuine dispute about the scope of the relevant prior art, nor does there appear to be a genuine dispute about the differences between the prior art and the patent claims (though there is, of course, a dispute over whether various features of the prior art satisfy the elements of the '294 patent's claims). The defendants contend that while the parties disagree somewhat about the level of

ordinary skill in the applicable art, a minor difference is irrelevant to this proceeding.³ EMC, in its brief, does not disagree with this conclusion. Thus, the first three of the four *Graham* factors for determining obviousness can be applied without considering contested issues of fact. 383 U.S. at 17-18.

The fourth *Graham* factor, however, is riddled with factual disputes. EMC has presented evidence of objective indicia of nonobviousness, including commercial success, industry recognition, copying, success where others had failed, and unexpected results. The defendants quarrel with this evidence, arguing that EMC cannot establish that its commercial success was a result of the patent, that the patented device received any significant industry recognition, that the defendants copied the patented device, that the device succeeded where others had failed, or that it achieved unexpected results. These factual disputes preclude summary judgment on the issue of obviousness because the court is required to

³ The parties' differing positions are italicized in the following:

[Plaintiff] claims that a person of ordinary skill in the art would be one with an education in *mechanical or electrical engineering* and approximately 3-5 years of work experience in the *design or manufacture* of electro-mechanical devices, or a person with approximately 6-10 years of work experience in the *design or manufacture* of electro-mechanical devices[.] Defendants maintain that it would be one with an education in electrical engineering and approximately 3-5 years of work experience in the design of electro-mechanical devices *used in the mining industry* or with approximately 6-10 years of work experience in the *maintenance* of electro-mechanical devices *used in the mining industry*.

(Mem. Law Supp. Defs.' Mot. Summ. J. 28 (italics added).)

consider all four *Graham* factors, including the objective indicia, before reaching an obviousness conclusion. Indeed, the Court of Appeals for the Federal Circuit has indicated that objective indicia of nonobviousness are particularly crucial in the determination of whether a claimed invention is invalid as obvious. Therefore, I conclude that factual disputes prevent a finding of invalidity due to obviousness at this stage of the proceeding.

The defendants have also moved for summary judgment on claims 12, 16, 18, 19, and 21 because EMC's expert witness, Dr. Novak, has opined that based on the court's construction of the claim terms, the accused device, called the CS-5, does not infringe these claims. EMC concedes that these claims are not infringed as currently construed, but it reserves its right to reassert infringement of these claims in the future in the event that I modify my construction of the claim terms.⁴ Because EMC has made no arguments in support of a finding of infringement of these five claims, based on the record before me and in light of my *Markman* order, I will grant summary judgment in favor of the defendants on Claims 12, 16, 18, 19, and 21. For the reasons stated above, the remainder of the defendants' Motion for Summary Judgment must be denied.

⁴ In its opposition brief (Pl.'s Resp. Opp'n Defs.' Mot. Summ. J. 1 n.2), EMC stated that it had withdrawn its infringement allegations as to those claims. EMC has not amended its Complaint, however, and in light of its express reservation of the right to reinstate its allegations as to these claims, I do not treat the allegations as withdrawn.

B

EMC has also moved for partial summary judgment, urging me to find as a matter of law that the accused device, the CS-5, infringes Claim 22 of the '294 patent.

Determination of infringement is a fact issue. *Bai v. L&L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998). “Thus, a literal infringement issue is properly decided upon summary judgment 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.” *Id.* To establish literal infringement, a plaintiff must prove by a preponderance of the evidence that “each and every limitation set forth in a claim appear[s] in an accused product.” *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1310 (Fed. Cir. 2005) (quoting *Frank’s Casing Crew & Rental Tools, Inc. v. Weatherford Int’l, Inc.*, 389 F.3d 1370, 1378 (Fed. Cir. 2004)).

Whether a patent claim has been infringed is a two-step inquiry: first, the court must construe the claims to determine their scope; second, the court must determine whether a construed claim encompasses the allegedly infringing device. *Bai*, 160 F.3d at 1353. Regarding claim construction, “[o]n the one hand, claims ‘must be read in view of the specification, of which they are a part,’” but “[o]n the other hand, it is improper to read a limitation from the specification into the

claims.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 904 (Fed. Cir. 4004) (citations omitted). “[T]here is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification.” *Id.* (quoting *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186-87 (Fed. Cir. 1998)). The Federal Circuit “has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Liebel-Flarsheim*, 358 F.3d at 906. A court should not read a patent claim restrictively unless “the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’” *Id.* (quoting *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002)). “Whether a claim must, in any particular case, be limited to the specific embodiment presented in the specification, depends in each case on the specificity of the description of the invention and on the prosecution history. . . . Claims are not correctly construed to cover what was expressly disclaimed.” *Liebel-Flarsheim*, 358 F.3d at 907 (quoting *Cultor Corp. v. A.E. Staley Mfg. Co.*, 224 F.3d 1328, 1331 (Fed. Cir. 2000)). Often during claim prosecution, a patentee expressly restricts the scope of the claim by “clearly characterizing the invention in a way to try to overcome rejections based on prior art.” *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1374 (Fed. Cir. 2008). The patentee will be held to such a restriction,

because it would be unjust to permit construction of claims ““one way in order to obtain their allowance and in a different way against accused infringers.”” *Id.* at 1375 (quoting *Rhodia Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005)).

Claim 22 of the '294 patent is an independent claim that states:

An apparatus for use in an electrical distribution system comprising: a stationary frame supporting one or more main bus input terminals and one or more of power output terminals in spaced relation to each other; a movable frame slidably mounted to said stationary frame and supporting one or more main bus input connectors and one or more power output connectors positioned for mating engagement with said main bus input terminal and said power supply output terminal upon selective movement of said movable frame into said stationary frame; and a disconnect mechanism mounted to said movable frame and being operable from external said apparatus, said disconnect mechanism providing selective electrical connection between said main bus input connectors and said power output connectors, said selective electrical connection visible from outside said apparatus, and said disconnect mechanism controlling movement of said movable frame relative said stationary frame.

(‘294 patent, col. 9, l. 59 – col. 10, l. 9.) EMC asserts that the defendants’ CS-5 product meets every element of Claim 22. EMC has submitted annotated photographs identifying each element of the claim on the accused device, the CS-5.

In response, the defendants argue that the CS-5 is missing two essential elements of Claim 22. First, the defendants assert that the CS-5’s disconnect mechanism does not control movement of the movable frame. According to the defendants, a shoulder bolt locks and unlocks the movable frame relative to the

stationary frame, so it is the shoulder bolt that controls movement. EMC responds that the defendants' Rule 30(b)(6) witness, Sammy Handshoe, admitted in his deposition that the disconnect mechanism of the CS-5 does, in fact, control movement of the movable frame. EMC argues that because the disconnect mechanism controls access to the shoulder bolt, it therefore indirectly controls movement of the movable frame, as the disconnect mechanism must be open in order for the movable frame to move.

Second, the defendants argue that the movable frame is not slidably mounted to the stationary frame of the CS-5. According to the defendants, in order for the movable frame to be "slidably mounted" to the stationary frame, the movable frame must be on wheels or rollers as described in the embodiment in the patent specification. The defendants argue that EMC should be estopped from asserting a broader definition of "slidably mounted" because of statements made to the patent examiner in an attempt to distinguish the '294 patent from prior art. EMC replies that the patent applicant never said anything about the term "slidably mounted" during claim prosecution, and it would be improper to import a limitation from the described embodiment into Claim 22.

Whether the disconnect mechanism of the CS-5 controls movement of the movable frame is a question of fact to be decided by the jury, as is the issue of whether the CS-5's movable frame is slidably mounted to its stationary frame. At

this time, I am unable to conclude that no reasonable jury could find that the CS-5 does not include every element of Claim 22. Therefore, I will deny EMC's Motion for Summary Judgment on Infringement of Claim 22.

III

Both EMC and the defendants have moved to exclude the testimony of their respective opponents' expert witnesses. The Federal Rules of Evidence allow expert evidence under certain circumstances.

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court interpreted this rule as placing the court in a "gatekeeping role" between expert evidence and the trier of fact. 509 U.S. 579, 589, 597 (1993). Accordingly, the

court is tasked with determining whether the proponent has established by a preponderance of the evidence that the expert's opinion is admissible. *See id.* at 593 n.10 (citing *Bourjaily v. United States*, 483 U.S. 171, 175–76 (1987)); Fed. R. Evid. 104(a).

To make this determination, *Daubert* suggests that the trial court examine the evidence's reliability and relevance using a number of nonexclusive factors. 509 U.S. at 593–95. A trial court may consider “(1) whether the particular scientific theory ‘can be (and has been) tested’; (2) whether the theory ‘has been subjected to peer review and publication’; (3) the ‘known or potential rate of error’; (4) the ‘existence and maintenance of standards controlling the technique's operation’; and (5) whether the technique has achieved ‘general acceptance’ in the relevant scientific or expert community.” *United States v. Crisp*, 324 F.3d 261, 266 (4th Cir. 2003) (quoting *Daubert*, 509 U.S. at 593-94). *Daubert* applies to all forms of expert evidence, and courts have “considerable leeway” in determining the admissibility of such evidence. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

A

EMC has moved to exclude the testimony of the defendants' expert, Dr. Podobinski, on the grounds that he applies incorrect interpretations of the terms

“disconnect mechanism” and “contactor” and bases his opinions on unsupported speculation. EMC argues that Dr. Podobinski misconstrues the terms “disconnect mechanism,” “contactor,” and “circuit breaker” such that there is overlap and redundancy among the terms. The defendants counter that Dr. Podobinski’s constructions are permissible and in accordance with the court’s *Markman* constructions. EMC also argues that Dr. Podobinski has incorrectly defined “slidably mounted” to require the use of wheels or rollers. The defendants counter that the term must include wheels or rollers because the embodiment described in the specification includes them, and EMC allegedly disclaimed a non-wheeled version during patent prosecution. Finally, EMC argues that Dr. Podobinski should be precluded from testifying because his opinions are based on hypothetical, rather than real-world, operation of the CS-5. The defendants respond that this assessment is factually inaccurate, but even if Dr. Podobinski had employed hypotheticals, nothing in Rule 702 prevented him from doing so.

In my *Markman* order, I construed “disconnect mechanism” to mean “a collection of components which in one or more combinations can control whether electricity can or cannot flow from the main bus input connector of the movable frame to the power output connector of the movable frame, one or more of which may indicate whether electricity can or cannot flow from the main bus input connector to the power output connector.” 2012 WL 2924001, at *18.

“Contactor” means “a device for repeatedly establishing and interrupting an electrical power current.” *Id.* at *19 n.8. The parties did not ask me to construe the term “circuit breaker” during the *Markman* proceeding.

I do not find Dr. Podobinski’s opinions to be necessarily inconsistent with my established claim construction. EMC’s arguments with respect to Dr. Podobinski’s interpretation of the terms “disconnect mechanism,” “contactor,” and “circuit breaker” do not properly go to the relevance or reliability of Dr. Podobinski’s testimony. Rather, EMC disagrees with the substance of the expert’s opinions; such disagreements are best addressed on cross-examination. *See i4i Ltd. P’ship*, 598 F.3d at 852 (“When the methodology is sound, and the evidence relied upon sufficiently related to the case at hand, disputes about the degree of relevance or accuracy (above this minimum threshold) may go to the testimony’s weight, but not its admissibility.”). Therefore, exclusion of Dr. Podobinski’s testimony is not warranted based on his use of the terms “disconnect mechanism,” “contactor,” and “circuit breaker.”

Dr. Podobinski’s use of a restrictive definition of the phrase “slidably mounted,” however, is improper. According to Dr. Podobinski, in order for the movable frame to be “slidably mounted” to the stationary frame, the movable frame must be on wheels or rollers as described in the embodiment in the ’294 patent specification. While the parties did not ask me to construe this term at the

Markman phase, I will now construe it. I find that the term “slidably mounted” does not require the use of wheels or rollers. Although the embodiment does describe a movable frame that is on rollers, the patent specifically states that the form described “is a preferred embodiment thereof and that various changes and modifications may be made therein without departing from the spirit of the invention or scope as defined in the claims.” (’294 Patent, col. 7, ll. 14-18.) The plain language of the patent reveals no reason for adopting the defendants’ restrictive construction of “slidably mounted.” Furthermore, estoppel based on prosecution disclaimer is not warranted here, where the patent applicant made no representation to the patent examiner about the meaning of the term “slidably mounted.” For these reasons, Dr. Podobinski will not be permitted to use his restrictive definition of “slidably mounted” in his opinion testimony, and I will instruct the jury that the term is not limited to require the use of wheels or rollers.

Finally, EMC claims that Dr. Podobinski’s opinions as to noninfringement are based on impermissible hypotheticals and should be excluded as speculative. After carefully reviewing the reports and the transcript of Dr. Podobinski’s deposition, I find that his opinions are not based on impermissible speculation.

For these reasons, EMC’s motion in limine to exclude the expert testimony of Dr. Podobinski will be granted in part and denied in part.

B

The defendants have moved to exclude the testimony of EMC's damages expert, Graham D. Rogers, because they assert that his calculation of damages is invalid because it is based on the so-called "entire market value rule," rather than on the lesser value of the allegedly infringing draw out trays. The defendants also request partial summary judgment in their favor and seek a pretrial ruling that the entire market value is an improper measure of damages.

Where a patent is found to have been infringed, the patent claimant is entitled to "damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court." 35 U.S.C.A. § 284 (West 2001). Lost profits may be an element of damages, but the availability of lost profits is a question of law. *Micro Chemical, Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1122 (Fed. Cir. 2003).

To recover lost profits a patentee must show that "but for" infringement it reasonably would have made the additional profits enjoyed by the infringer. [The Court of Appeals for the Federal Circuit] has not restricted patentees to any one particular method of proving "but for" causation. A patentee may resort to any method showing, with reasonable probability, entitlement to lost profits "but for" the infringement. Once the patentee establishes the reasonableness of this inference, the burden shifts to the infringer to show that the inference is unreasonable for some or all of the lost profits.

Id. (citations omitted).

The entire market value rule may be applied in appropriate circumstances to allow recovery of either lost profits or royalties based on the entire apparatus, rather than just the patented component. *Cornell Univ. v. Hewlett-Packard Co.*, 609 F. Supp. 2d 279, 286 (N.D.N.Y. 2009) (Rader, C.J., Fed. Cir., sitting by designation). “[T]he entire market value rule permits recovery of damages based on the value of the patentee’s entire apparatus containing several features when the patent-related feature is the ‘basis for customer demand.’” *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1549 (Fed. Cir. 1995) (citations omitted). In the *Cornell* case, Chief Judge Rader, citing a number of Federal Circuit decisions, set forth three elements required for invocation of the entire market value rule:

- (1) [T]he infringing components must be the basis for the customer demand for the entire machine including the parts beyond the claimed invention;
- (2) the individual infringing and non-infringing components must be sold together so that they constitute a functional unit or are parts of a complete machine or single assembly of parts;
- and (3) the individual infringing and non-infringing components must be analogous to a single functioning unit.

609 F. Supp. 2d at 286-87 (citations omitted). The Federal Circuit recently reaffirmed that “in any case involving multi-component products, patentees may not calculate damages based on sales of the entire product, as opposed to the smallest salable patent-practicing unit, without showing that the demand for the entire product is attributable to the patented feature.” *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67-68 (Fed. Cir. 2012).

The defendants argue that Dr. Graham's damages testimony, which applies the entire market value rule, should be excluded because, according to the defendants, the record evidence shows that (1) the draw out tray was not the basis for sales of the longwall power units, and (2) the draw out tray and longwall power units can be sold separately and are not necessarily parts of a single functioning unit. EMC, on the other hand, offers evidence that, it claims, shows that (1) the infringing draw out tray was the basis for sales of longwall power units by Defendants, and (2) the draw out tray and the longwall power unit are, in fact, analogous to a single functioning unit.

I find that EMC has produced sufficient evidence for the jury to consider application of the entire market value rule. The facts on this issue are clearly disputed, and both sides interpret the evidence quite differently. The jury, as fact-finder, will have to decide whether EMC has met its burden of proving the required elements for invocation of the entire market value rule. Neither exclusion of Dr. Graham's testimony nor summary judgment is warranted based on this issue.

IV

For the foregoing reasons, it is **ORDERED** as follows:

1. Defendants' Motion in Limine and for Partial Summary Judgment Regarding Plaintiff's Expert Testimony on Damages (ECF No. 66) is DENIED;
2. Plaintiff's Motion in Limine to Exclude Certain Opinion Testimony of Defendants' Expert David J. Podobinski (ECF No. 67) is GRANTED IN PART and DENIED IN PART;
3. The term "slidably mounted" does not require mounting on wheels or rollers;
4. Electro-Mechanical Corporation's Motion for Summary Judgment on Infringement of Claim 22 (ECF No. 73) is DENIED; and
5. Defendants' Motion for Summary Judgment (ECF No. 77) is GRANTED IN PART and DENIED IN PART. It is GRANTED as to Claims 12, 16, 18, 19, and 21 and DENIED as to all other claims.

ENTER: February 22, 2013

/s/ James P. Jones
United States District Judge