

11-5112.131-RSK

April 11, 2013

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

ABT SYSTEMS, LLC and THE	)	
UNIVERSITY OF CENTRAL FLORIDA	)	
BOARD OF TRUSTEES on behalf of	)	
THE UNIVERSITY OF CENTRAL FLORIDA,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	No. 11 C 5112
	)	
ROBERTSHAW CONTROLS COMPANY,	)	
	)	
Defendant.	)	

**MARKMAN ORDER**

Before the court are: (1) defendant Robertshaw Controls Company's ("Robertshaw") motion to limit or exclude inventor testimony; (2) Robertshaw's motion to strike portions of the plaintiffs' proposed means-plus-function claims constructions; and (3) the parties' competing claims constructions. For the reasons explained below, we deny Robertshaw's motion to limit or exclude inventor testimony, deny in part and grant in part its motion to strike, and adopt the claims constructions set forth in Section D of this Order.

**BACKGROUND**

Armin Rudd is the sole inventor of United States Patent Nos. 5,547,017 ("Air Distribution Fan Recycling Control") (the "'017 Patent") and 6,431,268 ("Air Distribution Fan and Outside Air

Damper Recycling Control") (the "'268 Patent"). Central air conditioning ("CAC") systems typically have a unit that "conditions" the air and a fan that circulates the "conditioned" air.<sup>1</sup> The fan runs when the thermostat has activated the air-conditioning unit to achieve the desired temperature and when the thermostat is set to run the fan continuously ("constant-fan mode"). Rudd's inventions periodically activate and deactivate the fan for a period of time after the fan shuts off. Plaintiff The University of Central Florida ("UCF") owns the patents and licenses them exclusively to co-plaintiff ABT Systems, LLC ("ABT"), a company controlled by Rudd. (See Compl. ¶¶ 7-10; Dep. of Armin Rudd, attached as Ex. A to Def.'s Mot. to Limit or Exclude the Testimony of Armin Rudd During the Markman Hearing (hereinafter, ("Mot. to Limit"), at 12-13.) UCF and ABT have sued Robertshaw for selling thermostats that allegedly infringe the '017 and '268 Patents. (See Compl. ¶¶ 14-37.)

The parties dispute the proper construction of the terms "recycle control" in Claim 1 of the '017 Patent and Claims 4 and 5 of the '268 Patent, and "recycle control means" in Claim 1 of the '268 Patent. On September 12, 2012, we held a hearing to address the parties' competing constructions. See Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995). On February 28,

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<sup>1/</sup> "Conditioning" in this context means cooling, heating, humidifying, dehumidifying, and cleaning the air. The parties have largely focused on heating and cooling for simplicity's sake, and we will do the same.

2013, the plaintiffs filed notice of a covenant not to sue Robertshaw for infringing the '268 Patent. (See Covenant Not to Sue, Dkt. 63.) Robertshaw concedes that the covenant moots plaintiffs' claims based upon its alleged infringement of the '268 Patent, as well as its corresponding counterclaims for non-infringement and invalidity. (See Def.'s Resp. to Pl.'s Notice of Jury Verdict and Effect of Covenant Not to Sue at 1.) It argues, however, that the proper construction of the '268 Patent is still a live issue because it intends to seek attorney's fees and costs under 35 U.S.C. § 285. See 35 U.S.C. § 285 ("The court in exceptional cases may award reasonable attorney fees to the prevailing party."). According to Robertshaw, its claim under § 285 will be based, in part, on unidentified "inequitable conduct" in procuring the '268 Patent. (See Def.'s Resp. to Pl.'s Notice of Jury Verdict and Effect of Covenant Not to Sue at 2.) It is unclear at this time whether the proper construction of the disputed terms in the '268 Patent will be relevant to Robertshaw's anticipated claim under § 285. So, we will confine our claims construction rulings to the '017 Patent, only.

#### **DISCUSSION**

##### **A. Robertshaw's Motion to Limit or Exclude Rudd's Testimony**

Robertshaw argues that portions of Rudd's testimony during the Markman hearing were improper. During the hearing, Robertshaw argued that the patents did not clearly identify which component(s)

of the "fan recycling control apparatus" constituted the "recycle control." (See '017 Patent, Col. 7, lns. 20-33; see also id. at Figs. 2 & 3.) When the plaintiffs called Rudd to testify, we asked plaintiffs' counsel to ask Rudd to address this issue from the perspective of a person of ordinary skill in the art. This drew an objection from Robertshaw that the testimony was improper "extrinsic evidence," which we sustained subject to the plaintiffs' offer of proof. We now conclude that Rudd's testimony on this subject was proper. First, Robertshaw overstates the Federal Circuit's disapproval of extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman, 52 F.3d at 980. Extrinsic evidence is entitled to less weight than "intrinsic" evidence, but it is generally admissible for whatever probative value it may have. See Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) ("Although we have emphasized the importance of intrinsic evidence in claim construction, we have also authorized district courts to rely on extrinsic evidence . . ."). Second, the case law does not support the general proposition that inventors cannot testify about what a person of ordinary skill in the art would understand. The inventor is presumed to be skilled in the relevant art, and Rudd impressed us during the hearing that he did in fact possess the pertinent skill. See Byrne v. Wood, Herron & Evans, LLP, 450

Fed.Appx. 956, 964 (Fed. Cir. 2011) ("As a general rule, an inventor will be a person of at least ordinary skill in the relevant art, and in many cases the inventor will be one of extraordinary skill in the field of invention.") (collecting cases) (*vacated on other grounds by Byrne v. Wood, Herron & Evans, LLP, - S.Ct. -, 2013 WL 656035, \*1 (Feb. 25, 2013) (slip op.)*). It is true, as Robertshaw points out, that an inventor's subjective intent is irrelevant for purposes of claim construction. See Howmedica Osteonics Corp. V. Wright Med. Tech., Inc., 540 F.3d 1337, 1347 (Fed. Cir. 2008) ("[I]nventor testimony as to the inventor's subjective intent is irrelevant to the issue of claim construction."). But that was not the nature of Rudd's testimony. When asked to identify the recycle control, Rudd simply recited the relevant portions of the patent specifications. (See, e.g., '017 Patent, col. 5, lns. 1-22; col. 5, lns. 66-57 through col. 6, lns. 1-28.) In that sense, we see no material distinction between this testimony and Rudd's testimony in support of the plaintiffs' "or" construction, (see infra), which Robertshaw concedes was proper. (See Def.'s Reply (Mot. to Limit) at 2.) Finally, Robertshaw argues that we should discount Rudd's testimony because he has an interest in the patents through his company ABT. We found Rudd to be a credible witness despite his personal stake in this case. More importantly, his testimony was consistent with the intrinsic

evidence concerning the scope of the disputed claims. Robertshaw's motion to exclude or limit Rudd's testimony is denied.

**B. "Recycle Control"**

The parties dispute the proper construction of the term "recycle control" in Claim 1 of the '017 Patent:

"a recycle control for periodically activating and deactivating only the circulating fan after a preselected time period, since the a central air conditioning system has been deactivated, or the fan has been deactivated from the selectable constant fan mode."

(Patent '017, Reexamination Certificate Issued Under 35 U.S.C. 307, col. 2, lns. 4-8 (italics and brackets removed).) The parties have articulated three main areas of disagreement with respect to this claim: (1) whether "recycle control" is a means-plus-function limitation; (2) whether the "recycle control" is limited to an embodiment that is separate and distinct from the thermostat; and (3) whether "recycle control" should be construed to require fan activation after two fan events (heating/cooling deactivation and constant fan deactivation), or just one (heating/cooling deactivation or constant fan deactivation).

**1. Whether "Recycle Control" is a Means-Plus-Function Limitation**

The parties dispute whether the term "recycle control" is a means-plus-function limitation. 35 U.S.C. § 112(f) provides that "[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the

recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112(f). "A means-plus-function limitation contemplated by [35 U.S.C. § 112(f)] recites a function to be performed rather than definite structure or materials for performing that function." Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc., 145 F.3d 1303, 1307 (Fed. Cir. 1998).<sup>2</sup> The use of the word "means" – as in Claim 1 of the '268 Patent ("recycle control means") – creates a rebuttable presumption that § 112(f) applies. See Flo Healthcare Solutions, LLC v. Kappos, 697 F.3d 1367, 1373 (Fed. Cir. 2012).<sup>3</sup> The absence of the word "means" creates a rebuttable presumption that § 112(f) does not apply. See id. The proponent of the means-plus-function construction must show that "the limitation essentially is devoid of anything that can be construed as structure" to rebut the presumption. Flo Healthcare, 697 F.3d at 1374; see also Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed. Cir. 2004) ("[T]he presumption flowing from the absence of the term 'means' is a strong one that is not readily overcome."). In Massachusetts

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<sup>2/</sup> Congress recently recodified the former 35 U.S.C. § 112, ¶ 6 as 35 U.S.C. § 112(f). See In re Avid Identification Systems, Inc., No. 2012-1092, 2013 WL 69102, \*7 n.1 (Fed. Cir. Jan. 8, 2013) (slip op.). For ease of reference, we will refer throughout this opinion to § 112(f).

<sup>3/</sup> Before filing their covenant not to sue, the plaintiffs did not attempt to rebut the presumption that § 112(f) applies to the term "recycle control means" in Claim 1 of the '268 Patent.

Institute of Technology and Electronics For Imaging, Inc. v. Abacus Software, 462 F.3d 1344, 1353-54 (Fed. Cir. 2006), the Federal Circuit held that the term "colorant selection mechanism" was a means-plus-function limitation even though the patentee did not use the word "means." The court reasoned that the "term 'mechanism' standing alone connotes no more structure than the term 'means.'" See id. In reaching that conclusion, the court distinguished Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583 (Fed. Cir. 1996), where the court held that § 112(f) did not apply to the phrase "detent mechanism." Relying on dictionary definitions, the Greenberg court concluded that "detent" was generally understood to denote structure "in the mechanical arts." See id. The Flo Healthcare court employed similar reasoning in concluding that the term "height adjustment mechanism" was not governed by § 112(f): "[d]ictionary definitions similarly show that the noun 'adjustment,' which modifies 'mechanism' here, has a reasonably well-understood meaning as a name for structure." Flo Healthcare, 697 F.3d at 1374.

This case is more similar to Abacus than it is to Greenberg or Flo Healthcare. Rudd testified at his deposition that the term "recycle control" does not have a generally understood meaning in the art. (See Dep. of Armin Rudd, attached as Ex. 5 to Def.'s Mem. (Claim Construction), at 76.) The most apposite dictionary definition of "control" is "a device or mechanism used to regulate or guide the operation of a machine, apparatus, or system." See



Merriam Webster's Collegiate Dictionary, 252 (10th ed. 1996). As the Abacus court observed, "[t]he generic terms 'mechanism,' 'means,' 'element,' and 'device,' typically do not connote sufficiently definite structure." Abacus, 462 F.3d at 1354; see also Toro Co. v. Deere & Co., 355 F.3d 1313, 1325 (Fed. Cir. 2004) (concluding that the term "control mechanism" was a means-plus-function limitation); cf. Ergo Licensing, LLC v. CareFusion 303, Inc., 673 F.3d 1361, 1363-64 (Fed. Cir. 2012) (holding that the term "control device" in a patent specification did not provide corresponding structure supporting the means-plus-function limitation "control means:" "[t]he recitation of 'control device' provides no more structure than the term 'control means' itself, rather it merely replaces the word 'means' with the generic term 'device'"). And unlike Greenberg and Flo Healthcare, the term "recycle" does not supply structure that is otherwise lacking in the generic term "control." It merely describes the function of the claimed "control." Finally, we are not persuaded by the plaintiffs' argument that the patent specifications indicate that "recycle control" denotes structure. Language in a patent specification may support a finding that a particular claim limitation denotes structure. See Flo Healthcare, 697 F.3d at 1374 ("[T]he written description typically uses the term 'height adjustment mechanism' to designate a class of structures that are generally understood to persons of skill in the art."); see also Lighting World, 382 F.3d at 1361 (Citing the written patent

description: “[i]n addition to the fact that the word ‘connector’ has a generally understood meaning as demonstrated by the dictionary definitions of the terms, it is clear that the parties in this case have used that term to denote structure.”). In this case, the written description of the ‘017 Patent sometimes refers to an “air distribution system fan recycling control.” (See, e.g., ‘017 Patent, col. 5, ln. 4.) We construe this phrase to refer to a particular embodiment of the claimed “recycle control,” one that is “electrically wired between thermostat and the central air conditioning (CAC) system terminal block.” (See id. at col. 5, lns. 3-6; see also infra.) It does not indicate that the term “recycle control” is generally understood to indicate structure. Cf. Flo Healthcare, 697 F.3d at 1374. The patent specification in Abacus also described a particular structure for the disputed limitation. See Abacus, 462 F.3d at 1355. Indeed, if it had not, the claim would have been invalid as indefinite. See, e.g., Ergo Licensing, 673 F.3d at 1363-64. But that particular structural embodiment of a “colorant selection mechanism” did not take the case outside of § 112(f). Just so here. We conclude that “recycle control” is a means-plus-function limitation.

**2. Whether the “Recycle Control” is Separate and Distinct from the Thermostat**

Robertshaw argues that the “recycle control” is limited to a stand-alone device separate from the thermostat. (See Def.’s Mem. at 8-9.) It points out that the specification of the ‘017 Patent

refers to an "air distribution fan recycling control," on the one hand, and "microprocessor based" controls on the other. (See, e.g., '017 Patent, col. 5, lns. 3-6; id. at col. 6, lns. 30-36.) As we just discussed, we do not construe the term "recycle control" to refer specifically to the embodiments shown in figures 2 and 3 of the '017 patent, despite the superficial similarity between the terms "recycle control" and "air distribution fan recycling control." As recited in the claims, the "recycle control" turns the fan on at preselected times after heating, cooling, or constant-fan deactivation. The claims are not limited to a stand-alone device, "and the specification expressly contemplates a fan control integrated into a thermostat." University of Central Florida v. Emerson Electric Co., Case No. 4:11CV00374 AGF, slip op. at 9 (E.D. Mo. March 2, 2012).<sup>4</sup> We conclude that the '017 Patent encompasses both separate and integrated "recycle controls."

### 3. "Or" Versus "And"

Robertshaw asks us to construe the claims to require the recycle control to operate the fan after a preselected time after "(1) the heating or cooling unit and fan have been simultaneously turned off; and (2) the circulating fan has been turned off from its indefinitely on state." (See Joint Statement in Advance of Claims Construction Hearing, Dkt. 38, at Ex. A (emphasis added).)

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<sup>4/</sup> The Emerson court construed claim 1 of the '017 Patent in an infringement lawsuit filed by UCF against a different defendant. The court's unpublished Markman order appears on our docket at Dkt. 27.

The problem with this construction is that the claims use the word "or:" "a recycle control for periodically activating and deactivating only the circulating fan after a preselected time period, since the central air conditioning system has been deactivated, or the circulating fan has been deactivated from the selectable constant fan mode." (Patent '017, Reexamination Certificate Issued Under 35 U.S.C. 307.) The "or" language also appears throughout the patent specification, (see, e.g., '017 Patent, col. 1, lns. 1-9), and Rudd persuasively explained during the Markman hearing how the figures in the '017 Patent depict an "or" rather than an "and" function.

Robertshaw relies primarily on the patent prosecution history to support its counterintuitive construction. The Federal Circuit considers the prosecution history a form of "intrinsic" evidence, but acknowledges its limitations: "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Phillips, 415 F.3d at 1317. In this case, the prosecution history is not sufficiently clear to support a construction contrary to the claim's plain language. In 1998, the USPTO granted a request to reexamine the '017 Patent in light of two prior-art patents: United States Patent Nos. 4,838,482 ("Vogelzang") and 5,020,332 ("Nakatsuno"). (See

Order Granting Request for Reexamination, attached as Ex. 3 to Def.'s Mem. (Claims Construction), at ABTR001117-119.) During the reexamination proceedings, claim 1 was amended as follows:

a recycle control for periodically activating and deactivating only the circulating fan after a preselected time period, since the central air conditioning system *has been deactivated*, or the circulating fan [have] *has been deactivated from the selectable constant fan mode*.

(Patent '017, Reexamination Certificate Issued Under 35 U.S.C. 307.)<sup>5</sup> As Robertshaw points out, the reexaminer concluded that activating the fan after the continuous fan mode is deactivated distinguished the prior art:

The amended claims 1-9, 15-18 now clearly point out that the recycle control is activated after a preselected time period under two separate conditions which are: (1) When the circulating fan has been deactivated from its continuous run position or (2) When the air conditioner has been deactivated. None of the prior art shows activating the recycle control after the circulating fan has been deactivated from its continuous run position and would not be obvious from any combination of the prior art. Claims 1 and 15, as amended, are not broadened claims because original claims 1 and 15 were also in the alternative.

(Notice of Intent to Issue Reexamination Certificate, attached as part of group Ex. 3 to Def.'s Mem. (Claim Construction), at ABTR001141; see also Supp. Notice of Intent to Issue Reexamination Certificate, attached as part of group Ex. 3 to Def.'s Mem. (Claim Construction), at ABTR001147 (similar).) But the "or" language

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<sup>5/</sup> The italicized words were added after reexamination, the words appearing in bold brackets were deleted. See Patent '017 ("Reexamination Certificate Issued Under 35 U.S.C. 307").

appears in both the original and the amended claim 1, and the specification – which likewise reflects the “or” construction – was not amended. Robertshaw argues that Rudd disclaimed the “or” construction during the reexamination proceedings, relying on an instance in the record where Rudd’s patent attorney used the word “and.” (See Def.’s Mem. (Claim Construction) at 11; see also Response to Order Granting Request for Reexamination, attached as part of group Ex. 3 to Def.’s Mem. (Claims Construction), at ABTR001125 (“Rudd ‘017 teaches a method of fan recycling that works automatically with an air conditioner system during the heating, cooling and fan circulating modes.”).) But it is apparent from the context of this statement that Rudd’s attorney was emphasizing the “automatic” nature of his invention, as distinguished from “manual” operation of Vogelzang’s.<sup>6</sup> In the same paragraph the attorney quotes a portion of the patent specification using the word “or.” (See id.) Finally, Robertshaw argues that we should interpret “or” to mean “and” to avoid a construction that would render the claim invalid vis-a-vis Vogelzang and/or Nakatsuno, citing the maxim that claims should be construed to preserve their validity. AFG

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<sup>6/</sup> Rudd’s written response to the reexaminer’s order did not emphasize the “continuous fan” concept as a distinguishing feature of his patent. (See Resp. to Order Granting Request for Reexamination, attached as part of group Ex. 3 to Def.’s Mem. (Claim Construction), at ABTR001124-131.) It appears that this issue arose later during the reexamination process. (See Examiner Interview Summary Record, attached as part of group Ex. 3 to Def.’s Mem. (Claim Construction), at ABTR001137 (brief handwritten summary of the reexaminer’s interview with Rudd’s attorney on June 22, 2009).) It is unclear whether the reexaminer considered that feature necessary or merely sufficient to distinguish the prior art because, as far as we can tell, he did not address Rudd’s other arguments.

Industries, Inc. v. Cardinal IG Co., Inc., 224 Fed.Appx. 956, 958 (Fed. Cir. 2007) (“[W]hen the validity of the patent depends on use of a particular process, the claims are construed in the manner that will sustain their validity, when such construction is supported by the record.”). But the Federal Circuit has made it clear that this maxim is an interpretive tool of last resort: “we have limited the maxim to cases in which the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous.” Phillips, 415 F.3d at 1327 (citation and internal quotation marks omitted). In this case, the claims and the specifications unambiguously support the “or” construction. We cannot rewrite the patents to avoid purported invalidity. See Generation II Orthotics Inc. v. Medical Technology Inc., 263 F.3d 1356, 1365 (Fed. Cir. 2001) (“[C]laims can only be construed to preserve their validity where the proposed claim construction is practicable, is based on sound claim construction principles, and does not revise or ignore the explicit language of the claims.”) (citation and internal quotation marks omitted).

**C. Robertshaw’s Motion to Strike the Plaintiffs’ Proposed Means-Plus-Function Constructions**

“Claim construction of a means-plus-function limitation includes two steps. First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that performs that function.” Applied Medical Resources Corp. v. U.S. Surgical

Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006) (citations omitted). At the conclusion of the Markman hearing we asked the plaintiffs to supplement their proposed constructions, which reflected their contention that § 112(f) did not apply, with alternative means-plus-function constructions. The plaintiffs have proposed the following structures corresponding to the recycle-control function identified Claim 1 of the '017 Patent:

(1) A fan control wired between the thermostat and central air conditioning system, such as shown in FIGURES 2-3 and their corresponding descriptions (e.g., '017 Patent, 2:64-66, 3:3-33, and 4:20-6:28), and which may use electromechanical or solid-state components (7:6-8); or (2) a fan control controlled by a microprocessor, located on the thermostat or humidistat, or in another location, such as disclosed in FIGURES 4-5 and their corresponding descriptions (e.g., 2:64-66, 3:3-33, and 6:29-7:5), and as disclosed in the attached revised FIGURES 4-5 of the '017 Patent (TAB A), revised to make clear that one or more of the heating or cooling and/or constant fan may be called for by the thermostat, and showing the steps of exemplary algorithms which may be used to effectuate microprocessor control for the claimed "[fan] recycle control . . ." if it is found to fall within § 112, ¶ 6. See also 3/2/12 *Markman Order* issued in *Rudd et al. v. Emerson Electric Co.* (Fleissig, J., E.D. Missouri, Case No. 4:11-CV-374 AGF).

(Pls.' Proposed Means-Plus-Function Claim Constructions, dated Sept. 18, 2012, Dkt. 46.) At Tab A to their proposed constructions, the plaintiffs have attached revised figures that combine boxes depicted separately in the flow charts at figures 4 and 5 of the '017 Patent.

Robertshaw argues that it is inappropriate to rely on the revised figures and has moved to strike them. Although



Robertshaw's authorities do not deal explicitly with this question, they do indicate that the structure corresponding to the function described in the means-plus-function limitation must be disclosed in the patent itself. See 35 U.S.C. § 112(f) (A means-plus-function claim "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."); see also Applied Medical, 448 F.3d at 1332 (directing courts to identify the structure corresponding to the disclosed function "in the written description of the patent"); Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002) ("After identifying the claimed function, the court must then determine what structure, if any, disclosed in the specification corresponds to the claimed function."). The plaintiffs argue that the revised figures are appropriate because they reflect Rudd's understanding of the patent. (See Pls.' Resp. (Mo. to Strike) at 4.) But they have not supported their position with relevant authorities,<sup>7</sup> nor have they addressed the authorities that Robertshaw cites. Accordingly, we will strike the plaintiffs'

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<sup>7/</sup> The plaintiffs cite Phillips for the proposition that the inventor is presumed to be someone skilled in the relevant art, and that patents should be construed from the perspective of persons with similar skills. See Phillips, 415 F.3d at 1313. But this general proposition has nothing to do with whether it is appropriate for a party to revise the patent specification to support its means-plus-function construction.

revised figures and the corresponding language in their proposed construction.<sup>8</sup>

**D. The Court's Means-Plus-Function Constructions**

We define the function of the "recycle control" as follows:

Periodically activating and deactivating only the fan after a preselected time after the (1) central air conditioning system has been deactivated, or (2) the circulating fan has been deactivated from the selectable constant fan mode.

A patent may recite alternative structures performing the same claimed function. See Cardiac Pacemakers, 296 F.3d at 1113-14 ("Alternative embodiments may disclose different corresponding structure, and the claim is valid even if only one embodiment discloses corresponding structure."). The specification of the '017 Patent describes three such structures:

Structure #1: A fan control that is wired between the thermostat and the CAC system terminal block, as in figures 2 and 3 and their corresponding written descriptions.

Structure #2: A fan control, as described in figures 2 and 3 and their corresponding written descriptions, that is activated and deactivated by a microprocessor-based thermostat or other microprocessor-based control, as illustrated by the algorithm in figure 4 and its corresponding written description.

Structure #3: A microprocessor-based control programmed to perform the same function as the fan control described in figures 2 and 3 and their corresponding written descriptions, as illustrated by the algorithm in figure 5 and its corresponding written description.

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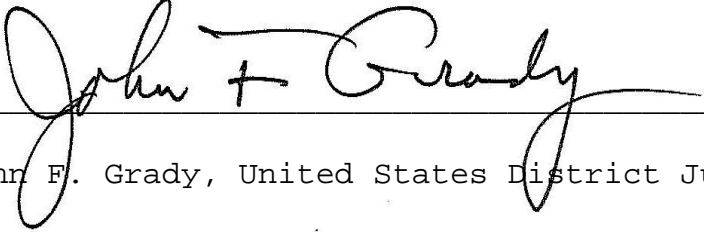
<sup>8</sup>/ Robertshaw also moved to strike in its entirety the plaintiffs' construction of "recycle control means" in claim 1 of the '268 Patent. That issue is moot in light of the plaintiffs' covenant not to sue.

**CONCLUSION**

Robertshaw's motion to limit or exclude the testimony of Armin Rudd [40] is denied. Robertshaw's motion to strike the plaintiffs' proposed means-plus-function constructions [49] is granted in part and denied in part. The motion is granted as to the revised patent figures attached to the plaintiffs' proposed constructions. The motion is denied as moot insofar as it pertains to the '268 Patent. The court adopts the claims constructions set forth in Section D of this order. A status hearing is set for May 1, 2013 at 10:30 a.m.

DATE: April 11, 2013

ENTER:

  
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John F. Grady, United States District Judge