UNITED STATES DISTRICT COURT
DISTRICT OF CONNECTICUT

MISTOP, INC.,	:	
	:	
Plaintiff,	:	
	:	
V.	:	CASE NO. 3:97-CV-1951 (RNC)
	:	
AEROFIN CORP.,	:	
	:	
Defendant.	:	

RULING AND ORDER

Plaintiff Mistop, Incorporated, holds U.S. Patent No. 5,074,117, which relates to a process and system for handling air inside large office buildings. The invention addresses the problem of "water carryover" in air conditioning systems, which arises when droplets of condensation on cooling coils are picked-up and entrained in the air stream. The salient feature of the invention is a moisture reduction mechanism, or moisture eliminator, in the form of a "metallic mesh pad," which is installed downstream from a cooling coil, where it catches the "carried over" droplets, thereby "reduc[ing] the moisture level of the flow of air." Patent Claim 1(d).

Mistop's complaint charges defendant Aerofin Corporation with infringing the patent. Aerofin contends that the patent is invalid under 35 U.S.C. § 102(b) because, among other things, the invention was reduced to practice at several locations more than

one year before the patent application was filed.[1] Cross-motions for summary judgment have been submitted addressing the validity of Aerofin's public use defense. As explained below, undisputed evidence establishes that the invention was in public use in Connecticut at least one year before the filing date of the patent application. Accordingly, defendant's motion is granted and plaintiff's cross motion is denied.

I. Facts

The essential facts are undisputed. Mistop was founded by David M. Kane, one of the two inventors named in the '117 patent. Mistop's business includes selling moisture eliminators for use in air handling systems. Aerofin manufactures cooling coils. During the pertinent time, Aerofin sold its products through an affiliated entity, Buffalo Forge Company ("BFC"). Until early 1990 or 1991, Aerofin and BFC were represented by a company owned and operated by Mr. Kane.

A. Bristol-Myers Facility[2]

---

[1] Defendant contends that the invention was in public use or on sale at a Bristol-Myers facility in Wallingford, Connecticut; the Olympia and York building at 59 Maiden Lane in New York City; and Eastman Kodak building 53 at Kodak Park in Rochester, New York.

[2] The facts in this section are derived from the defendant's Local Rule 9(c)(1) statement. Plaintiff has responded to defendant's assertions of undisputed facts with blanket denials unsupported by citations to the record. As such, defendant's assertions are uncontradicted for purposes of summary judgment. See generally Gottlieb v. County of Orange, 84 F.3d 511, 518 (2d Cir. 1996) (outlining nonmovant's (continued...)

In the mid-1980s, BFC furnished Aerofin with cooling coils for twelve air handling units ("AHUs") at a Bristol-Myers research facility in Wallingford, Connecticut. As originally designed and constructed, the AHUs were conventional air dehumidification and cooling systems. Each system included air ducts, a fan, and a cooling coil.[3]

After the first cooling season, it became apparent that there was a water carryover problem associated with the AHUs.[4] While the cause of the problem was being investigated, Aerofin fabricated and supplied to Bristol-Myers a test moisture reduction mechanism. The mechanism consisted of a plastic, fibrous filter made of material called "Kimre," which was to be installed in an AHU downstream from the cooling coil, where it would be maintained in an upright position by a frame.[5]

On September 11, 1987, BFC wrote to Bristol-Myers as follows:

> This letter will confirm our discussions with you concerning the addition of moisture eliminators to be added to the Aerofin cooling coils furnished by [BFC] . . . .

---

[2](...continued)
responsibilities to defeat summary judgment).

[3] See Def.'s Local Rule 9(c)(1) Statement ¶ 33.

[4] See id. ¶ 34.

[5] See id. ¶¶ 35-37.

The systems that these coils are furnished on, have carried over moisture beyond the drain pans for two summer operating seasons. [BFC] and Aerofin have conducted a number of tests on these coils during these operating seasons and the results of their testing do not agree with tests by [Bristol-Myers] and their contractors. Any further testing or analysis by either party or an independent party would only cause additional costs and expense for everyone involved.

A sample moisture eliminator section was installed on one of the systems and [Bristol-Myers] has determined that the carryover condition has diminished to an acceptable level. Aerofin also checked the installation and agreed that the moisture eliminators are effective in reducing water carryover.

To bring this situation to a close, [BFC] and Aerofin . . . have agreed to furnish and install moisture eliminators for all the built up cooling systems for Phase 1 and 2.

Aerofin . . . is proceeding to design and manufacture the eliminators for the cooling coil systems. The lead time will result in a shipment about the first week in November. [BFC] will install the eliminator sections and they will schedule their service personnel for the middle of November.

We do want to make it clear that we are doing that in satisfaction of [Bristol-Myers]. Both [BFC] and Aerofin have enjoyed an excellent business relationship with [Bristol-Myers] and they value that relationship and the continuance of it.

[BFC] has 110 years of experience and Aerofin over 75 years of experience in their respective fields. Over that span of time both companies have maintained a policy of fairness and responsibility for the equipment and materials that they manufacture, and that

> policy will continue in the years to come.
>
> We are certain that this is one of the reasons that you have considered in selecting [BFC] and Aerofin on your major projects and we hope that our cooperation on this project will renew your confidence.[6]

In late 1987, or early 1988, because of concerns regarding the combustibility of the Kimre material, Aerofin substituted a stainless steel mesh product made by the Koch company (9310 Koch Fleximesh).[7] By August 9, 1988, the moisture eliminators had "reduced" the water carryover problem.[8]

Ronald Benjamin, the Bristol-Myers employee responsible for overseeing the project, has testified that by September 1988, Bristol-Myers was satisfied that the stainless steel moisture eliminators were handling the majority of the carryover droplets.[9] Charles Eno, who worked on the installation, has testified that the eliminators solved the problem.[10] Kenneth

---

[6] Id. ¶ 43.

[7] The parties dispute who first raised the flammability concerns and who first came up with the idea of using stainless mesh, but that dispute goes to the identity of the inventor, not the public use issue. See id. ¶¶ 44-48.

[8] See id. ¶ 57.

[9] See id. ¶¶ 60-61.

[10] See id. ¶ 59.

Johnstone, former president of Aerofin,[11] has testified that the moisture eliminators installed on the twelve AHUs "were shown to be effective" at reducing moisture carryover.[12]

None of the companies involved in the work at Bristol-Myers required confidentiality of personnel knowledgeable about the design, construction and use of the moisture eliminators or the AHUs,[13] and neither Mr. Kane or the co-inventor named in the patent exercised any control over the installation.[14]

On March 21, 1989, Mr. Johnstone wrote to BFC as follows:

> [I]t is apparent to me that BFC and Aerofin had an arrangement on the fix up of this job, which should be classified commercial in nature to insure that BFC and Aerofin would be considered to be acceptable vendors by Bristol Myers for future work. (PX 5)[15]

At his deposition, Mr. Johnstone testified as follows:

> Q: If you recall, was the agreement on the part of Buffalo Forge and Aerofin to install the moisture eliminators a--motivated by the fact that Buffalo Forge and Aerofin

---

[11] In the mid-1980s, Johnstone was Vice President of Sales for Aerofin. He became the company's President in 1988, and left Aerofin in May 1990 to form his own company.

[12] See id. ¶ 63; Johnstone Dep. 47.

[13] See Def.'s Local Rule 9(c)(1) Statement, ¶ 65

[14] See doc. 63 at 8.

[15] See also doc. 58 ¶ 64.

wanted to remain on the approved vendor list of Bristol-Myers?

A: Oh, absolutely.

Q: And there was certainly value in that, wasn't there?

A: Yes.

(Johnstone Dep. 49-50).

II. Discussion

Defendant contends that all the claims of the patent, with the exception of claims 8 and 18, are invalid because they were reduced to practice at Bristol-Myers by September 1989, more than one year before the filing of the patent application on November 7, 1990. Plaintiff contends that claims 10, 11, 20 and 21 are valid on the grounds that the use at Bristol-Myers was non-public, experimental, and did not satisfy all the limitations of those four claims.[16]

A. Applicable Law

1. Prior Public Use

Section 102(b) provides that "[a] person shall be entitled to a patent unless . . . the invention was . . . in public use . . . in this country, more than one year prior to the date of the application for patent in the United States." A "public use"

[16] Plaintiff's papers do not take issue with defendant's position as to claims 1-7, 9, 12-17, or 19.

within the meaning of the statute is any use of the claimed invention "by a person other than the inventor who is under no limitation, restriction or obligation of secrecy to the inventor." In re Smith, 714 F.2d 1127, 1134 (Fed. Cir. 1983).

A party challenging the validity of a patent based on a prior public use has the burden of proving, by clear and convincing evidence, that there was a public use involving "each element of the claim in issue." Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1565 (Fed. Cir. 1992); Elmer v. ICC, 67 F.3d 1571, 1574 (Fed. Cir. 1995) ("Section 102(b) requires that in order for prior art to invalidate a claim, it must . . . contain all of the limitations of the relevant claim.").[17] However,

> [s]ection 102(b) does not require a strict identity between the claimed invention and the device involved in the public use . . . . In order for § 102(b) to be applicable in this context, it is sufficient if the differences between the claimed invention and the device used . . . would have been obvious to one skilled in the art."

Smith, 714 F.2d at 1137 n.13 (internal citations omitted).[18]

---

[17] See also ERNEST BAINBRIDGE LIPSCOMB III, WALKER ON PATENT § 4.4, at 274 (3d ed. 1984) ("In order to . . . 'anticipate' an invention, it is necessary that all the elements of the invention or their equivalents be found in one single description or structure where they do substantially the same work in substantially the same way.").

[18] For these purpoes, each claim is treated as a separate patent. See Nordberg, Inc. v. Telsmith, Inc., 881 F. Supp. 1252,

(continued...)

"In considering whether a particular use was a public use within the meaning of section 102(b), [courts] consider the totality of the circumstances in conjunction with the policies underlying the public use bar." Baxter Int'l, Inc. v. Cobe Lab., Inc., 88 F.3d 1054, 1058 (Fed. Cir. 1996); see also Petrolite Corp. v. Baker Hughes Inc., 96 F.3d 1423, 1425 (Fed. Cir. 1996). These policies include:

> (1) discouraging the removal, from the public domain, of inventions that the public reasonably has come to believe are freely available; (2) favoring the prompt and widespread disclosure of inventions; (3) allowing the inventor a reasonable amount of time following sales activity to determine the potential economic value of a patent; and (4) prohibiting the inventor from commercially exploiting the invention for a period greater than the statutorily prescribed time.

Baxter, 88 F.3d at 1058 (quoting Tone Bros. Inc. v. Sysco Corp., 28 F.3d 1192, 1198 (Fed. Cir. 1994)).

To constitute a public use, the invention need not be disclosed to, or used by, more than one member of the public; a well-defined use known to one person may constitute a public use under the statute. See Egbert v. Lippmann, 104 U.S. 333, 336

---

[18](...continued)
1282 (E.D. Wisc. 1995), aff'd on other grounds, 82 F.3d 394 (Fed. Cir. 1996).

(1881). Moreover, "some inventions are by their very character only capable of being used where they cannot be seen or observed by the public eye. . . . [In such circumstances, if] used without restriction of any kind, the use is a public one." Id.; see also Marrese v. Richard's Medical Equipment, Inc., 504 F.2d 479, 482-83 (7th Cir. 1974) (holding that use of device in anaesthesia circuit within hospital was public use).

Security measures at a facility where an invention is used do not render the use non-public if those measures are standard and not imposed by or on behalf of the inventor to maintain the secrecy of the invention. See Petrolite, 96 F.3d at 1428.

2. Exception for Experimental Use

The public use bar to patentability does not apply if the prior use was conducted by the inventor primarily for experimental reasons, in other words, to determine whether the invention was capable of fulfilling its purpose. See TP Laboratories, Inc. v. Professional Positioners, Inc., 724 F.2d 965, 971-72 (Fed. Cir. 1984); Elizabeth v. Pavement Co., 97 U.S. 126 (1877); see generally 1 PETER D. ROSENBERG, PATENT LAW FUNDAMENTALS § 7.07[1][a] (2d ed. 1997 & Cumm. Supp.) Whether a prior use was experimental in nature is a question of law, and the patentee bears the burden of producing evidence of experimentation once the issue of public use is raised. See Lough v. Brunswick Corp.,

86 F.3d 1113, 1120 (Fed. Cir. 1996). In determining whether a use was experimental, courts analyze the totality of the circumstances, including "the length of the test period, whether payment was made for the device, whether there was a secrecy agreement, whether progress reports were kept, whether someone other than the inventor conducted the experiments, and the overall number of tests . . . ." Petrolite, 96 F.3d at 1426 (quoting Sinskey v. Pharmacia Ophthalmics, Inc., 982 F.2d 494, 498 (Fed. Cir. 1992)).

The inventor's lack of control or direction over the use is given great weight in the analysis; there can be no experimental use when the testing is not done for the benefit of the inventor. See Baxter, 88 F.3d at 1060-61 ("[W]e hold that public testing before the critical date by a third party for his own unique purposes of an invention previously reduced to practice and obtained from someone other than the patentee, when such testing is independent of and not controlled by the patentee, is an invalidating public use, not an experimental use."); ROSENBERG § 7.07[1][a] ("To come within the experimental use exception, testing must be for the benefit of the inventor.").

The experimental use exception is limited by the reduction to practice principle. "Experimental use . . . ends with an actual reduction to practice." RCA Corp. v. Data General Corp.,

887 F.2d 1056, 1061 (Fed. Cir. 1989). An actual reduction to practice occurs when the device has been "perfect[ed] or complet[ed] . . . to the point of determining that it will work for its intended purpose." Id.; see also Allied Colloids Inc. v. American Cyanamid Co., 64 F.3d 1570, 1576-1577 (Fed. Cir. 1995) (holding that the one year grace period begins to run, and experimentation ends, when there is a reduction to practice); Manville Sales Corp. v. Paramount Systems, Inc., 917 F.2d 544, 550 (Fed. Cir. 1990) (determining when device was found to work as intended in order to determine when grace period began and ended). In other words, if the device works, the "experiment" is over. See Continental Plastic Containers v. Owens Brockway Plastic Products, Inc., 141 F.3d 1073, 1079 (Fed. Cir. 1998) ("[E]xperimental use cannot occur after a reduction to practice."); Allied, 64 F.3d at 1576 (same); Atlantic Thermoplastics Co. v. Faytex Corp., 5 F.3d 1477, 1480 (Fed. Cir. 1993) (same); see also Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 66 n.12, (1998) (noting holdings of prior case law that "the invention's reduction to practice demonstrate[s] that the concept [is] no longer in an experimental phase."); Zacharin v. United States, 43 Fed. Cl. 185, 192 (Ct. Fed. Cl. 1999) ("[O]nce an invention has been reduced to practice, a sale, offer to sell, or public use of that invention cannot be considered experimental

use.”); Nordberg, 881 F. Supp. at 1283-1285. "Reduction to practice does not require that the invention, when tested, be in a commercially satisfactory stage of development." Scott v. Finney, 34 F.3d 1058, 1061 (Fed. Cir. 1994) (quoting In re Dardick, 496 F.2d 1234, 1238 (Ct. Cust. & Pat. App. 1974)).

3. Claim Construction Generally

The proper interpretation of a patent claim presents a question of law. See Elmer v. ICC Fabricating, Inc., 67 F.3d 1571, 1574 (Fed. Cir. 1995); Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1565 (Fed. Cir. 1992); see also Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996)(“We hold that the construction of a patent, including terms of art within its claim, is exclusively within the province of the court.”).

In construing patent claims, courts consider three forms of “intrinsic” evidence: the text of the claim, the text and figures in the patent specification, and the prosecution history. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995). “Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

Claim construction starts with rigorous textual analysis of

the claim itself. See id. at 1582. Claims demarcate the subject matter of the claimed invention; they define the limits and scope of the patent grant. See Markman, 517 U.S. at 373. The terms of a claim are given their ordinary meaning unless the patent clearly sets forth special definitions of certain terms. See Markman, 52 F.3d at 980 ("The caveat is that any special definition given to a word must be clearly defined in the specification."); In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Next, a court turns to the patent specification, which may confirm a tentative construction of the claims based on the ordinary meaning of the claim language, or shed light on the meaning of ambiguous terms, by providing information about the subject matter of the invention, the problem it tries to solve, and the means used to accomplish its objective. "For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims." Markman, 52 F.3d at 979.

Courts must be careful to avoid importing a limitation from the specification into the claims. In other words, the elements of the invention must be set forth in the claims themselves. See Markman, 52 F.3d at 980 ("The written description part of the specification itself does not delimit the right to exclude. That

is the function and purpose of claims."); E.I. DuPont de NeMours & Co. v. Phillips Petroleum Co., 849 F.2d 1430, 1433 (Fed. Cir. 1988) ("It is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim. But this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.")

The claims and specification are usually dispositive in resolving the meaning of a disputed term. See Vitronics, 90 F.3d at 1582. When that is not the case, a court may also examine the prosecution history of the patent, that is, the record before the patent office. See Id.; Markman, 52 F.3d at 980. As with the specification, the prosecution history cannot be used to enlarge, diminish, or vary the limitations in the claims. See id.

Courts retain broad discretion in deciding whether to permit the submission of "extrinsic" evidence, such as expert testimony. See id. at 980-81. "Extrinsic evidence is to be used for the court's understanding of the patent, not for the purpose of varying or contradicting the terms of the claims." Id. at 981. In exercising its discretion, a court need not give any weight to expert testimony that merely offers a legal opinion as to the proper construction of the patent. See id. at 983.

B. Analysis

1. Public Use

Plaintiff's argument that the use at the Bristol-Myers research facility was not public rests on evidence that the AHUs were located deep within the facility; the facility was not open to the public; the moisture eliminators, once they were installed in the AHUs, could not be seen by people passing by; and personnel servicing the AHUs had to sign into the building and be escorted by Bristol-Myers employees.

Plaintiff's argument is unavailing under the case law outlined above. The security measures plaintiff relies on were standard measures instituted by Bristol-Myers for its own benefit without regard to confidentiality concerns relating to the AHUs or moisture eliminators. There is no evidence that Aerofin, BFC, or any other entity relied on Bristol-Myers' standard security measures to guard the secrecy of the invention or took any precautions of their own. In fact, the evidence indicates that the moisture eliminators were fabricated, transported, installed, used, tested, written about, and discussed with no attempt to conceal them or limit disclosure of information concerning their design, make-up, installation or use.

In these circumstances, the public use bar to patentability serves the important policy of discouraging removal from the public domain of an invention the public reasonably has come to believe is freely available. Baxter, 88 F.3d at 1058. Numerous

members of the public participated in, or were privy to, the use of the moisture eliminators at Bristol-Myers, including not only employees of Aerofin and BFC, but also employees of Bristol-Myers and the contractors involved in the installation. On the record before me, these people could reasonably believe that the type of moisture eliminators used at the facility were freely available for use in other buildings. There is no indication that any of them thought otherwise.

2. Experimental Use

Plaintiff's reliance on the experimental use exception is also unavailing. Plaintiff has not produced evidence that the people named as inventors in the patent exercised control over the use at Bristol-Myers or that the use was conducted on their behalf. The exception for experimental use does not apply when the inventor is not involved and the testing is conducted for the benefit of a third party. See Baxter, 88 F.3d at 1060-61.

In addition, as discussed in the next section, uncontradicted evidence establishes that there was a reduction to practice at Bristol-Myers, thereby terminating any experiment.[19]

C. Reduction to Practice

[19] Mr. Johnstone's opinion that the work was experimental in nature does not vitiate the reduction to practice that occurred.

Plaintiff contends that the patented invention was not reduced to practice at Bristol-Myers because "a person skilled in the art would understand that the term 'frame' as used in claims 10, 11, 20 and 21 refers to a 'stand-alone' 'prefab' frame unit that, together with the mesh pad and retaining grid, forms an independent assembly (i.e. a cartridge) that can be removably attached to the cooling coil housing." Misstop's Mem. in Opp. to Aerofin's Mot. at 8. It is undisputed that the frames used to retain the mesh pads in the AHUs at Bristol-Myers did not arrive on site in prefabricated, stand-alone cartridges encasing both the frames and the mesh pads. Rather, to retain the mesh pad in position in each AHU, an installer took the component pieces of a frame (i.e. cross-members and uprights), attached them to a housing by means of screws, and then inserted the mesh pad.

Defendant contends that plaintiff is trying to inject new limitations into the claims, which make no reference to 'pre-fab' units or 'stand-alone,' 'cartridge-type frames.' I agree.

The claim language supports defendant's construction. Claims 10 and 20 cover an air handling "system" and "process," respectively, "wherein [a] mesh pad is retained within a frame composed of a [moisture-resistant] material." Claims 11 and 21 cover the same "system" and "process," "wherein . . . at least one cooling coil is disposed within a housing and said frame is removably attached to the housing." Glaringly absent from this text is any mention of how,

where, or when the frame is to be constructed, or the mesh pad is to be inserted into the frame.

The claim terms must be given their ordinary meaning because no special definitions appear in the patent. The word "frame" ordinarily means a "structure made for admitting, enclosing or supporting something (as one that encloses a window, door or picture)" or "something on, in, or across which something else is held or stretched." Webster's Third New International Dictionary 902 (1993). To "retain" something ordinarily means "to hold secure or intact (as in a fixed place or condition) to prevent escape, loss, leakage or detachment." Id. 1938. To "attach" ordinarily means to "make fast or join as by string or glue." Id. 140. And "removable" ordinarily means "capable of being removed, displaced, transferred, dismissed or eradicated." Id. 1921.

Construed in accordance with these definitions, the "frame" described in the claims is (1) a structure for holding a mesh pad securely in place; (2) that is fastened to a cooling coil housing; and is (3) capable of being removed from the housing. To satisfy these characteristics, the frame does not have to be part of a prefabricated, stand-alone cartridge encasing both the frame and the pad. Nor need it be removable from the cooling coil housing in one piece. If such distinctive limitations had been intended by the patentee, it is reasonable to assume they would have been explicitly stated in the

claims.[20]

The patent's specification also supports defendant's position. The specification -- the dictionary for the claims –- does not describe the frame and mesh pad as components of a larger piece of stand-alone equipment such as a cartridge encasing a frame, mesh pad and retaining grid. Rather, it describes them as separate, distinct items. Compare Column 4, lines 58-68 ("Generally, mesh pad 50 is contained within a frame which can be attached to the discharge end of cooling coil . . . or, as noted, up to six feet downstream thereof. Frame 52 is a suitable retaining means for maintaining mesh pad 50 in position such that the air flow passes through mesh pad 50. Frame 52 is configured in the shape mesh pad 50 is to assume.") with Columns 5 (lines 65-68) & 6 (lines 1-10) (discussing general structure of the mesh pad).

The specification states that the frame and the mesh pad can be up to 50 feet wide. See Column 5, line 47. Assuming it would be possible to build, transport and install a prefabricated, stand-alone cartridge

---

[20] The word "removably" in claims 11 and 21 modifies the phrase "attached to said housing." It does not modify the word "frame." Read in context, the word "removably" serves to describe in a general way the manner in which the frame should be fastened to the housing (e.g., by screws not by a permanent method), rather than to specify a particular type of frame (e.g., a frame encased in a prefabricated cartridge as opposed to a frame assembled on site), or the ease with which the frame and mesh pad are to be installed and removed from the air handling system (e.g., in one piece as opposed to more than one).

of that size, it is hard to imagine why anyone would go to the trouble of doing so when it would be so much easier to use component parts. By the same token, it seems highly unlikely that the patentee meant to limit the scope of the patent claims in issue such that there would be no infringement unless a user eschewed the option of using components and insisted on using a prefabricated, stand-alone cartridge, no matter how unwieldy the cartridge might be.

The specification speaks in permissive terms as to how the frame is to be attached to the housing, see Column 5, lines 19-22 ("frame 52 can also comprise attachment flanges 56a and 56b, which can be used to attach frame 52 (and, therefore, mesh pad 50) to the housing which contains cooling coil 40."), and how the pad is to be retained in the frame, see Column 5, lines 29-31 ("Preferably, grid 58 and mesh pad 50 are attached through means such as ties 59 to assist in the maintenance of mesh pad 50 in position."). This language implies that alternative solutions still constitute the invention.

Plaintiff relies heavily on Figures 1 and 1A, which appear to depict a fully assembled frame and mesh pad, and the following language in column 6, lines 28-32: "Moreover, installation is generally easier since it usually only requires attachment by screw or other type means of frame 52 containing mesh pad 50 to the housing in which cooling coil is situated." The phrases "installation is generally easier" and "usually only requires attachment by screws or other means" run counter

to plaintiff's position that a prefabricated, cartridge-type frame is invariably required. In addition, the language and figures plaintiff relies on must be viewed in context, that is, as part of a discussion comparing the patented device to a "chevron-type moisture eliminator." See Column 2, lines 35-49 (explaining that the drawings in Figures 1 and 1A are provided to contrast the patented product against the chevron product). The specification explains that the patented product takes up less space, causes less "pressure drop," and can be attached to a cooling coil housing with screws. See Column 6, lines 28-32. Given this context, the language and figures serve to explain the advantages of the patented device compared to the chevron device, rather than to limit the scope of the invention to a frame and pad encased in a prefabricated, stand-alone cartridge.

Ultimately, the specification shows that the salient feature of the invention is a mesh pad that can be maintained in an upright position, rather than a mesh pad that is contained in a stand-alone cartridge. See, e.g., Column 5, lines 31 & 32-38 (suggesting that the key function of the frame is to maintain the mesh pad in an upright position); Column 5, lines 26-27 (same). Nothing in the specification suggests that if the components of a frame for retaining the mesh pad are fastened to a cooling coil housing by screws, as were the ones at Bristol-Myers, the resulting structure does

not constitute a "removable frame" within the meaning of the claims because it does not constitute a "removable-type cartridge." If anything, the specification confirms that such a structure, which can be removed with a screwdriver, is covered.

Plaintiff also points to the prosecution history of the application that issued as the '117 patent. Specifically, it relies on evidence that the applicant, in an effort to dispel a concern about obviousness, emphasized that the mesh pads would be easy to remove. See Doc. 61 at 9; see also Patent Prosecution Record, Doc. 55, Ex. 3, at 3. Even assuming that this evidence should be considered, it is too vague to support a claim construction limiting the scope of the patented product to prefabricated, stand-alone, cartridge-type units. Just because a moisture reduction mechanism is easy to remove (or easier to remove than a chevron-type product) does not necessarily mean that it must be removable in one piece. Moreover, even if the prosecution history were clearer in this regard, because the claims and specification are devoid of language limiting the scope of the invention to such a modular unit, plaintiff's position would require me to use the prosecution history to add a significant limitation to the claims, which I am not at liberty to do in the guise of claim construction.

Plaintiff also relies on extrinsic evidence in the form of

a declaration of John Davey, an expert on industrial air handling systems. The declaration states that prefabricated, stand-alone, cartridge-type units can be installed and removed faster and more cheaply than the moisture eliminators that were used in the AHUs at Bristol-Myers. Crediting those assertions, the declaration provides little assistance in resolving the issue of claim construction presented by the cross-motions. The issue is not whether a prefabricated, stand-alone cartridge is easier to install and remove but whether the claims in issue, properly construed, limit the scope of the invention to a cartridge-type unit, thus excluding from their coverage the frames and mesh pads used at Bristol-Myers.

For all the reasons stated above, I conclude that the claims cannot be given such a narrow construction. Patents are usually drafted in an attempt to cast the widest net without risking invalidity. Language in the specification indicates that this patent is no exception.[21] If for some reason the patentee intended to limit the scope of the invention to a "prefabricated,

---

[21] See Column 6, lines 38-46 ("The above description is for the purpose of teaching the person of ordinary skill in the art how to practice the present invention , and is not intended to detail all those obvious modifications and variations of it which will become apparent to the skilled worker upon reading the description. It is intended, however, that all such obvious modifications and variations be included within the scope of the present invention which is defined by the following claims.").

stand-alone cartridge," it would have been easy to use those words (or words like them) and thereby make it clear. On the basis of the evidence before me, I cannot avoid the conclusion that patent counsel for the applicant used no such words because they had no such limitation in mind. Once that limitation is put aside, as I believe it must be, there is no genuine dispute that the frames and mesh pads installed at the Bristol-Myers facility met each element of the claims in issue.

III. Conclusion

Accordingly, defendant's motion for partial summary judgment is granted and plaintiff's cross-motion is denied.

So ordered.

Dated at Hartford, Connecticut this 23rd day of January 2003.

_____

Robert N. Chatigny
United States District Judge