

United States District Court,  
N.D. Illinois, Eastern Division.

**MINUTEMAN INTERNATIONAL, INC,**  
Plaintiff.

v.

**CRITICAL-VAC FILTRATION CORPORATION, and Amerisafe, Inc,**  
Defendants.

**April 11, 1997.**

### ***MEMORANDUM OPINION AND ORDER***

**CONLON, District Judge.**

Minuteman International, Incorporated ("Minuteman") sues Critical-Vac Filtration Corporation ("C-Vac"), Amerisafe Incorporated ("Amerisafe") and Robert K. Hunter ("Hunter") (collectively "defendants") for infringement of Reissue Patent 34,980 ("the reissue patent"). Minuteman and C-Vac each move for a pretrial ruling on the meaning of language in claim 2 of the reissue patent. Minuteman also filed a second motion in limine to prevent C-Vac from presenting certain arguments.

### ***BACKGROUND***

#### **I. THE RELEVANT FACTS**

Minuteman is an Illinois corporation that manufactures vacuum machines for industrial and commercial use. Minuteman owns the reissue patent which derives from original U.S. Patent 5,102,435 ("the original patent"). The reissue patent discloses a vacuum cleaner with a special filter for removing microscopic particles from the stream of air created by the vacuum motor. This type of filter is known as a "high efficiency particulate air" filter. Vacuum cleaners of this type are often used to remove asbestos, lead and other hazardous materials containing harmful microscopic particles.

C-Vac manufactures and sells high efficiency replacement filters for Minuteman vacuum cleaners. Minuteman alleges C-Vac's replacement filter infringes the reissue patent. According to Minuteman, Hunter, the sole shareholder, president and only officer of C-Vac, directed the copying of the Minuteman filter and the manufacture and sale of C-Vac's infringing filter. Minuteman asserts C-Vac also distributed its infringing filter to Amerisafe for resale.

#### **II. THE CLAIM AT ISSUE**

The original patent included claim 1 of the reissue patent which is directed to the combination of the entire vacuum machine, including the motor housing, the motor, the switch and the filter. Claims 2 and 3 of the reissue patent are new and are directed to the filter *per se*. Claims 1 and 2 are independent claims, while claim 3 is dependant on claim 2. Minuteman asserts defendants have infringed claim 2.

Claim 2 defines the filter as including a canister with a generally cylindrical side wall and an upper circular mounting flange, or protruding rim, that is designed to be mounted to the bottom wall of the motor housing. Claim 2 also defines the filter as including projections. These projections are used to guide the filter, ensure a proper seal with the motor housing and prevent operation of the vacuum motor unless a proper filter is properly installed. If an operator inadvertently failed to install a filter or failed to seat the filter properly in the motor housing, the harmful substances being removed would be discharged into the air when the vacuum was started. Thus, an effective seal is especially important for safety reasons.

Claim 2 states the mounting flange includes "circular means adapted to engage said sealing tongue of said motor housing to seal therewith when said filter is mounted to said bottom wall of said motor housing under compression of mounting means" ("circular sealing means"). In the patent's illustrated embodiment, the seal between the filter canister and the motor housing is formed by a "tongue-in-groove" structure. In other words, a circular tongue is formed in the bottom of the motor housing and a corresponding groove is formed in the upper flange of the filter. When the tongue is received in the groove and the mounting bolts are tightened, an effective seal is formed.

The C-Vac filter does not have a groove. C-Vac has instead substituted a flat gasket of compressible neoprene material to conform to and seal with the tongue on the motor housing of the Minuteman vacuum cleaner. Thus, the central issue is the meaning of the language in claim 2 regarding the circular sealing means. First, this court must determine whether the groove depicted in the embodiment is a limitation on claim 2 such that a filter without a groove would not infringe claim 2. Second, this court must determine whether the circular sealing means must be in the flange, rather than on the flange. Third, this court must determine whether the "actuating member" and the "plurality of projections" are two separate elements.

## ***DISCUSSION***

### **I. STANDARD FOR CLAIM CONSTRUCTION**

Determining whether C-Vac's replacement filter infringes claim 2 of the reissue patent is a two step process: first, the language of claim 2 must be interpreted to determine its scope; and second, C-Vac's replacement filter must be compared to claim 2 as interpreted to determine whether the defendants have made, used or sold the claimed invention without authority. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed.Cir.1995), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The first step-claim construction-is a question of law exclusively for the court. *Id.* at 970-71. The second issue is a question of fact. *Malta v. Schulmerich Carillons, Inc.*, 952 F.2d 1320, 1325 (Fed.Cir.1991), *cert. denied*, 504 U.S. 974, 112 S.Ct. 2942, 119 L.Ed.2d 566 (1992); *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452 (Fed.Cir.1985). Claim construction is the task presently before the court.

In a jury case such as this, the court "has the power and obligation to construe as a matter of law the meaning of the language used in the patent claim[s]." *Markman*, 52 F.3d at 979. In construing the claim language, the court must first consider the intrinsic evidence, including the language of each claim, the specification and the prosecution history. *Id.*; *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Intrinsic evidence is the most important resource when determining the meaning of disputed claim language. *Id.* at 1582. In fact, the intrinsic evidence alone will usually resolve any ambiguity. *Id.* at 1538. Extrinsic evidence such as expert and inventor testimony, dictionaries and learned treatises may be helpful to explain scientific principles and the meaning of technical terms, but it may not be used to vary or contradict the terms of the claims. *Markman*, 52 F.3d at 980-81; *Vitronics*, 90 F.3d at 1584. Accordingly, the

admission of extrinsic evidence is improper unless there remains "some genuine ambiguity in the claims, after consideration of all available intrinsic evidence." Vitronics, 90 F.3d at 1584.

## II. ANALYSIS

### A. Whether a Groove Is a Limitation On Claim 2

There is no reference to the use of a groove in the language of claim 2. However, the summary of the invention in the specification of the reissue patent states a "tongue-in-groove seal is formed between the motor housing and the filter canister." Pl. Motion for Claim Construction ("Motion"), Ex. A, Col. 2., lines 17-18. The preferred embodiment is described as including a combination of pins on the motor housing and apertures on the filter that "insures proper seating of a tongue-in-groove seal between the bottom wall of the motor housing and the upper mounting flange of the ... filter." Motion, Ex. A, Col. 4, lines 33-36. The use of a groove is also mentioned several times thereafter in the description of the preferred embodiment. Motion, Ex. A, Col. 4, lines 37, 43-44, 56. Thus, the specification suggests the use of a groove to achieve an effective seal is a necessary limitation.

The prosecution history supports the court's interpretation of claim 2. The claims in the original patent application were rejected in view of two prior art references, one of which was U.S. Patent No. 4,786,295 issued to Newman, et al. ("the Newman patent"). The Newman patent disclosed among other features, a flat gasket seal. In response to the examiner's rejection, Minuteman canceled claims 2 through 5 of the original patent and amended claim 1. *See* Def. Response to Motion for Claim Construction ("Response"), Ex. A. In amending claim 1, Minuteman added language describing a tongue-in-groove seal to overcome the prior art. In the remarks section of the amendment, Minuteman emphasized the differences between its own tongue-in-groove seal and the flat gasket seal of the Newman patent. In making the distinction, Minuteman stated to the examiner that the "use of a tongue-in-groove seal ... is highly advantageous." Minuteman also stated it "is not aware that a circular tongue-in-groove seal has ever been used on any vacuum cleaner adapted for a cylindrical filter and useful for removing hazardous waste." Based on the amended language and these representations, the examiner issued Minuteman the original patent. Thus, the invention in claim 1, the only claim in the original patent, was limited to a tongue-in-groove seal.

This surrender of subject matter during the prosecution history of the original patent affects the new claims in the reissue patent. In claim 2, Minuteman describes the filter as it does in claim 1, but replaces the tongue-in-groove language with the broader circular sealing means language. Minuteman now argues that the circular sealing means language in claim 2 encompasses a flat gasket seal as is found in the Newman and Minuteman filters. However, the doctrine of recapture, as applied in *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992 (Fed.Cir.1993), requires this court to reject Minuteman's argument.

In *Mentor*, the patentee's original patent contained only claims 1 through 4. The patentee then filed for reissue and received a patent with original claims 1 through 4 and new claims 6 through 9. The defendant, Coloplast, argued that claims 6 through 9 of the reissue patent were invalid because they were not based on "error" within the meaning of 35 U.S.C. s. 251. Coloplast argued that the patentee amended its claims in response to a prior art rejection and that such conduct is not reissuable error. Thus, Coloplast argued, the new claims in the reissue patent impermissibly recaptured what the patentee had surrendered during the prosecution of the original patent.

The Federal Circuit agreed, stating "[i]f a patentee tries to recapture what he or she previously surrendered in order to obtain allowance of original patent claims, that 'deliberate withdrawal or amendment ... cannot be

said to involve the inadvertence or mistake contemplated by 35 U.S.C. s. 521, and is not an error of the kind which will justify the granting of a reissue patent which includes the matter withdrawn.' " *Mentor*, 998 F.2d at 995 (quoting *Haliczer v. United States*, 174 Ct.Cl. 507, 356 F.2d 541, 545 (Ct.Cl.1966)). The Federal Circuit continued: "The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or of broader scope than the original application.' " *Mentor*, 998 F.2d at 995 (quoting *Ball Corp. v. United States*, 729 F.2d 1429, 1439 (Fed.Cir.1984)). "[B]ecause the patentee amended his claims to overcome prior art," the Federal Circuit explained, "a member of the public is entitled to occupy the space abandoned by the patent applicant." *Mentor*, 998 F.2d at 996.

Like the patentee in *Mentor*, Minuteman amended claim 1 in its original patent to overcome prior art. It thereby surrendered subject matter and limited its patent protection to a vacuum filter with a tongue-in-groove seal. Therefore, under *Mentor*, Minuteman may not recapture protection for a seal without a groove through reissue. Although Minuteman correctly argues *Mentor* presents a rule of validity, not claim construction, the two concepts are related. It is well settled that claims should be construed, if possible, to sustain their validity. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed.Cir.1984). Accordingly, this court finds claim 2 includes the use of a groove as a limitation, despite the broader circular sealing means language.

### **B. Whether the Circular Sealing Means Must Be In the Flange, Rather Than On the Flange**

Claim 2 includes a tongue-in-groove seal as a limitation. A groove, by definition, is located in a surface, rather than on a surface. Therefore, this court finds the circular sealing means must be in the flange, rather than on the flange.

### **C. Whether the Actuating Member and the Plurality Of Projections Must Be Two Separate Elements**

Minuteman argues the phrases "actuating member" and "plurality of projections" in claim 2 must refer to two separate elements because the claim will otherwise be invalid as indefinite for "double inclusion." The language in the specification, however, suggests otherwise. The specification for the reissue patent states, "the fingers/actuators 52, 53 also serve to locate the filter relative to the motor housing and to insure against improper filter replacement, but they also preclude the operation of the machine without the presence of a [proper] filter." Motion, Ex. A, Col. 4, lines 58-63. Although both fingers or projections are capable of actuating the switch controlling the motor and disabling it when the filter is removed, only one of the projections engages the switch at any given time since there is only one switch. However, both projections are needed to properly locate the filter and ensure a proper seal. In other words, the projections serve two functions.

The fact that the two functions of the projections are recited separately is not problematic; "double recitation of elements of combination inventions does not necessarily render a claim vague and indefinite, particularly if ... an element performs more than one function or overlapping functions." *Palmer v. United States*, 191 Ct.Cl. 346, 423 F.2d 316 (Ct.Cl.), *cert. denied*, 400 U.S. 951, 91 S.Ct. 242, 27 L.Ed.2d 258 (1970). As the Court of Customs and Patent Appeals, the predecessor court for the Federal Circuit, stated in *In re Kelley*, 49 C.C.P.A. 1359, 305 F.2d 909, 916 (CCPA 1962): "The fact that one or more structural elements performing more than one function are common to the mechanisms which are recited separately in the claims does not prevent the claims from being sufficiently supported by the disclosure." Thus, the phrases "actuating member" and "plurality of projections" need not refer to two separate elements, as *C-Vac* argues, but are properly interpreted to allude to the two functions of the projections.

## **D. Minuteman's Second Motion In Limine**

Minuteman's second motion in limine seeks to prevent C-Vac from arguing that: (1) claim 2 requires the circular sealing means be in the flange rather than on the flange; (2) claim 2 requires the actuating member and the locating projections be two separate elements; (3) claim 2 is invalid under the recapture doctrine and (4) claim 2 is invalid under 35 U.S.C. s. 112 as indefinite for double inclusion. Minuteman argues C-Vac should not be able to make these arguments because the issues arose for the first time in C-Vac's response to Minuteman's motion for claim construction. Minuteman asserts it will be prejudiced if C-Vac is allowed to make these arguments because C-Vac's untimely assertions preclude Minuteman from taking discovery on these issues. In response, C-Vac asserts all four issues were pled in C-Vac's answer, presented in C-Vac's discovery responses and discussed in depositions. Thus, C-Vac asserts Minuteman has long been aware of these issues and cannot claim prejudice.

### **1. Whether C-Vac May Argue That Claim 2 Requires the Circular sealing Means Be In the Flange Rather Than Mounted On the Flange**

The sealing means used in the Minuteman filter is a groove in the flange, while the sealing means used in the C-Vac filter is a gasket mounted on the flange. C-Vac wants to argue that a circular sealing means in the flange, rather than on the flange, is a necessary element of the Minuteman filter that is not included in C-Vac's filter. This issue is not new to the case. In its amended answer, C-Vac asserted as its second affirmative defense "[d]efendant's filter does not include each element of the claimed invention. At least the tongue-in-groove seal, required by the patent-in-suit as properly interpreted, is lacking in C-Vac's filter." Pl. Second Motion in Limine ("Limine"), Ex. B. This defense was reiterated in response to Minuteman's Interrogatory No. 5. Limine, Ex. C. In addition, one of Minuteman's attorneys, James J. Hill ("Hill"), questioned C-Vac's president whether he ever considered putting a groove in the C-Vac filter. *See* Hunter Dep. at 86-87. The distinction between the two filters was also raised in C-Vac's expert report of Peter Rosenberg ("Rosenberg") served on Minuteman over four months ago. Rosenberg described the circular sealing means of Minuteman's filter as "located in, not on, the filter flange." Def. Response to Pl. Second Motion in Limine ("Limine Response"), Ex. B (emphasis in original). Rosenberg continued: "A groove would be located in a flange whereas a gasket would be located on the flange." *Id.* Accordingly, Minuteman was aware of this issue and is not entitled to have it removed from the case.

### **2. Whether C-Vac May Argue That Claim 2 Requires the Actuating Member and the Locating Projections Be Two Separate Elements**

This court has found, as a matter of law, that the phrases "actuating member" and "plurality of projections" are properly interpreted to refer to the two functions of the projections, not two separate elements. C-Vac may not argue to the contrary. Accordingly, Minuteman's second motion in limine is granted with respect to this second issue, but on other grounds.

### **3. Whether C-Vac May Argue That Claim 2 Is Invalid Under the Recapture Doctrine**

The recapture doctrine is a form of prosecution history estoppel. Estoppel is asserted in the fifth and sixth affirmative defenses of C-Vac's answer. *See* Limine, Ex. A. In its amended answer, C-Vac asserts its position that Minuteman is subject to estoppel because it made contradictory arguments with respect to the seal in the prosecutions of the original patent and reissue patent. *See* Limine, Ex. B. Accordingly, there is no unfair surprise with respect to C-Vac's assertion of the recapture doctrine and Minuteman is not entitled to have the issue removed from the case.

#### **4. Whether C-Vac May Argue That Claim 2 Is Invalid Under 35 U.S.C. s. 112 For Indefiniteness For Double Inclusion**

As stated above, this court has found, as a matter of law, that the phrases "actuating member" and "plurality of projections" are properly interpreted to refer to the two functions of the projections, not two separate elements. Therefore, C-Vac may not argue claim 2 is indefinite for double inclusion by asserting the "actuating member" and "plurality of projections" are separate elements. Accordingly, Minuteman's second motion in limine is granted with respect to this third issue, but on other grounds.

#### ***CONCLUSION***

The parties' motions for a pretrial ruling on claim construction are granted. Minuteman's second motion in limine is granted in part and denied in part.

N.D.Ill.,1997.

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