

United States District Court,  
N.D. West Virginia.

**PMG, INC., d/b/a PMG Manufacturing Group, a West Virginia corporation,**  
Plaintiff/Counter-Defendant.

v.

**STINGER SPIKE SYSTEMS, INC., a Utah corporation and Federal Signal Corporation, a Delaware corporation,**  
Defendants/Counter-Plaintiffs.

No. CIV.A.5:98CV69

**March 29, 2002.**

**MEMORANDUM OPINION AND ORDER MAKING FINDINGS AS TO CONSTRUCTION OF  
THE PATENT CLAIMS, DENYING PLAINTIFF'S RENEWED MOTION FOR SUMMARY  
JUDGMENT, DENYING DEFENDANTS' RENEWED MOTION FOR SUMMARY JUDGMENT  
AND SETTING STATUS AND SCHEDULING CONFERENCE**

**STAMP, District J.**

***I. Procedural Background***

Pending before this Court are the renewed motions for summary judgment, each filed by plaintiff (and counter-defendant), PMG, Inc. d/b/a PMG Manufacturing Group ("PMG"), and defendants and counter-plaintiffs, Stinger Spike Systems, Inc. ("Stinger Spike") and Federal Signal Corporation ("Federal"). FN1 These renewed motions also request that this Court construe the relevant patent claim ("Claim 15") and dependent claims ("Claims 17, 21 and 23") of the U.S. Patent No. Re. 35,373 ("the '373 patent") obtained by Federal, with the construction of the claims to be made by this Court, as a matter of law, pursuant to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

FN1. The parties first filed motions for summary judgment in November 1998. Defendants Federal then sought supplemental discovery and moved to amend their complaint. While this Court denied the motion to amend and certain additional discovery, it did permit mutual depositions of the parties' respective experts. That discovery was completed by December 6, 2000 pursuant to this Court's order.

Set forth below are this Court's findings regarding the construction of the claims. Moreover, because this Court finds, based upon review of the renewed motions for summary judgment as well as the memoranda of law and extensive exhibits and other papers filed herein that there are genuine issues of material facts as to all remaining issues, the respective renewed motions for summary judgment filed by plaintiff PMG and defendants Federal are denied.

## ***II. Background***

This civil action involves a patented tire deflation device designed to be used to assist law enforcement officers in stopping and capturing fleeing motor vehicles and their passengers.

Plaintiff PMG first filed a declaratory judgment action after having been advised that its tire deflation device called a "Roadspike<sup>TM</sup>" infringed a re-issued patent originally assigned to defendant Stinger Spike. The assets of Stinger Spike were later purchased by Federal Signal and so these defendants will be referred to in this memorandum opinion and order as defendants "Federal." Defendants Federal filed an answer to the declaratory judgment complaint and a counterclaim seeking damages and injunctive relief and alleging that PMG's Roadspike<sup>TM</sup> tire deflator infringes Federal's Patent No. Re. 35,373 (" '373 patent").

Federal's '373 patent is a re-issued patent, the third in a series of patents initially assigned to Stinger Spike, all of which deal with a tire deflator device.

The accused patent, Roadspike<sup>TM</sup>, belongs to plaintiff PMG and is also a tire deflator device.

In February 1991, the United States Patent Trade Office ("USPTO") issued the first Stinger Spike patent ("the '756 patent") FN2 for a tire deflation device which consisted of a foldable and extendable frame holding hollow spikes attached to the frame.

FN2. U.S. Patent No. 4,995,756.

Six months later, a second Stinger Spike patent ("the '950 patent") FN3 was filed, which added a number of new claims. This is a re-issue patent. Before the '950 patent was issued, the USPTO issued what has been called "the Lockheed patent" or " '588 patent ." FN4 Lockheed eventually licensed this patent for a tire deflator device to PMG. This type of tire deflator device offered a retractable tire deflation system which would, presumably, eliminate the need for placing the device on the road only shortly before a targeted vehicle drove over it. This new device, though not yet at that time patented, was demonstrated at a trade show in 1994 at which time Linda Kilgrow, one of the owners of the Stinger Spike device, saw the prototype and stated to an engineer connected with the Lockheed device that Stinger Spike was considering a lawsuit because of Lockheed's introduction of their new device.

FN3. U.S. Patent No. 5,253,950.

FN4. U.S. Patent No. 5,507,588.

On November 17, 1997, counsel for Stinger Spike wrote a letter to PMG stating, in part, as follows:

Stinger recently became aware that you are manufacturing and/or selling a device which you call the "Roadspike<sup>TM</sup> Retractable Spike Barrier Strip." After reviewing Stinger's above-mentioned patent, together with the information currently available to us about the "Roadspike<sup>TM</sup> Retractable Spike Barrier Strip," it appears that your "Roadspike<sup>TM</sup> Retractable Spike Barrier Strip" device may infringe the claims of U.S.

Defs.' Answer and Countercl. Ex. C.

Defendants Federal do not appear to contest PMG's assertion that the court has jurisdiction for relief by way of declaratory judgment. *See* Def. Federal's Answer at para. 3. The Federal Circuit has developed a two-part inquiry to determine whether there is an actual controversy in suits requesting a declaration of patent non-infringement or invalidity. First, the plaintiff must actually produce or be prepared to produce an allegedly infringing product. Second, the "patent holder's conduct must create an objectively reasonable apprehension on the part of the accused infringer that the patent holder will initiate suit if the alleged infringing activity continues." *Spectronics Corp. v. H.B. Fuller Co.*, 940 F.2d 631, 634 (Fed.Cir.1991); *EMC Corp. v. Norand Corp.*, 89 F.3d 807, 811 (Fed.Cir.1996).

About four months after the Lockheed patent was issued (in April 1996), the USPTO issued a third Stinger Spike patent, the '373 patent, which is the patent the defendants Federal now claim was infringed by PMG. The principle claim involves Claim 15 of the '373 patent.

### **III. Construction of Claim 15 and Dependent Claims of the '373 Patent**

Any patent infringement analysis involves a two-step process: (1) interpretation of the claim language of each of the asserted patent claims, which is a question of law for the court to decide and (2) application of the asserted claims, as properly interpreted, to the accused product, which is the question of fact. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1304 (Fed.Cir.1999).

Thus, this Court must first proceed to construe and interpret the relevant claims in this case, primarily Claim 15 of the '373 patent. The Federal Circuit has determined that "claim construction" and "claim interpretation" are the same thing in patent law. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 n. 6. Since the Federal Circuit's decision in *Markman* holding that claim construction is made by the court as a matter of law, *see id.* at 970, courts have made this determination in a patent case at a number of different times and in a number of different forms. Such determination has come to be called a "*Markman* hearing." One means of making this claim interpretation is through a decision on a motion for summary judgment under Federal Rule of Civil Procedure 56. In some cases, the *Markman* interpretation has been made earlier in the case and in some cases later, including the time of trial.FN5 In this case, the court has been favored in the summary judgment process with extensive briefing by all parties, as well as voluminous exhibits, including patent documents, affidavits, and other papers. PMG has requested oral argument on this matter. Federal has not objected and has, in fact, requested oral argument on other pending motions. However, no request has been made for an evidentiary hearing and this Court believes that no hearing either for receipt of oral argument or for receipt of additional evidence is necessary. This Court believes that a proper *Markman* ruling can be made based upon the briefs and records filed in connection with the renewed summary judgment motions.

FN5.

The "obligation" created by the Federal Circuit to instruct the jury on the meaning of the words used by an inventor in a claim basically leaves a district court with three options. The court can attempt to resolve these disputes on the paper record. Second, the court can hold a trial to resolve the disputes. Finally, the court can wait until trial and attempt to resolve claim disputes the evening before the jury must be instructed.

Elf Atochem v. Libbey-Owens-Ford Co., 894 F.Supp. 844, 850 (D.Del.1995).

A proper claim interpretation should require an examination of the patent claims, the written description of the patent (including the specifications and the drawings) and the prosecution history. *See Vitronics v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

In *Markman*, the Federal Circuit provided guidance to district courts on the relative significance of certain evidence regarding the meaning of claim terms. *See Markman*, 52 F.3d at 979-83. Proper claim interpretation derives from consideration of the relevant patent-related documents. *See id.* at 979-80. So-called "intrinsic" evidence includes (1) the patent itself, *i.e.* the specification and the claims and (2) the prosecution history, *i.e.* the record of proceedings before the USPTO. *See id.* at 979-80. The court has also approved the examination of "extrinsic" evidence, such as expert and inventor testimony, dictionaries, and learned treatises to learn of the state of the technology at the time of the invention. *See id.* at 980.

The Federal Circuit in *Markman* has made it clear that extrinsic evidence should only be used to assist in the court's understanding of the patent, not to clarify ambiguity in claim language, much less vary or contradict the meaning of the claim terms. *See Markman*, 52 F.3d at 981. Specifically, that court recognized that evidence of the subjective intent of the inventor when drafting the claims deserves little or no probative weight in claim interpretation unless otherwise documented in the prosecution history. *See Robert L. Haig, Business and Commercial Litigation in Federal Courts* s. 63.3 at 918 n. 12 (1998) (citing *Markman*, 52 F.3d at 983).

Claims are construed from the vantage point of a person of ordinary skill in the art at the time of the invention. *Markman*, 52 F.3d at 986.

There is a "heavy presumption in favor of the ordinary meaning of claim language ..." *Johnson Worldwide Assoc., Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed.Cir.1999) ("In short, a court must presume that the terms in the claim mean what they say, and, unless otherwise compelled, give full effect to the ordinary and accustomed meaning of claim terms.")

Claim 15 of the '373 patent states:

15. A deflator for tires, the deflator comprising:

a frame for supporting a plurality of spikes, the frame having an aperture extending a first depth and a first diameter;

a spike of the plurality of spikes positionable in the aperture the spike having a second diameter less than the first diameter;

a sleeve positionable around the spike to fit inside the aperture to resist distortion of the frame upon deflection of the spike.

PMG's Compl. for Declaratory Judgment Ex. B; Federal's Answer and Countercl. Ex. B; Reissued Patent, Column 8, line 61 through Column 9, line 3.

This Court will address and interpret each element, frame, spike, and sleeve in turn.

## **A. *Frame***

PMG's proposed interpretation of the term "frame" is that a frame is "generally a multi-element structure and ... that the frame actually claimed in Claim 15 is a frame with rocker arms and base supports." Mem. in Supp. of PMG's Renewed Mot. for Summ. J. at 15.

Federal's proposed interpretation of the term "frame" is that a frame is a "structure (which may consist of one or more elements) that supports two or more spikes and that includes holes into which the spikes are inserted." Defs.' Opp'n to Pl.'s Renewed Mot. for Summ. J. at 3.

PMG asserts that the plain meaning of the word "frame" excludes Federal's proposed interpretation and that an examination of the patent specification shows that the term "frame" refers to a rocker arm and base support arrangement as disclosed in the patent specification. PMG further asserts that the prosecution history precludes the interpretation advanced by Federal because the patent applicants expressly limited themselves to the frame as set forth in the patent specification.

This Court disagrees with plaintiff PMG and finds that, following a review of the patent's claim, specification, and prosecution history, the ordinary meaning of the word "frame" does not require the frame to have base supports and rocker arms. Further, this Court believes that the patent specification does not require this Court to adopt the narrow or limiting interpretation of the term "frame," as being only a type of frame with rocker arms and base supports. Finally, this Court agrees with Federal that the prosecution history broadens rather than narrows the scope of Claim 15.

Consequently, this Court, following a review of the claim, specification, and prosecution history, interprets the '373 frame element as being a structure, which may consist of one or more elements, that supports two or more spikes and that includes holes into which the spikes are inserted.

## **B. *Spike***

Federal's proposed interpretation of the term "spike" is that a spike is "an elongated, pointed object, one end of which is sharp and strong enough to pierce a tire to allow air to escape and an opposite end of which is small enough to be inserted into the hole of the frame." In its briefs dealing with the renewed summary judgment motion, PMG does not appear to offer any contrary interpretation of that term. Nevertheless, this Court has reviewed that term under the *Markman* standards set forth above and finds that Federal's interpretation is supported by the evidence presented. Therefore, this Court interprets the term "spike" as being an elongated, pointed object, one end of which is sharp and strong enough to pierce a tire to allow air to escape and an opposite end of which is small enough to be inserted into the hole of the frame.

## **C. *Sleeve***

Federal's proposed interpretation of the term "sleeve" is that a sleeve is:

"A part, such as a grommet or rubber collar, that fits over the non-pointed end of the spike such that (a) both the spike and the sleeve fit into the hole so that (b) the sleeve is capable of reducing the forces between the spike and the frame. This design reduces potential damage to, or distortion of, the frame as the spike pierces a tire and is removed from the frame during deployment ."

Mem. in Supp. of Defs.' Renewed Mot. for Summ. J. as to Countercl. for Infringement of U.S. Patent No. 35,373 at 22.

Plaintiff PMG does not appear to contest this construction but, rather, argues that Federal has failed to develop evidence that "the sleeve in the Roadspike<sup>TM</sup> device is used to resist distortion to the shaft, or of any other part of the device (whether a 'frame' or not)." Mem. of Law in Supp. of PMG's Renewed Mot. for Summ. J. at 37. Federal points out that this is an issue pertaining to infringement, the application of the claim language to the Roadspike<sup>TM</sup>, which is a question of fact. This Court agrees. Therefore, this Court has reviewed the term "sleeve" under the *Markman* standards and finds that Federal's interpretation is supported by the evidence presented. Therefore, this Court interprets the term "sleeve" as being a

part, such as a grommet or rubber collar, that fits over the non-pointed end of the spike such that (a) both the spike and the sleeve fit into the hole so that (b) the sleeve is capable of reducing the forces between the spike and the frame. This design reduces potential damage to, or distortion of, the frame as the spike pierces a tire and is removed from the frame during deployment.

This Court is also requested and required to construe and interpret dependent Claims 17, 21 and 23.

Federal contends that the proper interpretation of dependent Claim 17 is:

Claim 17 depends upon Claim 15 and includes all the elements properly construed Claim 15 in addition to the subject matter of Claim 17.

The hole ( *i.e.* "aperture") and the spike extend in the same general direction, and the sleeve is made of a flexible ( *i.e.* "resilient") material that compresses as the spike pierces the tire and returns to its original shape after the spike has pierced the tire and been removed from the hole.

Mem. in Supp. of Defs.' Renewed Mot. for Summ. J. as to Countercl. for Infringement of U.S. Patent No. Re 35,373 at 24.

Federal contends that the proper interpretation of dependent Claim 21 is:

Claim 21 depends from Claim 15 and includes all the elements of properly-construed Claim 15 in addition to the subject matter of Claim 21.

The spike defines a path capable of allowing air to pass from inside the tire to the outside of the tire.

Id. at 25.

Finally, Federal contends that the proper interpretation of dependent Claim 23 is:

Claim 23 depends from Claim 15 and includes all of the elements properly-construed Claim 15 in addition to the subject matter of Claim 23.

The spike permits an insert to extend into the spike along an internal wall.

Id. at 27.

PMG appears to offer no contrary interpretation of the above dependent claims but, rather, argues solely that those dependent Claims 17, 21 and 23, as well as dependent Claims 16, 22, 27 and 28, fail, as does Claim 15.

The Court therefore adopts the interpretations proffered by Federal as to Claims 17, 21 and 23.

#### ***IV. Summary Judgment Motions***

Having interpreted and construed Claim 15 and dependent Claims 17, 21 and 23 of the '373 patent, this Court now proceeds to determine whether summary judgment should be granted or denied on the renewed motions of plaintiff PMG and defendants Federal.

##### ***A. Summary Judgment Standards***

Under Federal Rule of Civil Procedure 56(c), summary judgment is appropriate if "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." The party seeking summary judgment bears the initial burden of showing the absence of any genuine issues of material fact. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23 (1986). "The burden then shifts to the nonmoving party to come forward with facts sufficient to create a triable issue of fact ." *Temkin v. Frederick County Comm'rs*, 945 F.2d 716, 718 (4th Cir.1991) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986)). However, as the United States Supreme Court noted in *Anderson*, "Rule 56(e) itself provides that a party opposing a properly supported motion for summary judgment may not rest upon the mere allegations or denials of his pleading, but ... must set forth specific facts showing that there is a genuine issue for trial." *Id.* at 256. "The inquiry performed is the threshold inquiry of determining whether there is the need for a trial-whether, in other words, there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." *Id.* at 250; *see also Charbonnages de France v. Smith*, 597 F.2d 406, 414 (4th Cir.1979) (Summary judgment "should be granted only in those cases where it is perfectly clear that no issue of fact is involved and inquiry into the facts is not desirable to clarify the application of the law." (citing *Stevens v. Howard D. Johnson Co.*, 181 F.2d 390, 394 (4th Cir.1950))).

In *Celotex*, the Court stated that "the plain language of Rule 56(c) mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." *Celotex*, 477 U.S. at 322. In reviewing the supported underlying facts, all inferences must be viewed in the light most favorable to the party opposing the motion. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

##### ***B. Discussion***

This Court has reviewed the memoranda of law, exhibits, affidavits, declarations, deposition transcripts, and other papers filed with and made a part of the renewed motions for summary judgment by plaintiff PMG and defendants Federal, respectively. This Court concludes, based upon that review, that there are genuine issues of material fact that exist with respect to all of the issues asserted in the complaint of PMG for declaratory judgment and the counterclaim of defendants Federal. These issues include, but are not limited to, infringement, including the applicability of the doctrine of equivalents with respect to infringement,

obviousness, a question of law that is based upon underlying questions of fact, and damages.

In its Memorandum in Opposition to Federal's Renewed Motion for Summary Judgment, PMG asserts that defendants Federal have failed to show that they are entitled to summary judgment as to PMG's affirmative defenses, specifically inequitable conduct, intervening rights, and obviousness. The Court has addressed the issue of obviousness because it is part of the patent validity claims. PMG is correct as to the other defenses but neither PMG nor Federal have sought summary judgment on those matters.

Accordingly, the renewed motion for summary judgment of plaintiff PMG, Inc. is DENIED and the renewed motion for summary judgment of defendants Stinger Spike Systems, Inc. and Federal Signal is DENIED.

This Court will conduct a status and scheduling conference on *April 22, 2002 at 11:00 a.m.* at the Wheeling point of holding court. The Court will permit those out-of-town attorneys having their offices further than forty miles from the point of holding court to participate in the conference by telephone. However, any such attorney shall advise the Court at least three working days prior to the conference of his or her intention to participate by telephone. In the event that there is more than one such out-of-town attorney, counsel shall decide who will initiate the conference call and so advise the Court. If the attorneys cannot reach agreement as to the initiator of the call, the Court will make that determination.

At the status and conference, this Court will schedule a pre-trial conference date and a trial date. It will also set a schedule for other pre-trial filings, including, but not limited to, motions in limine, proposed voir dire questions, proposed preliminary and final jury instructions, FN6 and verdict forms. Counsel for the parties are DIRECTED to meet prior to the conference and to discuss the above matters and also any methods that may be utilized for "streamlining" the trial proceedings, including stipulation of fact. The parties and their counsel shall also meet and confer prior to the status and scheduling conference to attempt to resolve this civil action by settlement. Counsel for the parties shall be prepared to report at the status and scheduling conference as to the results of any such meeting.

FN6. In the Defendants' Answer and Counterclaim, Federal demands "a trial by jury on all issues triable to a jury in this matter."

IT IS SO ORDERED.

The Clerk is directed to transmit copies of this order to counsel of record herein.

N.D.W.Va.,2002.

PMG, Inc. v. Stinger Spike Systems, Inc.

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