United States District Court,
N.D. Iowa, Central Division.

Donald S. KUDLACEK,
Plaintiff.
v.
DBC, INC., d/b/a Specialty Archery Products, and Donald I. Chipman,
Defendants.

and

Robert E. Shoemake and Jessie Morehead,
Third-Party Plaintiffs.
DBC, Inc., d/b/a Specialty Archery Products, and Donald I. Chipman,
Counterclaim Plaintiffs.
v.
Donald S. Kudlacek,
Counterclaim and Third-Party Defendant.

No. C 99-3041-MWB

Sept. 22, 2000.

Owner of patent for archery bow stabilizer sued competitor for infringement. Competitor counterclaimed that patent was invalid and that its own patent for peep sight targeting system was being infringed. On cross-motions for summary judgment, the District Court, Bennett, Chief Judge, held that: (1) fact issue existed as to whether stabilizer patent was invalid under on-sale bar; (2) stabilizer patent was not infringed; (3) peep sight patent was not infringed; and (4) issue of invalidity was not rendered moot by finding of non-infringement.

Motions granted in part and denied in part.

5,137,007, 5,611,325. Construed, Not Infringed.

MEMORANDUM OPINION AND ORDER REGARDING DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT REGARDING NON-INFRINGEMENT AND INVALIDITY OF THE '325 PATENT **AND PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT REGARDING NON-INFRINGEMENT OF** THE '007 PATENT

BENNETT**, Chief Judge.**

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Upon his return from years of wandering after the Trojan War, just before killing all the suitors his wife had unwillingly collected during his absence, Odysseus won an archery contest by shooting an arrow through twelve rings arranged in a line. FN1 What is most amazing about this story, at least to one acquainted with the present litigation, is that Odysseus apparently managed this feat of marksmanship without the aid of the archery bow stabilizers or peep sight targeting systems made by the parties to this patent infringement lawsuit.

FN1. *See, e.g.,* BULFINCH'S MYTHOLOGY (Richard P. Martin ed., HarperCollins Publishers 1991) 226-27.

I. INTRODUCTION

A. Procedural Background

Plaintiff Donald S. Kudlacek filed this action alleging patent infringement on May 20, 1999, against defendants DBC, Inc., an Iowa corporation, doing business as Specialty Archery Products, and Donald I. Chipman. Unless otherwise dictated by the circumstances, the defendants will be referred to collectively as "Specialty." In the single count of his Complaint, Kudlacek alleges that Specialty has been infringing and is continuing to infringe Kudlacek's United States Patent No. 5,611,325 (the '325 patent) for an archery bow stabilizer by making, using, selling, and offering for sale bow stabilizers embodying the patented invention.

Kudlacek seeks injunctive relief and damages, including treble damages for willful and wanton infringement, prejudgment interest and costs, attorney's fees, and such other legal and equitable relief as the court deems just. Kudlacek demanded a jury trial of his infringement claim.

On June 14, 1999, Specialty filed an Answer and Counterclaims, and on July 26, 1999, Specialty and third-party plaintiffs Robert E. Shoemake and Jessie Morehead filed an Amended Answer and Counterclaims and Third-Party Complaint. FN2 In the Amended Answer, Specialty denied Kudlacek's claim of infringement of the '325 patent and asserted various affirmative defenses to that claim. Specialty also asserted one Counterclaim addressed to the '325 patent, Counterclaim 1, which seeks declaratory judgment that Specialty is not now and never has infringed, induced infringement, or contributorily infringed the '325 patent, and that the '325 patent is invalid and/or unenforceable. In a second Counterclaim and Third-Party Claim, Specialty, Shoemake, and Morehead assert their own claim for patent infringement. This claim alleges that Kudlacek sells an "Adjustable Control Peep" for an archery bow that infringes at least claim 1 of United States Patent No. 5,137,007 (the '007 patent), a patent for an "Archery Shooting Control System," which is owned by third-party plaintiffs Shoemake and Morehead, but exclusively licensed to Specialty and for which Specialty holds the first right to sue infringers. Because of this licensing arrangement, the defendants and third-party plaintiffs will also be referred to collectively as "Specialty," unless the circumstances dictate otherwise. On this claim for infringement of the '007 patent by Kudlacek, Specialty seeks injunctive relief, damages, treble damages for willful infringement, an accounting of profits, attorney's fees and costs, and such other relief as the court deems just and equitable.

FN2. Kudlacek moved to dismiss the original Counterclaims on July 19, 1999, but withdrew that motion to dismiss on August 2, 1999, in response to the filing of the Amended Answer and Counterclaims and Third-Party Complaint.

On March 6, 2000, Specialty filed separate motions for summary judgment determinations of invalidity and non-infringement of the '325 patent. Specialty filed a supplemental memorandum in support of its "invalidity" motion on May 25, 2000, asserting additional grounds for invalidity of the '325 patent, and yet another supplemental memorandum in support of its "invalidity" motion on September 8, 2000, a facsimile copy of which was received by the court on September 7, 2000, the day before the court heard oral arguments on the various summary judgment motions at issue here. Pursuant to a court-ordered briefing schedule, Kudlacek resisted Specialty's "invalidity" motion on June 1, 2000, and Specialty filed a reply brief on June 14, 2000. Also pursuant to the briefing schedule, Specialty filed its brief in support of its "non-infringement" motion on June 14, 2000, Kudlacek filed his resistance to that motion on August 1, 2000, and Specialty filed a reply brief on August 14, 2000. On August 11, 2000, Kudlacek filed his own motion for summary judgment of non-infringement of the '007 patent, which Specialty resisted on August 31, 2000. Kudlacek filed a reply brief in support of his motion for non-infringement of the '007 patent on September 8, 2000.

By order dated August 21, 2000, the court set the various summary judgment motions for oral arguments on September 7, 2000. Those oral arguments were subsequently rescheduled to September 8, 2000. At the oral arguments, plaintiff Donald S. Kudlacek was represented by Daniel J. Cosgrove of Zarley, McKee, Thomte, Voorhees & Seese, P.L.C., in Des Moines, Iowa. Defendants DBC, Inc., d/b/a Specialty Archery Products, and Donald I. Chipman were represented by John B. Lunseth II of Rider, Bennett, Egan & Arundel, L.L.P., in Minneapolis, Minnesota.FN3 Defendant Donald Chipman was also personally present for the oral arguments. This matter is now fully submitted.

FN3. Because Specialty holds the first right to sue infringers of the '007 patent on behalf the owners of that patent, third-party plaintiffs Shoemake and Morehead, the third-party plaintiffs were not separately represented at the oral arguments.

B. Factual Background

The Kudlacek '325 patent and the Shoemake/Morehead '007 patent are the centers of attention in this litigation, and indeed, the centers of attention in the summary judgment motions presently before the court. Therefore, to provide the necessary background for the legal analysis to follow, for each patent, the court will first consider the invention as defined in the patent itself, pertinent portions of the prosecution history for that patent, and then the undisputed and disputed facts asserted by the parties regarding that patent. In its legal analysis, the court will construe the patents, as necessary, and address in greater detail, where necessary, the parties' assertions of genuine issues of material fact to determine whether those factual disputes preclude summary judgment on the claim, counterclaims, and third-party claim in this litigation.

1. The '325 patent

a. The background and claims of the patent

According to the '325 patent itself, Kudlacek filed Application No. 622,966 for a patent for an "Archery Bow Stabilizer" on March 27, 1996, identifying himself as the inventor. The application was eventually granted and United States Patent No. 5,611,325 (the '325 patent) was issued on March 18, 1997. The abstract of the '325 patent describes the invention as follows:

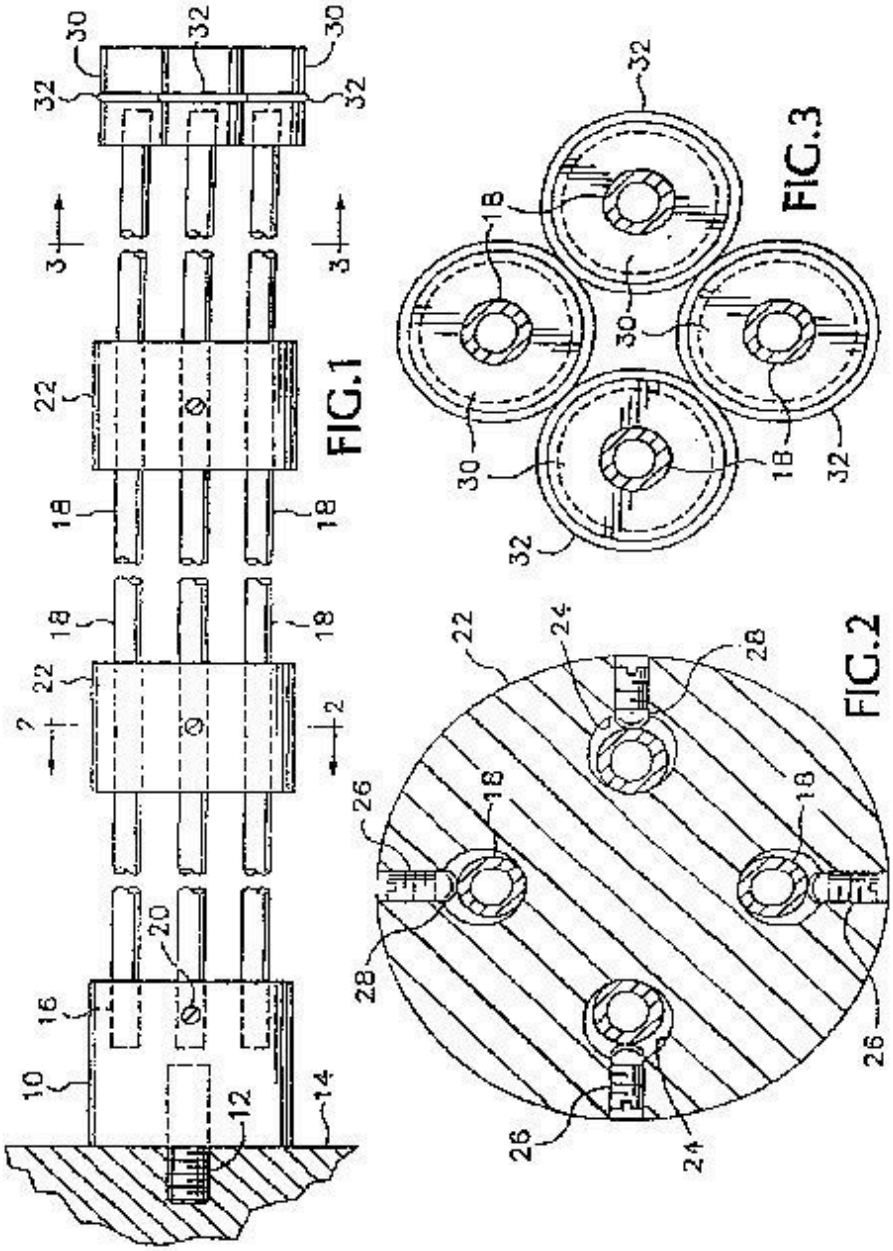
An archery bow stabilizer is formed of at least three elongated stabilizer rods secured at their inner ends to a base member mounted detachably on the handle of an archery bow and extending forwardly of the bow handle in parallel, circumferentially spaced-apart arrangement. At least one tuning slide member has elongated openings therethrough, spaced apart to match the spacing of the stabilizer rods and having a larger diameter than the rods for freely receiving the rods therethrough. A set screw is threaded into a threaded bore in the tuning slide member, the bore communicating with each opening, and a resilient pad on the inner end of the set screw is arranged to engage the associated stabilizer rod to secure the turning [sic] slide member to the stabilizer rods intermediate the ends of the rods, the pads allowing the rods to vibrate in the enlarged openings. The outer ends of the stabilizer rods are spaced apart freely from each other for individual vibration, and preferably are fitted with enlarged diameter weights to retard vibration. An O-ring cushion on each weight provides a resilient bumper for cushioning the stabilizer rods from each other during vibration.

Plaintiff's Complaint, Exhibit 1, United States Patent No. 5,611,325 (The '325 Patent), Abstract.

The "Background of the Invention" acknowledges that "[m]any forms of stabilizers presently are in use or proposed for use on archery bows [but][a]ll of these types of stabilizers have limited stabilizing effectiveness." Id. at "Background of the Invention." Specifically, "the adjustable archery stabilizer disclosed in U.S. Pat. No. 5,090,396" (the Bickel '396 patent) has a "fixed end cap at the outer end of the rod assembly [that] limits the range of vibration dampening." Id. Thus, "the principal objective of this invention [is] to provide an archery bow stabilizer that overcomes the aforementioned limitations and disadvantages of prior stabilizers." Id. at "Summary of the Invention." Subsidiary objectives of the patent include "provid[ing] a degree of vibration stabilization not attainable herretofore"; "provid[ing] an archery bow stabilizer ... in which the free ends of the rods are spaced resiliently from each other to allow each rod to vibrate independently of the others"; and "provision of an archery bow stabilizer ... that is of simplified construction for economical manufacture." Id.

Figures 1 through 3 of the '325 patent show the invention:

***1005**



The invention claimed in the '325 patent consists of two independent claims (claims **1** and **6**) and four dependent claims (claims **2** through **5**). Kudlacek has clarified in response to Specialty's summary judgment motions that he is alleging only that Specialty's "Super Stix" bow stabilizer infringes-either literally or under the "doctrine of equivalents"-claim **1** of the '325 patent.FN4 The pertinent claim is quoted below, with the court's insertion of numbers from Figures 1 through 3 above to assist the reader: FN5

FN4. In its motion for summary judgment of non-infringement, Specialty asserted that its "Super Stix" does not infringe either claim **1** or claim **6** of the '325 patent. However, Kudlacek responded that he is alleging infringement only of claim **1** of the patent and that Specialty's contentions concerning non-infringement of claim **6** are consequently "moot." *See* Plaintiff's Opposition to Defendants' Motion For Summary Judgment

Of Non-Infringement at 1.

FN5. The numbers shown in Figures 1 through 3 are matched to descriptions of parts of the invention in the "Description of the Preferred Embodiment." However, the court does not believe it is necessary to quote here both the "Description of the Preferred Embodiment" and the actual claims of the patent. Instead, the court has been guided by the "Description" in matching the numbers in the Figures to parts of the invention as defined in the claims.

I claim:
1. An archery bow stabilizer, comprising:

a) a base member [10] configured for attachment to an archery bow handle [14],

b) at least three elongated stabilizer rods [18] each having an inner end and an outer end,

c) anchor means [16 & 20] on the base member [10] securing the inner ends of the stabilizer rods thereto with the rods extending forwardly therefrom substantially parallel to and spaced apart circumferentially from each other,

d) at least one vibration dampener adjustment member [22] having openings therethrough [24] matching the number and circumferential spacing of said stabilizer rods [18] and a diameter larger than the diameter of said stabilizer rods freely receiving said rods therethrough, and

e) resilient securing means [26 & 28] on the vibration dampener adjustment member [22] extending into each of said openings and resiliently engaging and securing said adjustment member [22] to said stabilizer rods [18] intermediate the inner and outer ends of said rods.

Plaintiff's Complaint, Exhibit 1, '325 patent.
Turning briefly to the prosecution history of the '325 patent, in an "Examiner's Statement of Reasons for Allowance," attached to a "Notice of Allowability," dated July 28, 1996, the patent examiner stated the following:

The prior art does not show a bow stabilizer with three spaced parallel rods extending from a base member attached to the bow, with a vibration damper member with openings corresponding to each rod, slidably receiving the rods, and a resilient means extending into each opening to secure the rods to the damper.

* * * * * *

Bickel shows a stabilizer similar to applicant's, but the rods 20 are secured to the damper 50 with rigid set screws 44, without a resilient connection.

Helget Declaration, Exhibit D (July 28, 1996, "Notice of Allowability" of the '325 patent).

In a "Supplemental Notice of Allowability," dated October 28, 1996, the examiner added the following pertinent comments to the prosecution history:

The references show set screws with a resilient tip. These would not be combinable with Bickel to arrive at the claimed invention, because Applicant requires the set screws to extend through openings in the adjustment member and contact *each* stabilizer rod. Bickel only uses one set screw to contact only one rod,

so the others are not anchored to the adjustment member.

Plaintiff's Statement of Controverted Facts of June 1, 2000 (Invalidity), Exhibit 5 (October 28, 1996, "Supplemental Notice of Allowability" of the '325 patent).

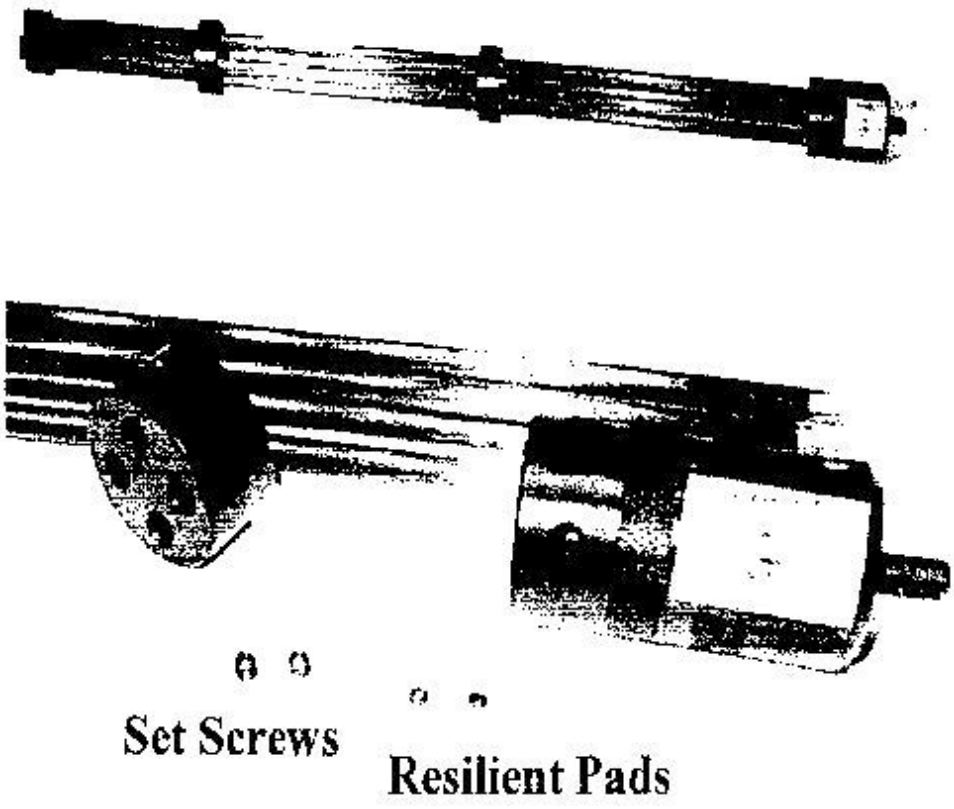
b. Undisputed and disputed facts relating to the invalidity of the '325 patent

The essence of Specialty's claim that the '325 patent is invalid is that the invention embodied in the patent was sold or offered for sale more than one year prior to the filing of the patent application, that is, more than one year before March 27, 1996, and therefore is invalid under the "on-sale bar" stated in 35 U.S.C. s. 102(b). Specialty contends that there is undisputed evidence of four sales or offers to sell the patented invention itself or a device anticipating the patented invention more than one year prior to Kudlacek's application for the '325 patent.

Specifically, Specialty contends that Sam Mannos, a former sales representative for Kudlacek, made the first invalidating sale, because he avers that he personally sold Kudlacek's "4x4 carbon stabilizers" containing resilient pads as early as 1993. Specialty next contends that Dianne Bottjer, another former sales representative for Kudlacek, personally sold two of Kudlacek's "4x4 carbon stabilizers" containing resilient pads to Bob's Bowhunting in Horseheads, New York, on May 20, 1994. Bottjer's sales invoice for the sale to Bob's Bowhunting is included in the record and memorializes the sale of two 30" Pro lite 2 slides. Specialty contends that these bow stabilizers were subsequently purchased from Bob's Bowhunting by Mr. and Mrs. Lee W. Moore in 1994. The Moores purportedly made no alterations or changes to the stabilizers during the time they owned them, and have since provided them to Dianne Bottjer, who also purportedly made no modifications or alterations to them before forwarding them to Specialty's counsel. Specialty's counsel also avers that he did not alter or modify the "4x4 carbon stabilizers" provided by Dianne Bottjer, but instead photographed them and "confirmed" that they contain a "resilient securing means" for securing the "vibration adjuster" to the stabilizer rods, and that this "resilient securing means" consists of "resilient pads" that are pressed against the stabilizer rods by set screws.

Two photographs of one of the stabilizers purportedly sold by Bottjer to Bob's Bowhunting and then to the Moores more than a year before Kudlacek filed the application for the '325 patent are shown below:

***1008**



Helget Declaration, Exhibit B (labels in photographs by Specialty's counsel).

Specialty contends further that Lawrence Kivett attended Kudlacek's booth at the February 1995 Las Vegas Archery Tournament and observed a display of "4x4 carbon stabilizers" containing resilient pads, one of which was purchased by his nephew. Finally, Specialty contends that Bickel's "Flitemate" archery bow stabilizers also contain a "resilient securing means," consisting of a nylon tip attached to a set screw, to hold the vibration adjuster in place, and "Flitemate" stabilizers were sold in the United States as early as October 1994.

Specialty contends that these four sales of stabilizers or offers to sell stabilizers establish beyond dispute that each and every element of the '325 patent was present in archery bow stabilizers sold or in public use more than one year prior to March 27, 1996, the date on which Kudlacek filed his application for what became the '325 patent. Consequently, Specialty contends that it cannot be disputed that the '325 patent is invalid.

However, Kudlacek disputes each of these factual contentions. He contends that he first invented archery bow stabilizers incorporating "resilient securing means" in June of 1995, and following his "discovery" of such "resilient securing means," he and his business associate, Roland Haggard, began assembling resilient pads into the archery stabilizers they were going to display at the NFAA archery tournament in Wassau, Wisconsin, in July of 1995. Consequently, Kudlacek contends that the first public disclosure and/or sale of archery stabilizers that included rubber, soft, or resilient pads was at the NFAA archery tournament in Wassau in July of 1995, less than one year before he filed the application for the '325 patent.

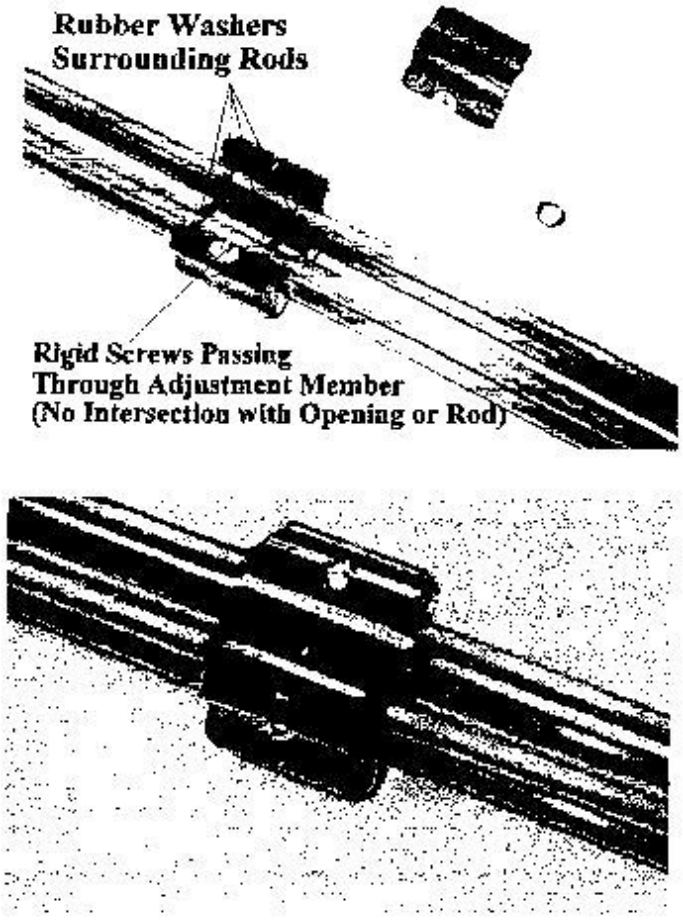
Turning to Kudlacek's specific challenges to Specialty's "undisputed" invalidating sales, Kudlacek contends that a second Declaration by Sam Mannos, which Kudlacek has submitted in support of his resistance to Specialty's "invalidity" motion, demonstrates that Mannos is not sure whether Kudlacek's 4x4 carbon

stabilizers with resilient or soft pads were ever for sale prior to March 27, 1995. Moreover, Kudlacek contends that the 4x4 carbon stabilizers shown in photographs attached to Dianne Bottjer's Declaration, one of which is shown again in the photographs by Specialty's counsel included above, are *not* the 30" Pro lite 2 slides listed in Dianne Bottjer's May 20, 1994, sales invoice, and hence are not the stabilizers involved in Bottjer's transaction with Bob's Bowhunting or the subsequent sale to the Moores. Instead, Kudlacek contends that the stabilizers shown in the photographs above and those attached to Bottjer's Declaration were not made before June of 1995 and were not publicly displayed, offered for sale, or sold until July 1995, or later. Similarly, Kudlacek contends that the "4x4 carbon stabilizers" displayed in photographs attached to Lawrence Kivett's Declaration were not made before June of 1995, and were not publicly displayed, offered for sale, or sold prior to July of 1995, and thus could not have been purchased by Kivett's nephew in February of 1995, as Kivett avers. Finally, Kudlacek contends that, although the Bickel "Flitemate TRI-TRACK" bow stabilizer uses nylon-tipped screws, those screws do not constitute "resilient securing means" within the meaning of the '325 patent, and even if the tips of those screws are "resilient," they do not anticipate any of the claims of the '325 patent, as indicated by the examiner's "Supplemental Notice of Allowability," dated October 28, 1996, the pertinent part of which is quoted above in Section I.B.1.a., at page 1003.

c. Undisputed and disputed facts relating to non-infringement of the '325 patent

The parties agree that the device Kudlacek contends infringes the '325 patent is Specialty's "Super Stix" archery bow stabilizer. However, Specialty contends that the undisputed facts demonstrate that there is no infringement. The "Super Stix" stabilizer is shown in the following photographs:

***1010**



PHOTOGRAPHS OF "SUPER STIX" PRODUCT (ASSEMBLED AND DISASSEMBLED)

Helget Declaration, Exhibit C (labels in photographs by Specialty's counsel).

Specialty contends that, as these photographs show, the adjustment mechanism of the "Super Stix" is comprised of four separate pieces that come together to form channels through which the stabilizer rods pass. The separate pieces of the adjustment member are held together by rigid screws that pass through the outer edges of the adjustment member, but do not extend into the channels through which the stabilizer rods pass. Thus, Specialty contends, the screws do not engage, intersect with, or make any contact with the stabilizer rods; rather, they pull the four pieces of the adjustment member together in a "clamping" action around the rods. Moreover, Specialty contends, the "Super Stix" adjustment mechanism is not held in place by set screws applying uneven pressure against the stabilizer rods, but is instead held in place by eight separate rubber washers surrounding the stabilizer rods (two per rod). Thus, when the adjustment mechanism on the "Super Stix" is tightened around the washers, Specialty contends that the adjustment mechanism distributes pressure evenly across the stabilizer rods.

Kudlacek, however, disputes these factual contentions. Although he admits that the "Super Stix" stabilizer adjustment member consists of four parts held together with screws, Kudlacek contends that all elements and limitations of claim **1** of the '325 patent are present in the "Super Stix" stabilizer, both literally and under the doctrine of equivalents. Specifically, Kudlacek contends that, when the separate pieces of the adjustment member are assembled, the adjustment member has four openings that are capable of freely

receiving the stabilizer rods, and indeed, the openings are slightly larger than the stabilizer rods, so that they allow the stabilizer rods to pass through the adjustment member, as defined in the '325 patent. Kudlacek contends that the rubber O-rings in the "Super Stix" stabilizer perform the same function of "engaging" and "securing" as the "resilient pads" in the '325 patent, that is, these O-rings extend into the openings in the stabilizer and thereby engage the stabilizer rods. Moreover, Kudlacek contends that the accused "Super Stix" stabilizer works in substantially the same way as the stabilizer claimed in claim **1** of the '325 patent, because both apply pressure to the resilient pads or O-rings by tightening screws, while the result of the resilient securing means of both the "Super Stix" and claim **1** of the '325 patent is that these means hold the adjustment member to the stabilizer rods. Thus, Kudlacek contends that claim **1** of the '325 patent and the "Super Stix" stabilizer perform substantially the same function in substantially the same way to achieve substantially the same result.

2. The '007 patent

a. The background and claims of the patent

Specialty's counterclaim and third-party claim of patent infringement relates not to bow stabilizers, but to archery targeting systems. Specifically, Specialty alleges that Kudlacek's "Adjustable Control Peep" infringes the Shoemake/Morehead '007 patent for "An Archery Shooting Control System" for which Specialty holds the exclusive license and first right to sue infringers.

Inventors Robert C. Shoemake and Jesse Morehead FN6 filed Application No. 622,739 on December 5, 1990, for the patent that was subsequently granted as United States Patent No. 5,137,007 on August 11, 1992 (the '007 patent). The abstract of the '007 patent describes the invention as follows:

FN6. Although third-party plaintiff Morehead is identified by the parties here as "Jessie," the '007 patent itself identifies Morehead as "Jesse." *See* The '007 Patent.

A shooting control system for bows and arrows that cooperates with front sight pins including a bowstring sight having a base mounted in the strands of the bowstring and sight inserts selectively mounted on the base for the user to sight through using the front sight pins to aim an arrow being shot in the bow. The system also includes an arrow nok on the bowstring at the arrow noking point.
Plaintiff's Statement of Undisputed Facts, Exhibit B (the '007 patent, "Abstract").
The "Background of the Invention" explains, in pertinent part, as follows:

Current archery equipment typically uses some type of sighting equipment and some type [of] arrow noking on the bowstring to increase accuracy. The sighting equipment typically includes a front sight and a rear sight.

A commonly used rear sight is called a peep sight and is installed in the bowstring itself. The peep sight has a fixed size sighting hole through it. Different field conditions, however, require different size holes. Thus, it is necessary to install different peep sights for these different field conditions. Because the bow has to be recalibrated each time the sight is changed, accommodating different field conditions is tedious and time consuming.

The axis of the sighting hole through the peep sight must also be correctly aligned with the front sight of [sic] accurate aiming. To control the rotational position of the peep sight, resilient members have been used to connect the bowstring in the vicinity of the peep sight to the bow. This device is clumsy and tends to interfere with the movement of the bowstring.

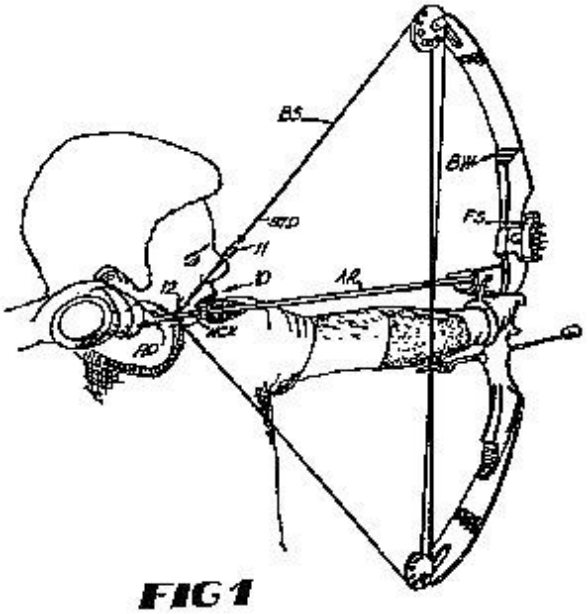
Plaintiff's Statement of Undisputed Facts in Support of Plaintiff's Motion for Summary Judgment of Non-Infringement, Exhibit B (the '007 patent). The "Summary of the Invention" explains further:

These and other problems and disadvantages associated with the prior art are overcome by the invention disclosed herein by providing the peep sight with interchangeable inserts, each with a different size sight hole through it so that different field conditions can be covered without having to change the entire sight. This eliminates having to recalibrate the sight each time the sight hole diameter is changed....

The peep sight of the invention includes a base adapated [sic] to be mounted in the strands of the bowstring similarly to the mounting for prior art peep sights where the base defines a hole through it. At least one sight insert is adapted to be selectively mounted in the hole through the base. The insert has a different size sight hole through it than the diameter of the hole through the base. The hold [sic] through the base may be used as one diameter sight hole with the insert providing a smaller diameter sight hole. The hole through the base may be threaded and the sight insert complementarily threaded to screw into the hole in the base to install the insert. Means may be provided for selectively locking the insert into position in the base.

Id.

Figures 1, 3, 4, 5, 5A, and 6 show the pertinent parts of the patent for purposes of this litigation.



***1013**

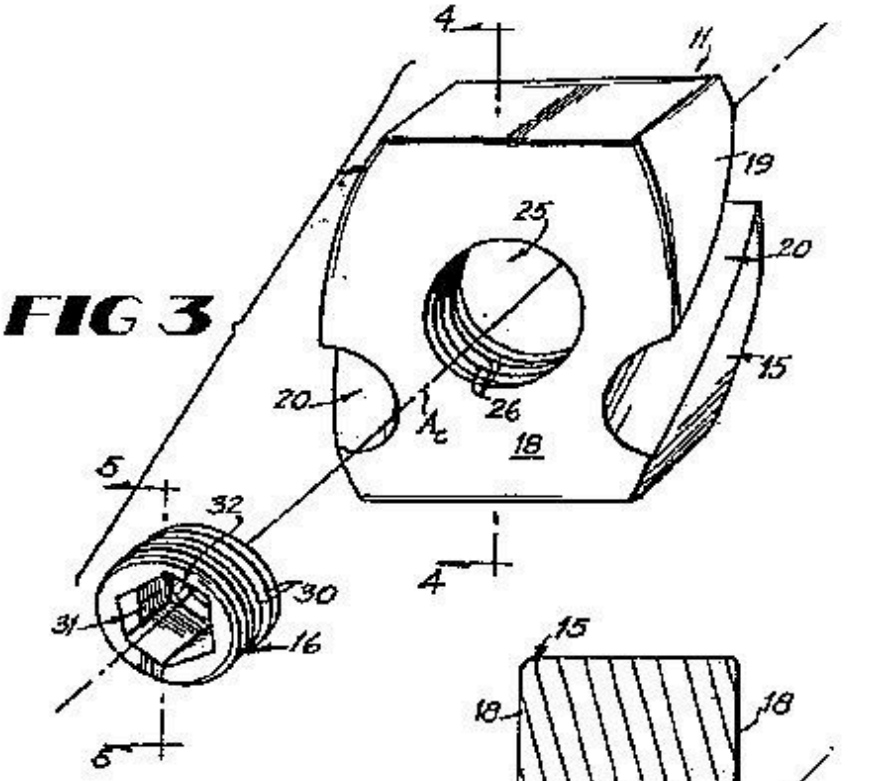


FIG 3

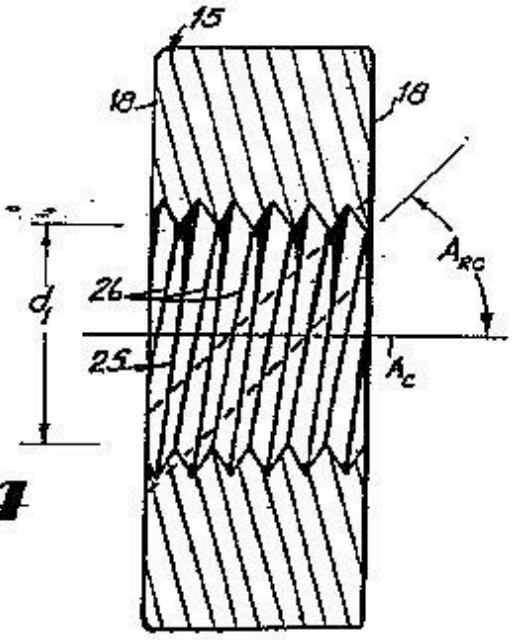


FIG 4

*1014

FIG 5

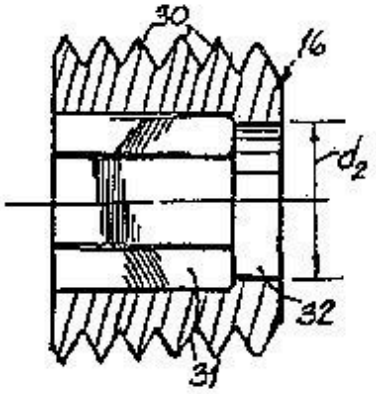
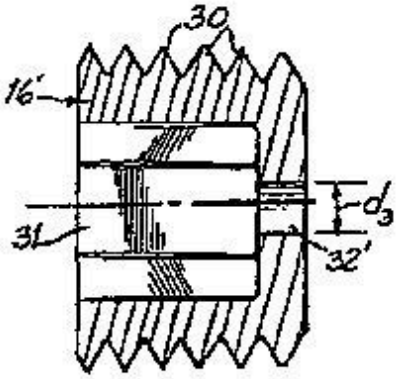


FIG 5A



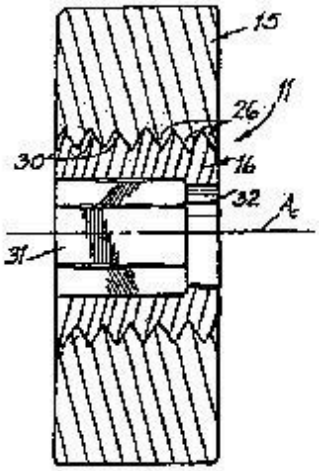


FIG 6

The '007 patent consists of two independent claims, claims **1** and **9**, and seven dependent claims, claims **2** through **8**. However, in response to discovery requests, Specialty has clarified that it is alleging that Kudlacek's "Adjustable Control Peep" infringes claims 1, 2, and 5 of the '007 patent. Therefore, the court will quote here only those claims of the patent. These claims are quoted below with the court's insertion of numbers from Figures 1, 3, 4, 5, 5A, and 6 above to assist the reader: FN7

FN7. As with the court's statement of the pertinent claim of the '325 patent, the numbers shown in 1, 3, 4, 5, 5A, and 6 of the '007 patent are matched to descriptions of parts of the invention in the "Detailed Description of Illustrative Embodiments." However, the court does not believe it is necessary to quote here both the "Detailed Description of Illustrative Embodiments" and the actual claims of the '007 patent. Instead, the court has been guided by the "Description" in matching the numbers in the Figures to parts of the invention as defined in the pertinent claims.

We claim:

1. A shooting control system for permitting sighting of bows and arrows along a sighting path where the bow has a bowstring equipped with a bowstring serving at the arrow noking point on the bowstring, said control system comprising:

a bowstring sight [Fig. 1: 11] adapted to be installed in the strands of a bowstring for use with front sight pins [Fig. 1: FS] on the bow, said bowstring sight including:

a base [Fig. 3: 15] adapted to the [sic] mounted in the strands of a bowstring at a pescribed [sic] sighting location lengthwise of the bowstring, said base defining a pair of mounting recesses [20] therein adapted to receive the strands of the bowstring therein a mount of said body at the prescribed sighting location and an internally threaded opening [25] therethrough aligned with the sighting path when the bowstring is drawn for shooting, said threaded opening having a first prescribed diameter [Fig. 4: d_1] so that the user can sight through said threaded hole in low light conditions; and

a plurality of externally threaded interchangeable sight inserts [Fig. 3-6: 16] interchangeably and selectively mountable to a prescribed sight position in and substantially filling said threaded opening [Fig. 3-4: 25] in said base [15], each of said sight inserts defining a sight opening therethrough [Figs. 3, 5, 5A, 6: 32] arranged for the user to sight through said sight opening using the front sight pins on the bow to aim an arrow being shot in the bow when said insert is in said prescribed sight position, said sight opening in each of said inserts being a different fixed diameter [Figs. 5, 5A: d_2, d_3] from that [Fig. 4: d_1] of the threaded opening [25] through said body [15] and from that of each of te [sic] other of said inserts so that the user can selectively interchange said inserts in said body to incrementally change the diameter of said sight opening being used to sight the bow and can selectively remove said insert from said body and use said threaded opening through said base to sight the bow.

2. The shooting control system of claim 1 wherein said bowstring sight further includes releasable locking means [Fig. 4: tapering hole 25] for selectively locking each of said sight inserts in said prescribed sight position in said base.

* * * * * *

5. The shooting control system of claim 1 for use with an installation wrench wherein each of said sight inserts [16] of said bowstring sight defines a driving recess [Figs. 3, 5, 5A, 6: 31] therein opening onto one end of said insert and having a bottom end, and extending partly therethrough along the length thereof, said driving recess adapted to drivingly receive the installation wrench therein to facilitate rotation of said insert during installation and removal with the installation wrench, said opening extending from the bottom end of said driving recess to the opposite end of said insert.

Id.

Turning briefly to the prosecution history of the '007 patent, in an Examiner's Action dated September 16, 1991, the examiner rejected the application for the '007 patent, in pertinent part, because application claims 1 through 4 were anticipated by the "Shores, Sr.," prior art reference, that is, United States Patent No. 4,833,786 (the Shores '786 patent). FN8 In response to this rejection of application claim 1, the applicants filed an amendment on December 16, 1991, including the language of the present claim **1**, requiring "an internally threaded opening" in the base member and "a plurality of externally threaded interchangeable sight inserts interchangeably and selectively mountable to a prescribed sight position...." Id. at 47. After this amendment, the examiner issued a Notice of Allowability for the '007 patent application on March 6, 1992, allowing application claims 1, 2, 5-8, 12, 13, and 20. Id. at 56. The examiner's grounds for rejection of the '007 patent in light of the Shores '786 patent, the precise amendments then made by the applicants, and the applicants' arguments for the patentability of the amended claim over the Shores '786 patent will be

examined in more detail in the court's "Legal Analysis" of Kudlacek's motion for summary judgment of non-infringement of the '007 patent. For now, the court turns instead to a summary of the undisputed and disputed facts concerning the '007 patent asserted by the parties.

FN8. The Shores '786 patent is attached as Exhibit C to the Declaration of Donald I. Chipman. Pertinent portions of the Shores '786 patent, including figures, are quoted infra in Section II.C.1.b.ii., beginning at page 1056.

b. Undisputed and disputed facts relating to non-infringement of the '007 patent

As noted above, Specialty contends that Kudlacek's "Adjustable Control Peep" infringes claims 1, 2, and 5 of the '007 patent. Kudlacek contends, and Specialty apparently does not dispute, that Kudlacek's accused "Genesis Archery Products' Adjustable Control Peep" sight, as made, used, and sold, is described in the patent application entitled "Adjustable Archery Bowstring Peep Sight," which Kudlacek has never filed. However, as mentioned below, Specialty disputes the worth and utility of the device as described, made, and sold. The "Background of the Invention" in the patent application, in its entirety, is as follows:

This invention relates to archery bowsights, and more particularly to a novel adjustable bowstring peep sight.

Bowstring-mounted peep sights of diverse designs are known in the art. Typical forms are disclosed in U.S. Patent Nos. 3,703,770; 3,859,733; 4,454,857; and 4,656,747. All of these suffer the common disadvantages and limitations of having one or more peep sight openings that are fixed relative to the bowstring angle at full draw, as well as being fixed relative to the rotation of the bowstring. Moreover, none affords adjustment of sighting angle while sighting on a target.

Most bowstring peepsights [sic] of the prior art are fixed at an angle of 45 (deg.) to accommodate the average draw length of 29 inches on a 45 inch bow. As the length is varied between 35 and 41 inches, the fixed angle of the peep admits less light. Also, as the rotation of the bowstring is varied as little as 1-2 (deg.), the light gathering quality decreases by 20-25%.

Plaintiff's Statement Of Undisputed Facts (in support of plaintiff's motion for summary judgment of non-infringement of the '007 patent), Exhibit E (Kudlacek Peep Sight Patent Application), "Background to the Invention" at 1.

The "Summary of the Invention" in the patent application, also in its entirety, states the following:

The bowstring peep sight of this invention includes a hollow body configured for attachment to the bowstring of an archery bow, and a peep component mounted in the hollow body for universal adjustment relative thereto.

It is the principal objective of this invention to provide an archery bowstring peep sight that overcomes the aforementioned disadvantages and limitations of prior bowstring peep sights.

Another objective of this invention is the provision of an archery bowstring peep sight that is provided with a novel configuration for secure attachment to a bowstring.

Still another objective of this invention is to provide an archery bowstring peep sight that includes a novel adjusting tool which affords viewing through the peep sight during its adjustment.

A further objective of this invention is the provision of an archery bowstring peep sight that maintains precise adjustment during continuous use.

Still another objective of this invention is to provide an archery bowstring peep sight of simplified construction for economical manufacture.

The foregoing and other objects and advantages of this invention will appear from the following detailed description, taken in connection with the accompanying drawing of a preferred embodiment.

Kudlacek Peep Sight Patent Application, "Summary of the Invention" at 2-3.

Kudlacek contends that his accused device is shown in Figure 4 of the patent application, below, with the adjustment tool installed therein:

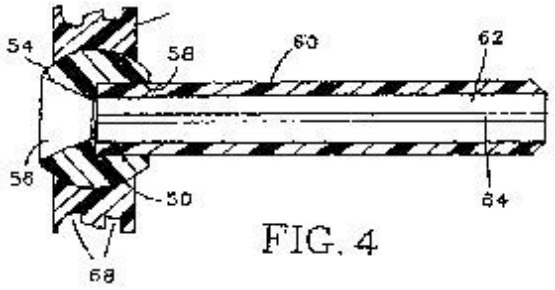


FIG. 4

Kudlacek Peep Sight Patent Application, Fig. 4. For purposes of this unpatented device, the court concludes that the most helpful explanation of the illustration is not the claims in the application, but the "Description of the Preferred Embodiment," pertinent parts of which follow:

In accordance with this invention, a peep sight is provided that is adjustable universally while sighting. It includes a base member 48 [number missing at top left of Fig. 4] provided with a central opening 50 defined by a surface having the shape of a spherical segment. The base member preferably is made of Delrin, polycarbonate, or other synthetic resin that, in cooperation with the longitudinal slot 52 [not shown in Fig. 4] that extends inwardly from the outer surface to the central opening 50, renders the base member sufficiently resilient to receive in its central opening, as a snap fit, a peep ball 54, preferably of similar resilient material. The peep ball is in the shape of a truncated sphere configured to be received in the central opening 50 by deforming either or both base member 48 and ball 54. The ball is held resiliently in the opening with sufficient friction to retain it in any adjusted position of rotation relative to the base member, during continued use of the archery bow.

The ball 54 is provided with a peep opening 56 that tapers from the rear side of the ball inwardly to smaller diameter at its inner end, approximately midway through the depth of the ball. A second opening 58 of uniform and larger diameter communicates at its inner end with the peep opening 56 and extends forwardly therefrom to the forward end of the ball. This opening serves as a socket to frictionally receive the inner end of an elongated adjustment tool 60 of tubular shape. The tube preferably is made of synthetic resin, although it may be made of metal or other suitable material.

The tool 60 is provided with a central bore 62 which registers with the peep opening 56, whereby to allow viewing of a target through the peep opening. An elongated slot 64 may trap the bowstring segments to

insure positive retention of the base member between the bowstring segments.

To adjust the peep sight opening to a desired angle for a certain archer, the tool 60 is fitted into the forward opening 58. Then, by grasping the tool in the fingers, the tool and the connected ball 54 may be rotated through any desired angular direction, while looking through the peep sight opening 56 at full draw, until the target image is brought into optimum view. Rotational adjustment of the ball 54 thus accommodates the characteristics of any archer, both as to draw length and bowstring rotation.

When the peep sight opening 56 has been adjusted to the desired position, the tool 60 is removed to allow normal operation of the archery bow.

It will be apparent to those skilled in the art that various changes may be made in the size, shape, type, number and arrangement of parts described hereinbefore. For example, the base member 48 may be formed as two longitudinal or lateral sections of metal or other rigid material and secured together with screws, capturing the ball member 54 frictionally in the spherical opening 50. The ball member also may be formed of metal or other rigid material, as may also be the tubular tool 60. Other means may be employed to secure the base member to a bowstring. These and other changes may be made, as desired, without departing from the spirit of this invention and the scope of the appended claims.

Kudlacek Peep Sight Patent Application, "Description of Preferred Embodiment" at 5, *l.* 18, to 9, *l.* 3.

Kudlacek contends that he offers peep sights as a single unit, which includes one ball installed in one body, but he does not sell a "plurality" of inserts separately or in combination with a single body, and he does not make, use, or sell a peep sight with a plurality of interchangeable inserts, as taught by the '007 patent. However, he contends that each peep sight made, used, or sold by defendant Chipman, presumably meaning Specialty as well, is made, used, and sold as a complete unit, including interchangeable inserts. Moreover, Kudlacek points out that, as originally filed, claim 1 of the '007 patent contained no requirements or limitations that the base have a threaded opening or that there be more than one insert. Kudlacek contends that the "threading" limitations were added to overcome anticipation by the Shores '786 patent, as indicated by the prosecution history. Kudlacek contends that none of the balls of the peep sights he makes are designed to be interchangeable, the ball on his peep sight is not externally threaded, the body of his device does not contain an internally threaded opening, and there are in fact no threads in the accused sight.

In response, Specialty contends that Kudlacek's "Genesis Archery Products Adjustable Control Peep" is designed to perform the exact same function as the '007 patent, because it is designed to allow different size sight holes to be easily interchanged in the field. Specialty contends that Kudlacek's device "is virtually worthless" and has "little or no utility" unless a customer purchases it in different sizes and uses the sight inserts interchangeably. Specialty also rejects Kudlacek's contention that his device has no threads at all by contending that Kudlacek's device has one large thread that holds the sight insert in the base. Thus, Specialty contends that Kudlacek's device performs substantially the same function, in substantially the same way, to achieve substantially the same result as the '007 patent.

Moreover, Specialty contends that the amendment to the '007 patent to include references to "threaded" and "threads" was neither necessary nor intended to overcome the examiner's rejection based on the Shores '786 patent. Rather, Specialty contends that the examiner allowed the '007 patent over the Shores '786 patent because of the inclusion of language highlighting the "interchangeable inserts" feature of the '007 patent. Specialty points out that the Shores '786 patent depicted an internally threaded base and an externally threaded insert, so that inclusion of "threading" in the '007 patent would not make the invention in the '007 patent patentable over the Shores '786 patent.

With this factual background, the court turns to its legal analysis of the parties' motions for summary

judgment of patent invalidity and non-infringement.

II. LEGAL ANALYSIS

A. Standards For Summary Judgment In Patent Cases

The Federal Circuit Court of Appeals recently explained its exclusive jurisdiction over certain appeals as follows:

Our relevant jurisdictional authority is contained in 28 U.S.C. s. 1295(a)(1) (1994), which states that this court enjoys exclusive appellate jurisdiction over appeals "based, in whole or in part, on section 1338 [of Title 28]." Section 1338(a), in turn, provides that district courts have jurisdiction over suits "arising under any Act of Congress relating to patents." 28 U.S.C. s. 1338(a) (1994). Thus, our jurisdiction turns upon whether the claims here arise (at least in part) under the patent laws.

* * * * * *

... "In order to demonstrate that a case is one 'arising under' federal patent law, 'the plaintiff must set up some right, title or interest under the patent laws, or at least make it appear that some right or privilege will be defeated by one construction, or sustained by the opposite construction of these laws.' " Christianson [v. Colt Industries Operating Corp.], 486 U.S. [800,] 807-08, 108 S.Ct. 2166, [100 L.Ed.2d 811 (1988)] (quoting Pratt v. Paris Gaslight & Coke Co., 168 U.S. 255, 259, 18 S.Ct. 62, 42 L.Ed. 458 (1897)). In other words, the scope of section 1338 extends to (1) claims where federal patent law creates the cause of action, or (2) claims where the plaintiff's right to relief necessarily depends upon resolution of a "substantial question of federal patent law." Christianson, 486 U.S. at 809, 108 S.Ct. 2166.

Helfgott & Karas, P.C. v. Dickenson, 209 F.3d 1328, 1333-34 (Fed.Cir.2000). This lawsuit involves claims and counterclaims of patent infringement that involve causes of action created by federal patent law and the present motions for summary judgment of patent invalidity and non-infringement necessarily involve "substantial question[s] of federal patent law." *See id*. Thus, this action and the present motions for summary judgment fall within the exclusive jurisdiction of the Federal Circuit Court of Appeals. Therefore, the court will consider here the standards for summary judgment in patent cases, as articulated by the Federal Circuit Court of Appeals.

"Summary judgment is appropriate in a patent case, as in other cases." Nike, Inc. v. Wolverine World Wide, Inc., 43 F.3d 644, 646 (Fed.Cir.1994); Conroy v. Reebok Int'l, Ltd., 14 F.3d 1570, 1575 (Fed.Cir.1994) ("The grant of summary judgment [in a patent case] is appropriate where the standards set forth in Rule 56(c) are satisfied."). Therefore, on a motion for summary judgment in a patent case, "a district court must decide '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.' " CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co., 224 F.3d 1308, 1315 (Fed.Cir.2000) (quoting FED. R. CIV. P. 56(c), and citing Celotex Corp. v. Catrett, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986)); Eli Lilly & Co. v. Barr Labs., Inc., 222 F.3d 973, 978 (Fed.Cir.2000); Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc., 212 F.3d 1377, 1381 (Fed.Cir.2000); Optical Disc Corp. v. Del Mar Avionics, 208 F.3d 1324, 1333 (Fed.Cir.2000).

The court must "dra[w] all reasonable inferences from the evidence in favor of the nonmovant." KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1355 (Fed.Cir.2000); Vehicular Techs. Corp., 212 F.3d at 1381 (citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986)). However, "an asserted issue of material fact is not 'genuine' in the sense of Fed.R.Civ.P. Rule 56 if a reasonable jury could only resolve the question for the moving party." Vehicular Techs. Corp., 212 F.3d at

1381 (citing Anderson, 477 U.S. at 248, 106 S.Ct. 2505). On the other hand, "[t]he truth of a disputed material fact can not be established on attorney statement alone." Vivid Techs., Inc. v. American Science & Eng'g, Inc., 200 F.3d 795, 812 (Fed.Cir.1999).

"When evaluating a motion for summary judgment, the court views the record evidence through a prism of the evidentiary standard of proof that would pertain at a trial on the merits." Eli Lilly & Co., 222 F.3d at 980 (citing Anderson, 477 U.S. at 248, 106 S.Ct. 2505). Thus, when summary judgment involves the question of non-infringement, as both Specialty's and Kudlacek's motions do here, summary judgment is only appropriate if, after resolving reasonable inferences in favor of the patentee, "no reasonable jury could find infringement." Ishida Co., Ltd. v. Taylor, 221 F.3d 1310, 1315 (Fed.Cir.2000); IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1429 (Fed.Cir.2000), *cert. dismissed,* 530 U.S. 1299, 121 S.Ct. 24, 147 L.Ed.2d 1047 (2000) (No. 00-234). This standard applies whether the court examines literal infringement or infringement under the "doctrine of equivalents." *See* CAE Screenplates, Inc., 224 F.3d at 1312 ("Even though infringement by equivalents is an issue of fact ordinarily preserved for the jury, '[w]here the evidence is such that no reasonable jury could determine two elements to be equivalent, district courts are obliged to grant partial or complete summary judgment.' ") (quoting Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 39 n. 8, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997)); KCJ Corp., 223 F.3d at 1355 ("Whether the accused device contains each claim element exactly or its equivalent is a question of fact," but one on which summary judgment may nevertheless be appropriate); Vehicular Techs. Corp., 212 F.3d at 1381 ("Infringement under the doctrine of equivalents requires an intensely factual inquiry. And, this court is well aware of the difficulty of granting summary judgment motions on issues requiring delicate balancing of many factual components. Ultimately this court may sustain summary judgment of non-infringement under the doctrine of equivalents, where that doctrine is legally applicable, only if it discerns no genuine issue of material fact and that no reasonable jury could find equivalence.") (citations omitted). "This standard [for summary judgment of non-infringement] sets a high hurdle which th[e] court does not lightly attempt to surmount." Vehicular Techs. Corp., 212 F.3d at 1381.

[1] As to summary judgment of patent invalidity, the hurdle is, if anything, even higher. A patent enjoys a presumption of validity pursuant to 35 U.S.C. s. 282, and that presumption can only be overcome by evidence that is "clear and convincing." Eli Lilly & Co., 222 F.3d at 977 (citing United States Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1563 (Fed.Cir.), *cert. denied,* 522 U.S. 950, 118 S.Ct. 369, 139 L.Ed.2d 287 (1997)). Therefore, "a moving party seeking to invalidate a patent at summary judgment," as Specialty attempts to do here as to the '325 patent, "must submit such clear and convincing evidence of invalidity so that no reasonable jury could find otherwise." Id.

In short, "[i]n assessing issues of material fact to determine whether a 'reasonable jury' could disagree on them, th[e] court identifies facts posing a potential dispute and then examines those facts in the context of the legal criteria by which a fact finder would resolve the dispute." Vehicular Techs. Corp., 212 F.3d at 1381.

B. Specialty's Motions For Summary Judgment

Specialty has filed separate summary judgment motions asserting that the '325 patent, on which Kudlacek's claim of infringement is based, is invalid as a matter of law, and that, even if the '325 patent is valid, Specialty's "Super Stix" bow stabilizer does not infringe the '325 patent, either literally or under the doctrine of equivalents. The court's first step in assessing claims of "invalidity" or "non-infringement" of a patent is construction of the pertinent claim or claims of the patent-in-suit. *Compare, e.g.,* Union Oil Co. of Cal. v. Atlantic Richfield Co., 208 F.3d 989, 995 (Fed.Cir.2000) (" 'The first step in any invalidity ... analysis is claim construction.' ") (quoting Rockwell Int'l Corp. v. United States, 147 F.3d 1358, 1362 (Fed.Cir.1998)), *petition for cert. filed,* (Aug. 15, 2000) (No. 00-249); *with, e. g.,* CAE Screenplates, Inc., 224 F.3d at 1316-17 (the first step in analysis of a motion for summary judgment of non-infringement of a patent is

construction of the claims of the patent).

1. Construction of claim 1 of the '325 patent

a. Rules of construction

[2] [3] [4] [5] Claim construction is a question of law for the court. CAE Screenplates, Inc., 224 F.3d at 1316-17; KCJ Corp., 223 F.3d at 1355; Optical Disc Corp., 208 F.3d at 1333; IMS Tech., Inc., 206 F.3d at 1429. The process of construing a claim begins with the language of the claim itself. *Id*. at 1316-17; KCJ Corp., 223 F.3d at 1355; Optical Disc Corp., 208 F.3d at 1334. This is so, because " '[t]he claim language, of course, defines the bounds of claim scope.' " Schering Corp. v. Amgen, Inc., 222 F.3d 1347, 1353 (Fed.Cir.2000) (quoting York Prods., Inc. v. Central Tractor Farm & Family Ctr., 99 F.3d 1568, 1572 (Fed.Cir.1996)). Furthermore, throughout the construction analysis, "[t]he central focus of the infringement inquiry remains on the claim language, as illuminated by the written description and the prosecution history." KCJ Corp., 223 F.3d at 1355. Thus,

[i]n interpreting an asserted claim, we look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Usually an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. However, extrinsic evidence may be considered if needed to assist in determining the meaning or scope of technical terms in the claims.

Optical Disc Corp., 208 F.3d at 1334 (citations omitted); *see also* Tate Access Floors, Inc. v. Maxcess Techs., Inc., 222 F.3d 958, 964-65 (Fed.Cir.2000) (same identification of primacy and nature of "intrinsic evidence"); Hockerson-Halberstadt, Inc. v. Avia Group Int'l, Inc., 222 F.3d 951, 954-55 (Fed.Cir.2000) (same). If the meaning of a claim is unambiguous from the intrinsic evidence, then a court may not rely on extrinsic evidence for purposes of claim construction. CAE Screenplates, Inc., 224 F.3d at 1317-18; Hockerson-Halberstadt, Inc., 222 F.3d at 954-55.

[6] [7] [8] As to the meaning of specific terms, although "[i]n some cases, a claim term can be given a different meaning in the various claims of the same patent, *when a patent so provides,*" CAE Screenplates, Inc., 224 F.3d at 1317 (emphasis added), the general rule is that "[a] word or phrase used consistently throughout a patent claim should be interpreted consistently." Phonometrics, Inc. v. Northern Telecom, Inc., 133 F.3d 1459, 1465 (Fed.Cir.1998) (quoted with favor in CAE Screenplates, Inc., 224 F.3d at 1317). Furthermore, " '[w]ithout an express intent to impart a novel meaning to claim terms, an inventor's claim terms take on their ordinary meaning.' " Schering Corp., 222 F.3d at 1353 (quoting York Prods., Inc., 99 F.3d at 1572); Tate Access Floors, Inc., 222 F.3d at 965 ("Absent an express intent to impart a novel meaning, 'terms in a claim are to be given their ordinary and accustomed meaning.' ") (quoting Renishaw, P.L.C. v. Marposs Societa' per Azioni, 158 F.3d 1243, 1249 (Fed.Cir.1998)); Hockerson-Halberstadt, Inc. 222 F.3d at 954-56 ("As a starting point, the court gives claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art," and such ordinary meaning provides the "default meaning," although "the patentee may act as a lexicographer and ascribe a different, or modified, meaning to the term"); Optical Disc Corp., 208 F.3d at 1334 ("Without evidence in the patent specification of an express intent to impart a novel meaning to a claim term, the term takes on its ordinary meaning."). "For such ordinary meaning, [the court] turn[s] to the dictionary definition of the term." Optical Disc Corp., 208 F.3d at 1335. Notwithstanding this "ordinary meaning" rule, certain expressions in patents receive "conventional" constructions:

This court has repeatedly emphasized that an indefinite article "a" or "an" in patent parlance carries the meaning of "one or more" in open-ended claims containing the transitional phrase "comprising." Unless the claim is specific as to the number of elements, the article "a" receives a singular interpretation only in rare circumstances when the patentee evinces a clear intent to so limit the article. Under this conventional rule,

the claim limitation "a," without more, requires at least one.

KCJ Corp., 223 F.3d at 1356 (citations omitted).

[9] [10] As mentioned above, the written description may assist in claim interpretation. KCJ Corp., 223 F.3d at 1356. Nevertheless, " '[a]lthough the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments.' " *Id.* (quoting Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed.Cir.1994)); Tate Access Floors, Inc., 222 F.3d at 966-67; *Kemco Sales, Inc.,* 208 F.3d at 1362. Also as mentioned above, "[p]rosecution history also may assist claim interpretation." KCJ Corp., 223 F.3d at 1356. "Indeed, prosecution history 'limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.' " *Id.* (quoting Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 452 (Fed.Cir.1985)); Hockerson-Halberstadt, Inc., 222 F.3d at 954-55.

b. Disputed language of the claim

Kudlacek has clarified that he is alleging that Specialty's "Super Stix" bow stabilizer infringes claim **1** of the '325 patent. Thus, the court's claim construction will focus on that claim of the '325 patent. Claim **1** is quoted in its entirety above in Section I.B.1.a. of this opinion, beginning at page 1005-06. The parties' disputes about construction focus specifically on the meaning of limitations (d) and (e) of claim **1**, each of which will be construed in turn.

c. Construction of claim 1(d)

[11] The parties first dispute the proper construction of certain terms in claim **1**(d), which claims an element of the invention as follows:

1. An archery bow stabilizer, comprising:

* * * * * *

d) at least one vibration dampener adjustment member having openings therethrough matching the number and circumferential spacing of said stabilizer rods and a diameter larger than the diameter of said stabilizer rods freely receiving said rods therethrough[.]

Plaintiff's Complaint, Exhibit 1 (the '325 patent). The bone of contention as to this element, as asserted in the parties' briefs, is whether the language requiring "at least one vibration dampener adjustment member having openings therethrough" requires that the adjustment member consist of a single piece through which openings are "bored," or whether it can instead encompass an "adjustment member" made up of multiple pieces that create "channels" through which the stabilizer rods pass. At oral arguments, Specialty also suggested that "openings therethrough" would not encompass "openings" that left a "gap" at some point on their perimeter. Kudlacek argued that the patent language did not require that the "openings" be completely enclosed.

The court agrees with the parties that the proper construction of element (d) of claim **1** can be discerned from the language of the claim illuminated by "intrinsic" evidence. *See, e.* g., CAE Screenplates, Inc., 224 F.3d at 1316; KCJ Corp., 223 F.3d at 1355. Indeed, the meaning of this portion of claim **1** can be determined according to the "ordinary meaning" rule, because Kudlacek has not acted as his own lexicographer defining any of the terms used in novel ways. *See* Schering Corp., 222 F.3d at 1353; Tate Access Floors, Inc., 222 F.3d at 964-65; Hockerson-Halberstadt, Inc. 222 F.3d at 954-56; Optical Disc

Corp., 208 F.3d at 1334.

Use of the word "member" does not necessarily define a component made of a single piece or exclude a component made up of multiple pieces. For example, the pertinent definition of member is "a constituent part of a whole," *see, e.g.,* MERRIAM WEBSTER'S COLLEGIATE DICTIONARY (10th ed., 1995), and the synonym "part" is defined, *inter alia,* as "a constituent member of a machine or other apparatus." *See id.* Ordinary experience teaches that a constituent part or member of a machine or apparatus may itself consist of one or several components, depending, for example, on the intricacy of the "part" or "member" and the machine or apparatus to which it belongs.

Specialty nevertheless contends that "member" here must mean a single piece, because the "Description of the Preferred Embodiment" refers to a "member" with "through bores," while "bore" in turn is defined as a "cylindrical hole made by or as if by boring." Specialty's argument fails for at least two reasons.

First, nothing about use of the "through bores" language in the "Description of the Preferred Embodiment" in the '325 patent demonstrates an express intent to define "vibration dampener adjustment member having openings therethrough" in a novel way. *See, e.g.,* Schering Corp., 222 F.3d at 1353 (" 'Without an express intent to impart a novel meaning to claim terms, an inventor's claim terms take their ordinary meaning' ") (quoting York Prods., Inc., 99 F.3d at 1572). Thus, the "through bore" language of the "Description of the Preferred Embodiment" does not constitute a specialized definition of the "openings therethrough" language of the claim. *See id.*

Furthermore, " '[a]lthough the specifications may well indicate that certain embodiments are *preferred,* particular embodiments appearing in a specification *will not* be read into the claims when the claim language is broader than such embodiments.' " KCJ Corp., 223 F.3d at 1356 (quoting Electro Med. Sys., S.A., 34 F.3d at 1054) (emphasis added); Tate Access Floors, Inc., 222 F.3d at 966-67; *Kemco Sales, Inc.,* 208 F.3d at 1362. Here, the language of the claim-which requires a "vibration dampener adjustment member having openings therethrough"-is undoubtedly broader than the language of the "Description of the Preferred Embodiment"-which describes a "member ... provided with a plurality of through bores...." The '325 Patent, "Description of Preferred Embodiment" at 2; *and compare, e.g.,* MERRIAM WEBSTER'S COLLEGIATE DICTIONARY (10th ed., 1995) (defining "bore" as "a usu. cylindrical hole made by or as if by boring"), *with* id. (defining "opening" as "something that is open: as a(1): BREACH, APERTURE"). Thus, it is improper to read the narrower "through bores" language of the "Description" into the broader language of the claim. *See* KCJ Corp., 223 F.3d at 1356. Similarly, although the "openings therethrough" are shown in the "Description of the Preferred Embodiment" and figures of the patent as completely enclosed, nothing about the language of the claim itself requires that the "openings therethrough" be completely enclosed or excludes the possibility that there will be "gaps" at some point on the perimeter of the "openings."

Consequently, the language of element (d) of claim **1** encompasses a "vibration dampener adjustment member" comprised of either a single piece or multiple pieces joined together so that the member has "openings therethrough" that permit the stabilizer rods to pass through the "adjustment member" and the "adjustment member" partially or completely encloses the "openings therethrough."

d. Construction of claim 1(e)

The parties also dispute the construction of element (e) of claim **1**, which claims an element of the invention as follows:

1. An archery bow stabilizer, comprising:

* * * * * *

e) resilient securing means on the vibration dampener adjustment member extending into each of said openings and resiliently engaging and securing said adjustment member to said stabilizer rods intermediate the inner and outer ends of said rods.

Plaintiff's Complaint, Exhibit 1 (the '325 patent). The parties have several disputes concerning the proper construction of the language of claim 1(e). These disputes concern the meaning of "resilient securing means," and more specifically, the meaning of "resilient"; the meaning of the language providing that the "resilient securing means" "extend" into the openings for the stabilizer rods; and the meaning of " *resiliently engaging* and *securing* said adjustment member to said stabilizer rods." The parties appear to agree, however, that this element is a "means-plus-function" element within the meaning of 35 U.S.C. s. 112, para. 6. The court will therefore begin its construction of claim 1(e) by examining the rules of construction for a means-plus-function element.

i. Rules of construction for a means-plus-function element. The sixth unnumbered paragraph of 35 U.S.C. s. 112 provides as follows:

An 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. s. 112 para. 6 (unnumbered). Thus, "[s]ection 112, paragraph 6 provides that a patentee may define the structure for performing a particular function generically through the use of a means expression, *provided* that it discloses specific structure(s) corresponding to that means in the patent specification." Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1360 (Fed.Cir.2000) (emphasis added); Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1364 (Fed.Cir.2000) (s. 112, para. 6 "allows patent applicants to claim an element of a combination functionally, without reciting structures for performing those functions"); IMS Tech., Inc., 206 F.3d at 1429-30 ("Limitations contemplated by s. 112, para. 6, often referred to as means-plus-function or step-plus-function limitations, recite a specified function to be performed rather than the structure, material, or acts for performing that function."). The Federal Circuit Court of Appeals has explained,

[W]e have referred to section 112, paragraph 6 as embodying a statutory quid pro quo. If a patentee fails to satisfy the bargain because of a failure to disclose adequate structure, the claim will be rendered invalid as indefinite under section 112, paragraph 2.

Kemco Sales, Inc., 208 F.3d at 1360-61 (citations omitted).

[12] Where a patent claim states a means-plus-function element, the construction of the element is "limited to the structure corresponding to the claimed function as 'described in the specification and equivalents thereof.' " Envirco Corp., 209 F.3d at 1365 (quoting s. 112, para. 6); IMS Tech., Inc., 206 F.3d at 1430 ("Such limitations are "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." ") (quoting s. 112, para. 6). In contrast, where what appears to be a means-plus-function element is determined not to meet the requirements of the statute, construction of the element is not so limited; instead, "th[e] court construes the claims with standard claim construction rules," such that "the specification informs[,] but does not control, the claim construction [and] the claim language itself governs the meaning of the claim." Envirco Corp., 209 F.3d at 1365.

[13] [14] "Before a court attempts to analyze what appears to be a means-plus-function claim limitation, it

must first assure itself that such a claim limitation is at issue." Kemco Sales, Inc., 208 F.3d at 1361. Whether the language of a claim is in means-plus-function format is a matter of claim construction, and hence, is a question of law for the court. *See* id. at 1360. The use of certain language gives rise to a presumption that s. 112, para. 6 is applicable-that is, that a claim element is a means-plus-function element-but that presumption can be rebutted:

If a claim element contains the word "means" and recites a function, this court presumes that element is a means-plus-function element under s. 112, para. 6. *See Al-* Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1318, 50 USPQ2d 1161, 1166 (Fed.Cir.1999). That presumption falls, however, if the claim itself recites sufficient structure to perform the claimed function. *See id.*

Envirco Corp., 209 F.3d at 1364; Kemco Sales, Inc., 208 F.3d at 1361 (also identifying the "converse" presumption that absence of the term "means" indicates that the element is *not* a means-plus-function element, although this presumption may also be rebutted). Even if the presumption that s. 112, para. 6 is applicable arises from the presence of "means" language in the element, the court must also complete "the triggering analysis for s. 112, para. 6" applicability by "determin[ing] whether the claims recite sufficient structure for performing the claimed function, thereby overcoming the presumption of [the applicability of] s. 112, para. 6" that arose from the presence of "means" language. Envirco Corp., 209 F.3d at 1365.

"Once a court establishes that a means-plus-function limitation is at issue, it must construe that limitation, thereby determining what the claimed function is and what structures disclosed in the written description correspond to the 'means' for performing that function." Kemco Sales, Inc., 208 F.3d at 1360; *see also* id. at 1361 ("After a court establishes that a means-plus-function limitation is at issue, it must then construe the function recited in that claim and determine what structures have been disclosed in the specification that correspond to the means for performing that function."); IMS Tech., Inc., 206 F.3d at 1430 ("Claim construction of a s. 112, para. 6 limitation includes identifying the claimed function and determining the corresponding structure or act disclosed in the specification."). Both questions at this step in the analysis are also questions of law for the court. Kemco Sales, Inc., 208 F.3d at 1360; IMS Tech., Inc., 206 F.3d at 1430; Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 206 F.3d 1440, 1445 (Fed.Cir.2000).

The construction of a means-plus-function element was recently explained somewhat more fully in Ishida Co., Ltd. v. Taylor, 221 F.3d 1310 (Fed.Cir.2000), a case in which the specification disclosed alternative structures for accomplishing the claimed function:

In Serrano [v. Telular Corp., 111 F.3d 1578 (Fed.Cir.1997)], this court determined that the district court had erroneously limited the structure corresponding to the claimed function to only one of the alternative structures in the specification. *Serrano* states that proper application of s. 112 para. 6 reads the claimed element to embrace distinct and alternative described structures for performing the claimed function. Specifically, "[d]isclosed structure includes that which is described in a patent specification, including any alternative structures identified." *Id.* at 1583; *see also* Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258-59, 52 USPQ2d 1258, 1264 (Fed.Cir.1999). Neither *Serrano* nor *Micro Chemical* requires the district court to formulate a single claim interpretation to cover multiple embodiments. Rather, s. *112 para. 6 requires only identification of the structure, or structures, in the specification that perform the recited function. See id.*

The trial court did not err by declining the invitation to articulate a single claim interpretation consonant with all structures in the specification corresponding to claimed functions. *The district court properly identified "the corresponding structure[s]" for each embodiment as required by s. 112 para. 6 by repeating in words the structures that the patentee had himself already defined in words and pictures. See Ishida II,* slip op. at 4.

Ishida Co., Ltd., 221 F.3d at 1316 (emphasis added). As the Federal Circuit Court of Appeals has also explained,

Section 112, para. 6 does not limit all terms in a means-plus-function or step-plus-function clause to what is disclosed in the written description and equivalents thereof; s. 112, para. 6 applies only to interpretation of the means or step that performs a recited function when a claim recites insufficient structure or acts for performing the function.... [Other terms must be construed] according to our standard claim construction methodology without application of s. 112, para. 6.

IMS Tech., Inc., 206 F.3d at 1432-33 (citations omitted). Similarly,

In construing the disputed claim limitations, it must be kept in mind that the claims at issue in this case are combination claims. Combination claims can consist of new combinations of old elements or combinations of new and old elements. Because old elements are part of these combination claims, claim limitations may, and often do, read on the prior art.

... It is well established in patent law that a claim may consist of all old elements, ... for it may be that the combination of the old elements is novel and patentable. Similarly, it is well established that a claim may consist of all old elements and one new element, thereby being patentable.

Clearstream Wastewater Sys., Inc., 206 F.3d at 1445 (citations omitted).

[15] ***ii. Application of the rules.*** Here, the means-plus-function presumption arises as to claim 1(e), because the element is defined as a "resilient securing *means*." Plaintiff's Complaint, Exhibit 1 (the '325 patent) (emphasis added); *see also* Envirco Corp., 209 F.3d at 1365 (the presumption arises from use of the term "means"); Kemco Sales, Inc. 208 F.3d at 1361 (same). However, this court must also complete "the triggering analysis for s. 112, para. 6" applicability by "determin[ing] whether the claims recite sufficient structure for performing the claimed function, thereby overcoming the presumption of [the applicability of] s. 112, para. 6." Envirco Corp., 209 F.3d at 1365.

In *Envirco Corporation,* the Federal Circuit Court of Appeals found that the presumption arising from use of "means" in the purported means-plus-function element had been rebutted, because the use of the term "baffle" in the "second baffle means" element was itself a structural term, and the court found that the structure of this particular "baffle" had been further described in the element, to the point that it conflicted with the statutory requirement that the element state a function "without a recital of structure." *See* Envirco Corp., 209 F.3d at 1365 (quoting 35 U.S.C. s. 112, para. 6). Here, "resilient securing means" includes no such structural term. Nor does further language of the element-stating that such means are "on the vibration dampener adjustment member extending into each of said openings" and secure the "adjustment member to said stabilizer rods intermediate the inner and outer ends of said rods"-sufficiently define a specific *structure* to overcome the presumption, although this language does indicate the *location* of such means. Therefore, the court concludes that the claim limitation at issue here is a means-plus-function element within the meaning of 35 U.S.C. s. 112, para. 6. Kemco Sales, Inc., 208 F.3d at 1361 ("Before a court attempts to analyze what appears to be a means-plus-function claim limitation, it must first assure itself that such a claim limitation is at issue.").

Because a means-plus-function limitation is at issue, this court "must construe that limitation, thereby determining what the claimed function is and what structures disclosed in the written description correspond to the 'means' for performing that function." Kemco Sales, Inc., 208 F.3d at 1360; Envirco Corp., 209 F.3d at 1365; IMS Tech., Inc., 206 F.3d at 1430. The parties here agree that the "function" of the "resilient securing means" at issue in claim **1**(e) of the '325 patent includes "engaging and securing" the adjustment member to the stabilizer rods. The parties therefore direct the bulk of their energies to disputing the question of what

structure(s) identified in the specification perform this (or these) function(s). However, Kudlacek suggests, at least in passing, that the "function" of the "resilient securing means" also includes " *extending* into each of said openings." The court does not agree that this "extending" language identifies a "function" of the "resilient securing means." The Federal Circuit Court of Appeals has observed that "[a]n error in identification of the function can improperly alter the identification of structure in the specification corresponding to that function." Micro Chem., Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250, 1258 (Fed.Cir.1999). Therefore, the court must tarry a moment on a question largely passed over by the parties to determine whether "extending" is also a "function" of the "resilient securing means."

As mentioned above, determination or identification of the "function" of a means-plus-function element is a matter of claim construction and therefore a question of law. Kemco Sales, Inc., 208 F.3d at 1360; IMS Tech., Inc., 206 F.3d at 1430; Clearstream Wastewater Sys., Inc., 206 F.3d at 1445. In determining the "function" of a means-plus-function element, the Federal Circuit Court of Appeals has looked first to language of the means-plus-function element, *see* Kemco Sales, Inc., 208 F.3d at 1361 (construing the function of a means-plus-function element as "recited" in the claim); IMS Tech., Inc., 206 F.3d at 1430 (same); Micro Chem., Inc., 194 F.3d at 1258 (noting that the district court initially identified the "function" as recited in the claim as "weighing," then improperly narrowed the function to "sequential and cumulative weighing," notwithstanding the specific language of the claim), then to other "intrinsic" evidence, including statements of the objective of the patent in the "summary of the invention." *See* Vehicular Techs., Inc., 212 F.3d at 1380 (noting that, in its prior decision, 141 F.3d 1084 (Fed.Cir.1998), it had discerned a "function" of a means-plus-function element in addition to those identified by the district court on the basis of the objectives of the invention stated in the "summary of the invention"). When looking at the claim language, the Federal Circuit Court of Appeals has noted that the properly identified function is often signaled by the preposition "for," as in, " 'weighing means ... for' performing a specified function." Micro Chem., Inc., 194 F.3d at 1258.

Here, the language of claim 1(e) lacks the presence of the helpful signal of the preposition "for" following statement of the "resilient securing means." *See id*. Instead, this element states that the "resilient securing means" is " *on* the vibration dampener adjustment member extending *into* each of said openings and resiliently engaging and securing said adjustment member to said stabilizer rods intermediate the inner and outer ends of said rods." Nevertheless, the language of this element indicates that the phrase " *on* the vibration dampener adjustment member *extending into* each of said openings" is an identification of the position and motion of the "resilient securing means" in performing its "function," which "function" is then defined,following the word "and," as " *resiliently engaging and securing* said adjustment member to said stabilizer rods." FN9 Furthermore, the identification of the "means" itself as a "resilient *securing* means" suggest that the "function" is at least primarily "securing."

FN9. Indeed, one could substitute the signal preposition "for" in place of the "and" in claim **1**(e) without doing violence to the grammar or meaning of the phrase ("resilient securing means on the vibration dampener adjustment member extending into each of said openings *for* resiliently engaging and securing said adjustment member to said stabilizer rods intermediate the inner and outer ends of said rods"), although such a substitution anywhere else would result in nonsense.

Moreover, an examination of the "Summary of the Invention" in the '325 patent, *see* Vehicular Techs., Inc., 212 F.3d at 1380, reinforces this court's reading of the claim language. The "Summary of the Invention" identifies "the principal objective of this invention" to be "to provide an archery bow stabilizer that overcomes the aforementioned limitations and disadvantages of prior stabilizers," Plaintiff's Complaint, Exhibit 1 (The '325 Patent), "Summary of the Invention," which limitations included "limited stabilizing effectiveness," and "limit[ed] range of vibration dampening." Plaintiff's Complaint, Exhibit 1 (The '325 Patent), "Background of the Invention." The "Summary of the Invention" explains how the invention

functions to achieve these results: "The invention provides ... resilient securing means on the vibration adjuster extending adjustably into the enlarged openings and engaging the associated rods, *for* securing the vibration adjuster to the rods and allowing the rods to vibrate in the enlarged openings. " The '325 Patent, "Summary of the Invention" (emphasis added). Thus, in the "Summary of the Invention," the "function" of the "resilient securing means" is specifically signaled by the preposition "for" to be "securing the vibration adjuster to the rods," *see* Micro Chem., Inc., 194 F.3d at 1258, while the "extending ... into" language is plainly part of the description of the *location* of the "resilient securing means" and the *manner* in which it performs its "function."

As the court reads claim **1**(e), "extending into each of said openings" is not a statement of "function" of the "resilient securing means," but is instead a definition of the "way" in which the "resilient securing means" performs its "function" of "engaging and securing" the adjustment member to the stabilizer rods. *Cf*. Kemco Sales, Inc., 208 F.3d at 1364 (although the "function" prong of the function-way-result test is different for determining "equivalence" for purposes of literal infringement of a means-plus-function element under s. 112, para. 6, than it is for determining "doctrine of equivalence" infringement, the "way" and "result" prongs are the same). Indeed, this reading of the " *extending into* each of said openings" language as "way" not "function" is strengthened by reference to the prosecution history, because the examiner determined that the '325 patent was patentable over the Bickel '396 patent, "because Applicant requires the set screws to *extend through openings in the adjustment member* and contact *each* stabilizer rod [whereas] Bickel only uses one set screw to contact only one rod, so the others are not anchored to the adjustment member." Plaintiff's Statement of Controverted Facts of June 1, 2000 (Invalidity), Exhibit 5, Supplemental Notice of Allowability (emphasis in the original). Thus, the "way" in which the '325 patent performed the "function" of securing the adjustment member to the stabilizer rods while allowing the rods to vibrate was what made the invention in the '325 patent patentable over Bickel.

Therefore, the court concludes that, as a matter of claim construction, the "function" of the means-plus-function element in claim **1**(e) of the '325 patent is "resiliently engaging and securing" the adjustment member to the stabilizer rods, but does not include "extending into each opening."

The next question is, what structure or structures described in the specification of the '325 patent perform this function? *See* Kemco Sales, Inc., 208 F.3d at 1360 (the second part of the analysis at this step is to determine "what structures disclosed in the written description correspond to the 'means' for performing that function"); Envirco Corp., 209 F.3d at 1365 (same); IMS Tech., Inc., 206 F.3d at 1430 (same). Kudlacek contends that this function is performed only by the "resilient pads" identified in the "Description of the Preferred Embodiment," Plaintiff's Complaint, Exhibit 1, Col. 2, *ll*. 18-29, and in the Figures illustrating the invention in the '325 patent as **28** (*see* Fig. 2, below, at page 1030). Kudlacek contends that the "set screws" **26** alone cannot perform the function of engaging and securing the stabilizer rods, because they do not contact those rods, and merely apply pressure to the resilient pads **28**. In the alternative, Kudlacek contends that, if the court determines that the set screws **26** are part of the structure that performs the claimed function, the location of the set screws should not be read into the means-plus-function limitation, because the set screws simply apply pressure to the resilient pads to force the pads to "resiliently engage and secure" the adjustment member to the stabilizer rods. Specialty counters that, while the set screws **26** do not contact or "engage" the stabilizer rods, without the set screws **26**, the resilient pads **28** are incapable of "securing" the adjustment member to the stabilizer rods. Moreover, Specialty argues that the structure detailed and called for in the '325 patent is a set screw **26** affixed to and tipped with a resilient pad **28**, with the two pieces working in unison to engage and secure the stabilizer rods.

The court's specific task is "identification of the structure, or structures, in the specification that perform the recited function." Ishida Co., Ltd., 221 F.3d at 1316. The court concludes that the portion of the specification describing the structures that perform the function of the means-plus-function element in claim **1**(e) of the '325 patent is the following:

A *set screw* **26** is mounted in each tuning member **22** in registry with each through bore 24, *and a resilient pad 28 is mounted on the inner end of each set screw for releasably engaging the associated stabilizer rod* ***18****. It is by this provision of the set screws* ***26*** *and pads* ***28*** *that each tuning slide member* ***22*** *may be released from the stabilizer rods* ***18*** and slid along the length of said rods to selected positions which maximize the dampening of vibrations in a variety of archery bows as an arrow is shot from the bow. *The set screws with pads then are tightened against the rods to secure the tuning slide members in their selected positions.*

* * * * * *

... Adjustment of the tuning slide members **22** along the stabilizer rods **18** and *securing them in the enlarged bores* ***24*** *by the set screws* ***26*** *with resilient pads* ***28****,* achieves the precise tuning of the archery bow, as demonstrated by tighter grouping of arrows in a target, as compared with stabilizers of the prior art. *Freedom of movement of the stabilizer rods* in the enlarged bores **24** and at the unrestrained outer weighted ends **30**, *permitted by the resilient pads* ***28****,* results in the absorption of greater vibration energy, with corresponding greater reduction in vibration of the archery bow.

The '325 Patent, "Description of the Preferred Embodiment," at Col. 2, *ll*. 18-29 & 44-54 (emphasis added). Figure 2 of the '325 patent shows the pertinent structures:

***1030**

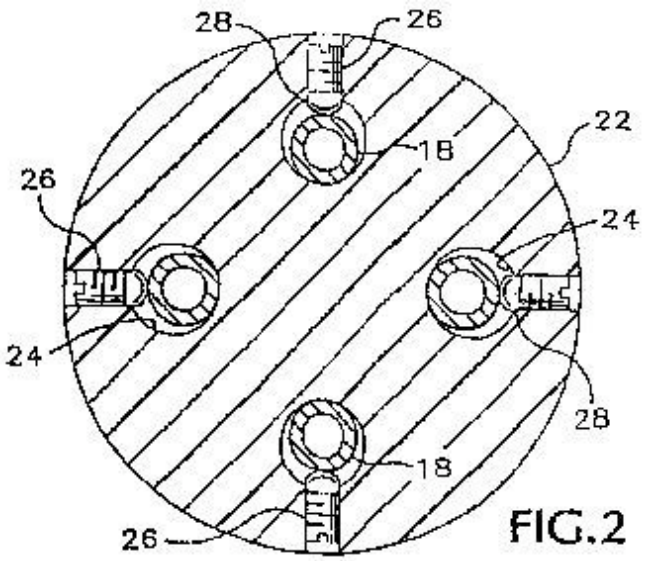


FIG.2

The '325 Patent, Fig. 2. The quoted portions of the specification are the only ones that describe any structure for " *engaging and securing* said adjustment member to said stabilizer rods." Thus, there is only one embodiment of the structure defined in the specification of the '325 patent that corresponds to the "means" defined in claim **1**(e). *Compare* Ishida Co., Ltd., 221 F.3d at 1316 (the specification included alternative structures for accomplishing the claimed function).

Moreover, as to the dispute between the parties as to how much of the identified structure performs the identified functions, the italicized portions of the specification and the illustration make it abundantly clear

that it is *both* the "set screws **26**" and the "resilient pads **28**" that perform the required function. Although "a resilient pad **28**" releasably engages the associated stabilizer rod, *see* The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 20-22, that "resilient pad **28** is mounted on the inner end of each set screw," id. at Col. 2, *ll*. 20-21, and "[i]t is by this provision of *the set screws **26** and pads **28*** that each tuning slide member **22** may be released from the stabilizer rods **18**." Id. at Col. 2, *ll*. 22-24 (emphasis added). Also, " *[t]he set screws with pads* then are tightened against the rods *to secure the tuning slide members in their selected positions*." Id. at Col. 2, *ll*. 27-29 (emphasis added). Similarly, the stabilizer rods **18** are "secur[ed] in the enlarged bores **24** *by the set screws **26** with resilient pads **28***." Id. at Col. 2, *ll*. 46-47 (emphasis added). Only at one point in the specification are the resilient pads described as performing a function separate from the set screws, and that function is permitting the stabilizer rods to vibrate, *see* id. at Col. 2, *ll*. 50-54, not "engaging and securing" the adjustment member to the stabilizer rods, which is the function of the "means" in claim **1**(e). Thus, the pertinent structure involves both the set screws **26** and resilient pads **28**, with the resilient pads "mounted on the inner end of each set screw," *see* id. at Col. 2, *ll*. 20-21, not merely resilient pads pushed into place by separate set screws in some other configuration.

Furthermore, contrary to Kudlacek's argument, the location of the set screws is part of the pertinent structure as described in the specification of the '325 patent. The specification states that "[a] set screw **26** is mounted in each tuning member **22** in registry with each through bore **24**." *See* id. at Col. 2, *ll*. 18-20. Were each set screw not so mounted, the "resilient pad **28** ... mounted on the inner end of each set screw" would not "releasably engag[e] the associated stabilizer rod," *see* id. at Col. 2, *ll*. 20-22, nor would the "set screws **26** and pads **28**" release the tuning slide member from the stabilizer rods, *see* id. at Col. 2, *ll*. 22-24, or "secure the tuning slide members in their selected positions." Id. at Col. 2, *ll*. 27-30. Similarly, as noted above, the claim itself indicates that the phrase " *on* the vibration dampener adjustment member *extending into* each of said openings" is an identification of the position and motion of the "resilient securing means" in performing its "function," and the prosecution history reveals the importance of this "way" of performing the "function" to the patentability of the invention. *See* Helget Declaration, Exhibit D (July 28, 1996, "Notice of Allowability" of the '325 patent, distinguishing the invention from the Bickel '396 patent).

Therefore, the structure described in the specification of the '325 patent that performs the function described in the means-plus-function element of claim **1**(e) of the '325 patent consists of "[a] set screw **26** ... mounted in each tuning member **22** in registry with each through bore **24**, and a resilient pad **28** ... mounted on the inner end of each set screw." *See* id. at Col. 2, *ll*. 18-21; *see also* Ishida Co., Ltd., 221 F.3d at 1316 ("The district court properly identified 'the corresponding structure[s]' for each embodiment as required by s. 112 para. 6 by repeating in words the structures that the patentee had himself already defined in words and pictures.") (quoting the court below); KCJ Corp., 223 F.3d at 1356 (under the "conventional rule, the claim limitation 'a,' without more, requires at least one").

[16] A few more terms in claim 1(e) of the '325 patent require construction: The parties dispute the meaning of the terms "resilient" and hence "resilient securing means." Kudlacek contends that "resilient," according to its ordinary meaning, means "returning to the original form or position after being bent, compressed, or stretched"; "pad" means a "cushion like mass of soft material used for ... protection"; thus, a "resilient securing means" or "resilient pad" should include any cushion-like mass made of a resilient material of any shape or size. Specialty contends that Kudlacek's reliance on a definition of "resilient" and "resilient securing means" or "resilient pads" as requiring a material that returns to its original form after being bent, compressed, or stretched, is out of step with dictionary definitions defining "nylon" as "elastic," and "elastic" as synonymous with "resilient," such that a nylon tip on a set screw that contacts and secures a stabilizer rod anticipates the structure defined as "resilient securing means" in the '325 patent, even if the nylon tip does not spring back into shape after compressing.

The court concludes that Specialty has confused the question of law, construction of the terms of the '325 patent, with the question of fact of whether or not any particular structure infringes or anticipates the patent,

because it uses a "securing means" that is or is not "resilient." For now, suffice it to say that nowhere in the '325 patent has the court found an express or novel definition of "resilient," so that the term "resilient" must be used in its "ordinary" sense in the '325 patent. *See, e.g.,* Schering Corp., 222 F.3d at 1353 (" 'Without an express intent to impart a novel meaning to claim terms, an inventor's claim terms take their ordinary meaning' ") (quoting York Prods., Inc., 99 F.3d at 1572). Thus, "resilient," as used in the '325 patent means "characterized or marked by resilience: as **a**: capable of withstanding shock without permanent deformation or rupture," with the synonym "ELASTIC," where "resilience" means "the capability of a strained body to recover its size and shape after deformation caused esp. by compressive stress." *See, e.g.,* MERRIAM WEBSTER'S COLLEGIATE DICTIONARY (10th ed., 1995). However, as discussed above, "resilient securing means" or "resilient pad," as used in the '325 patent cannot be defined as broadly as Kudlacek contends, because that term in a means-plus-function element is restricted in meaning by the structure described in the specification of the patent and its equivalents. *See* Envirco Corp., 209 F.3d at 1365 ("[T]he construction of the [means-plus-function] element is "limited to the structure corresponding to the claimed function as 'described in the specification and equivalents thereof.' ") (quoting s. 112, para. 6); IMS Tech., Inc., 206 F.3d at 1430 ("Such limitations are 'construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.' ") (quoting s. 112, para. 6). Therefore, "resilient securing means" and "resilient pad" must be construed to mean "a resilient pad **28** ... mounted on the inner end of [a] set screw" and its equivalents within the meaning of s. 112, para. 6. The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 18-21.

[17] Moreover, the term "pad" is not used in claim 1(e) itself, but only in the pertinent structure performing the associated "function," as described in the specification. Nevertheless, to construe the "means" in a means-plus-function element, the court must also construe, where necessary, the terms of the associated structure as described in the specification. "Pad" is nowhere defined in the '325 patent, so that it should be construed according to its ordinary meaning. *See, e.g.,* Schering Corp., 222 F.3d at 1353 (" 'Without an express intent to impart a novel meaning to claim terms, an inventor's claim terms take their ordinary meaning" ') (quoting York Prods., Inc., 99 F.3d at 1572); *and cf*. IMS Tech., Inc., 206 F.3d at 1432-33 ("[Section] 112, para. 6 applies only to interpretation of the means or step that performs a recited function when a claim recites insufficient structure or acts for performing the function.... [Other terms must be construed] according to our standard claim construction methodology without application of s. 112, para. 6.") (citations omitted). Thus, the applicable meaning of "pad" is its ordinary, dictionary meaning, which is "a thin flat mat or cushion," *see, e.g.,* MERRIAM WEBSTER'S COLLEGIATE DICTIONARY (10th ed., 1995), which does not suggest limitless possibilities of shape and size, and the further restriction from the applicable structure in the specification to the '325 patent, which also indicates that the "pad" in question here must be of a size and shape that it can be "mounted on the inner end of [a] set screw." The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 18-21.

Having construed the pertinent elements of the '325 patent, the court turns next to the propriety of summary judgment of "invalidity" and "non-infringement" of the '325 patent.

2. Invalidity of the '325 patent

Specialty contends that the '325 patent is invalid, because Specialty has presented undisputed evidence of four sales of the patented invention itself or a device that anticipates the patented invention more than one year prior to Kudlacek's application for the patent on March 27, 1996, that is, prior to the "critical date" of March 27, 1995. Kudlacek contends that none of the sales prior to the critical date that involve bow stabilizers he made could have involved the patented invention, because he did not even invent the patented device until June of 1995, or offer it for display or sale until July of 1995. Moreover, he contests whether the sale of bow stabilizers made by another manufacturer, Bickel, involved a device that includes all of the elements of claim **1** of the patented invention.

a. The "on-sale" bar

Section 102(b) of Title 35 states,

A person shall be entitled to a patent unless-

* * * * * *

(b) *the invention was* patented or described in a printed publication in this or a foreign country or in public use or *on sale in this country, more than one year prior to the date of the application for patent in the United States* [.]

35 U.S.C. s. 102(b) (emphasis added). Thus, the "critical date" for purposes of the "on-sale bar" is one year prior to the date of the patent application. The Federal Circuit Court of Appeals has explained that "[t]he overriding concern of the on-sale bar [stated in s. 102(b)] is an inventor's attempt to commercialize his invention beyond the statutory term [of a patent]." STX, L.L.C. v. Brine, Inc., 211 F.3d 588, 590 (Fed.Cir.2000). Therefore, the " 'typical case [is] where the patentee has placed some device on sale prior to the critical date and the accused infringer must demonstrate that this device actually embodied or rendered obvious the patented invention.' " Vanmoor v. Wal-Mart Stores, Inc., 201 F.3d 1363, 1366 (Fed.Cir.2000) (quoting Evans Cooling Sys., Inc. v. General Motors Corp., 125 F.3d 1448, 1451 (Fed.Cir.1997), *cert. denied,* 522 U.S. 1115, 118 S.Ct. 1050, 140 L.Ed.2d 113 (1998)), *petition for cert. filed,* --- U.S. ----, 121 S.Ct. 63, --- L.Ed.2d ---- (2000). Such a "typical case" is presented here to the extent that Specialty alleges, first, that Kudlacek sold his own invention more than one year before applying for the '325 patent. However, Specialty also alleges that sales of a device made by someone other than Kudlacek, the "Bickel Flitemate" bow stabilizer, establish the on-sale bar to the validity of the '325 patent. *Cf.* id. (noting that another alternative is where the accused infringer alleges that its sale of its own, infringing device met the requirements of the on-sale bar).

" 'The ultimate determination that a product was placed on-sale under [35 U.S.C. s. 102(b)] is a question of law based on underlying facts.' " STX, L.L.C., 211 F.3d at 590 (quoting Ferag AG v. Quipp, Inc., 45 F.3d 1562, 1566 (Fed.Cir.1995), *cert. denied,* 516 U.S. 816, 116 S.Ct. 71, 133 L.Ed.2d 31 (1995)); Vanmoor, 201 F.3d at 1366 (also quoting *Ferag AG*); Tec Air, Inc. v. Denso Mfg. Mich., Inc., 192 F.3d 1353, 1358 (Fed.Cir.1999) (also quoting *Ferag AG*). Thus, genuine issues of material fact may preclude a determination, on a motion for summary judgment, that a patent is invalid under the on-sale bar. *See Helifix, Ltd. v. Blok-Lok, Ltd.,* 208 F.3d at 1339, 1349-50 (Fed.Cir.2000) (finding that genuine issues of material fact existed as to the on-sale bar, thus precluding summary judgment). As mentioned above, in this court's statement of the standards for summary judgment in patent cases, a patent enjoys a presumption of validity pursuant to 35 U.S.C. s. 282, and that presumption can only be overcome by evidence that is "clear and convincing." Eli Lilly & Co., 222 F.3d at 977 (citing Ethicon, Inc., 103 F.3d at 1563). Therefore, "a moving party seeking to invalidate a patent at summary judgment must submit such clear and convincing evidence of invalidity so that no reasonable jury could find otherwise." *Id.*

[18] The Federal Circuit Court of Appeals has also recently explained the two conditions the Supreme Court finds must be satisfied to establish the on-sale bar:

In Pfaff v. Wells Electronics, Inc., 525 U.S. 55, 119 S.Ct. 304, 142 L.Ed.2d 261 (1998), the Supreme Court held that a patent claim is invalid under the on-sale bar if two conditions are met: first, the invention must have been the subject of a commercial offer for sale more than one year before the patent application was filed; second, the invention must have been ready for patenting more than one year before the filing of the application.

Zacharin v. United States, 213 F.3d 1366, 1369 (Fed.Cir.2000); STX, L.L.C., 211 F.3d at 590-91; *Helifix, Ltd.,* 208 F.3d at 1349; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358.

[19] To satisfy the first condition stated in *Pfaff,* the party asserting the on-sale bar " 'must demonstrate by clear and convincing evidence that there was *a definite sale* or offer to sell more than one year before the application for the subject patent, and that the subject matter of the sale or offer to sell *fully anticipated* the claimed invention or would have rendered the claimed invention obvious by its addition to the prior art.' " STX, L.L.C., 211 F.3d at 590 (quoting Tec Air, Inc., 192 F.3d at 1358, with citations omitted) (emphasis added); Vanmoor, 201 F.3d at 1366 (the invalidating sale must involve a device that " 'actually embodied or rendered obvious the patented invention' ") (quoting Evans Cooling Sys., Inc., 125 F.3d at 1451); Tec Air, Inc., 192 F.3d at 1358. Thus, "[t]he first determination in the s. 102(b) analysis must be whether the subject of the barring activity met each of the limitations of the claim, and thus was an embodiment of the claimed invention." Scaltech, Inc. v. Retec/Tetra, L.L.C., 178 F.3d 1378, 1383 (Fed.Cir.1999); *see also* STX, L.L.C., 211 F.3d at 590 (quoting *Scaltech,* Inc.); Tec Air, Inc., 192 F.3d at 1358 (quoting *Scaltech, Inc.*). That is why this court has first construed the pertinent claim of the '325 patent. *See, e.g.,* Union Oil Co. of Cal., 208 F.3d at 995 (" 'The first step in any invalidity ... analysis is claim construction.' ") (quoting Rockwell Int'l Corp., 147 F.3d at 1362).

[20] As to the second requirement under *Pfaff*-that the invention was ready for patenting more than one year before the application date for the patent, *see* Pfaff, 525 U.S. at 67, 119 S.Ct. 304; Zacharin, 213 F.3d at 1369; STX, L.L.C., 211 F.3d at 588; *Helifix, Ltd.,* 208 F.3d at 1349; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358-"[r]eduction of the invention to practice is sufficient." *See* Zacharin, 213 F.3d at 1369 (citing Pfaff, 525 U.S. at 67, 119 S.Ct. 304); *Helifix, Ltd.,* 208 F.3d at 1349 (the first way in which this condition can be satisfied is " 'by proof of reduction to practice before the critical date' ") (quoting Pfaff, 525 U.S. at 67, 119 S.Ct. 304); Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358. However, the party asserting invalidity can also satisfy this "ready for patenting" condition by establishing "that prior to the critical date, the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention." Pfaff, 525 U.S. at 67-68, 119 S.Ct. 304; STX, L.L.C., 211 F.3d at 591 (quoting *Pfaff*); *Helifix, Ltd.,* 208 F.3d at 1349 (also quoting *Pfaff*); Tec Air, Inc., 192 F.3d at 1358 (also quoting *Pfaff*).

b. Applicability of the on-sale bar here

[21] Specialty asserts that it has established beyond dispute at least four invalidating sales prior to the "critical date" of March 27, 1995: three sales of Kudlacek's own device and several sales of the Bickel "Flitemate" bow stabilizer, which Specialty contends fully anticipates the '325 patent. Specifically, Specialty alleges sales by representative Sam Mannos of Kudlacek's device as early as 1993; the sale by Dianne Bottjer of two invalidating devices made by Kudlacek to Bob's Bowhunting on May 20, 1994, both of which were purchased by Mr. and Mrs. Lee Moore in 1994; Kudlacek's sale to Lawrence Kivett's nephew of an invalidating device from Kudlacek's booth at the February 1995 Las Vegas Archery Tournament; and the sales as early as October 1994 of other fully anticipatory "Flitemate" archery bow stabilizers made by Bickel.

Kudlacek does not contest these sales on the ground that they did not involve devices that were "ready for patenting." *See* Pfaff, 525 U.S. at 67, 119 S.Ct. 304; Zacharin, 213 F.3d at 1369; STX, L.L.C., 211 F.3d at 588; *Helifix, Ltd.,* 208 F.3d at 1349; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358. Indeed, it seems unlikely that such a challenge would be fruitful, since all of the sales involved devices fully reduced to practice. *See* Pfaff, 525 U.S. at 67, 119 S.Ct. 304; *Zacharin,* F.3d at 1369; *Helifix, Ltd.,* 208 F.3d at 1349; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358. Thus, the second condition of the on-sale bar appears to be conceded here as to all four of the allegedly "invalidating" sales.

Rather, Kudlacek disputes the factual adequacy of these "invalidating" sales on the basis of the first condition, their qualificationeither as sales before the critical date or as sales of fully anticipatory devices. *See* Pfaff, 525 U.S. at 67, 119 S.Ct. 304; STX, L.L.C., 211 F.3d at 590; Tec Air, Inc., 192 F.3d at 1358; Scaltech, Inc., 178 F.3d at 1383. Specifically, Kudlacek contests the dates of the purported sales of his own anticipatory devices-the "Mannos," "Bottjer/Moore," and "Kivett" sales. Although Kudlacek apparently concedes that the devices purchased by Kivett's nephew and the Moores "fully anticipated the claimed invention," STX, L.L.C., 211 F.3d at 590; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358, that is, "met each of the limitations of the claim, and thus [were] embodiment[s] of the claimed invention," Scaltech, Inc., 178 F.3d at 1383, because they were sales of his own device, Kudlacek contends that these sales simply could not have occurred prior to the critical date, because he did not invent the device embodied in the '325 patent until June of 1995. Specialty argues that Kudlacek has failed to generate a genuine issue of material fact that these fully anticipatory sales did not occur before the critical date, because he relies only on his own self-serving and conclusory affidavit as to the date of invention.

[22] ***i. Sufficiency of Kudlacek's evidence of the date of invention.*** Specialty cites Barmag Barmer Maschinenfabrik AG v. Murata Mach., Ltd., 731 F.2d 831 (Fed.Cir.1984), for the proposition that a party cannot rely on mere denials or conclusory allegations to defeat a motion for summary judgment. In *Barmag Barmer,* the Federal Circuit Court of Appeals wrote,

A critical factor in a motion for summary judgment in a patent case, as in any other, is the determination by the court that there is no *genuine* issue of *material* fact. With respect to whether there is a genuine issue, the court may not simply accept a party's statement that a fact is challenged. Union Carbide Corp. v. American Can Co., 724 F.2d [1567,] 1571, 220 USPQ [584,] 588 [(Fed. Cir.1984)]. The party opposing the motion must point to an evidentiary conflict created on the record at least by counter statement of a fact or facts set forth in detail in an affidavit by a knowledgeable affiant. Mere denials or conclusory statements are insufficient.

Barmag Barmer, 731 F.2d at 835-36 (emphasis in the original). Similarly, in Johnston v. IVAC Corp., 885 F.2d 1574 (Fed.Cir.1989), the Federal Circuit Court of Appeals rejected the sufficiency of an attorney's affidavit concerning infringement, as follows:

The Iandiorio affidavit contains only the following statement of infringement:

More particularly, I have reviewed the probe cover grip mechanism of the IVAC thermometer with respect to the patent, and I find that it infringes at least claims 1, 2, 3, 4, 5 and 6 of the patent.

This conclusory statement is wholly insufficient to raise a genuine evidentiary dispute for a jury. In affirming summary judgment of non-infringement, this court held in Chemical Engineering [v. Essef Indus., Inc.], 795 F.2d [1565,] 1571, 230 USPQ [385,] 390 [(Fed.Cir.1986)]:

General assertions of fact issues, general denials, and conclusory statements are insufficient to shoulder the non-movant's burden. *Cf.* Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1141, 229 USPQ 182, 186 (Fed.Cir.1986).

Johnston, 885 F.2d at 1578; *see also* Wiener v. NEC Electronics, Inc., 102 F.3d 534, 542 (Fed.Cir.1996) (the plaintiff in a patent case could not defeat summary judgment, because "[h]er only relevant evidence, her expert's declaration [of equivalency of the infringing device], is too conclusory to constitute substantial evidence" as required by Celotex v. Catrett, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986)); Imperial Tobacco, Ltd. v. Philip Morris, Inc., 899 F.2d 1575, 1581 (trademark infringement case in which the court noted that "a conclusory statement on the ultimate issue does not create a *genuine* issue of fact," where the ultimate issue was abandonment of the trademark). Thus, "conclusory statements" that a factual

issue *exists* are insufficient to defeat summary judgment, *see* Barmag Barmer, 731 F.2d at 835-36, as are "conclusory statements" on an "ultimate issue," such as infringement. *See* Johnston, 885 F.2d at 1578; *see also* Wiener, 102 F.3d at 542; Imperial Tobacco, Ltd., 899 F.2d at 1581.

However, Kudlacek's averments, in his affidavit, that he invented the device embodied in the '325 patent only in June of 1995 meet the criteria in these cases to generate genuine issues of material fact as to the date on which the device was invented. As required by *Barmag Barmer,* Kudlacek's affidavit "point[s] to an evidentiary conflict created on the record at least by counter statement of a fact or facts set forth in detail in an affidavit by a knowledgeable affiant." Barmag Barmer, 731 F.2d at 836. Kudlacek, the inventor, and hence a "knowledgeable affiant," makes a "counter statement of fact" concerning the date on which he invented the device that is embodied in the '325 patent, and indeed, as the inventor, he is uniquely placed to have knowledge of such information. Id. Kudlacek does not merely assert that there is "a factual issue" as to the invention date, id., or make an assertion on an "ultimate question" of law and fact, such as infringement, *see* Johnston, 885 F.2d at 1578, or equivalency, *see* Wiener, 102 F.3d at 542, or "abandonment," *see* Imperial Tobacco, Ltd., 899 F.2d at 1581-or, in this case, validity. Kudlacek's testimony as to the date on which he invented the device embodied in the '325 patent would certainly be admissible evidence on the fact question of when the patented device was invented. *See* FED. R. CIV. P. 56(c); Celotex, 477 U.S. at 322, 106 S.Ct. 2548.

Moreover, Kudlacek's affidavit concerning the date of invention does not stand alone and uncorroborated. Rather, Kudlacek has also submitted a supporting affidavit of his business associate, Roland Haggard, corroborating Kudlacek's own statements concerning the date he "discovered" his invention and first made and displayed devices incorporating his invention.

Specialty is correct that documentary support for Kudlacek's invention date is lacking, but this lack of documentary support goes to the weight of Kudlacek's evidence in light of the circumstances, including the likelihood or unlikelihood that an inventor would consciously develop such a "paper trail" to document the date and progress of his inventions. Similarly, the weight of Roland Haggard's corroborating affidavit may be challenged, because he is also an "interested" affiant as Kudlacek's "business associate." Nevertheless, what is presented here is a classic credibility question on the fact issue of the date of invention, which belongs to the jury. Certainly, Specialty has not shown on this record that the "Bottjer/Moore" or "Kivett" sales establish by the requisite "clear and convincing evidence" that "no reasonable jury could find otherwise" than that the patent is invalid. Eli Lilly & Co., 222 F.3d at 977; STX, L.L.C., 211 F.3d at 590; Tec Air, Inc., 192 F.3d at 1358.

ii. The "Bottjer/Moore" sales. In its eleventh-hour second supplemental memorandum in support of its "invalidity" motion, Specialty contends that, in Kudlacek's deposition on August 25, 2000, Kudlacek "concedes" that the stabilizers purchased by the Moores were manufactured prior to the March 27, 1995, critical date. Such evidence would likely satisfy the "clear and convincing evidence" requirement for summary judgment of invalidity, if it were true that Kudlacek had made such a concession and had also conceded that the stabilizer or stabilizers bought by the Moores fully anticipated the patented device. However, Specialty has mischaracterized Kudlacek's testimony.

Far from "conceding" that the sale to the Moores involved a device manufactured prior to the critical date, or that the sale involved a fully anticipatory device, Kudlacek simply stated in his deposition that he had "no idea of what [the Moores] gave the Bottjers," *see* Defendants' Second Supplemental Memorandum In Support Of Motion For Summary Judgment Of Invalidity Of U.S. Patent No. 5,611,325, Affidavit of Michael Lafeber, Exhibit A, Transcript of Deposition of Donald Kudlacek ("Kudlacek Deposition"), pp. 97-98; conceded only that he has no information that would lead him to assert that the Moores' declarations were wrong or inaccurate in any way, *see* id.; acknowledged that Bottjer was only a sales representative for Kudlacek's company for part of 1993 and 1994, *see* id. at pp. 94-95; and acknowledged that Kudlacek had

shipped no bow stabilizers to Bob's Bowhunting after 1994. *See* id. Specialty contends that this deposition testimony indicates the absence of evidence challenging the validity or accuracy of the Moores' declarations and concedes that the stabilizers they purchased from Bob's Bowhunting must have been made and sold prior to the critical date, thus establishing the invalidity of the '325 patent as a matter of law. This simply is not so.

As noted above, there is evidence in the record, from Kudlacek's and Haggard's declarations, that the device embodied in the '325 patent was not invented prior to June of 1995, so that there are reasonable inferences on record evidence that whatever was sold to Bob's Bowhunting and then to the Moores prior to the critical date could not have been a fully anticipatory device, as well as reasonable inferences that, if the Moores purchased a device that fully embodies the patented invention, it could not have been purchased prior to June of 1995. Kudlacek's lack of knowledge of what the Moores sent Bottjer utterly fails to establish beyond dispute that what the Moores bought prior to the critical date was a fully anticipatory device. Kudlacek's lack of information about when and what the Moores bought may weigh in Specialty's favor, but nevertheless, it is not "clear and convincing evidence" of a fully anticipatory, hence "invalidating," sale prior to the critical date.

Similarly, Specialty's other bit of "new" evidence from Kudlacek's deposition that is discussed in its second supplemental brief on "invalidity"-Kudlacek's supposed "misrepresentation" that another bow stabilizer represented a pre-critical date device, followed by his deposition concessions that the bow stabilizer in question was a mix of pre-and post-critical date components-utterly fails to demonstrate that any particular device sold before the critical date was indeed a fully anticipatory device, whatever the effect of this testimony on Kudlacek's credibility. Thus, the evidence to which Specialty points in its second supplemental brief in support of its motion for summary judgment of invalidity of the '325 patent also fails to establish by the requisite "clear and convincing evidence" that "no reasonable jury could find otherwise" than that the patent is invalid. Eli Lilly & Co., 222 F.3d at 977; STX, L.L.C., 211 F.3d at 590; Tec Air, Inc., 192 F.3d at 1358.

iii. The "Kivett" sale. Genuine issues of material fact regarding the purported anticipatory sale to Lawrence Kivett's nephew at the February 1995 Las Vegas Archery Tournament are readily apparent. The affidavits of Kudlacek and his business associate, Roland Haggard, detailing the "discovery" date and first display of bow stabilizers embodying the discovery are sufficient to generate genuine issues of material fact as to whether or not what Lawrence Kivett and his nephew saw on display and what Kivett's nephew purchased in February of 1995 was a fully anticipatory device. Similarly, if it can be shown that what Kivett's nephew purchased was indeed a fully anticipatory device, these affidavits generate genuine issues of material fact about when he could have purchased such a device. Thus, there is a genuine issue of material fact as to whether any bow stabilizers seen or purchased by Kivett or his nephew prior to the critical date "fully anticipated the claimed invention," STX, L.L.C., 211 F.3d at 590; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358, that is, "met each of the limitations of the claim, and thus [were] embodiment[s] of the claimed invention." Scaltech, Inc., 178 F.3d at 1383.

iv. The "Mannos" sales. Genuine issues of material fact regarding the purported anticipatory sales by Sam Mannos are also readily apparent. Although Mannos originally averred that he had sold anticipatory devices as early as 1993, he subsequently retracted that statement, stating, "Contrary to what I attested to in my previous declaration, I am not certain of the date when Donald S. Kudlacek and/or his company Kudlacek's Archery, Inc. first sold or offered for sale 4x4 carbon stabilizers having resilient or soft pads which are between the set screws and stabilizer rods." May 25, 2000, Declaration of Sam Mannos at 2. Thus, there is a genuine issue of material fact as to whether any bow stabilizers sold by Sam Mannos prior to the critical date "fully anticipated the claimed invention," STX, L.L.C., 211 F.3d at 590; Vanmoor, 201 F.3d at 1366; Tec Air, Inc., 192 F.3d at 1358, that is, "met each of the limitations of the claim, and thus [were] embodiment[s] of the claimed invention." Scaltech, Inc., 178 F.3d at 1383.

[23] ***v. The "Bickel Flitemate" sales.*** At oral arguments, counsel for Specialty conceded that jury questions were presented as to whether any of the purported invalidating sales of Kudlacek's own devices were both prior to the critical date and involved devices that fully anticipated the patented invention. Consequently, the invalidity of the '325 patent, for purposes of Specialty's summary judgment motion, rides on whether the admittedly pre-critical date sales of Bickel "Flitemate" bow stabilizers constituted sales of fully anticipatory devices. Specialty contends that the Bickel "Flitemate" bow stabilizers incorporated nylon tips on set screws, and that, because "nylon" is defined as "elastic," and a synonym of "elastic" is "resilient," the pre-critical date sales of the Bickel "Flitemate" bow stabilizers were sales of bow stabilizers with "resilient securing means" for securing the adjustment member to the stabilizer rods, and hence fully anticipated the patented device. Kudlacek argues, first, that the nylon tips on the set screws in the Bickel "Flitemate" bow stabilizers are not "resilient" within the meaning of the '325 patent, because they crush and retain a new shape when they engage a stabilizer rod, instead of recovering their original shape, and next, that even if the Bickel nylon tips are "resilient," sales of Bickel "Flitemate" bow stabilizers are not fully anticipatory, because, as the patent examiner observed in allowing the '325 patent, Bickel bow stabilizers do not use a set screw with a "resilient" tip to engage *each* of the stabilizer rods, but instead use a set screw that engages only *one* of the several stabilizer rods.

The court concludes that Kudlacek has also generated genuine issues of material fact as to whether the pre-critical date sales of Bickel "Flitemate" bow stabilizers were fully anticipatory of the patented invention. As the court noted above, Specialty has confused a question of law, construction of the terms of the '325 patent, with a question of fact, whether or not any particular structure infringes or anticipates the patent, because it uses a "securing means" that is or is not "resilient." Specialty has thereby turned the analytical process on its head, by asserting that "nylon" equals "elastic," which equals "resilient," when the proper question is, do the "nylon" tips of the Bickel "Flitemate" bow stabilizers actually (that is, as a matter of fact) possess the characteristics of a "resilient pad," as that element of the '325 patent was construed above (as a matter of law). Moreover, Kudlacek has also pointed to record evidence generating genuine issues of material fact that, even with "resilient" tips, Bickel "Flitemate" bow stabilizers do *not* anticipate the '325 patent, because, in the Bickel device, only one set screw engages only one stabilizer rod, whereas the patentable feature of the '325 patent over Bickel was that it used a set screw with a resilient tip engaging each of the stabilizer rods. Thus, the court cannot find, by the requisite "clear and convincing evidence," that "no reasonable jury could find otherwise" than that the patent is invalid because of pre-critical date sales of Bickel "Flitemate" bow stabilizers. Eli Lilly & Co., 222 F.3d at 977; STX, L.L.C., 211 F.3d at 590; Tec Air, Inc., 192 F.3d at 1358.

Because genuine issues of material fact are presented on the record evidence as to whether any of the allegedly "invalidating" sales occurred prior to the critical date, or if they occurred prior to the critical date, that they involved fully anticipatory devices, Specialty's motion for summary judgment determination that the '325 patent is invalid will be denied.

3. Non-infringement of the '325 patent

[24] [25] [26] In its second motion for summary judgment, Specialty seeks a determination that its "Super Stix" bow stabilizer does not infringe the '325 patent as a matter of law. Neither literal infringement nor infringement under the "doctrine of equivalents" requires proof of intent to infringe. *See* Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 34, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997). Rather, "[l]iteral infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.*, when 'the properly construed claim reads on the accused device exactly,' " KCJ Corp., 223 F.3d at 1358 (quoting Amhil Enters., Ltd. v. Wawa, Inc., 81 F.3d 1554, 1562 (Fed.Cir.1996)), while "[i]nfringement under the doctrine of equivalents requires that the accused product contain each limitation of the claim or its equivalent." *Id.* (citing Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. 1040); *see also* Elekta Instrument

S.A. v. O.U.R. Scientific Int'l, Inc., 214 F.3d 1302, 1306 (Fed.Cir.2000) (" 'In order for a court to find infringement, the [claimant] must show the presence of every element or its substantial equivalent in the accused device.' ") (quoting Wolverine World Wide, Inc. v. Nike, Inc., 38 F.3d 1192, 1199 (Fed.Cir.1994)).

[27] "Whether the accused device contains each claim element exactly or its equivalent is a question of fact." KCJ Corp., 223 F.3d at 1355; Tate Access Floors, Inc., 222 F.3d at 963-64. Therefore, as this court mentioned above in its discussion of standards for summary judgment in patent cases, when summary judgment involves the question of non-infringement, summary judgment is only appropriate if, after resolving reasonable inferences in favor of the patentee, "no reasonable jury could find infringement." Ishida Co., Ltd., 221 F.3d at 1316; IMS Tech., Inc., 206 F.3d at 1429. This standard applies whether the court examines literal infringement or infringement under the "doctrine of equivalents." *See* CAE Screenplates, Inc., 224 F.3d at 1318; KCJ Corp., 223 F.3d at 1355-56; Vehicular Techs. Corp., 212 F.3d at 1381. As this court also recognized above, "[t]his standard [for summary judgment of non-infringement] sets a high hurdle which th[e] court does not lightly attempt to surmount." Vehicular Techs. Corp., 212 F.3d at 1381.

Specialty contends that its "Super Stix" lacks certain elements required by the '325 patent, and does not have "equivalents" of such elements, so that it does not infringe the '325 patent, either literally or under the doctrine of equivalents, as a matter of law. Kudlacek however, contends that each element of claim **1** of the '325 patent reads on the "Super Stix," either literally or under the doctrine of equivalents. The court will address the parties' arguments concerning both literal and doctrine-of-equivalents infringement below, after surveying the applicable law.

a. Literal infringement

i. The literal infringement analysis. As the Federal Circuit Court of Appeals recently explained,

When reviewing whether an accused device literally infringes a patent claim, we perform a two-step analysis. "First, the claims must be correctly construed to determine the scope of the claims. Second, the claims must be compared to the accused device." Kahn v. General Motors Corp., 135 F.3d 1472, 1476, 45 USPQ2d 1608, 1610 (Fed.Cir.1998)[, *cert. denied,* 525 U.S. 875, 119 S.Ct. 177, 142 L.Ed.2d 144 (1998)].

CAE Screenplates, Inc., 224 F.3d at 1316; KCJ Corp., 223 F.3d at 1355-56; Tate Access Floors, Inc., 222 F.3d at 963-64; Elekta Instrument S.A., 214 F.3d at 1306. This court performed the first step of the analysis, construction of the pertinent claims of the '325 patent, above in Section II.B.1., beginning on page 1021. Therefore, the court must now turn to the second step of the literal infringement analysis and compare the claims of the '325 patent, as construed, to the accused device.

[28] As mentioned above, "[l]iteral infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.,* when 'the properly construed claim reads on the accused device exactly.' " KCJ Corp., 223 F.3d at 1359 (quoting Amhil Enters., Ltd., 81 F.3d at 1562); Tate Access Floors, Inc., 222 F.3d at 964 (" 'Literal infringement requires that every limitation of the patent claim be found in the accused device.' ") (quoting General Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 981 (Fed.Cir.1997)). Therefore, "[i]f any claim limitation is absent from the accused device, there is no literal infringement as a matter of law." Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1247 (Fed.Cir.2000); Zodiac Pool Care, Inc. v. Hoffinger Indus., Inc., 206 F.3d 1408, 1415 (Fed.Cir.2000). On the other hand,

[i]t is fundamental that one cannot avoid infringement merely by adding elements [to an accused device] if each element recited in the claims is found in the accused device. For example, a pencil structurally infringing a patent claim would not become noninfringing when incorporated into a complex machine that limits or controls what the pencil can write.

Suntiger, Inc. v. Scientific Research Funding Group, 189 F.3d 1327, 1336 (Fed.Cir.1999); *see also* Tate Access Floors, Inc., 222 F.3d at 970-71 (quoting *Suntiger, Inc.*). To avoid literal infringement, an addition to the accused device must "eliminate a limitation or inherent feature of the claim" in the patent-in-suit. *See* Tate Access Floors, Inc., 222 F.3d at 970 ("Accordingly, given that the addition of paint does not eliminate a limitation or inherent feature of the claim, Maxcess may not avoid infringement by merely adding paint to the border of its floor panel.").

ii. Literal infringement of claim 1(d). Again, claim 1(d) claims the following element of the '325 patent:

1. An archery bow stabilizer, comprising:

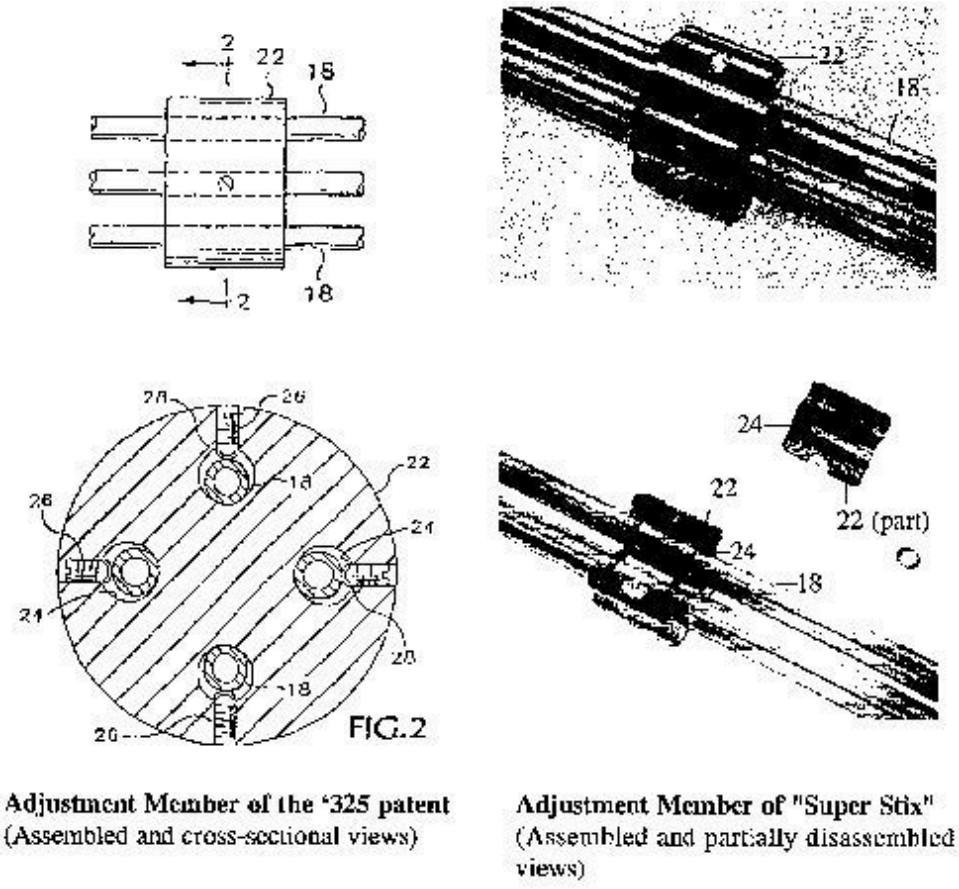
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d) at least one vibration dampener adjustment member having openings therethrough matching the number and circumferential spacing of said stabilizer rods and a diameter larger than the diameter of said stabilizer rods freely receiving said rods therethrough[.]

Plaintiff's Complaint, Exhibit 1 (the '325 patent). Specialty contends that the adjustment member of the "Super Stix" does not literally infringe this element of the '325 patent, and hence does not infringe claim **1** of the patent, because the adjustment member of the "Super Stix" is not a single unit with "openings therethrough," but a multi-piece component that comes together to form channels through which the stabilizer rods pass. Kudlacek, however, argues that the multi-piece adjustment member of the "Super Stix" still falls within a proper construction of "adjustment member" in claim **1**(d) and that the "Super Stix" adjustment member has "openings therethrough," as required by claim **1**(d).

The "adjustment members" of the '325 patent and the "Super Stix" are shown side by side below:

***1041**



Adjustment Member of the '325 patent (Assembled and cross-sectional views)

Adjustment Member of "Super Stix" (Assembled and partially disassembled views)

[29] In its construction of this element in Section II.B.1.c., on page 1024, above, this court concluded that "the language of element (d) of claim 1 encompasses a 'vibration dampener adjustment member' comprised of either a single piece or multiple pieces joined together so that the member has 'openings therethrough' that permit the stabilizer rods to pass through the 'adjustment member' and the 'adjustment member' partially or completely encloses the 'openings therethrough.' " *See* CAE Screenplates, Inc., 224 F.3d at 1316 (first step of the literal infringement analysis requires that "the claims must be correctly construed to determine the scope of the claims"); KCJ Corp., 223 F.3d at 1355-56; Tate Access Floors, Inc., 222 F.3d at 963-64; Elekta Instrument S.A., 214 F.3d at 1306. Based on this construction of claim 1(d) of the '325 patent, and comparison of the claim to the accused device, *see* CAE Screenplates, Inc., 224 F.3d at 1316-17 (second step of the literal infringement analysis requires that "the claims must be compared to the accused device"); KCJ Corp., 223 F.3d at 1355-56; Tate Access Floors, Inc., 222 F.3d at 963-64; Elekta Instrument S.A., 214 F.3d at 1306, the court concludes that the "Super Stix" adjustment member *does* literally infringe this element of the '325 patent, because "every limitation recited in the claim appears in the accused device, *i.e.*, ... 'the properly construed claim reads on the accused device exactly.' " KCJ Corp., 223 F.3d at 1358 (quoting Amhil Enters., Ltd., 81 F.3d at 1562); Tate Access Floors, Inc., 222 F.3d at 964 (" 'Literal infringement requires that every limitation of the patent claim be found in the accused device.' ") (quoting General Mills, Inc., 103 F.3d at 981). Specifically, as shown in the illustrations above, the "Super Stix" has a " 'vibration dampener adjustment member' [22] comprised of ... multiple pieces joined together so that the member [22] has 'openings therethrough' [24] that permit the stabilizer rods [18] to pass through the 'adjustment member' [22] and the 'adjustment member' [22] partially or completely encloses the 'openings therethrough' [24]." *See* Court's construction of claim 1(d) (numbers from Fig. 2 of the '325 patent inserted).

However, the "Super Stix" accused device only infringes the '325 patent if "every limitation recited in *the*

claim "-not merely a single element of a claim-"appears in the accused device." KCJ Corp., 223 F.3d at 1358 (quoting Amhil Enters., Ltd., 81 F.3d at 1562); Tate Access Floors, Inc., 222 F.3d at 964 (" 'Literal infringement requires that every limitation of the patent claim be found in the accused device.' ") (quoting General Mills, Inc., 103 F.3d at 981). Thus, Specialty may still prevail on its motion for summary judgment of non-infringement of the '325 patent if it can show that its "Super Stix" does not, as a matter of law, infringe element (e) of claim **1** of the patent-in-suit, either literally or equivalently.

[30] ***iii. Literal infringement of claim 1(e).*** As the court concluded above, claim **1**(e) is a means-plus-function element. The determination of literal infringement of this means-plus-function element therefore involves somewhat different considerations than did literal infringement of claim **1**(d):

Literal infringement of a claim with a means-plus-function clause requires that the accused device perform a function identical to that identified in the means clause. *See* Micro Chem., Inc. v. Great Plains Chem. Co., 103 F.3d 1538, 1547, 41 USPQ2d 1238, 1245-46 (Fed.Cir.1997)[, *cert. denied,* 521 U.S. 1122, 117 S.Ct. 2516, 138 L.Ed.2d 1018 (1997)]. If it performs the identical function, an accused device literally infringes a claim element under s. 112 para. 6 only if it is insubstantially different from the corresponding structure in the patent specification. *See* Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus. Inc., 145 F.3d 1303, 1309, 46 USPQ2d 1752, 1756 (Fed.Cir.1998). The "insubstantial difference" analysis requires a determination of "whether the 'way' the accused structure performs the claimed function, and the 'result' of that performance, are substantially different from the 'way' the claimed function is performed by the 'corresponding structure ... described in the specification,' or its 'result.' " Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1267, 51 USPQ2d 1225, 1229-30 (Fed.Cir.1999) (quoting 35 U.S.C. s. 112 para. 6).

Ishida Co., Ltd., 221 F.3d at 1316-17; IMS Tech., Inc., 206 F.3d at 1430 ("For literal infringement of a s. 112, para. 6 limitation, the second step of an infringement analysis begins with determining whether the accused device or method performs an identical function to the one recited in the claim. If the identical function is performed, the next step is to determine whether the accused device uses the same structure, materials, or acts found in the specification, or their equivalents.") (citation omitted).

In *IMS Technology, Inc.,* the Federal Circuit Court of Appeals explained in some detail the relationship between this tripartite test for literal infringement of a s. 112, para. 6, element with the test for infringement under the doctrine of equivalents:

This court has on several occasions compared statutory equivalence under s. 112, para. 6 and the judicial doctrine of equivalents. *See, e.g.,* Odetics, Inc. v. Storage Technology Corp., 185 F.3d 1259, 1267, 51 USPQ2d 1225, 1229-30 (Fed.Cir.1999); *Al-* Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1319-21, 50 USPQ2d 1161, 1167-68 (Fed.Cir.1999); Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc., 145 F.3d 1303, 1310, 46 USPQ2d 1752, 1757-58 (Fed.Cir.1998); Cybor Corp. v. FAS Technologies, 138 F.3d 1448, 1467, 46 USPQ2d 1169, 1184 (Fed.Cir.1998) (*en banc*) (Mayer, C.J., concurring); Alpex Computer Corp. v. Nintendo Co., 102 F.3d 1214, 1222, 40 USPQ2d 1667, 1673-74 (Fed.Cir.1996)[, *cert. denied,* 521 U.S. 1104, 117 S.Ct. 2480, 138 L.Ed.2d 989 (1997)]; Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1042-44, 25 USPQ2d 1451, 1453-55 (Fed.Cir.1993). While acknowledging that there are differences between s. 112, para. 6 and the doctrine of equivalents, *this court on several occasions has indicated that the tests for equivalence under s. 112, para. 6 and the doctrine of equivalents are "closely related," involving "similar analyses of insubstantiality of the differences*." Chiuminatta, 145 F.3d at 1310, 46 USPQ2d at 1757-58; *see also* Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 28, 117 S.Ct. 1040, 137 L.Ed.2d 146, 41 USPQ2d 1865, 1870 (1997) (stating that application of s. 112, para. 6 "is an application of the doctrine of equivalents in a restrictive role...."); Valmont, 983 F.2d at 1043, 25 USPQ2d at 1455 ("The word 'equivalent' in section 112 invokes the familiar concept of an insubstantial change which adds nothing of significance."). Thus, a reduced version of the well-known tripartite test for the doctrine of equivalents has been applied in the s. 112, para. 6 context to determine if the differences are insubstantial,

i.e., after determining that the accused device performs the identical function, as required by statute, whether it performs the function in substantially the same way to achieve substantially the same result. *See* Odetics, 185 F.3d at 1267, 51 USPQ2d at 1229-30; *see also* Dawn Equipment Co. v. Kentucky Farms Inc., 140 F.3d 1009, 1019-20, 46 USPQ2d 1109, 1116 (Fed.Cir.1998) (Plager, J., additional views) (suggesting use of the tripartite test "to resolve the question of insubstantial changes" under s. 112, para. 6). Evidence of known interchangeability between structure in the accused device and the disclosed structure has also been considered an important factor. *See Al-* Site, 174 F.3d at 1316, 50 USPQ2d at 1165; Chiuminatta, 145 F.3d at 1309, 46 USPQ2d at 1757 (citing Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 609, 70 S.Ct. 854, 94 L.Ed. 1097, 85 USPQ 328, 331 (1950)).

In light of the similarity of the tests for equivalence under s. 112, para. 6 and the doctrine of equivalents, the context of the invention should be considered when performing a s. 112, para. 6 equivalence analysis just as it is in a doctrine of equivalents determination. See Texas Instruments, Inc. v. U.S. ITC, 805 F.2d 1558, 1563, 231 USPQ 833, 835 (Fed.Cir.1986) ("It has long been recognized that the range of permissible equivalents depends upon the extent and nature of the invention ...."); *cf.* Warner-Jenkinson, 520 U.S. at 40, 117 S.Ct. 1040, 137 L.Ed.2d 146, 41 USPQ2d at 1875 (noting that in a doctrine of equivalents determination, "[a]n analysis of the role played by each element in the context of the specific patent claim will thus inform the inquiry as to whether a substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element"). *As a result, two structures that are equivalent in one environment may not be equivalent in another. More particularly, when in a claimed "means" limitation the disclosed physical structure is of little or no importance to the claimed invention, there may be a broader range of equivalent structures than if the physical characteristics of the structure are critical in performing the claimed function in the context of the claimed invention. Thus, a rigid comparison of physical structures in a vacuum may be inappropriate in a particular case. Indeed, the statute requires two structures to be equivalent, but it does not require them to be "structurally equivalent," i.e., it does not mandate an equivalency comparisonthat necessarily focuses heavily or exclusively on physical structure.*

In some cases, an analysis of insubstantial differences in the context of the invention results in a finding of equivalence under s. 112, para. 6 even though two structures arguably would not be considered equivalent structures in other contexts, e.g., if performing functions other than the claimed function. *See* Odetics, 185 F.3d at 1269-71, 51 USPQ2d at 1231-32 (reinstating jury verdict of infringement when there was evidence that a "bin array" with a cam and cam follower mechanism performed a rotary function in the same way as a "rotary means" with a gear mechanism by receiving force); *Al-* Site, 174 F.3d at 1315-17, 50 USPQ2d at 1164-65 (affirming jury verdict of infringement based on expert testimony of known interchangeability of glue and rivet as a "fastening means" on hanger tag for glasses). *But see* Odetics, 185 F.3d at 1277-79, 51 USPQ2d at 1237-38 (Lourie, J., dissenting) (criticizing majority for focusing exclusively on function and not on structure). *In other cases, in which the specific physical features of the structure corresponding to the "means" limitation may have more relevance to the claimed invention, a finding of noninfringement results. See* Chiuminatta, 145 F.3d at 1309-10, 46 USPQ2d at 1757 (finding wheels and skid plate not equivalent for supporting surface of concrete, particularly since there was no allegation that one skilled in the art recognized the interchangeability of structures for performing claimed function).

IMS Tech., Inc., 206 F.3d at 1435-36 (emphasis added). Because s. 112, para. 6, "requires two structures to be equivalent, but does not require them to be 'structurally equivalent,' " the court in *IMS Technology, Inc.*, also explained the difference between "equivalent structure" and "structural equivalents":

The difference between "equivalent structures" and "structural equivalents" can be demonstrated with a simple example borrowed from the late Judge Rich. A claim includes part A, part B, and "means for securing parts A and B together in a fixed relationship." The written description discloses that parts A and B are made of wood and are secured together by nails. For purposes of the invention, it does not matter how

parts A and B are secured; nails are not a critical part of the invention. A screw is not a nail, but for purposes of s. 112, para. 6, it is equivalent structure in the context of the invention, though it is not the "structural equivalent" of a nail.

IMS Tech., Inc., 206 F.3d at 1436 n. 3.

These principles led the court in *IMS Technology* to conclude that, "[i]n light of the evidence presented by IMS regarding insubstantiality of the differences between a floppy disk drive and a tape cassette transport *in the context of the claimed invention* ... there are genuine issues of material fact regarding literal infringement under s. 112, para. 6" of two claims of the patent-in-suit, even though "there are admittedly physical differences" between "a floppy disk drive and a tape cassette transport," because "[t]his does not appear to be a case in which any physical characteristics of the interface means, such as the specific format of recorded data and the mechanism for accessing data, are important to the invention." *Id*. at 1437. Also, "because of the similarities in analysis of equivalence under s. 112, para. 6 and the doctrine of equivalents, there also remain genuine factual issues regarding infringement ... under the doctrine of equivalents." *Id*.

Somewhat more concisely, the Federal Circuit Court of Appeals explained in *Kemco Sales, Inc*., that

[a] key feature that distinguishes "equivalents" under section 112, paragraph 6 and "equivalents" under the doctrine of equivalents is that section 112, paragraph 6 equivalents must perform the identical function of the disclosed structure, *see* Odetics, 185 F.3d at 1267, 51 USPQ2d at 1229; Pennwalt [Corp. v. Durand-Wayland, Inc.], 833 F.2d [931,] 934, 4 USPQ2d [1737,] 1739 [(Fed.Cir.1987) (*en banc*)], while equivalents under the doctrine of equivalents need only perform substantially similar functions, *see Al-* Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1320-21, 50 USPQ2d 1161, 1168 (Fed.Cir.1999).

Because the "way" and "result" prongs are the same under both the section 112, paragraph 6 and doctrine of equivalents tests, a structure failing the section 112, paragraph 6 test under either or both prongs must fail the doctrine of equivalents test for the same reason(s). That was the case in *Chiuminatta,* in which the "way" was determined to be substantially different under a section 112, paragraph 6 analysis. *See* Chiuminatta, 145 F.3d at 1309, 46 USPQ2d at 1757. Accordingly, we concluded that the accused structure did not infringe under the doctrine of equivalents for precisely the same reason. *See* id. at 1311, 145 F.3d 1303, 46 USPQ2d at 1758.

Kemco Sales, Inc., 208 F.3d at 1364. Therefore, once the court in *Kemco Sales, Inc*., had concluded, in its s. 112, para. 6 literal infringement analysis, that the accused device performed the identical function, but did so in a substantially *different* way, it also concluded that there could be no infringement of the means-plus-function element under the doctrine of equivalents for the same reason. *Id*. at 1365.

Again, element (e) of claim **1** of the '325 patent claims an element of the invention as follows:

1. An archery bow stabilizer, comprising:

* * * * * *

e) resilient securing means on the vibration dampener adjustment member extending into each of said openings and resiliently engaging and securing said adjustment member to said stabilizer rods intermediate the inner and outer ends of said rods.

Plaintiff's Complaint, Exhibit 1 (the '325 patent). Specialty contends that the "Super Stix"lacks any "resilient securing means" that is "on the adjustment member" or that "extend[s] into each of said openings" for the stabilizer rods, as required by claim **1**(e). Specialty argues that the securing screws on the "Super Stix" are

not resilient or tipped with resilient material, and indeed, do not extend into the openings for the stabilizer rods and do not engage or intersect such rods. Instead, Specialty argues that the "Super Stix" uses rigid screws that travel through the outside edges of the pieces of the adjustment member, pulling the four pieces of the adjustment member together in a clamping action around the stabilizer rods. Kudlacek, however, argues that the "Super Stix" has equivalent structures within the meaning of 35 U.S.C. s. 112, para. 6 for element (e) of claim **1**. Kudlacek contends that the function of resiliently engaging and securing the stabilizer rods is performed by the O-rings on the "Super Stix," which are "resilient pads" that "extend into each opening" for the stabilizer rods, and the resilient pads secure the stabilizer rods when screws are tightened. Thus, Kudlacek contends that the "Super Stix" performs the identical function in substantially the same way with substantially the same result.

This court has also "construe[d] [claim **1**(e) of the '325 patent], thereby determining what the claimed function is and what structures disclosed in the written description correspond to the 'means' for performing that function." Kemco Sales, Inc., 208 F.3d at 1360; Envirco Corp., 209 F.3d at 1365; IMS Tech., Inc., 206 F.3d at 1430. Specifically, the court concluded above, in Section II.B.1.d.ii., on page 1029, that the "function" of the means-plus-function element in claim **1**(e) of the '325 patent is "resiliently engaging and securing" the adjustment member to the stabilizer rods, but does not include "extending into each opening." The parties agree that the "Super Stix" accused device performs the identical function of "engaging and securing" the adjustment member to the stabilizer rods. Thus, the accused device satisfies the first requirement for literal infringement of a means-plus-function elementunder s. 112, para. 6. *See* Ishida Co., Ltd. 221 F.3d at 1316 ("Literal infringement of a claim with a means-plus-function clause requires that the accused device perform a function identical to that identified in the means clause."). Therefore, the court will pass on to the "insubstantial difference" analysis concerning "whether the 'way' the accused structure performs the claimed function, and the 'result' of that performance, are substantially different from the 'way' the claimed function is performed by the 'corresponding structure ... described in the specification,' or its 'result.' " *Id*. (quoting Odetics, Inc., 185 F.3d at 1267); IMS Tech., Inc., 206 F.3d at 1430.

In Section II.B.1.d.ii., on page 1031, the court concluded that the structure that performs the function described in the means-plus-function element of claim **1**(e) of the '325 patent is shown in Figure 2 below (side-by-side with the pertinent portion of the accused device) and is described in the specification as consisting of "[a] set screw **26** ... mounted in each tuning member **22** in registry with each through bore **24**, and a resilient pad **28** ... mounted on the inner end of each set screw." *See* The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 18-21; *see also* Ishida Co., Ltd., 221 F.3d at 1316 ("The district court properly identified 'the corresponding structure[s]' for each embodiment as required by s. 112 para. 6 by repeating in words the structures that the patentee had himself already defined in words and pictures.") (quoting the court below).

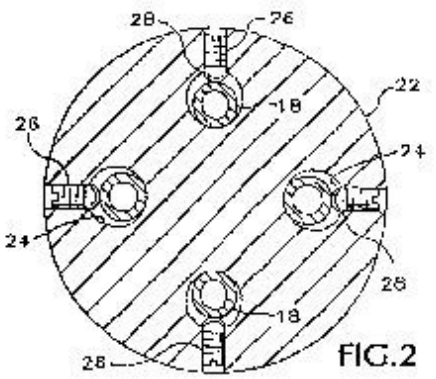
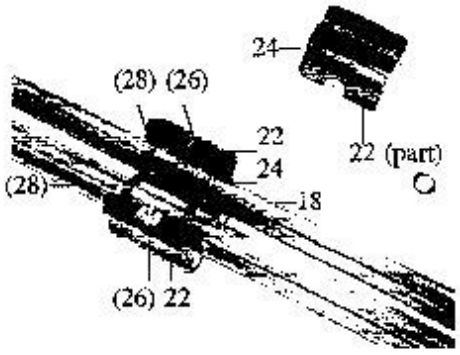


FIG.2

Adjustment Member of the '325 patent
(Cross-sectional view)



Adjustment Member of "Super Stix"
(Partially disassembled view)

[31] Specialty contends that its accused device lacks equivalents of the pertinent structure, and thus performs the identical function in a substantially *different* way. Whether Specialty prevails on this argument depends in large part upon "the context of the invention." *See* IMS Tech., Inc., 206 F.3d at 1435. Indeed, in the case of claim **1**(e) of the '325 patent, the court concludes that "the specific physical features of the structure corresponding to the 'means' limitation [do] have more relevance to the claimed invention"; indeed, "the physical characteristics of the structure are critical in performing the claimed function in the context of the claimed invention." *Cf*. id. at 1436. Here, it is clear that "[t]his [*is*] a case in which [the] physical characteristics of the [resilient securing means] *are* important to the invention." *Compare* id. at 1437 (finding "[t]his does not appear to be a case in which any physical characteristics of the interface means, such as the specific format of recorded data and the mechanism for accessing data, are important to the invention."). The specification of the pertinent structure in the '325 patent specifies certain components-including set screws and resilient pads-and the orientation of those components to each other and to the adjustment member-"[a] set screw **26** [is] mounted in each tuning member **22** in registry with each through bore **24**" and a "resilient pad" is "mounted on the inner end of each set screw." Indeed, the importance of this orientation of components in the pertinent structure is reflected in the language of claim **1**(e) itself, which claims "resilient securing means on the vibration dampener adjustment member extending into each of said openings." The '325 Patent, claim **1**(e).

Nevertheless, Kudlacek has attempted to assert the equivalence of certain structures in the accused device, as indicated by the component numbers shown in parentheses, above, in the illustration of the "Super Stix" adjustment member. Although Kudlacek identifies the O-rings of the accused device (28) as equivalents of the resilient pads **28** in the '325 patent, it is readily apparent that the O-rings are neither "on the vibration dampener adjustment member extending into each of said openings," *compare* The '325 Patent, claim 1(e), nor "mounted on the inner end of [any] set screw," *see* The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 18-21; rather, the O-rings (28) are both "on" and "mounted on" the stabilizer rods. The set screws of the accused device (26) also are not "mounted in each tuning member **22** in registry with each through bore **24**," but instead pass through the outer edges of the pieces of the adjustment member without ever contacting the "through bores" or the "resilient pads," in this case the O-rings (28), and the O-ring "resilient pads" are *not* "mounted on the inner end of each set screw." *See* The '325 Patent, "Description of the Preferred Embodiment" at Col. 2, *ll*. 18-21. Although it must be admitted that both devices secure the adjustment member to the stabilizer rods by tightening screws, as Kudlack contends, the tightening of the screws performs this securing function in an entirely different way in the two devices, because of the orientation of the components: In the accused device, the adjustment member is "clamped" around the O-rings on the stabilizer rods by tightening screws around the perimeter of the adjustment member, which is different from screwing individual pads against individual rods with individual set screws through the

adjustment member and into the individual "openings therethrough" through which the stabilizer rods pass.

In short, *in the context of the claimed invention,* the "resilient securing means" of the accused device is *not* an equivalent structure of the structure disclosed in the specification of the '325 patent and, although it performs the identical function, it does so in a substantially *different* "way." *See* IMS Tech., Inc., 206 F.3d at 1435-36 & n. 3; Kemco Sales, Inc., 208 F.3d at 1364; *see also* Ishida Co., Inc., 221 F.3d at 1316. Moreover, the court concludes that no reasonable jury could conclude that the structures are equivalent in the context of the language of claim 1(e) and the pertinent structure of this means-plus-function element as described in the specification, and hence "no reasonable jury could find [literal] infringement." Ishida Co., Ltd., 221 F.3d at 1315; IMS Tech., Inc., 206 F.3d at 1429.

However, before the court can grant Specialty's motion for summary judgment determination of non-infringement, the court must also consider whether there are genuine issues of material fact as to whether the "Super Stix" infringes the '325 patent under the doctrine of equivalents.

b. Infringement under the doctrine of equivalents

[32] [33] ***i. The infringement analysis under the doctrine of equivalents.*** "A device which does not infringe a patent claim literally may still infringe the claim under the doctrine of equivalents if each and every limitation of the claim is literally or equivalently present." CAE Screenplates, Inc., 224 F.3d at 1318-19; KCJ Corp., 223 F.3d at 1358; Tate Access Floors, Inc., 222 F.3d at 963-64; Zodiac Pool Care, Inc., 206 F.3d at 1415. "A claim limitation is 'equivalently present' in an accused device if there are only 'insubstantial differences' between the limitation and corresponding aspects of the device." CAE Screenplates, Inc., 224 F.3d at 1319 (quoting Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1517-18 (Fed.Cir.1995), *rev'd on other grounds,* 520 U.S. 17, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997)); KCJ Corp., 223 F.3d at 1358; Zodiac Pool Care, Inc., 206 F.3d at 1415. Thus, the doctrine of equivalents " 'prevents an accused infringer from avoiding infringement by changing only minor or insubstantial details of a claimed invention while retaining their essential functionality.' " Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1424 (Fed.Cir.1997)). The classic tripartite test of infringement under the doctrine of equivalents is to determine "whether the substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element." Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. 1040; *see* id. at 17, 117 S.Ct. 1040 (noting that the test for literal infringement of a s. 112, para. 6 means-plus-function element "is an application of the doctrine of equivalents in a restrictive role...."); *see also* IMS Tech., Inc., 206 F.3d at 1435-36 (comparing this test with the test for literal infringement of a means-plus-function element); Kemco Sales, Inc., 208 F.3d at 1364 (pointing out that this test differs from the test for literal infringement of means-plus-function in that the "function" must be only substantially similar, not identical, but the "way" and "result" elements are the same in the two tests, requiring only substantial similarity). In *Warner-Jenkinson Company,* the Court held that the doctrine of equivalents must be applied as an objective inquiry on an element-by-element basis. Id. at 28-29, 117 S.Ct. 1040.

[34] One limitation on the scope of infringement under the doctrine of equivalents, however, is that "the range of equivalents cannot be divorced from the scope of the claims." Vehicular Techs. Corp., 212 F.3d at 1382; Zodiac Pool Care, Inc., 206 F.3d at 1416. Where " 'th[e] issued patent contains clear structural limitations, the public has a right to rely on those limits in conducting its business activities. This court will not effectively remove such a limitation under a doctrine designed to prevent "fraud on the patent." ' " Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc., 126 F.3d at 1425-26).

Some examples demonstrate this principle that a court cannot ignore claim language expressly requiring a certain structure. In *Vehicular Technologies Corporation,* the court noted the following:

The claim language expressly requires two springs. Moreover the patent drafter underscored this limitation with the introductory phrase "consisting of." The phrase "consisting of" is a term of art in patent law signifying restriction and exclusion, while, in contrast, the term "comprising" indicates an open-ended construction. *See* Parmelee Pharm. Co. v. Zink, 285 F.2d 465, 469, 128 USPQ 271, 275 (8th Cir.1961); John Landis, *Mechanics of Patent Claim Drafting* 11-13 (1974). In simple terms, a drafter uses the phrase "consisting of" to mean "I claim what follows and nothing else." A drafter uses the term "comprising" to mean "I claim at least what follows and potentially more." In this case, the drafter limited the claim to two concentric springs and nothing else.

As this court noted in Vehicular, [the prior decision at 141 F.3d 1084 (Fed.Cir.1998)], the drafter's choice of the phrase "consisting of" does not foreclose infringement under the doctrine of equivalents. This court clarified in *Vehicular* that "the claims specifically require that an infringing device consist of two springs (either literally or equivalently)." Vehicular, 141 F.3d at 1092. Nonetheless the term "consisting of" emphasizes the claim's specific limitation to a concentric spring structure. To determine whether the spring-plug assembly infringes the two-spring limitation under the doctrine of equivalents, a jury would consider evidence of insubstantial differences. To put that evidence in context, the jury would consult the claim language with its claimed feature of two concentric springs. No reasonable jury could find infringement by equivalents in these accused devices when the claim requires "two concentric springs" or a structure insubstantially different from that. Thus, for all the reasons stated above, this court agrees with the trial court's award of summary judgment.

Vehicular Techs. Corp., 212 F.3d at 1382-83.

Similarly, in *Zodiac Pool Care, Inc.,* the court's analysis of the importance of structure, as defined by the claims of the patent-in-suit, to the doctrine-of-equivalents analysis consisted of the following:

Zodiac argues that weight arms of the accused devices, even if not literally infringing, infringe under the [doctrine of equivalents] because they accomplish substantially the same function, in substantially the same way, to achieve substantially the same result. However, like the patent at issue in *Sage Products,* the '382 patent contains "clear structural limitations," including a limitation that the stop be located "substantially inward" of the peripheral edge of the disc. Given the proper construction of this limitation, a verdict of infringement under the [doctrine of equivalents] would reduce the claims to nothing more than "functional abstracts, devoid of meaningful structural limitations on which the public could rely." Sage Products, 126 F.3d at 1424, 44 USPQ2d at 1107 (citing Conopco, Inc. v. May Dept. Stores Co., 46 F.3d 1556, 1562, 32 USPQ2d 1225, 1228 (Fed.Cir.1994)).

No less than the defendants in *Sage Products,* Hoffinger and others in the pool cleaner industry have a right to rely on these limitations in planning their activities. As we were reminded in Warner-Jenkinson Co., 520 U.S. at 29, 117 S.Ct. 1040, "[i]t is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety." In sum, we agree with the district court that no reasonable jury could find that a stop which extends to the peripheral edge of a disk is equivalent to one that is "substantially inward" of the very same disk. To use the words of our decision in Ethicon Endo-Surgery [v. United States Surgical Corp.], 149 F.3d [1309,] 1319, 47 USPQ2d [1272,] 1278 [(Fed.Cir.1998)], we agree that the two stops are "not even close." Thus, Hoffinger was entitled to JMOL, and the district court's grant must be affirmed.

Zodiac Pool Care, Inc., 206 F.3d at 1416.

[35] There is yet another limit on the application of infringement by equivalents, a limit arising from "prosecution history estoppel." *See, e.* g., CAE Screenplates, Inc., 224 F.3d at 1318-19; KCJ Corp., 223 F.3d at 1356 ("[P]rosecution history 'limits the interpretation of claims so as to exclude any interpretation that

may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.' ") (quoting Standard Oil Co., 774 F.2d at 452); Elekta Instrument S.A., 214 F.3d at 1308 ("Claims that have been narrowed in order to obtain issuance over prior art cannot later be interpreted to cover that which was previously disclaimed during prosecution.").

This doctrine provides that a patent owner can be estopped from relying upon the doctrine of equivalents when the patent applicant relinquishes coverage of subject matter during the prosecution of the patent, either by amendment or argument. *See* Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376-77, 50 USPQ2d 1033, 1036 (Fed.Cir.1999). It is the totality of the prosecution history which defines and establishes the metes and bounds of the patent grant. *See* Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 979, 52 USPQ2d 1109, 1113 (Fed.Cir.1999). The purpose of prosecution history estoppel is to protect the notice function of claims, "measured from the vantage point of what a competitor was reasonably entitled to conclude." Hoganas [v. Dresser Indus., Inc.], 9 F.3d [948,] 952, 28 USPQ2d [1936,] 1939 (Fed.Cir.1993); *see also* Charles Greiner & Co. v. Mari-Med Mfg., Inc., 962 F.2d 1031, 1036, 22 USPQ2d 1526, 1529-30 (Fed.Cir.1992). Whether or not prosecution history estoppel precludes a particular action for infringement by equivalents is a question of law, which we review de novo on appeal. *See* Hoganas, 9 F.3d at 952, 28 USPQ2d at 1939.

CAE Screenplates, Inc., 224 F.3d at 1319; KCJ Corp., 223 F.3d at 1358. In other words, "prosecution history estoppel prevents the application of the doctrine of equivalents as a tool to recapture subject matter surrendered during prosecution." KCJ Corp., 223 F.3d at 1356; Hilgraeve Corp. v. McAfee Assocs., Inc., 224 F.3d 1349, 1355 (Fed.Cir.2000). Estoppel "may preclude recapturing any part of that subject matter, even if it is equivalent to the matter expressly claimed." Hilgraeve Corp., 224 F.3d at 1355.

[36] [37] More specifically, "Prosecution history estoppel can occur as a result of (i) amendments made to overcome patentability rejections or (ii) arguments made during prosecution that show 'a clear and unmistakable surrender of subject matter.' " Bayer AG, 212 F.3d at 1251 (quoting Sextant Avionique, S.A. v. Analog Devices, Inc., 172 F.3d 817, 828 & 828 n. 3 (Fed.Cir.1999)). As the Federal Circuit Court of Appeals recently explained,

"Unmistakable assertions made by the applicant to the ... PTO ... in support of patentability, whether or not required to secure allowance of the claim, ... may operate to preclude the patentee from asserting equivalency...." Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1174, 26 USPQ2d 1018, 1025 (Fed.Cir.1993); *see also* Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, 1462, 46 USPQ2d 1321, 1327 (Fed.Cir.1998); Coleco Indus., Inc. v. United States Int'l Trade Comm'n, 65 C.C.P.A. 105, 573 F.2d 1247, 1256-57, 197 USPQ 472, 479-80 (1978). In determining whether there has been a clear and unmistakable surrender of subject matter, the prosecution history must be examined as a whole. *See* Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376, 50 USPQ2d 1033, 1036 (Fed.Cir.1999). An objective standard is applied when looking at the prosecution history, the proper inquiry being "whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter." Cybor [Corp. v. FAS Techs., Inc.], 138 F.3d [1448,] 1457, 46 USPQ2d [1169,] 1175 [(Fed.Cir.1998) (*en banc*)] (citing Insituform Techs., Inc. v. Cat Contracting, Inc., 99 F.3d 1098, 1107-08, 40 USPQ2d 1602, 1608 (Fed.Cir.1996)).

Bayer AG, 212 F.3d at 1252; *see also* id. at 1253-54 (discussing cases in which "clear and unmistakable surrender" was shown). However, not every amendment gives rise to estoppel; where an amendment or argument is *not* directed to distinguishing the claim or claims of the patent-in-suit from cited references, and thus was *not* made for reasons of patentability, no estoppel arises. *See* Fiskars, Inc. v. Hunt Mfg. Co., 221 F.3d 1318, 1322 (Fed.Cir.2000) (citing Warner-Jenkinson Co., 520 U.S. at 33, 117 S.Ct. 1040).

ii. Equivalents infringement of claim 1(d). Kudlacek contends that, even if the "Super Stix" does not

literally infringe claim **1**(d) of the '325 patent, the "Super Stix" includes an equivalent of claim 1(d) under the doctrine of equivalents, because the function of the "openings" referred to in the element is to freely receive the rods, and the openings in the "Super Stix" adjustment member also perform this function, both devices perform the function in the same way by providing openings matching the stabilizer rods in number and circumferential spacing, but slightly larger in diameter, with the result that the rods do indeed freely pass through both kinds of adjustment members.

The court concluded above that the "Super Stix" *does* literally infringe claim **1**(d). In the alternative, the court concludes that the "Super Stix" infringes claim **1**(d) under the doctrine of equivalents, because "there are only 'insubstantial differences' between the limitation and the corresponding aspects of the [accused] device." CAE Screenplates, Inc., 224 F.3d at 1319 (quoting Hilton Davis Chem., 62 F.3d at 1517-18); KCJ Corp., 223 F.3d at 1358; Zodiac Pool Care, Inc., 206 F.3d at 1415. In other words, the accused adjustment member performs substantially the same function as element (e) of claim **1** of the '325 patent in substantially the same way with substantially the same result. Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. 1040.

Although Specialty points out that its adjustment member is composed of several pieces, not one piece, the court finds that this difference constitutes " 'changing only minor or insubstantial details of the claimed invention while retaining their essential functionality,' " *see* Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc., 126 F.3d at 1424), because the "essential functionality" of this claim element is to provide openings in the adjustment member through which the stabilizer rods can freely pass, and a multi-piece structure serves this "essential functionality" as well as a single-piece structure. Indeed, if a copyist could escape infringement simply by cutting a component into multiple pieces, then screwing them back together, both the doctrine of equivalents and the value of patents which the doctrine serves to protect would be substantially undermined. *See, e.g.,* Zodiac Pool Care, Inc., 206 F.3d at 1416 (the doctrine of equivalents is " 'designed to prevent "fraud on the patent" ' ") (quoting Sage Prods., Inc., 126 F.3d at 1425-26). Similarly, the fact that the enclosure of the openings in the accused adjustment member leaves "gaps" constitutes only an "insubstantial difference," because it has no effect on the essential functionality of this element of the '325 patent. Moreover, this element uses claim language signaling an intent to claim "at least what follows and potentially more," because the claim is defined as "comprising" an adjustment member as defined. *See* Vehicular Techs. Corp., 212 F.3d at 1382-83. There are no "clear structural limitations" in the language of claim **1**(d) of the '325 patent that would suggest to others in the industry that Kudlacek was claiming only an adjustment member consisting of a single piece that completely encloses each "opening therethrough." *See* Zodiac Pool Care, Inc., 206 F.3d at 1416. Thus, the "Super Stix" accused device does infringe claim **1**(d) of the '325 patent under the doctrine of equivalents.

Nevertheless, the court must also consider whether Specialty can prevail on its motion for summary judgment of non-infringement by showing that it does not infringe claim **1**(e) of the '325 patent, just as it has shown that it does not literally infringe that means-plus-function element.

iii. Equivalents infringement of claim 1(e). As to infringement of claim **1**(e) under the "doctrine of equivalents," although Specialty concedes that its "Super Stix" performs the same function as the invention in the '325 patent, reduction of vibration of an archery bow and improvement in the accuracy of arrows shot from the bow, Specialty contends that the "Super Stix" performs this function in an entirely different way from that defined in the '325 patent. Instead of set screws with resilient tips on the adjustment member that engage and secure the stabilizer rods, Specialty points out that the "Super Stix" uses eight rubber O-rings on the stabilizer rods themselves that reduce vibration when they are "clamped" by a multi-piece adjustment member drawn together by screws that do not directly intersect or engage the stabilizer rods. Specialty also argues that prosecution history estoppel prevents Kudlacek from drawing the "Super Stix" back within the scope of equivalents of the '325 patent, because the '325 patent was allowed only because it involved resilient securing means on the adjustment member extending into each opening to secure the adjustment member to each stabilizer rod.

Kudlacek contends that prosecution history estoppel only applies if the patentee gives up something to obtain allowance of the claim, but, in the case of claim **1** of the '325 patent, the examiner's reason for allowing the claim over Bickel had been stated in the original version of claim **1**(e). Thus, the examiner did not exclude anything from the range of equivalents by acknowledging the patentability of the invention over Bickel and Kudlacek gave up nothing to obtain the patent. Kudlacek also contends that the "Super Stix" includes an equivalent of claim **1**(e), because the function of the O-rings in the "Super Stix" is the same as that of the "resilient securing means" of claim **1**(e) of the '325 patent-resiliently engaging and securing the adjustment member to the stabilizer rods-and that function is accomplished in substantially the same way-by tightening screws to put pressure on "resilient pads," which in the case of the "Super Stix" are the O-rings, that extend into each opening-with substantially the same result-that the adjustment member on the "Super Stix" does not move.

Again, as the court concluded above, claim **1**(e) is a means-plus-function element. Infringement of a means-plus-function claim under the doctrine of equivalents is also subject to somewhat different considerations. As mentioned above, there is a close relationship between the "literal infringement" test for a s. 112, para. 6 element and the test for doctrine-of-equivalents infringement of such a claim, because both involve a tripartite test of function-way-result, although in the case of literal infringement, the functions must be "identical," not merely substantially similar. *See* Kemco Sales, Inc., 208 F.3d at 1364.

[38] Another distinction is that, when a means-plus-function claim limitation is at issue, there is a "pre-existing technology" limitation:

In *Chiuminatta,* we reversed the district court's grant of summary judgment of literal infringement of the asserted means-plus-function claim because the accused wheel structure was not equivalent to the skid plate disclosed in the written description for performing the claimed function. *See* Chiuminatta, 145 F.3d at 1310, 46 USPQ2d at 1757. We further held that, because the accused wheel structure was known at the time the patent issued, our determination of non-equivalence under 35 U.S.C. s. 112 precluded a contrary finding under the doctrine of equivalents. *See id.* at 1310-11, 145 F.3d 1303, 46 USPQ2d at 1757-58. Our rationale for the latter holding was that, given the close relationship between equivalence under 35 U.S.C. s. 112, para. 6 and that under the doctrine of equivalents, litigating the question of infringement under the doctrine of equivalents for pre-existing technology after holding that such technology did not literally infringe as an "equivalent" under s. 112, para. 6 would give the patentee "two bites at the apple." *Id.* at 1311, 145 F.3d 1303, 46 USPQ2d at 1758.

Kraft Foods, Inc. v. International Trading Co., 203 F.3d 1362, 1372 (Fed.Cir.2000). However,

[t]he doctrine of equivalents might come into play to determine infringement of a means-plus-function claim element if the accused device features technology that has arisen since the time of patent issuance. *See Al-* Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1320, 50 USPQ2d 1161, 1168 (Fed.Cir.1999). In that instance, the insubstantial difference analysis once again determines infringement, and again requires comparison of the structure corresponding to the function-the literal meaning of the claim element-with the accused structure. *See id.*

Ishida Co., Ltd., 221 F.3d at 1316. Nevertheless, as the Federal Circuit Court of Appeals noted in *Kemco Sales, Inc.,* if the court determines, in its s. 112, para. 6 literal infringement analysis, that the accused device performs the identical function in a substantially *different* way, or with a substantially *different* result, it must also conclude that there is no infringement of the means-plus-function element under the doctrine of equivalents for the same reason or reasons. Kemco Sales, Inc., 208 F.3d at 1365.

Because the doctrine of equivalents must be applied on an element-by-element basis, *see* Warner-Jenkinson

Co., Inc., 520 U.S. at 28-29, 117 S.Ct. 1040, the court concludes, first, that the "function" in question is the function of claim **1**(e), which this court has construed to be "resiliently engaging and securing" the adjustment member to the stabilizer rods. *See* Section II.B.1.d.ii., on page 1029. The court concluded above, in its analysis of literal infringement of claim **1**(e), that the "Super Stix" resilient securing means performs the identical function, not simply a substantially similar one. Therefore, the question once again is whether the accused device performs this function in substantially the same way with substantially the same result. Warner-Jenkinson Co., Inc., 520 U.S. at 40, 117 S.Ct. 1040.

No party contends that the "Super Stix" uses only pre-existing technology, such that a determination of non-equivalence under 35 U.S.C. s. 112, para. 6, for purposes of literal infringement, precludes a contrary finding under the doctrine of equivalents. *See* Kraft Foods, Inc., 203 F.3d at 1372. Therefore, the doctrine of equivalents "come[s] into play" as to equivalence of technology that has arisen since the time the '325 patent was issued. *See* Ishida Co., Ltd., 221 F.3d at 1316-17. However, the court's determination, in its literal infringement analysis of this means-plus-function element, that the "Super Stix" performs the function of "engaging and securing" in a substantially *different* way also requires a conclusion that there is no infringement of this element under the doctrine of equivalents for the same reason. *See* Kemco Sales, Inc., 208 F.3d at 1365.

Thus, no reasonable jury could conclude that the "Super Stix" accused device infringes *all* of the elements of claim **1** of the '325 patent, either literally or equivalently, and Specialty is entitled to summary judgment of non-infringement of the '325 patent. *See* CAE Screenplates, Inc., 224 F.3d at 1319 ("Even though infringement by equivalents is an issue of fact ordinarily preserved for the jury, '[w]here the evidence is such that no reasonable jury could determine two elements to be equivalent, district courts are obliged to grant partial or complete summary judgment.' ") (quoting Warner-Jenkinson Co., Inc., 520 U.S. at 39 n. 8, 117 S.Ct. 1040); Vehicular Techs. Corp., 212 F.3d at 1381 ("Infringement under the doctrine of equivalents requires an intensely factual inquiry. And, this court is well aware of the difficulty of granting summary judgment motions on issues requiring delicate balancing of many factual components. Ultimately this court may sustain summary judgment of non-infringement under the doctrine of equivalents, where that doctrine is legally applicable, only if it discerns no genuine issue of material fact and that no reasonable jury could find equivalence.") (citations omitted).

C. Kudlacek's Motion For Summary Judgment

For his part, Kudlacek has moved for summary judgment on Specialty's second counterclaim and third-party claim, which alleges that Kudlacek sells an "Adjustable Control Peep" for an archery bow that infringes at least claim **1** of United States Patent No. 5,137,007 (the '007 patent), a patent for an "Archery Shooting Control System" that is owned by third-party plaintiffs Shoemake and Morehead, but exclusively licensed to Specialty and for which Specialty holds the first right to sue infringers. The court's analysis of this motion for summary judgment of non-infringement, like its analysis of Specialty's motion for summary judgment of non-infringement of the '325 patent, begins with a determination of the proper construction of the pertinent claim or claims of the '007 patent. *See* CAE Screenplates, Inc., 224 F.3d at 1315 (the first step in analysis of a claim of infringement or non-infringement is to construe the claims of the patent as a matter of law); KCJ Corp., 223 F.3d at 1355-56 (same); Tate Access Floors, Inc., 222 F.3d at 963-64 (same); Elekta Instrument S.A., 214 F.3d at 1306 (same).

1. Construction of claim 1 of the '007 patent

As to construction of the pertinent claim or claims of the '007 patent, Specialty has clarified that it is asserting that Kudlacek's peep sight infringes claims **1**, **2**, and **5** of the '007 patent. However, in his motion for summary judgment of non-infringement of the '007 patent, Kudlacek notes that claims **2** and **5** are dependent on claim **1**. Thus, if he demonstrates that his accused device does not infringe claim **1** as a matter

of law, and he contends that it does not, his device necessarily does not infringe claims **2** and **5**, either. The court agrees that, in the circumstances presented, the court must only construe claim **1** of the patent.

Kudlacek contends that claim **1** of the '007 patent should be read narrowly to protect only the peep sight as literally defined by the terms of claim **1**. This is so, he argues, because of the application of prosecution history estoppel: Kudlacek points out that claim **1** originally did not include language requiring a "threaded" base or "threaded" and "interchangeable" inserts and that the examiner rejected claim **1** in light of the Shores '786 patent until the specific language requiring these limitations was included in the claim. Kudlacek contends that claim **1** therefore cannot be construed to encompass the structure and design of his accused peep sight, which has no "threads," and only a single ball sight that "snaps into" a spherical opening in its base member.

In response, Specialty argues that the base member of Kudlacek's peep sight has "one large thread," comprised of the two outer ridges of the spherical opening in the base member, which secure the sight insert in place. In other words, Specialty contends that the outer ridges of the base member of Kudlacek's peep sight are identical to one section of the multiple threads utilized in the preferred embodiment of the '007 patent. Specialty also argues that the "threaded" language added to application claim 1 was not necessary to patentability, because the focus of the amendment including that language was on the "interchangeability" of the inserts. Furthermore, Specialty argues that the Shores '786 patent reference that the amendment was intended to overcome already showed a threaded opening and threaded inserts, so that the addition of "threading" would not have made the invention disclosed in the '007 patent patentable over the Shores '786 patent reference. In other words, Specialty contends that the "threading" addition is a voluntary amendment that does not give rise to estoppel.

a. Language of the claim

Because the court has detailed above the rules of construction for patent claims, in Section II.B.1.a., beginning on page 1021, the court will proceed directly to construction of the pertinent claim of the '007 patent in light of those rules. Again, for purposes of Kudlacek's motion for summary judgment of non-infringement, the court need only construe claim **1** of the '007 patent. Still more specifically, Kudlacek contends that his accused device lacks the underlined elements in claim **1**, as quoted below:

We claim:

1. A shooting control system for permitting sighting of bows and arrows along a sighting path where the bow has a bowstring equipped with a bowstring serving at the arrow noking point on the bowstring, said control system comprising:

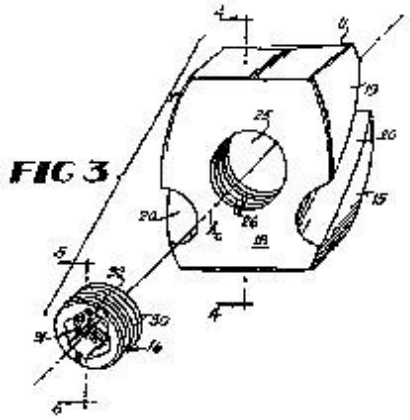
a bowstring sight adapted to be installed in the strands of a bowstring for use with front sight pins on the bow, said bowstring sight including:

a base adapted to the [sic] mounted in the strands of a bowstring at a pescribed [sic] sighting location lengthwise of the bowstring, said base defining a pair of mounting recesses therein adapted to receive the strands of the bowstring therein a mount of said body at the prescribed sighting location and *an internally threaded opening* therethrough aligned with the sighting path when the bowstring is drawn for shooting, said threaded opening having a first prescribed diameter so that the user can sight through said threaded hole in low light conditions; and

a plurality of externally threaded interchangeable sight inserts interchangeably and selectively mountable to a prescribed sight position in and substantially filling said threaded opening in said base, each of said sight inserts defining a sight opening therethrough arranged for the user to sight through said sight opening using

the front sight pins on the bow to aim an arrow being shot in the bow when said insert is in said prescribed sight position, said sight opening in each of said inserts being a different fixed diameter from that of the threaded opening through said body and from that of each of te [sic] other of said inserts so that the user can selectively interchange said inserts in said body to incrementally change the diameter of said sight opening being used to sight the bow and can selectively remove said insert from said body and use said threaded opening through said base to sight the bow.

Plaintiff's Statement of Undisputed Facts in Support of Plaintiff's Motion for Summary Judgment of Non-Infringement, Exhibit B (the '007 patent) (underlining added). Among the illustrations in the patent are the following:



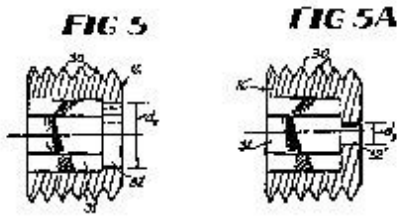


Fig. 3: Base member and one "interchangeable" insert.
Figs. 5 & 5A: Additional "interchangeable" inserts with sight holes of different diameters.

b. Prosecution history and the Shores '786 patent

As mentioned above, "[p]rosecution history ... may assist claim interpretation." KCJ Corp., 223 F.3d at 1356. "Indeed, prosecution history 'limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.' " *Id*. (quoting Standard Oil Co., 774 F.2d at 452); Hockerson-Halberstadt, Inc., 222 F.3d at 955-56. Kudlacek contends that the prosecution history of the '007 patent has such a limitingeffect here on the proper construction of claim **1**. Therefore, the court turns to the prosecution history as it relates to this claim.

i. Application claim 1. Claim 1 of the original application for the '007 patent claimed only the following:

1. A shooting control system for bows and arrows comprising a bowstring sight adapted to be installed in the strands of a bowstring for use with front sight pins on the bow, said bowstring sight including

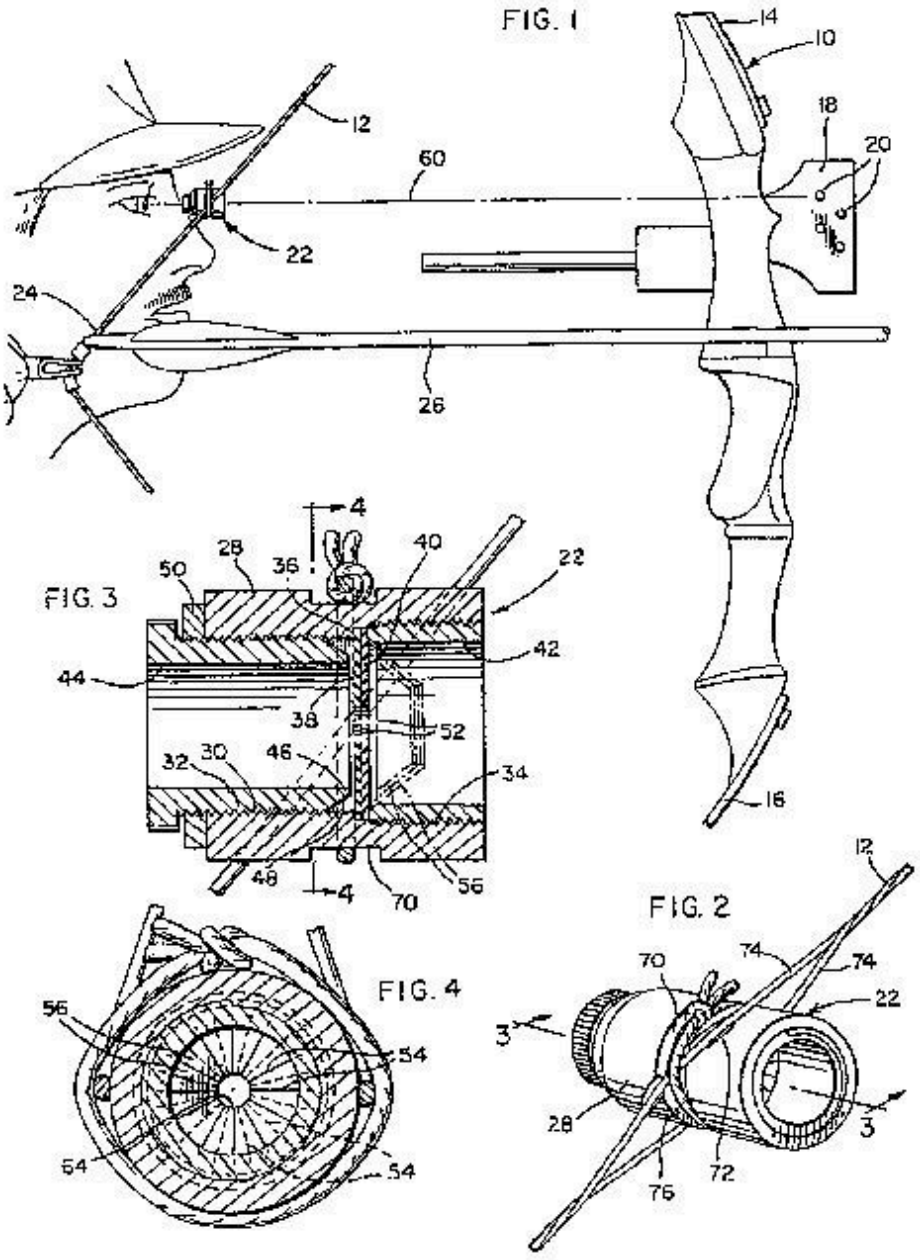
A base adapted to be mounted in the strands of a bowstring at a prescribed sighting location along the bowstring; and

at least one sight insert selectively mountable in a prescribed sight position on said base, said sight insert defining a sight opening therethrough arranged for the user to sight through said sight opening using the front sight pins on the bow to aim an arrow being shot in the bow.

Plaintiff's Statement of Undisputed Facts, Exhibit C (prosecution history file of the '007 patent) at 23. However, the examiner rejected this claim in light of the Shores '786 patent. *See* Plaintiff's Statement of Undisputed Facts, Exhibit C (prosecution history file of the '007 patent) at 39-40.

ii. The Shores '786 patent**.** The Shores '786 patent, which figures so prominently in the prosecution history of the '007 patent, includes the following Figures illustrating the invention:

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Declaration of Donald I. Chipman, Exhibit C (the Shores '786 patent) at 2. FN10

FN10. What is specifically claimed in the '786 patent, as it relates to attempts to overcome this prior art in the prosecution history of the '007 patent, is found in claims **1** through **8**:
What is claimed as new is as follows:

1. An adjustable peep sight for a projectile launching device, said sight including a housing defining an elongated passage extending therethrough, a pair of thin flexibly resilient and stiff material annular discs mounted from said housing in and transverse to said passage, each of said discs defining a central, generally circular opening formed therethrough and having a plurality of circumferentially spaced, generally radial slits formed therein defining generally radial, inwardly tapering fingers extending inward from the outer marginal portion of the corresponding disc to the central opening therein, said discs being mounted within said passage with said central openings axially registered and the width of said discs at least substantially axially abutted and the slits of one of said discs circumferentially spaced between the slits of the other disc, and wedge means mounted from said housing and adjustably shiftable along said passage, said wedge means including an annular abutment portion disposed in said passage on the side of one of said discs remote from the other disc and facing and abuttingly engageable with the fingers of said one disc intermediate the opposite ends of the last-mentioned fingers to variably deflect the fingers of said one disc, and thus also the fingers of the other disc, along said passage, responsive to shifting of said wedge means in the direction in which said annular abutment portion faces, said housing including mounting means adapating [sic] said housing to be mounted from a suitable portion of said device.
2. The peep sight of claim 1 wherein said housing is generally cylindrical and said passage extends centrally therethrough, one end of said passage including a counterbore, said discs being seated in said counterbore and removably retained therein by a retaining sleeve removably secured in said counterbore outwardly of said discs.
3. The peep sight of claim **2** wherein said counterbore is threaded and said retaining sleeve is removably threaded in said counterbore.
4. The peep sight of claim **2** wherein the other end of said passage is threaded and said wedge means comprises a sleeve member adjustably threaded in said other end of said passage and said annular abutment portion comprises the end of said sleeve member opposing said one disc.
5. The peep sight of claim **4** wherein the said sleeve member is externally bevelled.
6. The peep sight of claim **4** wherein said sleeve member projects outwardly of the end of said cylindrical housing corresponding to said other end of said passage, and a lock nut threaded on said sleeve member and abuttingly engageable with said housing end.
7. The peep sight of claim **6** wherein said end of said sleeve member is externally bevelled.
8. The peep sight of claim **7** wherein said counterbore is threaded and said retaining sleeve is removably threaded in said counterbore.

The '786 Patent, claims **1-8**.
iii. Rejection and amendment. The examiner rejected claim 1 of the '007 patent as originally drafted in light of the Shores '786 patent, stating the following:

Shores, Sr. discloses a peep sight for an archery bow, comprising a base 28 *a plurality of sight inserts* 38, 40, 42, and 44. The insert 44 is selectively mountable in a prescribed position on the base 28 and defines a sight opening for the user to align with a front sight pin when aiming an arrow. The sight includes a releasable locking means 50 for locking the *threaded insert* 44 against rotation within the *threaded base opening* 30. The above described device of Shores, Sr. provides all of the structure recited in [application] claims 1, 2 and 4.

As to claim 3, *the inserts* 38, 40, 42 and 40 in the device of Shores Sr. *each have different sized openings and have the capability to be used selectively* under different field conditions to vary the size of the sighting aperture.

See Plaintiff's Statement of Undisputed Facts, Exhibit C (prosecution history file of the '007 patent) at 39-40 ("Examiner's Action" of September 16, 1991) (emphasis added).

In response to this rejection of application claims 1 through 4, the applicants for the '007 patent filed an amendment on December 16, 1991, amending claim 1, in pertinent part, to include a limitation that the base member have " *an internally threaded opening therethrough aligned with the sighting path when the bowstring is drawn for shooting, said threaded opening having a first prescribed diameter so that the user can sight through said threaded hole in low light conditions* " and a limitation for " *a plurality of externally threaded interchangeable* sight inserts *interchangeably and* selectively mountable [in] *to* a prescribed sight position...." Id. at 47 (underlining showing additions, brackets showing deletions). In support of the patentability of application claims 1 through 4, as amended, the applicants asserted the following:

The Examiner rejected Claims 1-4 under 35 U.S.C. s. 102(b) as being anticipated by *Shores, Sr*. Claim 1 has been amended to specify that the inserts are interchangeable with the threaded opening through the base serving to as [sic] one sighting opening and with each of the inserts having a different size opening so that the size opening being used is determined by selecting the particular insert or the base member with the desired size opening and using it. This [is] quite unlike *Shores, Sr*. where the pieces must be screwed together to get the right size opening and the user must guess at the actual size opening that has been adjusted in that sight. While it is true that each of the members 38, 40, 42 and 44 each have a different size opening therethrough but [sic] it is respectfully pointed out that only the openings in members 38 and 40 serve to establish the variable sight opening. Thus, *Shores, Sr*. teaches just the opposite of the claimed structure, that is, the use of one set of members in the sight rather tha[n] interchangeable separate members and the use of a variable size sight opening rather than different fixed size sight openings in the different inserts. Therefore, it is submitted that Claim 1 is clearly patentable over the prior art.

Id. at 51. This prosecution history establishes that both the "threading" and the "interchangeability" limitations, which Kudlacek contends are absent from his device, were offered in an amendment seeking to obtain patentability over the Shores '786 patent. After this amendment, the examiner issued a Notice of Allowability for the '007 patent application on March 6, 1992, allowing amended claim 1. Id. at 56. Therefore, the critical question is, whether (and which parts) of the amendments were directed to distinguishing claim **1** of the '007 patent from the Shores '786 patent? *See* Fiskars, Inc., 221 F.3d at 1322 (citing Warner-Jenkinson Co., 520 U.S. at 33, 117 S.Ct. 1040, for the proposition that, where an argument or amendment is *not* directed to distinguishing the claim or claims of the patent-in-suit from cited references, and thus was not made for reasons of patentability, no estoppel arises).

iv. The scope of prosecution history estoppel. The '786 patent says nothing whatever about "a plurality of externally threaded interchangeable sight inserts," each of which "defin[es] a [different] sight opening." *Compare* The '007 Patent, claim **1**, *with* The Shores '786 Patent, claims **1-8** (*supra,* n. 10). Rather, the '786 patent relies on a single threaded insert, or "wedge means" (44 & 46) that varies the size of the sighting window when it is "adjustably shift[ed] along" the passage in the central cylinder (28), thereby deflecting the "fingers" (54) of the internal "discs" (38 & 40) a greater or lesser amount. *See* The '786 Patent, claim **1**; *see also* The Shores '786 Patent, Fig. 3, supra at 1057. However, the examiner for the '007 patent described both the "discs" (**38** and **40** in the figures to the Shores '786 patent) and the "wedge means" (**44** in the figures to the Shores '786 patent), as well as the "retaining sleeve removably secured in said counterbore outwardly of said discs" (**42** in the figures to the Shores '786 patent), *see* The Shores '786 Patent, claim **2** (defining the "retaining sleeve" limitation), as constituting "a plurality of sight inserts." *See* Prosecution History File of The '007 Patent at 39-40 ("Examiner's Action" of September 16, 1991). The examiner for the '007 patent also described these "inserts" in the Shores '786 patent as "each hav[ing] different sized openings and hav[ing] the capability to be used selectively." Id. at 40. The examiner also noted that both the "insert 44" and the "base opening 30" were "threaded." *See* id. at 39.

Kudlacek points out that neither of the "disc" inserts, **38** and **40** in the figures to the Shores '786 patent, is "threaded." Nevertheless, in light of the examiner's reading of the Shores '786 patent as anticipatory prior art that included "threaded inserts" and a "threaded base opening," it is difficult to imagine that the addition of

"threading" to the inserts or base member, in an amendment to application claim 1 of the '007 patent, was intended to overcome patentability objections based on the examiner's reading of the Shores '786 patent. *See, e.g.,* Fiskars, Inc., 221 F.3d at 1322 (not every amendment gives rise to estoppel; amendments not directed to patentability do not give rise to estoppel).

[39] Indeed, in their argument in support of the patentability of amended application claim 1, the applicants did not argue that the addition of the "threading" language was what made the amended claim patentable over the Shores '786 patent. The applicants' arguments for the patentability of the amended claim mention only in passing "threading" of the inserts and base member of their device, just as they mention only in passing that the parts of the device in the Shores '786 patent are "screwed together." *See* Prosecution History Of The '007 Patent at 51. In contrast, as Specialty argues, the applicants expressly argued that the "interchangeable" feature established the patentability of amended application claim 1. *See* id. The applicants expressly argued that "[c]laim 1 has been amended *to specify that the inserts are interchangeable* with the threaded opening through the base," so that different size sight openings could be used under different conditions. *See* id. (emphasis added). The applicants explained that "[t]his [is] quite unlike *Shores, Sr*. where the pieces must be screwed together to get the right size opening and the user must guess at the actual size opening that has been adjusted in that sight," because " *Shores, Sr*. teaches just the opposite of the claimed structure, that is, the use of one set of members in the sight rather tha[n] *interchangeable separate members* and the use of a variable size sight opening rather than different fixed size sight openings in the different inserts." Id. (emphasis added). The applicants acknowledge that, "[w]hile it is true that each of the members 38, 40, 42 and 44 [of the Shores '786 patent] each have a different size opening therethrough ... it is respectfully pointed out that only the openings in members 38 and 40 serve to establish the variable sight opening." Id. The court concludes, in light of the examiner's grounds for rejection of the original claim and the applicants' arguments for patentability of the amended claim, that only the "interchangeability" amendment, not the "threading" amendment was directed to distinguishing the claim or claims of the patent-in-suit from the Shores '786 patent reference, and thus only the "interchangeability" amendment gives rise to any prosecution history estoppel as to claim **1**. *See* Fiskars, Inc., 221 F.3d at 1324.

This does not mean, however, that the "threading" language in the '007 patent is irrelevant to the construction of claim **1**. Rather, "[t]he central focus of the infringement analysis remains on the claim language," albeit claim language "as illuminated by the written description and the prosecution history." *See* KCJ Corp., 223 F.3d at 1355; Tate Access Floors, Inc., 222 F.3d at 964-65; Hockerson-Halberstadt, Inc., 222 F.3d at 954-55; Optical Disc Corp., 208 F.3d at 1334. Indeed, " '[t]he claim language ... defines the bounds of claim scope.' " Schering Corp., 222 F.3d at 1353 (quoting York Prods., Inc., 99 F.3d at 1572). Here, the limitations of claim **1** of the '007 patent expressly and unambiguously claim "threaded" inserts and a "threaded" base member. *See* The '007 Patent, claim **1**. To ignore this "threading" language would be to read an express limitation out of the patent.FN11 Thus, such "threading" is *literally* required by the patent language, although the prosecution history does not exclude non-threaded "equivalents" under the doctrine of equivalents. Moreover, the court notes that this identical "threading" of the hole in the base member and the exterior of the inserts is also indicated in the specification of the preferred embodiment in the '007 patent. *See, e.g.,* The '007 Patent, "Detailed Description Of Illustrative Embodiments," at Col. 3, *ll*. 10-11 (the hole in the base member is "threaded with threads for use in mounting the inserts"), *ll*. 17-18 ("The insert **16** is externally threaded with threads **30** complementary to the hole threads **26**"). Thus, to the extent that the specification of the preferred embodiment of the invention in the patent "illuminates" claim language, *See* KCJ Corp., 223 F.3d at 1355-56; Tate Access Floors, Inc., 222 F.3d at 964-65; Hockerson-Halberstadt, Inc., 222 F.3d at 954-55; Optical Disc Corp., 208 F.3d at 1334, the specification here confirms that the patented device literally requires "threading" of the hole in the base member and the exterior of the inserts.

FN11. This express statement of a particular structure in the claim itself in the '007 patent should be contrasted with the lack of any such specification of the number of parts that make up the "adjustment

member" as defined in claim **1**(d) of the '325 patent. As to claim **1**(d) of the '325 patent, the court refused, above, to "read into" the patent a requirement that the claimed "adjustment member" had to be a single piece, even though the preferred embodiment indicated more narrowly that the "adjustment member" was a single piece, because it is improper to read narrower language from a description or specification into broader claim language. *See* KCJ Corp., 223 F.3d at 1356. As to the '007 patent, the court declines to "read out" of the patent a "threading" requirement specified in the claim language. The court notes that the specification of the preferred embodiment and the "threading" limitation in claim **1** of the '007 patent describe identical structures, rather than a preferred embodiment that is narrower than claim language. *See, e.g.,* The '007 Patent, "Detailed Description Of Illustrative Embodiments," at Col. 3, *ll*. 10-11 (the hole in the base member is "threaded with threads for use in mounting the inserts"), *ll*. 17-18 ("The insert **16** is externally threaded with threads **30** complementary to the hole threads **26**").

v. The resulting construction. In short, as to construction of the challenged portions of claim **1** of the '007 patent in light of prosecution history estoppel, the court concludes that the claim must be construed as *literally* requiring a base member with "an internally threaded opening therethrough" and "a plurality of externally threaded interchangeable sight inserts interchangeably and selectively mountable to a prescribed sight position in and substantially filling said threaded opening in said base, each of said sight inserts defining a sight opening therethrough." The '007 Patent, claim **1**. Only equivalents of the "interchangeability" element are limited by the prosecution history of the patent; there is no such limit on the "threading" elements.

c. Construction of "threaded"

[40] The court's construction of the claim is not finished, however, because the meaning of "threaded" must be construed, in light of Kudlacek's contention that his accused device has no threads and Specialty's contention that Kudlacek's base member has "one large thread." Even though the parties dispute the applicability of "threaded" to Kudlacek's peep sight, they do not dispute that "threaded" must be given its "ordinary meaning" in the '007 patent, nor do they dispute what that "ordinary meaning" is. Therefore, the court must briefly consider the "ordinary meaning" of "threaded" as it relates to the internally threaded hole in the base member and the externally threaded sight inserts claimed in claim **1** of the '007 patent.

As the parties apparently agree, there is no novel definition of "threaded" expressly stated in the '007 patent. Thus, the court must rely on the "ordinary meaning rule" to determine the proper construction of this term. *See,* supra, p. 37 *ff*. The pertinent dictionary definition, for present purposes, of "thread," as a noun, is "a projecting helical rib (as in a fitting or on a pipe) by which parts can be screwed together: SCREW THREAD," while the pertinent definition of "thread," as a verb, is "to form a screw thread on or in." MERRIAM WEBSTER'S COLLEGIATE DICTIONARY (10th ed., 1995). The dictionary definitions proffered by the parties are comparable. Specialty, for example, proffers the definition of "thread" as a "helical or spiral ridge," citing AMERICAN HERITAGE DICTIONARY (2d ed.), and Kudlacek embraces that definition. "Helical" in turn means "of, relating to, or having the form of a helix; *broadly:* SPIRAL"; where "helix" is defined as "something spiral in form," such as "a coil formed by winding wire around a uniform tube," or "a curve traced on a cylinder or cone by the rotation of a point crossing its right sections at a constant oblique angle; *broadly:* SPIRAL"; and where "spiral" itself, as a noun, is defined as "the path of a point in a plane moving around a central point while continuously receding from or approaching it," and as "a three-dimensional curve (as a helix) with one or more turns about an axis."

The court concludes that Specialty has ignored the "helical" or "spiral" meaning of "thread" and the meaning of the term that indicates that complementarily "threaded" parts must "screw" together by asserting that the patent term encompasses parallel ridges that form complete circles or segments of a complete circle. However, the court concludes that "threaded," "threads," and "threading" in the '007 patent, according to the

ordinary meaning of the terms, require that the "threaded" parts have a continuous helical or spiral ridge or groove, around the inside of the hole in the base member (*i.e.,* internally), or around the outside of each sight insert (*i.e.,* externally), completing one or more turns around the central axis of the part, like the threading of a nut or bolt, respectively, and parts with complementary threads must be able to "screw" together.

2. Non-infringement of the '007 patent

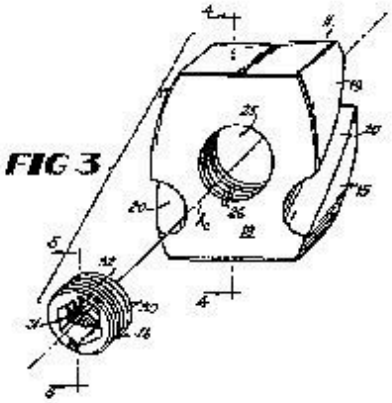
With construction of the disputed terms of claim **1** of the '007 patent completed, the court turns to the second step in the analysis, which is comparison of the claims, as properly construed, to the accused device. *See* CAE Screenplates, Inc., 224 F.3d at 1315; KCJ Corp., 223 F.3d at 1355-56; Tate Access Floors, Inc., 222 F.3d at 963-64; Elekta Instrument S.A., 214 F.3d at 1306. The court will consider literal, doctrine-of-equivalents, "direct," and "contributory" infringement in turn.

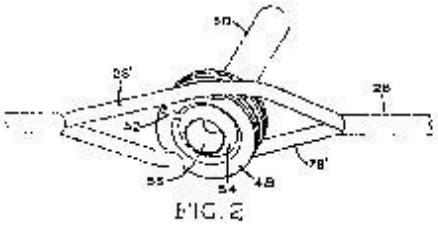
a. Literal infringement

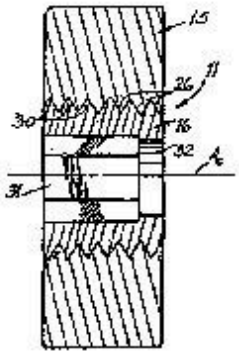
[41] Kudlacek argues that he is entitled to summary judgment of non-infringement of the '007 patent, in part, because the base member and insert for his accused device are not "threaded" and the device does not use "a plurality of interchangeable inserts," and so, as a matter of law, his device does not literally infringe claim **1** of the '007 patent. Kudlacek points out that his peep sight is only sold with a single ball insert, although complete peep sights with different size sight openings can be purchased, in keeping with the prior art. In response, Specialty argues that Kudlacek's peep sight base member has "one large thread," comprised of the two outer ridges, which secure the sight insert in place. The court does not find that Specialty has ever argued that Kudlacek's sight insert is "threaded."

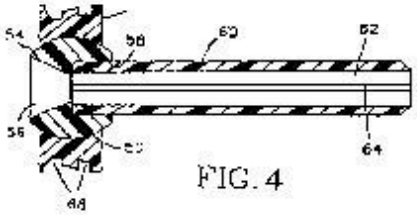
The patented device, as illustrated in Figures 3 and 6 of the '007 patent, and Kudlacek's accused device, as illustrated in Figures 2 and 4 of his never-filed patent application, are shown below, side by side, with the patented device on the left and the accused device on the right:

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Figs. 3 & 6 of the '007 patent (back and cross-sectional views)

Figs. 2 & 4 of the Kudlacek peep sight (back and cross-sectional views)

i. Literal infringement of the "threading" limitation. Claim **1** of the '007 patent requires, *inter alia,* "a base ... defining ... *an internally threaded opening* " and " *a plurality of externally threaded interchangeable sight inserts* interchangeably and selectively mountable to a prescribed sight position in and substantially filling *said threaded opening in said base*." The '007 Patent, claim **1** (emphasis added). As the court has construed the "threading" limitation of claim **1** of the '007 patent, there is no *internal* threading on the opening in the *base member* of Kudlacek's peep sight, that is, the Kudlacek base member lacks the internal threads identified in the '007 patent illustrations as **26**, because the base member lacks a continuous helical or spiral ridge or groove, around the inside of the hole in the base member, completing one or more turns around the central axis of the part, like the threading of a nut. Such a limitation is literally absent, where the Kudlacek base member has an opening that is a segment of a sphere and the ridges at the edges of the opening are therefore necessarily circular or segments of a circle (because of a "notch" or "slot" on one of the ridges). Similarly, the court's construction of the "threading" limitation in claim **1** of the '007 patent establishes that Kudlacek's accused peep sight does not, as a matter of law, literally infringe claim **1** of the '007 patent. There is no *external* threading on Kudlacek's *ball insert,* that is, the Kudlacek ball insert lacks the external threads identified in the '007 patent illustrations as **30**. As the court's construction pertains to a threaded insert, the limitation requires a continuous helical or spiral ridge or groove around the outside of the insert, completing one or more turns around the central axis of the part, like the threading of a bolt. Such a limitation is literally absent from the Kudlacek device, where the accused insert is spherical. Moreover, in the Kudlacek accused device, the parts that are complementary do not literally "screw" together, with complementary threading, but "snap" together.

At oral arguments, Specialty disputed the first and third of these conclusions, contending that there is

internal threading on the base member, because the "notch" or "slot" (**52** in Figure 2 of the Kudlacek peep sight) in the front "ridge" of the base member and extending into the opening (**50** in Figure 4 of the Kudlacek peep sight) in the base member made the ridge a "thread" when the ridge was "deformed" out of its circular shape into a "helical" shape to permit the sight ball to be "screwed" into the base member. The never-filed patent application for the Kudlacek device does state, in its specification, that "[t]he base member preferably is made of Delrin, polycarbonate, or other synthetic resin that, in cooperation with the longitudinal slot 52 that extends inwardly from the outer surface to the central opening 50, renders the base member sufficiently resilient to receive in its central opening ... a peep ball 54," and also describes the "snap fitting" as being achieved "by *deforming* either or both the base member 48 and ball 54." Plaintiff's Statement Of Undisputed Facts (in support of plaintiff's motion for summary judgment of non-infringement of the '007 patent), Exhibit E (Kudlacek Peep Sight Patent Application), "Description of the Preferred Embodiment" at 5-6 (emphasis added). Similarly, claim 2 of the never-filed patent application defines an "archery bow peep sight ... wherein the base member and ball member are made of resilient synthetic resin, whereby the ball member is installed in the spherical bore." Id., "Claims" at 10. However, the specification and claim 2 also state that the base member receives the peep ball "by a snap fit." The actual Kudlacek peep sight also in evidence in the record, as Plaintiff's Exhibit SJH-1, appears to conform to this language of the specification and claim in the never-filed patent application in all respects. It is readily apparent that, even when the ridge on the base member is "deformed" to permit the peep ball to be inserted, the deformation is not "helical," nor is it possible to "screw" the peep ball into the opening. Rather, the construction of the peep sight and base member is such that the ball insert necessarily "snaps" straight into the spherical opening, with the aid of a temporary inward deformation of the "ridge" at the "slot."

Thus, as a matter of law, there is no literal infringement of the "threading" limitation, where that limitation is absent from the accused device.

ii. Literal infringement of the "interchangeability" limitation. The '007 patent claims " *a plurality* of externally threaded *interchangeable* sight inserts *interchangeably* and selectively mountable to a prescribed sight position in and substantially filling said threaded opening in said base." The '007 Patent, claim **1** (emphasis added). The court's analysis of literal infringement of this "interchangeability" limitation need only be quite brief. Kudlacek's peep sight does not literally require or suggest more than one sight insert, nor, as sold, does Kudlacek's peep sight ever include more than one sight insert with a base member. Kudlacek's peep sight therefore does not literally infringe the "interchangeability" limitation, which is premised on "a plurality" of "interchangeable" inserts, where the Kudlacek peep sight only has one sight insert. Indeed, the court cannot find that Specialty has ever argued that the Kudlacek peep sight *literally* infringes this limitation of claim **1** of the '007 patent.

Thus, Kudlacek's accused peep sight does not literally infringe claim **1** of the '007 patent, because certain claim limitations are absent from the accused device. Bayer AG, 212 F.3d at 1247 ("If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law."); Zodiac Pool Care, Inc., 206 F.3d at 1415. No reasonable jury could find such limitations are literally present in the Kudlacek device, so that Kudlacek is entitled to summary judgment to the extent that his accused device does not literally infringe the '007 patent. Ishida Co., Ltd., 221 F.3d at 1316-17; IMS Tech., Inc., 206 F.3d at 1429.

b. Equivalents infringement

[42] The court therefore turns to the question of whether the Kudlacek peep sight infringes the '007 patent under the doctrine of equivalents. *See* CAE Screenplates, Inc., 224 F.3d at 1318-19 ("A device which does not infringe a patent claim literally may still infringe the claim under the doctrine of equivalents...."); KCJ Corp., 223 F.3d at 1358 (same); Tate Access Floors, Inc., 222 F.3d at 963-64 (same); Zodiac Pool Care, Inc., 206 F.3d at 1415 (same). Although Kudlacek argues primarily that prosecution history estoppel limits equivalents of the "threaded" structure of the '007 patent to the literal language of the patent-a contention

the court rejected above, in Section II.C.1.b.v. at page 1061, in its construction of claim **1** of the patent-Kudlacek also argues that his ball-and-socket, "snap fit" structure is not an equivalent of the "threaded" structures required by the '007 patent, because his device does not work in substantially the same way. Furthermore, Kudlacek argues that his peep sight is only sold with a single ball insert, and, although complete peep sights with different size sight openings can be purchased, the ball inserts are not designed to be interchangeable. He argues further that Specialty has presented no evidence of any occasions on which ball inserts were sold separately or a "plurality" of "interchangeable" ball inserts was sold with a single base member for his peep sight. Therefore, he contends that there is no equivalent in his accused device of the "interchangeable inserts" limitation in the '007 patent.

Specialty argues that Kudlacek's peep sight performs the same function as the embodiment of the '007 patent, because it allows different size sight inserts to be randomly interchanged to account for varying or changing field conditions, and the only difference in the "way" the devices function is that Kudlacek's device has only one large thread on the base member. Specialty argues that equivalents of the "threading" limitations are not foreclosed by prosecution history estoppel.

To establish infringement under the doctrine of equivalents, Specialty must establish that each and every limitation of claim **1** of the '007 patent is literally or equivalently present. *See* CAE Screenplates, Inc., 224 F.3d at 1318-19. The court concluded above that no reasonable jury could find that either of the disputed limitations is *literally* present. Thus, if the court finds that no reasonable jury could find that an equivalent of *one* of the disputed limitations is present in the accused device, Specialty's "equivalents" infringement claim also fails.

i. Equivalents of the "threading" limitation. Although the court concluded above that prosecution history estoppel does not limit the range of equivalents of the "threading" limitations, the court nevertheless concludes that no reasonable jury could find that any equivalent of the "threading" limitation is present in the accused device. The Kudlacek peep sight simply does not satisfy the classic tripartite function-way-result test of infringement under the doctrine of equivalents. Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. 1040 (to determine whether there is infringement by equivalents, the test is "whether the substitute element matches the function, way, and result of the claimed element, or whether the substitute element plays a role substantially different from the claimed element."). Again, this test must be applied as an objective inquiry on an element-by-element basis. Id. at 28-29, 117 S.Ct. 1040

The "function" of the "threading" limitations is clear from the language of claim **1** of the '007 patent: The threading is to allow interchanging of sight inserts with different size sight openings to suit varying field conditions. *See* The '007 Patent, claim **1** (the peep sight includes "a plurality of externally threaded interchangeable sight inserts interchangeably and selectively mountable to a prescribed sight position in and substantially filling said threaded opening in said base, each of said sight inserts defining a sight opening therethrough ... *so that the user can selectively interchange said inserts* in said body to incrementally change the diameter of said sight opening being used to sight the bow and can selectively remove said insert from said body and use said threaded opening through said base to sight the bow.") (emphasis added); *see* id., "Summary of the Invention" ("[P]roblems and disadvantages associated with the prior art are overcome by the invention disclosed herein by providing the peep sight with interchangeable inserts, each with a different size sight hole through it *so that different field conditions can be covered without having to change the entire sight*."). The "function" of the sight insert in the Kudlacek peep sight, at least as asserted by Kudlacek in his never-filed patent application, is not to facilitate interchanging of inserts with different size sight openings to adjust to varying field conditions, but to permit the single size sight opening of the single insert to be aligned properly with the line of sight of the shooter based on variations in draw length of the bow string. *See* Kudlacek Peep Sight Patent Application, "Summary of the Invention" at 2, *ll*. 6-9 ("It is the principal objective of this invention to provide an archery bowstring peep sight that overcomes the aforementioned disadvantages and limitations of prior bowstring peep sights," which are identified in the

"Background to the Invention," at 1, *ll*. 14-20, as the fact that prior art peep sights "are fixed at an angle of 45 ~to accommodate the average draw length of 29 inches on a 45 inch bow," but "[a]s the length is varied between 35 and 41 inches, the fixed angle of the peep admits less light. Also, as the rotation of the bowstring is varied as little as 1-2,~ the light gathering quality decreases by 20-25%."). Thus, there are genuine issues of material fact as to whether the two devices perform substantially the same function. *See* Warner-Jenkinson, 520 U.S. at 40, 117 S.Ct. 1040 (there is no infringement under the doctrine of equivalents if "the substitute element plays a role substantially different from the claimed element.").

However, even if the court assumes that the "snap fit" structure of the Kudlacek peep sight performs the same function as the "threaded" structures of the '007 patent by allowing sight inserts with different size sight openings to be interchanged, as a matter of law, the Kudlacek "snap fit" structure performs this function in a substantially *different* way from the "threaded"-one might say "screw fit"-structure defined by the '007 patent. This case is one in which "the range of equivalents cannot be divorced from the scope of the claims." Vehicular Techs. Corp., 212 F.3d at 1382; Zodiac Pool Care, Inc., 206 F.3d at 1416. Here, " 'th[e] issued patent contains clear structural limitations,' " including the "threading" limitations, and therefore " 'the public has a right to rely on those limits in conducting its business activities.' " Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc., 126 F.3d at 1425-26, and adding further that " '[t]his court will not effectively remove such a limitation under a doctrine designed to prevent "fraud on the patent." ' "). As noted above, with regard to literal infringement, there are no "threaded" inserts or openings in the base member in the accused device. Even though the claim language states that the patented device is one "comprising" rather than "consisting of" certain structures, and thus does not impose a "nothing else" limitation, *see* Vehicular Techs. Corp., 212 F.3d at 1382, a jury would have to consider whether a "snap fit" structure is insubstantially different from a "screw fit" one, and to do so, the jury would consult the claim language with its repeated specifications of "threading." *See* id. at 1383. In doing so, no reasonable jury could find infringement by equivalents in the accused device, when the claim language requires a "threaded" opening in the base member and "threaded" inserts, or a structure only *insubstantially* different from that, and the accused device has no "threaded" structures at all. *Id*. Again, the claim at issue here contains "clear structural limitations," including "threading," and, given the proper construction of this limitation, as defined above by this court, "a verdict of infringement under the [doctrine of equivalents] would reduce the claims to nothing more than 'functional abstracts, devoid of meaningful structural limitations on which the public could rely.' " Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc., 126 F.3d at 1424). In this case, the court concludes that a reasonable jury could reach no other conclusion than a verdict that the two devices are " 'not even close.' " *Id*. (quoting Ethicon Endo-Surgery, 149 F.3d at 1319). Thus, as a matter of law, Kudlacek's accused device lacks either literally or equivalently one of the limitations of the '007 patent, and therefore does not infringe the patent as a matter of law. CAE Screenplates, Inc., 224 F.3d at 1318-19.

ii. Equivalents of the "interchangeability" limitation. Nor does Kudlacek's accused device satisfy the test for infringement of the "interchangeability" limitation under the doctrine of equivalents. Again, assuming the "function" of this limitation is to allow the device to be adjusted to meet varying field conditions, the accused device performs this "function" in a substantially different "way." The accused device quite simply lacks any equivalent of "a plurality" of sight inserts, where it is comprised of only a single insert. Moreover, to the extent that the accused device, like the patented one, performs the "function" of permitting adjustment for varying light conditions, *see* Kudlacek Peep Sight Patent Application, "Summary of the Invention" at 2, *ll*. 6-9 (stating the objective of the invention as overcoming disadvantages of prior art peep sights, including, as stated in the "Background to the Invention," at 1, *ll*. 18-20, the fact that "as the rotation of the bowstring is varied as little as 1-2 (deg.), the light gathering quality decreases by 20-25%."), Kudlacek's peep sight does not perform this function by providing for "a plurality" of inserts with different sight openings, but by allowing the single sight opening in the single sight insert to be realigned with the shooter's line of sight, by looking through the hole in the adjustment tool (**60** in the figures illustrating the Kudlacek peep sight, above), and using the tool to rotate (*i.e.,* "universally" adjust) the ball into the optimal alignment. *See id.,* "Description of the Preferred Embodiment" at 8, *ll*. 3-11.

Thus, the accused device once again, as a matter of law, performs or may perform substantially the same function, but does so in a substantially *different* way. *See* Warner-Jenkinson Co., 520 U.S. at 40, 117 S.Ct. 1040 (equivalents infringement exists only if "the substitute element matches the function, way, and result of the claimed element"). Even though the claim language states that the patented device is one "comprising" rather than "consisting of" certain structures, and thus does not impose a "nothing else" limitation, *see* Vehicular Techs. Corp., 212 F.3d at 1382, a jury would have to consider whether Kudlacek's single adjustable ball structure is insubstantially different from a structure employing "a plurality" of inserts, and to do so, the jury would consult the claim language with its specification of "a plurality" of inserts. *See* id. at 1383. In doing so, no reasonable jury could find infringement by equivalents in the accused device, when the claim language requires "a plurality" of inserts or a structure only *insubstantially* different from that, and the accused device has only a single adjustable sight insert. *Id*. Again, the claim at issue here contains "clear structural limitations," including "a plurality" of inserts, and, given the proper construction of this limitation, as defined above by this court, "a verdict of infringement under the [doctrine of equivalents] would reduce the claims to nothing more than 'functional abstracts, devoid of meaningful structural limitations on which the public could rely.' " Zodiac Pool Care, Inc., 206 F.3d at 1416 (quoting Sage Prods., Inc., 126 F.3d at 1424). In this case, the court once again concludes that a reasonable jury could reach no other conclusion than a verdict that the two devices are " 'not even close.' " *Id*. (quoting Ethicon Endo-Surgery, 149 F.3d at 1319). Thus, as a matter of law, Kudlacek's accused device lacks either literally or equivalently another limitation of the '007 patent, and therefore does not infringe the patent under the doctrine of equivalents as a matter of law. CAE Screenplates, Inc., 224 F.3d at 1318-19.

c. "Direct" infringement

As its penultimate argument for the viability of its infringement claims, Specialty argues that Kudlacek's peep sight "directly" infringes the '007 patent, even though it is sold only with a single ball insert, and even if it is capable of a non-infringing use, because Kudlacek's device is *capable* of infringing use by "interchangeably" inserting various ball inserts, with different size sight openings, from other peep sights made and sold by Kudlacek. The only authority Specialty cites for this proposition is Interspiro USA, Inc. v. Figgie Int'l, Inc., 815 F.Supp. 1488 (D.Del.1993), *aff'd,* 18 F.3d 927 (Fed.Cir.1994). In *Interspiro,* the court did, as Specialty contends, state that "it is of no moment that in certain modes of operation ... the [accused device] may not operate in a way that would infringe the ... patent. It matters only that the accused device operate in an infringing way at some time." Interspiro USA, Inc., 815 F.Supp. at 1512. However, in *Interspiro,* the court had already found that the accused device satisfied the limitations of the patent claims, either literally or equivalently:

In sum, Figgie's redesign effort consisted of moving the detent from one side of the movable member or diaphragm to the other. This is not an invention beyond the scope of the '145 patent-the detent still moves the diaphragm, maintains it in place, and maintains the inlet valve in a closed position. The patent does not require that the detent move and maintain the movable member by physically pushing it; it only requires that the detent move the movable member in a given direction against a biasing spring, and at some point maintain it in position. Figgie certainly had every right to design around the '145 patent, but it did not do so.

Interspiro USA, Inc., 815 F.Supp. at 1512 (citations omitted). Similarly, in other cases in which the court found capability to infringe is sufficient to establish "direct" infringement, even if the device is also capable of non-infringing use, the court had already determined that the accused device satisfied the limitations of the patent-in-suit, either literally or equivalently. For example, in Zygo Corp. v. Wyko Corp., 79 F.3d 1563 (Fed.Cir.1996), the court explained,

Zygo argues that under the precedent of Intel Corp. v. United States Int'l Trade Comm'n, 946 F.2d 821, 832, 20 USPQ2d 1161, 1171 (Fed.Cir.1991), a device which is CAPABLE of infringing use does not escape

infringement although not actually used in an infringing manner. However, Zygo overreads *Intel*. By its literal terms, the claim involved in *Intel* only required "capability" (*i.e.,* "PROGRAMMABLE selection means"). The substitute means in the accused device in *Intel* literally met the claim language.

Zygo Corp., 79 F.3d at 1570. However, in *Zygo,* the appellate court found that the allegedly infringing capability could only be seen if the accused device was misadjusted. *Id*. at 1569-70. The appellate court also found that the accused device did not satisfy the limitations of the patent:

In any event, the alignment aid in the [accused device] is the prism, not an alignment reticle, *i.e.,* one placed on the center of alignment. The reticle in the [accused device] is not positioned as an "alignment reticle," does not function as one, and is present in the device for an entirely different purpose. Further, using spots through and around the prism is a distinctly different "way" of achieving alignment from imaging spots directly from the diffuse screen to a monitor for alignment on the displayed reticle. Because the [accused device] operates on different optical principles, the same "way" prong of the tripartite test has not been satisfied.

Zygo Corp., 79 F.3d at 1570.

Similarly, in High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc., 49 F.3d 1551 (Fed.Cir.1995), the district court had found a "likelihood of infringement," because it found that, but for certain set screws in a camera mounting, the camera was otherwise coupled to the body member of a dental endoscope in such a manner that it was "capable of being rotated," and hence, capable of infringing the patent-in-suit. High Tech Med. Instrumentation, Inc., 49 F.3d at 1555. However, the Federal Circuit Court of Appeals found that, in the accused device, "as designed, sold, and intended for use, the camera is rigidly coupled to its housing [and] [t]he original and intended operating configuration of the device must be altered-by loosening the set screws-in order for the camera to rotate." *Id*. The appellate court rejected the district court's finding of a "likelihood of infringement," stating that "a device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim." *Id*. (citing Hap Corp. v. Heyman Mfg. Co., 311 F.2d 839, 843 (1st Cir.1962), *cert. denied,* 373 U.S. 903, 83 S.Ct. 1290, 10 L.Ed.2d 198 (1963), which states that "[t]he question is not what [a device] might have been made to do, but what it was intended to do and did do.... [T]hat a device could have been made to do something else does not of itself establish infringement.").

[43] [44] Here, Kudlacek's accused device lacks not only the "interchangeability" limitation Specialty contends it could be altered to meet, but the "threaded" limitation. Thus, the present case is distinguishable from Intel Corp., 946 F.2d at 832, in which the accused device literally infringed the patent claims, even though it was used in a non-infringing way, and Interspiro USA, Inc., 815 F.Supp. at 1512, in which the accused device literally or equivalently infringed all of the limitations of the patent, even though it was "operated" in an infringing way only some of the time. This case is instead controlled by Zygo Corp., 79 F.3d at 1570, in which the accused device did not literally infringe the patent and the allegedly infringing capability was only obtainable by misadjusting the accused device, and therefore no infringement was found, and High Tech Med. Instrumentation, Inc., 49 F.3d at 1555, in which the accused device did not infringe the patent unless it was altered in a way it was not designed or intended to be altered, and no infringement was found. Even supposing the Kudlacek peep sight is "capable" of being altered to infringe the '007 patent, that is, it is or can be used by interchanging inserts, it still would not infringe the '007 patent, because it would still lack the "threading" limitation. *See* Zygo Corp., 79 F.3d at 1570. Moreover, even if only the "interchangeability" limitation were lacking, "a device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim." *See* High Tech Med. Instrumentation, Inc., 49 F.3d at 1555.

Kudlacek is also entitled to summary judgment on Specialty's infringement claim to the extent that claim

asserts "direct" infringement based on "capability" of infringement.

d. Contributory infringement

As its final argument for the viability of its infringement claim, Specialty argues that, even if Kudlacek's peep sight does not directly infringe the '007 patent, Kudlacek's peep sight *contributorily* infringes the '007 patent. Specialty argues that it is "well known in the industry" that Kudlacek's peep sights are sold with the knowledge that the ball inserts are interchangeable, and the low price of complete peep sights of different sizes, less than $10, readily permits purchase of several peep sights to acquire "interchangeable" sights to be used with one base member. Specialty argues further that Kudlacek's device has little or no use unless used by interchanging the inserts in a manner covered by the '007 patent, which provides circumstantial evidence of direct infringement by others, as required for a contributory infringement claim, even in the absence of evidence of a particular direct infringer. In reply to Specialty's contributory infringement arguments, Kudlacek points out that Specialty has not identified *any* direct infringer and that his accused device is suitable for a non-infringing use, so that there can be no contributory infringement. Kudlacek also argues that the utility of his peep sight, with only a single ball insert, is plainly in evidence, for example, from his explanation of the utility of the device in his application for a patent for the device. In response to Kudlacek's argument that Specialty had not identified any direct infringer, Specialty asserted at oral arguments that identification of infringers would be the subject of further discovery, but Specialty did not move to stay Kudlacek's motion for summary judgment under Rule 56(f) of the Federal Rules of Civil Procedure to conduct such discovery.

i. The statutory basis for the claim. The statute providing a cause of action for contributory infringement upon which Specialty relies is 35 U.S.C. s. 271(c). That statute provides as follows:

(c) Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

35 U.S.C. s. 271(c). As the Federal Circuit Court of Appeals has explained,

The most common pre-1952 contributory infringement cases dealt with the situation where a seller would sell a component which was not itself technically covered by the claims of a product or process patent but which had no other use except with the claimed product or process.... The legislative history of the Patent Act of 1952 indicates that no substantive change in the scope of what constituted "contributory infringement" was intended by the enactment of s. 271. However, the single concept of "contributory infringement" was divided between s. 271(b) and 271(c) into "active inducement" (a type of direct infringement) and "contributory infringement," respectively. Section 271(c) codified the prohibition against the common type of contributory infringement referred to above, and made clear that only proof of a defendant's *knowledge,* not *intent,* that his activity cause infringement was necessary to establish contributory infringement.

Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F.2d 1464, 1469 (Fed.Cir.1990) (citations omitted; emphasis in the original); *accord* Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 485 n. 6, 84 S.Ct. 1526, 12 L.Ed.2d 457 (1964) (*Aro II*) ("The section was designed to 'codify in statutory form principles of contributory infringement' which had been 'part of our law for about 80 years.' ") (quoting H.R. REP. NO.1923 on H.R. 7794, 82d Cong., 2d Sess., at 9).

[45] ***ii. Requirements of the claim.*** Certain requirements for a contributory infringement claim are apparent from the language of the statute itself: (1) the allegedinfringer must "offe[r] to sell or sel[l] ... a component of" either (a) "a patented machine, manufacture, combination or composition," or (b) "a material or apparatus for use in practicing a patented process,"; (2) the component must "constitut[e] a material part of the invention"; (3) the seller must "know the [component] to be especially made or especially adapted for use in an infringement of such patent"; and (4) the component is "not a staple article or commodity of commerce suitable for substantial noninfringing use." 35 U.S.C. s. 271(c); *see also* Aro II, 377 U.S. at 488, 84 S.Ct. 1526 (Section 271(c) "require[s] a showing that the alleged contributory infringer knew that the combination for which his component was especially designed was both patented and infringing."); Fina Research, S.A. v. Baroid, Ltd., 141 F.3d 1479, 1481-82 (Fed.Cir.1998) (suit may not be brought under 35 U.S.C. s. 271(c) if the product or device on which contributory infringement is based is "a staple article or commodity of commerce suitable for substantial noninfringing use"); Serrano v. Telular Corp., 111 F.3d 1578, 1584 (Fed.Cir.1997) (the accused device was not a staple article of commerce, thus meeting one requirement for contributory infringement); Trell v. Marlee Electronics Corp., 912 F.2d 1443, 1447 (Fed.Cir.1990) ("Section 271(c) 'require[s] a showing that the alleged contributory infringer knew that the combination for which his component was especially designed was both patented and infringing.' ") (quoting *Aro II*); C.R. Bard, Inc. v. Advanced Cardiovascular Sys., Inc., 911 F.2d 670, 674 (Fed.Cir.1990) (a component is "not a staple article of commerce" if it " 'has no use except through practice of the patented method,' " whereas "substantial non-infringing uses" establish that something is "a staple article of commerce") (quoting Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 199, 100 S.Ct. 2601, 65 L.Ed.2d 696 (1980)).

[46] Other requirements are implicit in the statute. Thus, "[i]t is settled that if there is no *direct* infringement of a patent there can be no *contributory* infringement." *See* Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341, 81 S.Ct. 599, 5 L.Ed.2d 592 (1961) (*Aro I*) (emphasis in the original); Serrano, 111 F.3d at 1583 ("There can be no contributory infringement [under 35 U.S.C. s. 271(c)] without direct infringement."); Kendall Co. v. Progressive Med. Tech., Inc., 85 F.3d 1570, 1573 & 1576 (Fed.Cir.1996) (quoting *Aro I,* and also concluding that "[s]ince Kendall's customers were not direct infringers, Progressive could not have been liable as a contributory infringer."); FMC Corp. v. Up-Right, Inc., 21 F.3d 1073, 1076 (Fed.Cir.1994) (quoting *Aro I*). Similarly, "[a]lthough it was not clear on the face of the statute, subsequent case law held that s. 271(c) required not only knowledge that the component was especially made or adapted for a particular use but also knowledge of the patent which proscribed that use." Hewlett-Packard Co., 909 F.2d at 1469 (citing Aro II, 377 U.S. at 488, 84 S.Ct. 1526).

[47] [48] ***iii. Contributory infringement here.*** In a contributory infringement case, the accused device does not contain all of the limitations of a claim of the patent-in-suit, but the accused device in combination with another device does contain all the limitations of the patented claim. *See, e.g.,* Serrano, 111 F.3d at 1584 (the accused device, a Motorola-configured MiniDial device, did not contain all of the limitations of claim **1** of the patent in suit, but "the accused device in combination with the Microtac Transceiver does contain all the limitations of the asserted claim"). The parties' arguments concerning contributory infringement are apparently premised on the assumption that, but for the fact that the Kudlacek device comes with only one sight insert, and thus fails to satisfy the "interchangeability" limitation of the '007 patent, Specialty could prove infringement of the '007 patent. In other words, the parties' arguments are premised on the assumption that, if Kudlacek sold his accused peep sight with more than one of the available ball sights, each having a different sight opening, his peep sight would infringe the '007 patent. However, the court concludes, for essentially the same reasons the Kudlacek peep sight does not, as a matter of law, literally or equivalently infringe the '007 patent, Kudlacek is also entitled to summary judgment on the ground that he does not "contributorily infringe" the '007 patent.

First, as the court concluded above, neither the base unit, a single ball sight insert, or a base unit sold with a single ball sight insert, infringes the "threaded" limitation of the '007 patent, either literally or equivalently.

Thus, no combination of these components, not even a combination including more than one ball sight insert, each with different sight openings, would contain all the limitations of the patented claim, because the combination would still lack the "threaded" limitation. *See* Serrano, 111 F.3d at 1584 (the combination of the accused device with other components must contain all of the elements of the patented claim). Moreover, as a matter of law, because no component satisfies the "threading" limitation, no component of Kudlacek's peep sight, as sold, can be combined with the components of Specialty's patented peep sight to arrive at a patented combination, *i.e.*, no component of Kudlacek's peep sight is a "replacement part" for any component of Specialty's patented device. *See id.* (the accused device was a Motorola-configured device that could be combined with other Motorola components to satisfy all of the limitations of the patented claim); *see also* Hewlett-Packard Co., 909 F.2d at 1469 (s. 271(c) was intended to codify "contributory infringement" as dealing with "the situation where a seller would sell a component which was not itself technically covered by the claims of a product or process patent but which had no other use except with the claimed product or process").

In statutory terms, Specialty cannot, as a matter of law, show that Kudlacek "offers to sell or sells ... a component of a patented machine, manufacture, combination or composition ... constituting a material part of the invention," 35 U.S.C. s. 271(c), because Specialty cannot show that Kudlacek offers to sell or sells a component that is *any* part of the patented invention where no component has the "threads" each must have. By obtaining the '007 patent, Specialty has not obtained a patent on the *process* for using interchangeable inserts in archery peep sights to vary the size of the sight opening, only a *patented machine* or *combination* that achieves this end. *Cf.* id. (also identifying as contributory infringement sales or offers to sell "a material or apparatus for use in practicing a patented process").

Thus, no reasonable jury could find that Kudlacek contributorily infringes the '007 patent by selling or offering to sell his peep sight or components thereof. *See* Ishida Co., Ltd., 221 F.3d at 1315-16; IMS Tech., Inc., 206 F.3d at 1429 (summary judgment is only appropriate if, after resolving reasonable inferences in favor of the patentee, "no reasonable jury could find infringement"). Kudlacek is entitled to summary judgment on Specialty's counterclaim and third-party claim alleging infringement of the '007 patent. FN12

FN12. Consequently, the court need not reach the parties' arguments concerning whether the accused device here is or is not "a staple article of commerce," the companion question of whether the accused device has any utility apart from use as a component of an infringing device, and whether there is or isn't any "direct infringer," in the form of someone using the Kudlacek peep sight by interchanging ball inserts with different size sight openings, and whether such a direct infringer is required or can be inferred from the purported lack of utility of the accused device.

D. Final Or Partial Judgment?

[49] The court has concluded that there are genuine issues of material fact as to the validity or invalidity of the '325 patent, barring summary judgment of non-infringement of that patent in favor of Specialty. However, the court has also concluded that, as a matter of law, Specialtydoes not infringe the '325 patent and that Kudlacek does not infringe the '007 patent. Thus, the question is whether the court, having fully resolved the claims of patent infringement, should nonetheless continue to entertain proceedings to address Specialty's counterclaim that the '325 patent is invalid, or should instead dismiss this action in its entirety, for example, on the grounds that Specialty's challenge to the validity of the '325 patent is now "moot" in the face of this court's determination of non-infringement.

1. Guidance from the Federal Circuit Court of Appeals

The Federal Circuit Court of Appeals recently held that its decision in Multiform Desiccants, Inc. v.

Medzam Ltd., 133 F.3d 1473, 1481 (Fed.Cir.1998), "permits a district court to resolve the issue of invalidity, even if the issue was raised only as an affirmative defense and even if the court finds that the patent was not infringed." Hill-Rom Co., Inc. v. Kinetic Concepts, Inc., 209 F.3d 1337, 1344 (Fed.Cir.2000). However, the court noted that there was no need to vacate the district court's ruling that the patent was not invalid or to address the validity issue on appeal, because the invalidity issue was raised only as an affirmative defense to the infringement claim, not in a counterclaim; the district court did not include any reference to the validity of the patent in its judgment; the district court's determination on the validity issue was not necessary to its judgment; and the district court's determination on the validity issue would consequently have no collateral estoppel effect. *See id*. Similarly, in *Multiform Desiccants,* the defendant raised invalidity of the patent only as an affirmative defense to a claim of infringement. *See* Multiform Desiccants, Inc., 133 F.3d at 1481. The appellate court noted that the district court had found no infringement and then declined to reach the question of invalidity. *Id*. The appellate court rejected the defendant's contention that the appellate court should require further proceedings on the invalidity issue, concluding that "as this litigation has evolved, Medzam has no justiciable interest in validity. The case is over." *Id*. In the present case, however, Specialty asserted the invalidity of the '325 patent in a counterclaim for declaratory judgment, not merely in an affirmative defense to Kudlacek's infringement claim.

2. The Supreme Court's decision in Cardinal Chemical

This court finds more guidance on the question presented here in the Supreme Court's decision in Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 113 S.Ct. 1967, 124 L.Ed.2d 1 (1993). In *Cardinal Chemical,* the Court observed that, "[u]nder its current practice, the Federal Circuit uniformly declares that the issue of patent validity is 'moot' if it affirms the District Court's finding of noninfringement and if, as in the usual case, the dispute between the parties does not extend beyond the patentee's particular claim of infringement." Cardinal Chem. Co., 508 U.S. at 95, 113 S.Ct. 1967. The Court therefore considered whether, "in the absence of an ongoing dispute between the parties over infringement, an adjudication of invalidity would be moot," recognizing that "the issue before us ... concern[s] the jurisdiction of an intermediate appellate court-not the jurisdiction of either a trial court or this Court." *Id*. Nevertheless, the Court also provided useful guidance to this district court on the question of whether "the case is over" when this court has found non-infringement of a patent that is also the subject of a defendant's counterclaim asserting invalidity of the patent-in-suit.

In *Cardinal Chemical,* the Court observed that "[i]n the trial court, of course, a party seeking a declaratory judgment has the burden of establishing the existence of an actual case or controversy." *Id*. The Court added,

In patent litigation, a party may satisfy that burden, and seek a declaratory judgment, even if the patentee has not filed an infringement action.... Merely the desire to avoid the threat of a "scarecrow" patent ... may therefore be sufficient to establish jurisdiction under the Declaratory Judgment Act. If, in addition to that desire, a party has actually been charged with infringement of the patent, there is, *necessarily,* a case or controversy adequate to support jurisdiction of a complaint, or a counterclaim, under the Act. In this case, therefore, it is perfectly clear that the District Court had jurisdiction to entertain Cardinal's counterclaim for a declaratory judgment of invalidity.

Id. at 95-96, 113 S.Ct. 1967 (emphasis in the original). Similarly, this court concludes that "it is perfectly clear" that this court *had* jurisdiction to entertain Specialty's counterclaim for declaratory judgment of invalidity of the '325 patent, where that counterclaim necessarily rested on a jurisdictional basis independent of Kudlacek's infringement claim. The question is whether this court *continues* to have such jurisdiction in the face of its determination that Specialty does not, as a matter of law, infringe the '325 patent.

Further examination of the decision in *Cardinal Chemical* provides further insight:

[W]hile the initial burden of establishing the trial court's jurisdiction rests on the party invoking that jurisdiction, once that burden has been met courts are entitled to presume, absent further information, that jurisdiction continues. If a party to an appeal suggests that the controversy has, since the rendering of judgment below, become moot, that party bears the burden of coming forward with the subsequent events that have produced that alleged result.... If, before the [appellate] court had decided the case, either party had advised it of a material change in circumstances that entirely terminated the party's controversy, it would have been proper either to dismiss the appeal or to vacate the entire judgment of the District Court. In fact, however, there was no such change in this case. The Federal Circuit's decision to rely on one of two possible alternative grounds (noninfringement rather than invalidity) did not strip it of *power* to decide the second question, particularly when its decree was subject to review by this Court. Even if it may be good practice to decide no more than is necessary to determine an appeal, it is clear that the Federal Circuit had jurisdiction to review the declaratory judgment of invalidity. The case did not become moot when that court affirmed the finding of noninfringement.

Id. at 98, 113 S.Ct. 1967.

The Supreme Court explained further that the most important interest weighing in favor of considering invalidity, even when non-infringement has been determined, is the litigant's interest in preserving a declaratory judgment of invalidity, because "[a] company once charged with infringement must remain concerned about the risk of similar charges if it develops and markets similar products in the future." Id. at 99-100, 113 S.Ct. 1967. Thus, "[g]iven that the burden of demonstrating that changed circumstances provide a basis for vacating the judgment of patent invalidity rests on the party that seeks such action, there is no reason why a successful litigant should have any duty to disclose its future plans to justify the retention of the value of the judgment [of invalidity] that it has obtained." Id. at 100, 113 S.Ct. 1967. The Court also recognized the strong public interest in determinations of the validity or invalidity of patents. *See* id. at 100-01, 113 S.Ct. 1967. In the case before the Court in *Cardinal Chemical,* the Court noted that continued appellate jurisdiction over the invalidity issue was warranted, despite a determination of non-infringement of the patents-in-suit, because the two patents at issue had been the subject of three separate lawsuits, and both parties had urged the Federal Circuit Court of Appeals to resolve their ongoing dispute over the issue of validity. Id. at 102-03, 113 S.Ct. 1967. In such circumstances, the Court concluded that it would be an abuse of discretion for the appellate court not to decide the invalidity question in the case then before the Court. Id. at 103, 113 S.Ct. 1967.

3. The import of Cardinal Chemical for this case

Although the *Cardinal Chemical* decision was couched primarily in terms of continuing *appellate* jurisdiction, the inferences for the continuing jurisdiction of this court are clear: This court had independent jurisdiction over Specialty's counterclaim asserting the invalidity of the '325 patent, *see* id. at 96, 113 S.Ct. 1967, and this court "is entitled to presume, absent further information, that jurisdiction continues." Id. at 98, 113 S.Ct. 1967. Specialty's invalidity counterclaim was not necessarily "mooted" by this court's determination of non-infringement. *Id*. Just as "the burden of demonstrating that changed circumstances provide a basis for vacating the judgment of patent invalidity rests on the party that seeks such action," id. at 100, 113 S.Ct. 1967, the burden of demonstrating that "changed circumstances" have eliminated the jurisdictional basis for Specialty's counterclaim asserting invalidity rests with Kudlacek. The present record does not demonstrate whether the parties have been involved in an ongoing dispute over infringement and invalidity of the patents that would justify continued jurisdiction over the invalidity issue, even in the absence of a viable charge of infringement. *Cf*. id. at 102-03, 113 S.Ct. 1967. Therefore, the court will continue to entertain Specialty's counterclaim asserting invalidity of the '325 patent until such time as Kudlacek demonstrates that the claim is indeed entirely "mooted" by the "changed circumstances" of this court's determination of non-infringement or Specialty itself moves to dismiss its counterclaim. Thus, the

summary judgments of non-infringement of the patents-in-suit is only "partial," and does not dispose of this case in its entirety.

III. CONCLUSION

Although perhaps not as long or grueling as Odysseus's journey home, nor as gratifying as his victory in the archery contest, the court has at last reached the end of its analysis of the parties' various motions for summary judgment in this patent infringement case involving patents for archery equipment. The court's conclusions should be briefly recapitulated here.

The court concludes, first, that there are genuine issues of material fact as to whether any fully anticipatory sales of Kudlacek's invention of a bow stabilizer, as embodied in the '325 patent, occurred prior to the "critical date" of March 27, 1995. A jury question-essentially a credibility question-arises from the conflict between Specialty's evidence of sales that purportedly occurred before the "critical date" and that purportedly involved Kudlacek's own devices including all of the limitations of the '325 patent, on the one hand, and Kudlacek's own evidence that he did not even "discover" his invention until June of 1995 or incorporate it into any device until July of 1995, on the other. Thus, there are genuine issues of material fact as to whether any of the sales of Kudlacek's own devices prior to the "critical date" could have involved a fully anticipatory device, or if they did involve a fully anticipatory device, whether those sales could have occurred before the "critical date" as Specialty alleges. Moreover, there are genuine issues of material fact as to whether the "Bickel Flitemate" sales involved a device that was fully anticipatory of Kudlacek's patented invention, even where it is conceded that the sales occurred before the "critical date." Thus, Specialty's motion for summary judgment determination of the invalidity of the '325 patent under the "on-sale bar" in 35 U.S.C. s. 102(b) must be denied.

However, the court concludes that there are no genuine issues of material fact precluding summary judgment in favor of Specialty on its motion for summary judgment determination of non-infringement of the '325 patent for a bow stabilizer. Although the court concludes that Specialty's accused device does infringe claim **1**(d) of the '325 patent-the "adjustment member" limitation-both literally and by equivalents, the court concludes that Specialty's accused device does not, as a matter of law, infringe claim 1(e) of the '325 patent-the means-plus-function element within the meaning of 35 U.S.C. s. 112, para. 6, for a "resilient securing means"-either literally or by equivalents. Specialty's accused "Super Stix" bow stabilizer performs the identical function of "engaging and securing" the adjustment member to the stabilizer rods, but it does so in a substantially *different* way. That conclusion precludes a finding of infringement of a means-plus-function element, either literally or by equivalents. Therefore, Specialty is entitled to summary judgment of non-infringement of the '325 patent.

Similarly, the court concludes that Kudlacek is entitled to summary judgment in his favor on his motion for summary judgment determination of non-infringement of the "Shoemake/Morehead" '007 patent. Kudlacek's accused device does not, as a matter of law, infringe either the "threading" or "plurality of interchangeable inserts" limitations in the '007 patent, either literally or by equivalents, where it entirely lacks these limitations, and even if it performs substantially the same "function" of these limitations, it performs them in substantially different ways. Nor does Kudlacek's accused device "directly" infringe the '007 patent, as a matter of law, where it lacks the "threading" and "plurality of interchangeable inserts" limitations, either literally or by equivalents, even if it could be altered to meet the "interchangeability" limitation. Similarly, there is no "contributory infringement" within the meaning of 35 U.S.C. s. 271(c), as a matter of law, where no combination of the components of the Kudlacek accused device would contain all the limitations of the patented claim, and no component of Kudlacek's peep sight, as sold, can be combined with the components of Specialty's patented peep sight to arrive at a patented combination. Therefore, Kudlacek is also entitled to summary judgment of non-infringement on the patent infringement counterclaim and third-party claim asserted by Specialty.

Finally, guided by the Supreme Court's decision in *Cardinal Chemical,* the court concludes that, even in the absence of any viable claim of infringement of the '325 patent, and in the absence of any demonstration that this determination of non-infringement constitutes sufficiently "changed circumstances," Specialty's counterclaim asserting the invalidity of the '325 patent is not necessarily "moot." Therefore, this court will continue to exercise jurisdiction over Specialty's "invalidity" counterclaim until and unless such a demonstration of "mootness" is made or the counterclaim is voluntarily dismissed. Judgment in this case consequently is only "partial" and not "final."

THEREFORE,

1. Specialty's March 6, 2000, motion for summary judgment determination of invalidity of the '325 patent is **denied.**

2. Specialty's March 6, 2000, motion for summary judgment determination of non-infringement is **granted.** The court finds and declares that Specialty's "Super Stix" bow stabilizer does not, as a matter of law, infringe Kudlacek's United States Patent No. 5,611,325. Count 1 of Kudlacek's Complaint is therefore dismissed.

3. Kudlacek's August 11, 2000, motion for summary judgment determination of non-infringement is **granted.** The court finds and declares that Kudlacek's "Genesis Archery Products' Adjustable Control Peep" archery peep sight does not, as a matter of law, infringe United States Patent No. 5,137,007, either literally, equivalently, directly, or contributorily. Specialty's second Counterclaim and the Third-Party Complaint of third-party plaintiffs Shoemake and Morehead are therefore dismissed.

4. The court continues to retain jurisdiction over Specialty's first Counterclaim, although the court's retention of jurisdiction at this time is without prejudice to subsequent challenges to the court's jurisdiction over this claim or its voluntary dismissal.

IT IS SO ORDERED.

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