

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

OUT RAGE, LLC,

Plaintiff,

v.

NEW ARCHERY PRODUCTS CORP.,

Defendant.

OPINION AND ORDER

11-cv-701-bbc

NEW ARCHERY PRODUCTS CORP.,

Plaintiff,

v.

OUT RAGE, LLC,

Defendant.

12-cv-122-bbc

In these consolidated cases, Out RAGE, LLC and New Archery Products Corp. have accused one another of infringing patents related to broadhead arrowheads. In Case No. 11-cv-701-bbc, Out RAGE contends that New Archery's Killzone broadheads infringe Out RAGE's U.S. Pats. Nos. 6,942,588 and 6,669,586. In Case No. 12-cv-122-bbc, New Archery contends that Out RAGE's RAGE broadheads infringe New Archery's U.S. Pats. Nos. 6,174,252, 6,398,676 and 5,941,784, and that Out RAGE engaged in trademark

infringement and false advertising in violation of the Lanham Act, 15 U.S.C. §§ 1051-1127, the Illinois Uniform Deceptive Trade Practices, 815 ILCS §§ 510/1-510/7 and Illinois common law. The parties also filed various counterclaims alleging invalidity of their adversary's patents.

The parties have filed cross motions for partial summary judgment. New Archery filed a motion for summary judgment of non-infringement with respect to Out Rage's '586 patent, dkt. #186 (unless otherwise noted, docket citations are to 11-cv-701-bbc), which I will deny because a reasonable jury could find the Killzone broadheads have an "internal passage."

I will grant Out RAGE's motion for summary judgment in part. Dkt. #183. I will grant its motion with respect to non-infringement of New Archery's '252 and '676 patents because no reasonable jury could find that the RAGE broadheads have "pivoting blades." In addition, the Rage broadheads use O-rings, which the New Archery patents disclaim. I will deny Out RAGE's motion for summary judgment with respect to its invalidity defense of New Archery's '784 patent and grant it with respect to non-infringement because New Archery has no evidence that version 1 of the RAGE practice broadheads infringes any claims of New Archery's '784 patent or that version 2 has two bearing surfaces interfering with the same sidewall, as required by claim 11. I will grant Out RAGE's motion with respect to New Archery's trademark infringement claims because New Archery has not shown a likelihood of confusion. Last, I will grant Out RAGE's motion with respect to New Archery's false advertising claims because New Archery presented no evidence that three of the accused

statements were false and laches bars its claims based on the remaining statements.

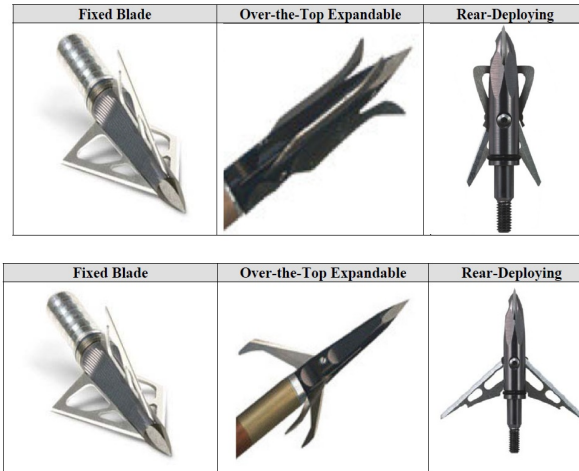
The parties have filed various other motions. After Out RAGE served a covenant not to sue with respect to the '588 patent, New Archery filed a motion to dismiss those claims, dkt. #206, which I will grant. New Archery filed a motion to exclude the testimony of Randy Ulmer, dkt. #200, which I will grant in part because Ulmer did not establish a reliable basis for his opinion about consumer confusion. In its brief, New Archery asked the court to exclude two declarations by William Pedersen as untimely expert opinions and to strike a declaration by Richard Krause. I will grant the motion with respect to Pedersen in part and exclude any new opinions in his declarations. I will also grant the motion with respect to Krause in part and disregard any of his opinions about the engineering details of the accused products or details about the parties' market shares.

From the parties' proposed findings of fact, I find the following facts to be undisputed.

UNDISPUTED FACTS

A. Broadhead Technology

"Broadheads" are arrowheads with fixed or movable blades. They come in three main categories: fixed-blade, over-the-top expandable and rear-deploying expandable. Fixed-blade broadheads have blades that do not move in relation to the arrow, while expandable broadheads have movable blades that open upon impact. Representative examples of the three types are depicted below in their open and closed positions.



Over-the-top expandable broadheads have blades mounted in slots of the body (also called the “ferrule”) of the arrowhead. When in flight, the blades are rotated forward in the closed position with their sharp edges resting in slots of the body. Because a portion of the blade rests within the slot, the arrowhead is more aerodynamic than a fixed-blade broadheads. When it hits a target, the impact on the forward tip of the blade causes the blades to rotate “over-the-top” from the front into their open position, exposing their sharp cutting edges. The extended blades create a larger wound in the animal, which leads to a faster and more humane kill. However, over-the-top expandable broadheads may not open until they are fully inside the target, thus reducing the size of the entry wound.

Rear-deploying broadheads have blades that open from the rear of the broadhead. The two accused product lines at issue in this case are rear-deploying broadheads.

B. Out RAGE’s RAGE Broadhead

The RAGE broadheads are a line of rear-deploying expandable broadheads first

released by Field Logic, LLC in 2006. In March 2011, Out RAGE purchased Field Logic's broadhead intellectual property, including its RAGE broadhead line. (Sixteen models of the RAGE broadheads of infringement are at issue. The models differ with respect to the type of tip and the materials, weight, number and length of the blades but the parties agree that the operation of their blades does not differ in any way material to analyzing infringement.)

The following image shows a RAGE 2-blade broadhead in a closed position. The



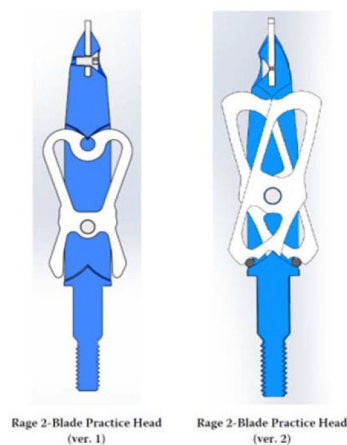
blades have an elongated slot that permits them to translate rearwardly and rotate outwardly at the same time. (As the parties use the term, “translate” means linear motion without rotation.) The blades are attached to the broadhead by a pin that passes through the elongated slot in the blades. When the arrowhead hits a target, the force of contact on the blunt, exposed edges of the blades (or “shoulders”) causes the blades to translate rearward. This motion causes the rear surface of the blades to slide along the rear surface of the arrowhead body, which forces the blades to rotate outwardly in a process that Out RAGE calls “camming.”



Most of the RAGE broadheads use a rubber O-ring at the rear of the body to help

hold the blades in place until the arrow strikes its target. Because the rubber ages and oxidizes, these O-rings wear out and must be replaced. Depending on conditions during hunting and storage, they may need to be replaced after several months or years. Out RAGE provides replacement O-rings with the RAGE broadheads and sells replacements separately.

Out RAGE also sells RAGE 2 and 3-blade practice tips for target practice. New Archery has accused seven models of RAGE practice broadheads of infringing claims 1, 3-6, 8, 9, and 11 of the '784 patent. The image below depicts two versions of the RAGE 2-blade practice broadheads. The practice broadheads have a shape and weight similar to that of



their mechanical counterparts in order to simulate the flight characteristics of the expandable broadhead. However, they do not have sharp blades that deploy, which means that hunters can practice with the practice blades without dulling the sharp edges or ruining the target. When this litigation began, Out RAGE had two designs for its 2-blade practice broadhead, which are depicted above. Version 2 used two components to mimic the two blades and Version 1 used one component. Out RAGE no longer manufactures or sells Version 1.

C. New Archery's Killzone Broadheads

In January 2012, New Archery introduced its first line of two-blade rearward-deploying broadheads, which it calls “Killzone” broadheads. (It produces six models that differ with respect to tip styles, blade sizes, weight and the means to connect the broadhead to the arrow, but the parties agree that the designs are sufficiently similar to treat them collectively for purposes of infringement.) The images below depict a representative Killzone broadhead in its closed and open positions.



The Killzone broadhead has two open spaces running lengthwise along its body. (I use the neutral term “open spaces” because the parties dispute whether these open spaces constitute “slots” within the meaning of the ‘586 patent.) The first open space passes from the top to the bottom of the body and the second from one side to the other. These spaces pass all the way through the body and intersect at a perpendicular angle.

A bolt passes through the first open space and is mounted so that it can translate forward and backward along the body. Because the bolt and its nuts extend beyond the body of the broadhead, they are exposed to the target. Two blades pass through the second open space. Each blade has a hole in it and these holes overlap, allowing the bolt to pass through both blades and out the other side of the first open space. This arrangement allows the

blades to rotate about the bolt while also allowing the bolt and the blades to translate rearwardly along the broadhead body. The bolt causes the blades to move simultaneously.

Each blade has a blunt impact edge (or “shoulder”) and a sharp cutting edge. In the closed position, the cutting edge of the blades face outward from the body. The impact edges extend outwardly from the front of the broadhead, so the impact edge is the first portion of the blade to contact the target. Both blades pass all the way through the second open space, so that the cutting edge of each blade extends out of one side of the body and its impact edge extends out of the opposite side.

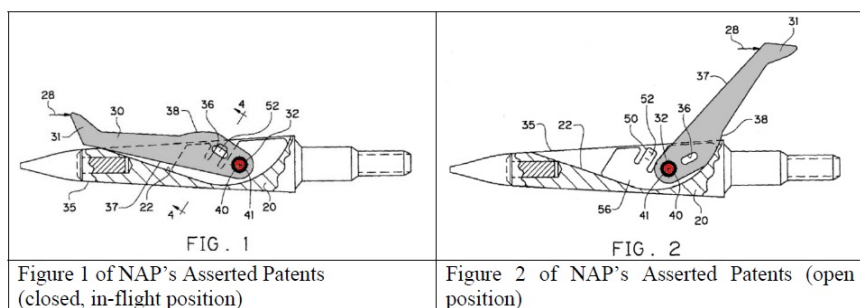
D. New Archery’s Asserted Patents

New Archery contends that Out RAGE’s RAGE broadheads infringe three related New Archery patents: U.S. Pats. Nos. 5,941,784, 6,174,252 and 6,398,676. The ’252 patent was filed as a division of the ’784 patent, and the ’676 patent was filed as a division of the ’252 patent. Robert Mizek, New Archery’s director of engineering, is the named inventor on all three patents. The specification of the ’252 patent contains one figure and two paragraphs that do not appear in the other two patents; otherwise, their disclosures are nearly identical.

The ’252 patent claims a “pivoting blade” for a broadhead with a blunt tip that facilitates opening in response to an impact force. The ’676 patent claims an “apparatus” for mounting a “pivoting” or “pivotally mounted blade” with an engagement mechanism and a biasing mechanism that hold the blades in the closed and open positions. The ’784 patent

claims an apparatus for mounting a blade within a slot on the arrowhead body, so the body can be used with fixed blades or blunt blades in addition to pivoting and sharp blades.

The preferred embodiments in the three patents depict mechanical broadheads with similar rear-deploying blades. The following figures are Figures 1 and 2 of all three patents.



‘252 pat., dkt. #187-16, Fig. 1, 2.

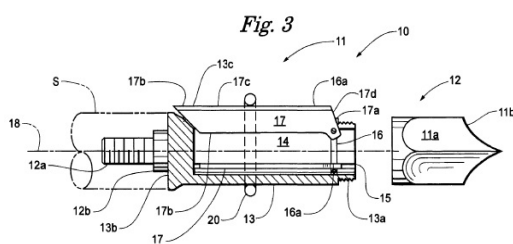
These figures show blades with a hole that mates with a pivot shaft, which is mounted to the body. When the tip of the blade hits the target surface, the impact forces the blades to rotate about the shaft into their open position.

E. Out RAGE's '586 Patent

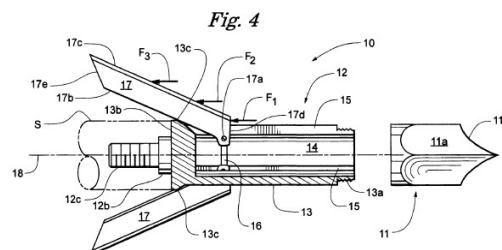
Out RAGE has accused New Archery's Killzone broadheads of infringing claims 1-5, 9, 11-15 and 19 of Out Rage's '586 patent. Issued on December 30, 2003 to Bruce Barrie and John Sodaro, the '586 patent describes a rear-deploying expandable broadhead. The body has an "internal passage" with a "translatable ring" inside. A plurality of blades are mounted on the ring through "slots" in the body. In the retracted position, each blade rests lengthwise parallel to the body, partially within its slot and partially exposed to the outside. When the front edge of the blade strikes a target, the impact pushes the blade and ring

assembly rearward. This motion causes the blades to strike the “camming surface” on the rear of the body, forcing the blades to slide outward and open, which the patent refers to as “camming.”

The ‘586 patent describes only one preferred embodiment, which is depicted in its retracted and partially expanded positions in the following figures.



‘586 pat., Fig. 3



‘586 pat., Fig. 4

F. The Parties’ Uses of “Killzone” or “Kill Zone”

On April 13, 2005, New Archery filed for registration of the KILLZONE mark with the United States Patent and Trademark Office. The registration was granted on April 3, 2007. New Archery has used its “KILLZONE” trademark with respect to two products: a fixed blade broadhead that it sold from 2005 until 2007 and the line of rear-deploying broadheads launched on January 10, 2012.

In June 2005, New Archery began selling the KillZone 100-grain broadhead, SKU 60-361. New Archery sold 11,444 packages exclusively to Dick’s Sporting Goods®, with its last sale in August 2007. (New Archery asserted that Dick’s carried the Killzone broadhead after January 1, 2008, but produced no evidence of those sales. New Archery’s

Vice President of Sales admitted that his buyer from Dick’s was unable to determine when it sold the last 2007 KillZone.) The packaging had the word “KillZone” written across the top but contained no reference to New Archery.

In September and October 2010, New Archery management discussed whether the company should brand its line of crossbow arrowheads with the KILLZONE name, but they chose to save “Killzone for a future new product.” In July 2011, New Archery decided to use the name “Killzone” for the rear-deploying broadhead planned for release in 2012. It released the current Killzone broadheads on January 10, 2012. The packaging of the current Killzone products has the word “Killzone” across the top in red, uppercase lettering.

Since July 2009, the packages for RAGE 2 and 3-blade broadheads have included the slogan “Expand your KILL ZONE!™” The words “KILL ZONE!” are larger than the words “Expand your” and are written in all capital letters and a red typeface. The images below depict the packaging of New Archery’s first and second KillZone and the RAGE broadhead.

		
<p>NAP's First KillZone (2005-2007)</p>	<p>RAGE Broadheads Marketed with Expand Your KILL ZONE! (2009-present)</p>	<p>NAP's Second Killzone (2012- present)</p>

Jon Syverson helped approve the packaging that carried Out RAGE's slogan "Expand your Kill ZONE!" He testified that Out RAGE intended the term "kill zone" to refer to "an area on the animal. . . that you can kill the animal" and that the entire phrase is meant to convey that the broadhead can expand a hunter's kill zone because it has a "larger cutting diameter." When he approved the packaging, Syverson did not know that New Archery had registered the mark "KILLZONE."

New Archery has been aware of Out RAGE's "Expand your KILL ZONE!" slogan since July 2009. On July 6, 2009, Brady Arview, New Archery's vice president of sales, sent an email to Andy Simo (New Archery's president), among others. In the email, Arview says:

Also, have you heard what they [Rage] are telling consumers now and they even have their celebrities saying it on video? 'Just put a Rage in the cage and you will get your game'....'Rage...Expands the kill zone.' How un-ethical are these statements that they are making to tell hunters just to shoot an animal anywhere in the cage and you will kill it and now Rage guarantees it or you get your money back!

Arview testified that he understood the term "kill zone" to mean "[t]he area that people, quote 'talk about' to ethically shoot an animal," which he understood to mean the heart and lungs. Jason McKee, New Archery's creative director, has been aware of the Out RAGE slogan for at least four years and testified that he interpreted it to "mean[] the area you can shoot an animal would be larger."

Out RAGE's expert, Randy Ulmer, testified that the term "kill zone" has a well-understood descriptive meaning among hunters: the area on an animal at which a hunter aims in order to kill the animal. Out RAGE has introduced numerous articles from news and industry trade publications in which hunters, journalists and hunting advice columnists use

the term “kill zone” to describe the primary target area on an animal to ensure a kill. Out RAGE has also cited several bowhunting related patents that used the term “kill zone” in this fashion. On its website, New Archery advertised that its fletches (the fins on the end of an arrow shaft) extend a hunter’s “kill zone.”

Simo, New Archery’s president, had not heard or used the term “kill zone” before the company began using it for its products. The term “kill zone” has no specific meaning to Bob Mizek, New Archery’s director of engineering.

G. Out RAGE’s Advertisements

As part of its advertising, Out RAGE claims that the RAGE broadheads have better penetration. On one of its packages, Out RAGE claimed that “penetration tests show that RAGE out-penetrate the competition!” Two of its advertisements included a photograph of the RAGE broadhead and several other broadheads in ballistic gel. The first advertisement stated that “Tests [were] conducted shooting through 1/8" cowhide and into military ballistic gel.” As shown in the image below, Out RAGE stated that a Rage 3-blade penetrated 17



Counterclaim, Ex. I, dkt. #59-9.

inches, a Rage 2-blade penetrated 16.5 inches, a “cut-on-contact fixed blade broadhead” penetrated 15.5 inches and an “over-the-top expandable” penetrated 13.5 inches. A second advertisement on Out RAGE’s website included a similar photograph depicting five arrows and stating that a Rage 3-blade penetrated 17 inches, a Rage 2-blade penetrated 15.5 inches, a “trocar tip fixed blade” penetrated 14.75 inches, a “cut-on contact fixed blade” penetrated 14.25 inches and an “over-the-top expandable” penetrated 13.5 inches.

The first advertisement also included a photograph of the entry holes from the four broadheads when shot through cowhide. An image of an entry hole for an over-the-top expandable broadhead was captioned: “Notice that over-the-top expandable does not open until it is in the gel (or inside the animal).” Out RAGE’s advertisement did not identify the brand of fixed blade or over-the-top expandable broadheads depicted.

William Pedersen performed the ballistics gel testing cited in these advertisements. Field Logic employed Pedersen as a consultant from 2005 to 2007 and as its vice-president of engineering from 2007 to 2010. In 2011, Pedersen became a consultant for Out RAGE and is a paid fact and expert witness in this case. Over the course of two days, Pedersen performed tests measuring the comparative penetration of arrowheads into ballistics gel. On the first day, he tested the Rage 2-blade, the Rage 3-blade, a Rocky Mountain Assassin (an over-the-top expandable broadhead) and a G5 Montec (a cut-on-contact broadhead). During the first day, he fired “around one hundred” arrows into ballistics gel. The depth photograph in the first advertisement was taken on his first day after he shot all four broadheads into a single piece of ballistics gel. The depth photograph in the second advertisement on Out

RAGE's website was taken on his second day of testing. He used the same four broadheads and, in addition, a Muzzy 4-blade broadhead. The measurements listed in the photographs are measurements that he took using a ruler from the photographed tests.

During his tests, Pedersen also fired the Rage 2 and 3-blade broadheads into a concrete block dozens of times. He testified that the Rage 2-blade and 3-blade broadheads never broke into multiple pieces or exploded when fired at the concrete block. Based on his tests, Out RAGE's website included the following statement.

The ultimate test of broadhead integrity is the concrete block shot. Watch here as both the Rage 2-blade and Rage 3-blade survive this explosive collision. Concrete dust flies and the arrow shafts collapse over the broadheads, but both the Rage 2-blade and Rage 3-blade perform without failure.

In addition to these claims about its testing, Out RAGE's website also stated that one of the advantages of the RAGE blades is

No deflection or change of direction[.] An angled hit with an over-the-top expandable can result in the leading blade grabbing and throwing the arrow off line. This also costs you kinetic energy. RAGE's rear deploying blades will not grab or deflect.

On January 2, 2007, Bob Mizek, New Archery's director of engineering, sent an email to several other New Archery employees, in which he wrote:

I just received a call from a friend that knows 'Larry' the owner of RAGE. He called to tell me that Rage is next to our booth at the ATA Show and allegedly will be going after our Spitfire (and our other mechanicals). His claim will be that our entrance holes are small and that the Rage makes a large entrance hole. This is categorically untrue because our special blade tips (which are patented and different from everybody else's) start opening instantly. This is different from Rocket, Satellite, etc. In fact, our entrance holes on the Spitfire are typically as large as or larger than most conventional broadheads. I have photos to prove it at home and can give these to you if you want to have enlargements made for the show.

In addition, on November 5, 2008, Mizek sent an email to several other New Archery employees, including Andy Simo, its CEO, in which he referred to “Rage’s false ad that shows the Rage outpenetrates the Spitfire.”

H. Dr. Sara Parikh’s Expert Report

Dr. Sara Parikh conducted a survey of 300 bowhunters who had recently purchased broadheads. She showed them the packaging of an Out RAGE broadhead, depicted below.



The hunters were asked open-ended questions about the main message of the packaging, what it suggested about Out RAGE broadheads and what it suggested about competing broadheads. Parikh classified the responses to Out RAGE’s packaging in categories including that “Rage Has Bigger Kill Zone,” “Rage Has Wider Entry Hole,” “Rage Kills Easier/More Quickly/Causes More Damage” and other similar responses. Some of the respondents

explained that Out RAGE's packaging told them that

- “you have a larger kill zone and a more definite kill chance”;
- the “broadhead creates large entry holes thus the kill zone is enlarged”;
- RAGE offers “expansion, deeper penetration, and wider cutting swath”;
- “The broadhead expands as it makes contact with your target, expanding the size of the entry hole thereby greatly enlarging your chances of hitting a vital area. As a secondary, the larger diameter also causes greater blood loss just in case you missed the heart or other immediate kill zone thus allowing the animal to be tracked easier and bleed out quicker. Basically they cause a load more damage, and will lead to[] less idiots who can[']t hit the target from wounding and losing as many animals.”

In addition, Parikh studied the packaging's effect on the respondents' purchasing attitudes by asking them about their desire to purchase various brands of broadheads before and after seeing the RAGE broadhead packaging. She concluded that viewing the RAGE packaging caused a statistically significant increase in bowhunters' intentions to purchase from Out RAGE and a decrease in their intentions to purchase from New Archery, from which she inferred that “Rage'[s] packaging claims are material to bow hunters' purchasing decisions.”

Parikh also asked the respondents to rate nine attributes of broadheads in terms of their importance in their purchasing decisions. She concluded that they considered the penetration level, the reliability of the broadhead's deployment mechanism and the size of the entry hole to be the three most important factors, in that order.

OPINION

I. EVIDENTIARY ISSUES

A. Motion to Exclude Expert Testimony of Randy Ulmer

New Archery argues that the testimony of Out RAGE's expert, Randy Ulmer, should be excluded under Fed. R. Evid. 702 and Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993). Ulmer offered opinions on four topics: (1) the history of the broadhead industry; (2) the meaning of the term "kill zone" in the bow-hunting community; (3) the likelihood consumers will be confused by the use of "kill zone" in Out RAGE's advertising; and (4) the likelihood consumers would identify the unlabeled broadheads in Out RAGE's advertising as New Archery products.

In assessing a motion to exclude testimony under Rule 702 and Daubert, the court must consider whether the proposed opinion witness (1) is qualified to offer opinion testimony under Rule 702; (2) has employed reliable methods; (3) proposes to offer opinions that follow rationally from the application of his "knowledge, skill, experience, training, or education"; and (4) presents testimony on a matter that is relevant to the case at hand, and thus helpful to the trier of fact. Walker v. Soo Line Railroad Co., 208 F.3d 581, 586 (7th Cir. 2000). This inquiry is meant to be flexible and fact specific. A court should use, adapt or reject Daubert factors to accommodate the facts of a particular case. Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141-42 (1999).

Ulmer's opinions about the meaning of "kill zone" in the bowhunting community and about the history of the industry meet the standards of Rule 702. Ulmer has bowhunted for

35 years and is an accomplished competitive bowhunter. He has had sponsorships from numerous archery companies, written a column for a bowhunting magazine for 13 years and hosted a segment on a bowhunting television program for seven years. He speaks to national hunting conventions four times a year and makes appearances at retail stores. Ulmer's experience makes him well-qualified to offer helpful testimony about the meaning of "kill zone" and the history of the industry. However, Ulmer has offered no basis for his opinion about likely confusion of consumers, so I will exclude those opinions.

B. New Archery's Supplemental Facts

Out RAGE argues that the court should disregard large portions of New Archery's brief in opposition because it includes supplemental facts, in violation of the court's Procedure to Be Followed on Motions For Summary Judgment, I.B.4. Dkt. 27 ("The court will not consider facts contained only in a brief."). New Archery did not file supplemental proposed findings of fact in response to Out RAGE's motion for summary judgment.

I have disregarded new facts raised for the first time by New Archery in its response brief, including those identified specifically by Out RAGE. Out RAGE's Resp. to New Archery's Addit. PFOF ¶ 7, 11, 19, 22, 25, 26, 28, 35, 37, 38, 43, dkt. #237. Several of New Archery's new facts were attempts to bolster its obviousness and claims construction arguments with statements by its expert, Kunz, about the beliefs of "a person of ordinary skill in the art." E.g., id. ¶¶ 10, 12, 13, 31, 33, 54. I also disregarded these new "facts" because they were conclusory assertions without useful explanation. However, many of the

additional “facts” about which Out RAGE complains are citations to patents, e.g. id. ¶¶ 14, 24; claims construction arguments, e.g. id. ¶¶ 3-5, 8, 15-17, 20, 21, 27, 29, 32, 41; and arguments about the lack of foundation for the declarations submitted by Out RAGE, e.g. id. ¶¶ 1-2. None of these are “facts” that had to be included in proposed findings, so I have considered them when appropriate.

C. Motion to Strike William Pedersen’s Declarations

In its brief, New Archery has asked the court to strike two declarations from William Pedersen, Out RAGE’s expert, and disregard any proposed findings of fact supported by these declarations because they are untimely expert opinions under Fed. R. Civ. P. 26(a)(2) and the preliminary pretrial conference order.

Rule 26 requires parties relying on expert testimony to file a report containing “a complete statement of all opinions the witness will express and the basis and reasons for them.” Fed. R. Civ. P. 26(a)(2)(B)(I). Rule 37 directs that a “party that without substantial justification fails to disclose information required by Rule 26(a) . . . is not, unless such failure is harmless, permitted to use as evidence . . . on a motion any witness or information not so disclosed.” Fed. R. Civ. P. 37(c)(1). Mannoia v. Farrow, 476 F.3d 453, 457 (7th Cir. 2007)

The court set a deadline pursuant to Rule 16(b) for disclosure of expert reports and advised the parties that they could supplement matters raised in their initial report only if they served the supplement no later than five days before the expert’s deposition. Dkt. #27. Pedersen was deposed on January 17 and February 24, 2013. Out RAGE filed a new

declaration from Pedersen on March 22, 2013 with its summary judgment motion, dkt. #190, and a second new declaration on April 12, 2013 with its brief in opposition to New Archery's motion. Dkt. #236. If Pedersen's declarations include new opinions, they are untimely.

After comparing Pedersen's March 22 declaration with his infringement report, I agree with Out RAGE that this declaration is limited to illustrative demonstrations of previously disclosed opinions. New Archery did not identify any specific new opinions in the report or explain why it would be prejudiced by these demonstratives. City of Gary v. Shafer, 2:07-CV-56-PRC, 2009 WL 1370997 (N.D. Ind. May 13, 2009) (denying request to strike expert declaration that contained no new opinions). In any case, in many of the proposed findings to which New Archery objected, Out RAGE also cited a corresponding portion of Pedersen's non-infringement report and New Archery did not object to that evidence. E.g., New Archery's Resp. to Out RAGE's PFOF ¶¶ 208-210, dkt. #240.

However, after comparing Pedersen's infringement report to the declaration filed on April 12, 2013, I conclude that many of these declarations and purported demonstratives offer new opinions that alter his infringement contentions in response to New Archery's brief. Pedersen Decl. ¶¶ 8-9, 12-17, dkt. #236. Accordingly, I will strike those paragraphs and disregard Out RAGE's responsive findings of fact that rely on them. Out RAGE's Addit. PFOF, ¶ 11, 34-40, 53, dkt. #253. Pedersen's remaining declarations offer either obvious descriptions of the patent or conclusory claims construction arguments about what a person of ordinary skill would believe. The former are not new opinion testimony and I have

disregarded the latter as unhelpful.

D. General Issues with Proposed Findings of Fact

The parties also raise two broad categorical disputes about the proposed findings of fact that I should note. First, I have rejected several of Out RAGE's proposed facts about the technology employed by the RAGE broadheads and about the market for mechanical broadheads because they were supported only by a declaration by Krause, Out RAGE's Chief Executive Officer. Although Krause is qualified to testify about the general features of his company's markets and products, e.g., New Archery's Resp. to Out RAGE's PFOF ¶ 179, dkt. #240, he testified at his deposition that he lacked evidence about the companies' market shares and expertise about engineering details, so I have disregarded any proposed facts that rely on his declaration for such information or expertise. E.g., New Archery's Resp. to Out RAGE's PFOF ¶¶ 21-23, 173, 175, dkt. #240.

On numerous occasions, New Archery objected to Out RAGE's citation of news stories and other publications to prove the meaning of the term "Killzone," arguing that this evidence was hearsay. E.g. New Archery's Resp. to Out RAGE's PFOF ¶ 46, dkt. #240. However, Out RAGE is offering these publications only as examples of how the term "kill zone" was used by members of the bowhunting community, not to prove the truth of any particular assertion in the publications. In re Omaha National Corp., 819 F.2d 1117, 1119 (Fed. Cir. 1987) (publications are not hearsay when "not used to support the truth of statements in the text but to illustrate common descriptive use" of the contested mark).

II. MOTION TO DISMISS

In count III, Out RAGE contends that New Archery infringed Out RAGE's '588 patent. On November 23, 2012, Out RAGE entered a binding covenant not to sue "New Archery Products Corporation . . . for infringement of any claim of United States Patent Number 6,942,588 . . . based on conduct by New Archery that was accused or could have been accused in the present lawsuit." Dkt. #201-1. The parties agree that this covenant is sufficiently broad to moot any controversy between the parties with respect to the '588 patent. Therefore, I will dismiss Out RAGE's count III for infringement of the '588 patent. Already, LLC v. Nike, Inc., 133 S. Ct. 721, 725 (2013).

The parties disagree about whether count III should be dismissed with or without prejudice. As a general rule, dismissal for lack of subject matter jurisdiction is without prejudice because the court lacks authority to render judgment on the merits. Textile Productions, Inc. v. Mead Corp., 134 F.3d 1481, 1486 (Fed. Cir. 1998) (citations omitted); El v. AmeriCredit Financial Services, Inc., 710 F.3d 748, 751 (7th Cir. 2013). However, the Supreme Court and the Court of Appeals for the Federal Circuit have affirmed judgments in which a district court dismissed patent claims subject to a covenant not to sue with prejudice (along with counterclaims also mooted without prejudice). Already, LLC, 133 S. Ct. at 725; Super Sack Manufacturing Corp. v. Chase Packaging Corp., 57 F.3d 1054, 1060 (Fed. Cir. 1995); Intellectual Property Development, Inc. v. TCI Cablevision of California, Inc., 248 F.3d 1333, 1342 (Fed. Cir. 2001). Unfortunately, these cases contain no discussion of the propriety of dismissing with prejudice or explain this atypical result.

Dismissal with prejudice seems inappropriate given the nature of a covenant not to sue. A plaintiff's promise not to sue eliminates the controversy between the parties but does not extinguish the plaintiff's underlying rights, unlike a release of liability that would affect the merits. 12 Williston on Contracts § 36:19 (4th ed.). Therefore, I will follow the general rule and dismiss count III without prejudice.

New Archery asks the court to find that it was the prevailing party and to retain jurisdiction so that it may file a motion for fees in the future. These requests are premature. I will address these issues if and when New Archery files a motion for fees.

III. NEW ARCHERY'S MOTION FOR SUMMARY JUDGMENT

New Archery has moved for summary judgment on Out RAGE's claim that the Killzone broadheads infringe claims 1-5, 9, 11-15 and 19 of Out Rage's '586 patent. Claims 1 and 11 are independent claims. Claims 2-5 and 9 depend from claim 1 and claims 12-15 and 19 depend from claim 11. Claim 1 describes

A broadhead . . . comprising:

a blade support having an internal passage defined in a blade receiving body, the blade receiving body having a plurality of slots defined therein extending from the internal passage to a blade receiving body external margin and having a camming surface;

a translatable ring disposed in the internal passage; and

a plurality of external blades, each blade being shiftably coupled to the ring proximate a blade first end and being at least partially disposed in a respective slot when in a blade retracted disposition, a blade second end being cammable outward to a

blade extended disposition by interaction with the body camming surface.

Claim 11 describes a “method of operating an expandable broadhead” by “defining an internal passage” and “a plurality of slots” in the body, “translatably disposing a ring in the internal passage” and “coupling” a plurality of blades to said ring such that each blade is “at least partially dispos[ed] . . . in a respective slot.”

Out RAGE maintains that summary judgment is appropriate because the undisputed facts demonstrate that its Killzone broadheads do not satisfy the “internal passage” element and therefore do not infringe either literally or under the doctrine of equivalents. The “internal passage” element is present in all of the asserted claims of the ‘586 patent.

A. Construction of “internal passage”

The parties agree that the term “internal passage” has no technical meaning for a person of ordinary skill in the art. Out RAGE argues that the court need not construe the term “internal passage.” (Out RAGE asks for a plain and ordinary meaning construction but proposes no such construction.) New Archery asks the court to construe “internal passage” as “a longitudinally extending, generally cylindrical cavity within the body of the broadhead.”

Neither the claims, the abstract nor the summary limits the shape of the “internal passage.” The claims of the ‘586 patent do not limit “internal passage” and the abstract merely repeats the claim language. The summary of the invention describes the passage as “a longitudinally extending cavity within the body of the broad.” ‘586 pat., dkt. #191-1, at col. 1, lns. 41-44. It also explains that the internal passage enables the ring to slide

rearward. Id. However, the drawings and description of the drawings disclose a cylindrical passage. Figures 3 and 4 depict a cylindrical body with a cylindrical internal passage and the description of those drawings states:

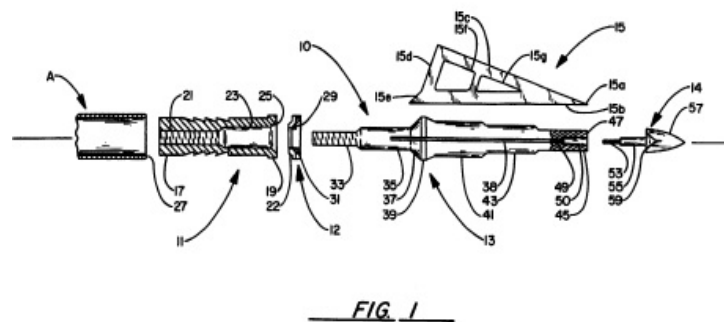
Blade support 12 includes a longitudinally extending generally cylindrical blade receiving body 13 having a front, threaded tip receiving section 13a connectable with tip 11 and a rear blade camming section 13b having a camming surface 13c. A longitudinally extending, generally cylindrical internal passage 14 is provided within said blade support 12 and terminates in spaced relation from the threaded front 13a and extensions 12a, 12b.

Id. at col. 2, lns. 38-45. The description further explains that the ring is placed inside and “slides freely” within the passage. Id. at col. 2, l. 54.

New Archery argues that “internal passage” should be limited to generally cylindrical passages because (1) the sole preferred embodiment describes a generally cylindrical passage and (2) any embodiment of the passage would have to be cylindrical for a “ring” to slide within it. “[C]laim terms must be given their plain and ordinary meaning to one of skill in the art,” Thorner v. Sony Computer Entertainment America, LLC, 669 F.3d 1362, 1367 (Fed. Cir. 2012), and the term “internal passage” encompasses passages of any shape. A court should not impose limitations from the specification onto broad claim terms, unless it is manifest that the specification expressly or implicitly disavows the broad claim scope. Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005). This rule applies even if the specification includes only a single preferred embodiment. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004). Although the preferred embodiment of the ‘586 patent depicts a cylindrical passage, the patent specification does not expressly limit the term “internal passage” to cylindrical passages.

New Archery argues that the specification implicitly limits the passage's shape because the passage can serve its function only if it is cylindrical. This argument fails because New Archery offers no expert testimony in support of its function claim. Its only evidence is a statement by Barrie at his deposition. Despite claiming that the invention covered any system to hold the blades secure, Barrie admitted that he could not think of any mechanism other than a ring to serve that function and the passage would have to be cylindrical to accommodate a ring. Barrie Dep., dkt. #177, at 51:20-23, 58:8-25. However, the testimony of one of the two inventors nine years after the patent issued is weak evidence. Moreover, it is obvious even to a lay person that a ring can slide freely through passages with a variety of shapes. (Although Pedersen testified similarly in his declaration, I need not rely on it to reach this conclusion.)

In addition, New Archery argues that the term “internal passage” is used in Out RAGE’s U.S. Pat. No. 5,417,440 to refer to a cylindrical passage, ‘440 pat., dkt. #191-16, and the ‘440 patent was issued to Bruce Barrie and his father in 1995. The ‘440 patent claims an “insert ferrule” (labeled 11 in the figure below) that attaches to the shaft. The broadhead screws into the insert ferrule. The specification uses the term “internal passage”



‘440 pat., Fig. 1

once to describe the interior of the insert ferrule, which the figure depicts as cylindrical. Id. at col. 2, ln. 67 – col. 3, ln. 10.

Although the ‘440 and ‘586 patents share an inventor and both use the term “internal passage,” the contexts are substantially different. The internal passage in the ‘440 patent is a screw anchor, not a passage through which other parts slide back and forth. Moreover, the ‘440 patent offers little guidance about the meaning of its use of “internal passage.” The term is not defined in the ‘440 patent and appears only once in the specification. Therefore, the ‘440 patent does not provide persuasive support for limiting “internal passage” to cylindrical passages.

After considering the parties’ arguments, I conclude that the term “internal passage” is not limited to cylindrical or generally cylindrical passages. New Archery has provides no further basis for limiting the term and it needs no further definition to be understood.

B. Infringement

In addition to its contention that the Killzone broadheads lack a cylindrical cavity, New Archery argues that the Killzone broadheads do not have an internal passage because (1) their body has two through-slots rather than one internal passage and a plurality of slots and (2) if the through-slots create a passage, the passage is “external,” not “internal.”

1. Do the Killzone broadheads have an internal passage?

New Archery’s first argument is that the Killzone broadheads do not literally infringe

Out RAGE's '586 patent because they have two intersecting slots that pass through the body rather than an "internal passage." It also argues that these two slots cannot satisfy the internal passage element under the doctrine of equivalents because that would vitiate the separate element requiring the body to have "a plurality of slots."

Claim 1 recites a "a blade support having an internal passage defined in a blade receiving body, the blade receiving body having a plurality of slots defined therein extending from the internal passage to a blade receiving body external margin." '586 patent., dkt. #191-1, col. 4, lns. 22-25. The blades are "partially disposed in a respective slot when in a retracted position." The slots are described as "grooves" in the description of the drawings, in which the author explains that "[a] plurality of longitudinal grooves 15 are formed in said blade receiving body 13 and may extend the entire longitudinal dimension of internal passage 14." These "grooves 15 extend from the internal passage 14 to the external margin of the blade receiving body 13."

In his initial infringement report, Out RAGE's expert, Pedersen, relied primarily on labeled images to identify the "internal passage" and the "slots" on the Killzone broadheads. The two images below are representative. It is unclear whether the arrows identifying the

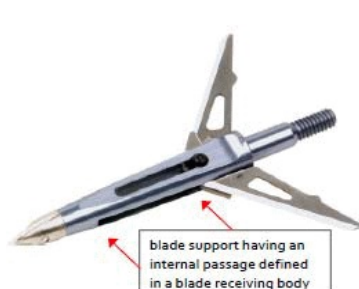


Figure 13 - Cut-on-Contact Internal Passage

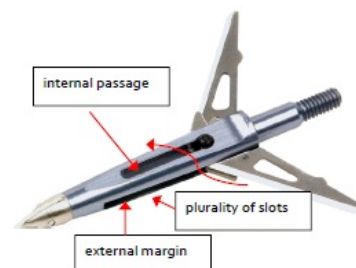


Figure 16 - Cut-on-Contact Blade Receiving Body With Slots

internal passage point to the horizontal space through which the blades pass, the vertical space through which the pin passes or simply the space within the body generally. At his deposition, Pedersen explained that

“[t]he internal passage is very difficult to point out in a two-dimensional image. And so if you look at multiple images such as that shown in Figure 13 . . . you will see different angles representing a statement indicating internal passages indicated, attempting to indicate an internal volume within the broadhead ferrule that is difficult to otherwise communicate in a two-dimensional still image.

Pedersen Dep., dkt. #181, at 187:21-188:8. In an attempt to describe the passage, he stated that

The internal passage of the Killzone is a interior volume that is empty of material, with the exception of the components that are largely contained within it, to include a translatable pin that is equivalent to a translatable ring, and portions of the main cutting blades of the broadhead also go through the interior volume, the internal passage of the Killzone.

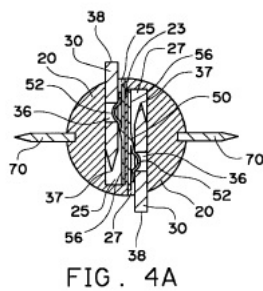
Id. at 128:14-22.

Despite his difficulty describing the passage in words, Pedersen stated his opinion, and New Archery understood him as doing so, that the “internal passage” is the empty volume within the broadhead body created by the open spaces and through which the pin and blades move. New Archery Br., dkt. #197, at 14 (describing Pedersen’s theory).

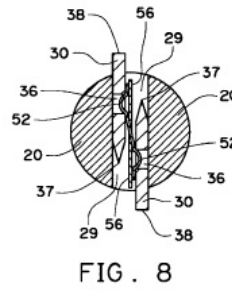
New Archery has not explained why a person of ordinary skill in the art would not regard this open volume within the broadhead as an “internal passage.” Instead, New Archery argues that Out RAGE’s infringement theory must fail as a matter of law because it would vitiate the separate element of claim 1 that the broadhead body have slots leading from the internal passage to the exterior surface of the body. (In his new declaration,

Pedersen tries to allay this concern by saying that the internal passage is the area where the spaces overlap and the slots are the remaining portion of the horizontal space. As discussed above, I have stricken this opinion as untimely.) I disagree. New Archery has offered no reason why one continuous volume cannot serve as both the internal passage and the slots extending to the exterior margin of the body. I see no reason why the slots cease to be slots or an internal passage ceases to exist simply because the slots extend through the body and are wider than those in the preferred embodiment of the '586 patent.

Allowing this theory of infringement does not vitiate the plurality of slots element. A broadhead may have slots or through-slots without creating a passage within the broadhead. Such an arrangement is shown in Figures 4A and 8 of the '784 patent. Figure 4A shows two blades mounted within closed slots and Figure 8 shows "two blades each mounted within an open slot, which extends entirely through blade carrying body." '784



'784 pat., Fig. 4A



'784 pat., Fig. 8

pat., dkt. #168-38, at col. 7, ln. 62 - col. 8, ln. 9. Each figure depicts a broadhead with slots but without a passage within the body. Conversely, a patent might have a passage within the broadhead without also having slots.

Finally, New Archery proposed a number of facts about its manufacturing process showing that Killzone broadheads are created by drilling four cuts into a solid metal bar, one halfway through each side, the top and the bottom. New Archery argues that the Killzone broadheads lack an “internal passage” because no separate step is undertaken to create the internal volume. However, as Out RAGE argues, separate cuts may combine to create the internal passage. Moreover, New Archery has not explained why the manufacturing process affects the infringement analysis. The ‘586 patent claims a broadhead and a method for expanding broadhead blades, not a method of manufacturing.

2. Is the passage on the Killzone broadhead internal?

New Archery’s second argument is that even if the open spaces constitute a passage, this passage is exposed to the outside and so cannot satisfy the “internal” element, either literally or under the doctrine of equivalents. New Archery proposes to define internal as “[o]f, relating to, or located within the limits or surface of something; inner.” American Heritage Dictionary, Second College Ed. 670 (1982). As I concluded above, New Archery has not shown that this construction is necessary. Even if I adopted it, it would not support New Archery’s argument. Nothing in this definition or the patent specification suggests that an internal passage cannot be exposed to the outside. Indeed, the internal passage in the preferred embodiment of the ‘584 patent is exposed to the outside through the grooves or slots in the broadhead body, at least to a degree.

New Archery also argues that the slots within the Killzone are too exposed to the

outside to be considered “internal” because the benefits of the “internal passage” come from shielding the passage from the outside. In his deposition, Barrie testified that the benefit of an internal passage is that “there was nothing outside the body,” which would leave “less drag” and “improve[] . . . penetration.” In his expert report, Pedersen argued that the internal passage improved on previous technology, which used a similar ring that slid along the outside of the broadhead body, because the external ring was more likely to break off on impact or become clogged because it was exposed to material from the target. However, New Archery cited nothing in Out RAGE’s ‘586 patent or its prosecution history to support these claimed benefits and offered no authority for the position that the claims should be limited by the later-perceived benefits of the patented technology.

Last, New Archery argues that through slots were well known in the prior art because they were described in New Archery’s ‘784 patent. Dkt. #197, at 20. This fact would not show that through slots and “internal passages” are exclusive, so it is not clear what the relevance of this argument was. In any case, the argument is not developed and I consider it waived for purposes of summary judgment.

In conclusion, a reasonable jury could conclude from the undisputed facts that the Killzone broadheads infringe the “internal passage” element of the ‘586 patent either literally or under the doctrine of equivalents. Therefore, I will deny New Archery’s motion for summary judgment.

IV. OUT RAGE'S MOTION FOR SUMMARY JUDGMENT

In its motion for summary judgment, Out RAGE contends that (1) the RAGE broadheads do not infringe any claims of New Archery's '252 and '676 patents; (2) Version 2 of the RAGE practice broadheads does not infringe any claims of the '784 patent and Version 1 does not infringe claim 11; (3) claims 1 and 3-9 of the '784 patent are invalid as anticipated and claim 7 is invalid as obvious; and (4) summary judgment is appropriate on New Archery's trademark and false advertising claims.

A. New Archery's '252 and '676 Patents

1. Construction of "pivoting blade," "pivotable blade" and "pivotally mounted"

Each asserted claim in the '252 and '676 patents discloses a "pivoting blade." The parties agree that "pivot" should be construed the same way for both patents. Out RAGE argues that "pivoting blade" means a blade that "rotates about an axis that is fixed with respect to the blade" and that the RAGE broadheads do not rotate about a fixed axis. New Archery argues that the court should use the plain and ordinary meaning of "pivot," which it contends "simply means moving from the closed to open position." New Archery's Br., dkt. #234, at 23.

Every asserted claim of the '252 and '676 patents is limited to a "pivoting blade" or a "pivotable" blade. '252 pat., claims 1-10 ("pivoting blade"), claims 11-15 ("pivotable blade"); '676 pat., claims 1-16 ("the blade pivoting between a closed position and an open position"), claim 17 ("the blade pivotable between a closed position and an open position").

Claims 6-10 of the '252 patent and claims 1-17 of the '676 patent also describe the blades as “pivotally mounted.”

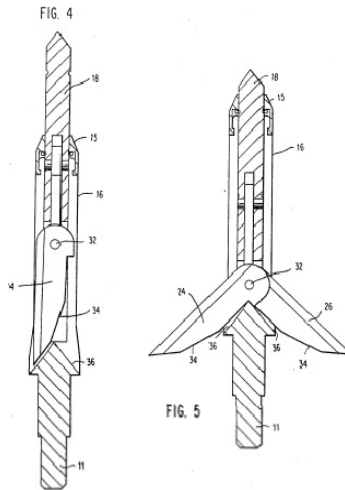
The patent emphasizes the pivoting motion of the blade, which it describes as rotation about a shaft. The abstract of the '252 patent describes the blades as “pivotal blades” or “pivotally mounted” four times. The patent describes the first two preferred embodiments of the blades as having “a through hole or blind bore within which [a] pivot shaft 40 is mateably mounted” with a “relatively tight clearance” so that the “blade 30 can easily rotate about the pivot shaft 40.” ‘252 pat. at col. 6, lns. 50-65. When the blade’s tip hits the target, the blade “pivots toward the fully open position,” so “it is important for the blade to easily pivot or free-wheel.” Id. at col. 6, lns. 60-61. In two places, the patent explains that the “opening force” hitting the tip of the blade causes it to pivot or rotate “clockwise” about a shaft toward the open position. Id. at col. 6, ln. 66-67; col 9, ln. 54.

Despite the prominence of this pivoting limitation, New Archery argues that the plain meaning of “pivoting” encompasses any motion from an open to a closed position. In support of this construction, it cites two sentences in the patent specification that describe the blades as moving from a closed to an open position without limiting that motion to rotation about a shaft. New Archery’s Br., dkt. #24, at 23 (citing ‘252 pat. at col. 7, lns. 1-5; col. 2, lns. 64-65). However, New Archery has quoted both sentences out of context. The sentence immediately preceding New Archery’s first quotation describes the blade as pivoting in a clockwise direction about the shaft. ‘252 pat. at col. 6, lns. 66-67.

Moreover, New Archery’s proposed construction conflicts with the majority of the

patent text. The claims disclose “pivoting blades” and nothing suggests that the term means simply blades that open. On the contrary, the specification describes how the blades pivot open, which is redundant if New Archery’s construction is adopted. Moreover, the preferred embodiments describe the blades as rotating or free-wheeling about a pivot shaft. Last, the patentee chose different words to describe the movement of the engaging and biasing mechanisms. One embodiment uses a “plunger shaft” that moves longitudinally to hold the blades in place and the patent describes the shaft as being “slidably mounted.” Id. at col. 4, ln. 28. Another embodiment uses a leaf spring to hold the blades closed, and the patent describes this leaf spring as “deflectably mounted.” Id. at col 8, lns. 24-25. In contrast, the patent describes the blades as “pivotally mounted.”

New Archery argues that the patent and the patent examiner described prior art patents with blades that translate and rotate as having “pivoting blades.” As New Archery points out, the background section of ‘252 patent describes four prior art patents as having “pivoting blades,” and the blades in these patents both rotate and translate. The ‘252 patent explains that three patents issued to Puckett, U.S. Pats. Nos. 5,122,063, 4,998,738 and 5,082,292, “each disclose a broadhead with deployable cutting blades that are connected by pivot pins to a plunger. The cutting blades pivot between an open cutting position and a closed non-barbed position.” ‘252 pat. at col. 2, lns. 32-36. Figs. 4 and 5 appear in all three Puckett patents and show blades connected to a plunger tip by a pin. When an impact drives the plunger tip back into the broadhead, it forces the “pivot pin” and blades to translate rearward, which causes the blades to cam against the rear wall and rotate about the



'063 pat., Figs. 4, 5, dkt.
#237-12.

pin. '292 pat., col. 3, lns. 26-49. The background of New Archery's '252 patent also describes U.S. Pat. No. 5,102,147 as "disclos[ing] a ballistic broadhead assembly that has blades pivotally mounted on an actuating plunger." The '147 patent describes a broadhead similar to the Puckett patents. Two "blades are pivotably mounted" on a plunger by a pin such that rearward movement of the plunger causes "camming or thrusting of the blades outwardly" because of the "free pivoting of the blades on the pin." '147 pat., dkt. #15, at col 3, ln. 62 - col. 4, ln. 11.

The description of these prior art references in New Archery's '252 patent does not show that "pivoting" as used in the patent claims encompasses both translation and rotation. The blades in the cited patents rotate about a pin that is fixed with respect to the blades and the pin and the blades translate rearwardly together. It is not clear that the '252 patent uses pivoting to describe the translational motion. However, these references do show that pivoting and translation are not exclusive. A blade may both translate and pivot about a pin

or shaft. This is also consistent with the ordinary meaning of translation and rotation.

Last, Out RAGE argues that the examiner described Fig. 14 of U.S. Pat. No. 4,166,619 as depicting blades that were “pivotably mounted,” even though those blades translate as well as rotate. Slawniak Decl., Exh. 21, dkt. #237-21, at 2. The ‘619 patent describes an over-the-top expandable arrowhead with serrated blades. In the embodiment in Fig. 14, the blades are mounted by a pin that passes through a small “oblong hole” instead of a tight-fitting circular hole. The oblong shape allow the blades to slide backwards just enough to dislodge the blades and allow them to rotating open. This attempt to extrapolate from one reference of the examiner is weak evidence of meaning, at best. Moreover, like the previous references, the fact that the blades of the invention claimed in the ‘619 patent rotate and translate does not prove that “pivoting” referred to both movements. New Archery’s arguments do not offer convincing reasons to depart from the meaning otherwise revealed by the patent description, that pivot means to rotate about the pin.

Moreover, the patent’s use of “pivot” to describe rotation about a shaft is consistent with the extrinsic evidence, including its definition in technical and lay dictionaries. Technical and lay dictionaries define a “pivot” as “a short, pointed shaft forming the center and fulcrum on which something turns, balances or oscillates.” McGraw-Hill Dictionary of Scientific and Technical Terms 1606 (6th ed. 2003); Academic Press Dictionary of Science and Technology 1659, Berengaut Decl., Ex. 53, dkt. #187-23 (1992) (same); Webster’s 1726 (1971) (same). These technical dictionaries do not define “pivot” as a verb or adjective but Webster’s defines the verb as “to turn about or oscillate or balance as if on a

pivot” and the adjective as “turning on or as if on a pivot.” Webster’s Third New International Dictionary 1727 (1971). The McGraw-Hill Dictionary of Scientific and Technical Terms defines other compound expressions using the word pivot, such as “pivot anchor,” “pivot bridge” and “pivot window,” and in each case, the object pivots around a fixed axis. Id. at 1606. Mark’s Standard Handbook for Mechanical Engineers (11th ed. 2007) uses the term pivot more than 50 times and uses it consistently to mean rotation about a fixed axis. E.g., dk. #187-22, at 17, 26, 31, 38.

Both the intrinsic and extrinsic evidence supports Out RAGE’s construction that pivoting means rotation about a shaft. However, Out RAGE has not adequately supported its proposal to include the terms “fixed axis.” Although “fixed axis” appears in some of the dictionary definitions listed above, it does not appear in the intrinsic evidence. In light of the patent specification and the majority of the dictionaries, the more natural construction is retaining the reference to rotating about a shaft. Therefore, I conclude that for purposes of the ‘252, ‘676 and ‘784 patents, a “pivoting blade” is a blade that rotates about a shaft, a “pivotable blade” is a blade that can rotate about a shaft and a “pivotally mounted” blade is a blade that is mounted so as to rotate about a shaft.

2. Infringement of the ‘252 and ‘676 patents

Adopting the construction of “pivoting” to mean rotating about a shaft essentially resolves the parties’ infringement dispute. It is undisputed that the blades of the RAGE broadheads translate as well as rotate. At several points, Out RAGE implies that the blades

of the RAGE broadheads do not pivot because they translate. This argument is contrary to my construction. Nevertheless, no reasonable jury could conclude from the evidence that New Archery has cited that the blades of the RAGE broadhead rotate *about a shaft*.

First, New Archery argues that Out RAGE's expert, Pedersen, admitted during his deposition that the blades' motion has "a rotating element." This concession does not help New Archery. An object may rotate without rotating about a shaft and Pedersen did not concede that the blades rotate about a shaft so as to "pivot." Second, New Archery argues that in Out RAGE's internal documents, employees of Out RAGE referred to the pin along which the blades slide as a "pivot pin" or "pivot shoulder screw." However, the employee's characterization of the pin has little relevance to whether the blades rotate about a shaft as a matter of fact. Last, New Archery cites portions of U.S. Pat. No. 7,771,298 but does not explain how the disclosures of this patent relate to the accused products. No reasonable jury could infer from these snippets of evidence that the blades of the Out RAGE broadhead are pivoting blades, pivotable blades or are pivotally mounted. Therefore, I will grant Out RAGE's motion for summary judgment of non-infringement.

3. Infringement of claims 11-15 and claims 1-17 of the '676 patent

Even if a jury could conclude that the blades of the RAGE broadhead pivot, I would reach the same conclusion of non-infringement with respect to claims 11-15 of the '252 patent and claims 1-17 of the '676 patent. Those claims disclose, among other elements, an "engagement means" or "mechanism" for holding the blades in the closed or open position

and a second “bias means” or “mechanism” for holding the engagement means against the blades. ‘252 patent col.15, lns. 2-7; ‘676 patent col.13, ln. 66 - col. 14, ln. 4. New Archery contends that the RAGE broadheads satisfy these engagement and biasing mechanism elements by using an O-ring, an annular device that surrounds the blades and holds them in a compact position.

Although Out RAGE concedes that the broad language of these claims of New Archery’s patents encompasses annular retaining rings, it argues that the patent specifications disclaimed the type of O-rings that the RAGE broadheads use for biasing and engagement. New Archery disagrees, contending that its patents disclaim only “consumable O-rings” and that Out RAGE's broadhead uses “non-consumable O-rings.”

“Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.” SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001). Although there is a strong presumption for interpreting the claims according to their plain meaning, Teleflex, Inc., 299 F.3d at 1325, a disclaimer that is clear, unmistakable, or “manifest” will limit the scope of the claim. Omega Engineering, Inc. v. Raytek Corp., 334 F.3d 1314, 1326 (Fed. Cir. 2003); Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005). The disclaimer need not be stated expressly and can be inferred through the exclusion of prior art alternatives and criticism of those prior art alternatives in the specifications. L.B.

Plastics, Inc. v. Amerimax Home Products, Inc., 499 F.3d 1303, 1309 (Fed. Cir. 2007).

New Archery admits that its ‘252 and ‘676 patents are directed toward engagement and biasing mechanisms that eliminate the need for O-rings but argues that the scope of the patents’ disclaimers is limited to consumable O-rings that must be replaced frequently. This argument is not persuasive. Although an objective of New Archery’s patents is to eliminate the need to buy replacements for consumable O-rings, e.g., ‘252 pat., dkt. #187-16, at col. 3, lns.9-11; col. 2, lns. 46-49; col. 4, lns. 50-61, the patentee’s concerns are not limited to O-rings that must be replaced frequently. The patent explains that “many of the annular retaining rings are designed for one use,” but explains that all rings have a problem that when the “material dries out, cracks or is otherwise damaged, the blades may open prematurely, resulting in significant danger or injury to the archer.” It also states, “In addition to the cost involved with supplying such consumable item, the annular retaining ring is difficult and time-consuming to install.” Id. at col. 21, lns. 11-14. The patents also voice concern about the efficacy of O-rings, stating that “the material properties of such conventional annular retaining rings can be affected by temperature changes, thereby resulting in different bias forces that cause the blade to open prematurely or to not open when desired.” Id. at col. 2, ln.15-19.

The patents disparage O-rings for problems that apply to all O-rings and are unrelated to the need to replace them after a single use, which demonstrates that the ‘252 and ‘676 patents disclaim all types of O-rings. Because the patents disclaim all O-rings as engaging or biasing means and New Archery does not dispute that the RAGE broadheads use O-rings,

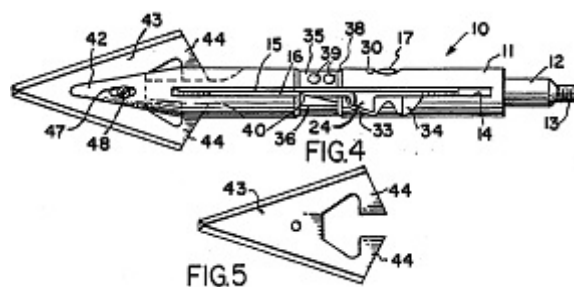
I will grant Out RAGE's motion for summary judgment of non-infringement with respect to claims 11-15 of the '252 patent and 1-16 and 17 of the '676 patent.

B. New Archery's '784 Patent

I. Anticipation of claims 1 and 3-9

Claim 1 of New Archery's '784 patent discloses an "apparatus for mounting a blade within a slot . . . of an arrowhead." '784 pat., col. 13, lns. 33-47. A "portion of the blade [is] fixedly mounted within the slot" and "positioned adjacent" to the "sidewall," which is "at least partially defining the slot." A pin that is "mounted with respect to the . . . body" retains the blade "in a fixedly mounted position with respect to the" body. Claims 2-9 are dependent from claim 1.

Out RAGE argues that claims 1 and 3-9 of the '784 patent are anticipated by U.S. Pat. No. 4,940,246, which was issued to Jonathan B. Staggs on July 10, 1990. Entitled "Arrow Attachment," the '246 patent discloses a means for mounting interchangeable blades on the tip of a fixed-blade broadhead. Figures 4 and 5 show an embodiment in which a blade (43) is mounted into a "slotted" nose cone (42) and two "flanges" of the blade (44)



'246 pat., dkt. #187-48, Figs. 4, 5.

wrap around into two slots on the side of the ferrule. ‘246 pat. at col. 4, lns. 40-58.

Anticipation occurs when all of the limitations of a claim are either expressly or inherently present in a single piece of prior art. 35 U.S.C. § 102; Leggett & Platt, Inc. v. VUTEk, Inc., 537 F.3d 1349, 1354 (Fed. Cir. 2008) (citations omitted). To determine anticipation, the court must first construe the claims at issue and then compare the claims to the prior art. Helifix Ltd. v. Blok-Lok, Ltd., 208 F.3d 1339, 1346 (Fed. Cir. 2000). Anticipation is a question of fact, but a movant can obtain summary judgment on anticipation by showing that the record discloses no genuine dispute of material fact by clear and convincing evidence. Golden Bridge Technology, Inc. v. Nokia, Inc., 527 F.3d 1318, 1321 (Fed. Cir. 2008).

Although neither Out RAGE nor New Archery presented the court proposed constructions for terms of the ‘784 patent, it is apparent from their anticipation arguments that they dispute the meaning of numerous terms in claim 1, including “mounted,” “fixedly mounted,” “slot” and “sidewall.” For example, the parties dispute whether the ‘246 patent discloses “a blade carrying body having a sidewall at least partially defining the slot.” ‘784 pat. at col. 13, ln. 54-56. New Archery contends that the blade of the ‘246 patent is fitted into a slotted nose cone, which New Archery seems to assume cannot have a sidewall because it is located at the tip of the ferrule. In contrast, Out RAGE argues that the flanges are located within two slots on the side of the arrow that each have sidewalls. Because neither party argued for a construction of “sidewall” or explained which part of the blade should be scrutinized, it is impossible to decide their dispute.

It would be inappropriate to make conjectures about the party's desired constructions from their anticipation analysis. Because claim construction is a necessary precursor to any determination of anticipation and I cannot construe the terms, I must deny Out RAGE's motion for summary judgment on anticipation. If Out RAGE intends to assert its anticipation defense or counterclaim at trial, it must submit arguments for the construction of claim 1 as a motion in limine. Any such motion must identify the proposed construction for each disputed term and explain why the dispute about that term is potentially dispositive. I will not entertain motions for judgment as a matter of law on anticipation prior to trial. All material facts left unresolved after these claims are construed will be presented to the jury during trial.

2. Obviousness of claim 7 of New Archery's '784 patent

Claim 7 describes using a blade with a blunt leading edge in the broadhead disclosed in claims 1 and 6. Out RAGE argues that this claim is invalid because it was obvious to attach blunt blades to a broadhead that permits interchangeable blades, either in light of the '246 patent's disclosure of replaceable broadhead blades or in light of that disclosure in combination with U.S. Pat. No. 4,210,330. The '330 patent was issued to John Kosbab on July 1, 1980. Entitled "Modular Broadhead Arrowhead," it discloses a ferrule that can use four different detachable blades, one of which has a blunt leading edge. '330 pat., dkt. #187-19, at col. 5, lns. 44-58.

A patent is invalid "if the differences between the claimed invention and the prior art

are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103. “[W]hen a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.” KSR International Co. v. Teleflex Inc., 550 U.S. 398, 417 (2007) (internal quotation omitted). Obviousness is a legal determination that rests on several factual inquiries, including the content and scope of the prior art, the differences between the prior art and the patent claims at issue and the level of ordinary skill in the pertinent art. Graham v. John Deere Company of Kansas City, 383 U.S. 1, 17 (1966). Because issued patents are presumed valid, a challenger must show obviousness by clear and convincing evidence. 35 U.S.C. § 282; Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1534 (Fed. Cir. 1983).

Out RAGE has not made a prima facie case of obviousness by clear and convincing evidence. Enzo Biochem, Inc. v. Applera Corp., 599 F.3d 1325, 1337 (Fed. Cir. 2010) (challenger has initial burden to make prima facie obviousness showing). Although Out RAGE argued that blunt broadheads are desirable for target practice and small game hunting, it did not provide evidence that a person of ordinary skill would have known or wanted to use blunt blades with arrowheads like those in the ‘784 patent. Out RAGE relies on attorney arguments that rely in turn on references to the prior art, but the cited prior art discloses fixed blade broadheads. Because Out RAGE did not provide facts to support a prima facie case, I will deny its motion for summary judgment as to the obviousness of claim 7.

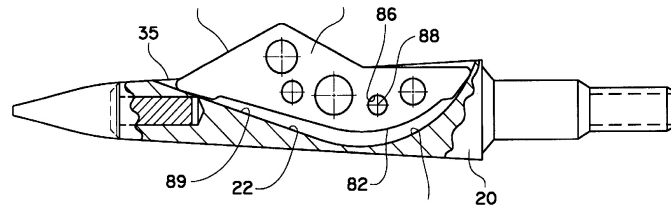
2. Infringement of New Archery's '784 patent by the Out RAGE practice broadheads

Out RAGE produces two versions of its RAGE practice broadheads. Because the products and evidence about them differ, they must be analyzed separately.

New Archery has no evidence that version 1 of the RAGE 2-blade broadheads infringes any claims of the asserted patents. Version 1 uses only one blade to mimic the two-blade field tips. New Archery's expert, Kunz, mentioned version 1 in his expert report but discussed only versions of the practice broadheads with two or three blades and relied on features distinct to those versions. Counsel's belated assertion in the brief that the two-blade version can be considered "representative" of the one-blade version cannot rectify New Archery's lack of evidence. Accordingly, I will grant Out RAGE's motion for summary judgment of non-infringement with respect to version 1 of the RAGE 2-blade practice broadhead.

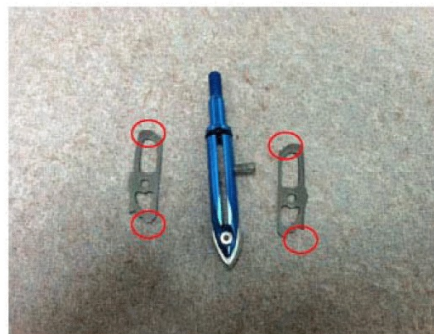
With respect to version 2, Out RAGE moved for summary judgment on non-infringement of claim 11 of the '784 patent. Claim 11 discloses a portion of the blade is fixedly mounted in the slot along a sidewall and has "a plurality of bearing surfaces spaced apart from each other and said bearing surfaces interfer[e] with said sidewall to maintain the blade in a mounted position." According to Out RAGE, claim 11 requires each blade to have a plurality of bearing surfaces that interfere with the same sidewall. New Archery concedes

this implication of Out RAGE's claim construction. New Archery Resp., dkt. #234, at 51. Figure 32 of the '784 patent portrays one preferred embodiment of the blade with two bearing surfaces along the same sidewall (22).

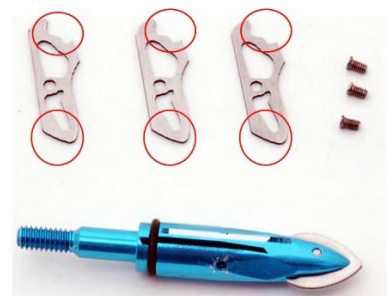


'784 pat., dkt. #187-15, Fig. 32.

The parties' only disagreement with respect to infringement of claim 11 is whether the RAGE practice broadheads have multiple bearing surfaces that interfere with the same sidewall. New Archery's expert, Kunz, identified the bearing surfaces on the RAGE practice broadhead by circling them in the photographs, as shown below. He says that the practice



RAGE's 3-Blade Practice Tips:



tips "have blades that comprise *a bearing surface* that abuts the sidewall when mounted," but offers no further details and says nothing else about how many bearing surfaces are on the blade. Kunz Opening Rpt., dkt. 167, ¶ 130 (emphasis added).

As a result, the parties' factual dispute becomes a dispute about how to interpret his report. Out RAGE argues that Kunz's circles show two bearing surfaces on each blade that

do not abut the same sidewall. New Archery argues that this image identifies three bearing surfaces, two at the rear of the blades (on the bottom in the picture above left) and one at the front (on the top in the picture above left). New Archery's Resp. to Out RAGE's PFOF ¶ 320, dkt. #240. I agree with Out RAGE. The attempt by New Archery to supplement Kunz's expert report is both procedurally improper and factually unpersuasive. New Archery does not explain why one circle would indicate two bearing surfaces.

In addition, New Archery argues that the drawings of the RAGE broadheads in the report by Out RAGE's expert, Pedersen, show that the blades have two bearing surfaces along the bottom side wall, one in the center and one in the right. On the contrary, it is not clear that the drawings depict the blades abutting the rear wall in two places. Pedersen did not testify to that fact. Counsel's arguments about what Pedersen's drawings show is not sufficient evidence to withstand summary judgment. Therefore, I conclude that the RAGE practice broadheads do not infringe claim 11 of the '784 patent.

C. Trademark Infringement

Out RAGE argues that summary judgment in its favor is appropriate on New Archery's trademark infringement claims under the Lanham Act and Illinois law because (1) New Archery has no evidence of consumer confusion; (2) Out RAGE's use is a "fair use"; and (3) New Archery abandoned its trademark. Because I find that no reasonable jury could find that Out RAGE's use of the slogan "Expand your KILL ZONE!TM" is likely to confuse consumers about the source or origin of the RAGE broadheads, Out RAGE's fair use and

abandonment affirmative defenses are moot.

The Court of Appeals for the Seventh Circuit has said that likelihood of confusion should be analyzed through a seven factor test, considering

(1) the similarity between the marks in appearance and suggestion; (2) the similarity of the products; (3) the area and manner of concurrent use; (4) the degree and care likely to be exercised by consumers; (5) the strength of the plaintiff's mark; (6) any actual confusion; and (7) the intent of the defendant to 'palm off' his product as that of another.

AutoZone, Inc. v. Strick, 543 F.3d 923, 929 (7th Cir. 2008). No factor is dispositive but "the similarity of the marks, the defendant's intent, and actual confusion are particularly important." Id. Because likelihood of confusion is a question of fact, summary judgment is appropriate "only if the evidence is so one-sided that there can be no doubt about how the question should be answered." Id. (quotation omitted).

It is undisputed that New Archery and Out RAGE used the words "kill zone" to sell similar products and that these similar products are sold in overlapping geographical markets. However, New Archery has developed no other evidence or arguments for the remaining factors and what limited evidence is in the record favors Out RAGE.

First, New Archery has no evidence that anyone at Out RAGE knew that New Archery had used or registered KILLZONE before Out RAGE began using its slogan. One of the key employees at Out RAGE testified that he was unaware of New Archery's use or registration of the mark. Moreover, there is no reason to think Out RAGE would want to "palm off" its flagship line of mechanical broadheads as New Archery's products.

Second, New Archery has not shown that the KILLZONE mark is a strong indicator

of “the origin of the product in the eyes of the purchasing public.” Sullivan v. CBS Corp., 385 F.3d 772, 777 (7th Cir. 2004). The phrase “kill zone” is used commonly in the bowhunting community to describe the target area on an animal that will likely result in a mortal wound. Moreover, it is unlikely that consumers would associate this “suggestive” mark with New Archery or any particular products. New Archery used the mark for only four years on fixed broadheads sold through one store, in packaging that carried no indication that New Archery manufactured the product. There is no evidence that New Archery promoted its initial KillZone broadheads or its mark. From August 2007 until January 2012, New Archery did not use the mark.

Third, New Archery presented no evidence that Out RAGE’s use of its “kill zone” slogan has caused actual confusion among consumers. Despite hiring Dr. Parikh to survey broadhead consumers, New Archery chose not to perform a survey to develop evidence regarding actual confusion. Moreover, although Parikh’s survey did not purport to measure the likelihood of confusion, her survey questions produced anecdotal evidence that confusion is unlikely. She solicited consumer responses to packaging displaying Out RAGE’s accused slogan. Many of the participants said the slogan meant that the RAGE broadheads can improve a hunters’ ability to mortally wound an animal, which is consistent with the descriptive meaning of “kill zone.” None of the participants reported thinking the slogan referred to a New Archery product.

Last, New Archery has not developed an argument that Out RAGE and New Archery use the marks in sufficiently similar manner that consumers are likely to be confused. When

considering the similarity of the trademarks, the marks should be compared “in light of what happens in the marketplace,” by considering the marks or labels “as a whole.” Sullivan, 385 F.3d at 778 (quotation omitted). For example, in Sullivan, the court of appeals compared stylistic differences between the marks, the location of the marks on the packaging and their relationship with other slogans or names on the packaging.

In its brief, Out RAGE pointed out many distinguishing features of the parties’ use of the marks. New Archery used the compound word “KillZone” as the name of its product. In contrast, Out RAGE used the separate words “KILL ZONE” as part of the descriptive slogan “Expand your KILL ZONE!”, rather than as a name for the product. New Archery’s mark appears across the top of its product while Out RAGE used the words “kill zone” in a less prominent position, subordinate to the prominently displayed “RAGE” and “Slip Cam” trademarks. Id. at 778 (“the prominent display of different names on the marks reduces any likelihood of confusion”). In response to these arguments, New Archery simply asserted in a conclusory fashion that the marks are similar enough that a jury should decide whether they will likely confuse consumers. Because New Archery did not develop its argument for similarity, the issue was waived.

Because New Archery has presented almost no evidence that Out RAGE’s slogan will likely cause confusion about the source of the RAGE broadheads, the evidence is sufficiently one-sided that no reasonable jury could conclude from it that consumers would likely be confused about the source of the RAGE broadheads. Libman Co. v. Vining Industries, Inc., 69 F.3d 1360, 1363 (7th Cir. 1995) (likelihood of confusion cannot “be based on pure

conjecture”). Accordingly, I will grant summary judgment on New Archery’s eighth, ninth and tenth counterclaims for trademark infringement.

Out RAGE has also moved for summary judgment on its counterclaim for cancellation, arguing that New Archery abandoned its trademark by not using it between August 2007 and January 2012. However, in its counterclaim, Out RAGE alleged only that the “KILLZONE” trademark was not issued validly because the term is merely descriptive. Counterclaim, Case No. 12-cv-202, dkt. #8, at ¶¶ 98-101. Although Out RAGE developed an argument that it had not waived abandonment as an affirmative defense, it did not address its failure to plead abandonment as a basis for cancellation. Therefore, I find the claim waived and Out RAGE’s motion for summary judgment will be denied as to its cancellation counterclaim. (Neither party moved for summary judgment on the cancellation counterclaim on the grounds that “Killzone” is descriptive.)

D. False Advertising

In its eleventh and twelfth counterclaims, New Archery alleges that Out RAGE violated the Lanham Act, 15 U.S.C. § 1125(a)(1)(B), the Illinois Uniform Deceptive Trade Practices Act, 815 ILCS §§ 510/1-7, and Illinois common law by engaging in false advertising. To prevail on its false advertising claims, New Archery must show that (1) Out RAGE made a false or misleading statement of fact about its own or New Archery’s product; (2) the deception is material, in that it is likely to influence the purchasing decision; and (3) New Archery has been or is likely to be injured as a result of the false statement. Hot Wax,

Inc. v. Turtle Wax, Inc., 191 F.3d 813, 819 (7th Cir. 1999). As an alternative to proving falsity, New Archery may show that the statements, “while literally true or ambiguous, convey a false impression or are misleading in context, as demonstrated by actual consumer confusion.” Abbott Laboratories v. Mead Johnson & Co., 971 F.2d 6, 13 (7th Cir. 1992).

New Archery contends that Out RAGE’s advertisements contain the following false or misleading statements: (1) tests show that RAGE broadheads have better penetration than other broadheads; (2) tests show that RAGE broadheads create larger entry holes; (3) RAGE broadheads survive when fired into a concrete block; (4) over-the-top expandable broadheads deflect on angled hits; and (5) tests show that over-the-top expandable broadheads do not open until inside the target animal. Out RAGE filed a motion for summary judgment on these claims, arguing that New Archery’s claims based on the first two statements are barred by laches and there is no evidence that any of the statements were false or misleading, were material or caused injury to New Archery. In its brief, New Archery asserts that Out RAGE made other false statements and engaged in other forms of unfair competition, but New Archery did not identify any other false statements or instances of unfair competition.

1. Laches

Out RAGE contends that the doctrine of laches bars New Archery’s false advertising claims with respect to Out RAGE’s advertisements about the depth of penetration and entry wound size. False advertising claims are subject to the equitable doctrine of laches, which

applies if the defendant proves an “unreasonable lack of diligence by the party against whom the defense is asserted and prejudice arising from this lack of diligence.” Hot Wax, Inc., 191 F.3d at 820 (citations omitted). A “presumption of laches” exists if the plaintiff does not file within the analogous state law statute of limitations, which in this case is the three-year statute of limitations of the Illinois Uniform Deceptive Trade Practices Act.

The undisputed facts demonstrate that Mizek and others were aware that Out RAGE was advertising the claim that the RAGE broadheads created larger entry holes as early as January 2007 and that Out RAGE was advertising the claim that the RAGE broadheads penetrated more deeply as early November 2008. In addition, Mizek claimed in 2007 that Out RAGE’s own testing proved its entry holes were not smaller. Accordingly, I find that the presumption of laches applies. New Archery’s only argument in response is that Out RAGE has not identified any specific advertisements that New Archery failed to challenge in a timely fashion. However, New Archery has cited no cases stating that a laches time period begins only when the plaintiff sees a specific false advertisement. Therefore, I conclude that New Archery was not reasonably diligent in asserting its false advertising claims based on the depth of penetration and the width of the entry wound.

Out RAGE argues that it was prejudiced by New Archery’s delay in asserting these claims because Out RAGE continued investing money and accruing potential liability over the next three years by using the accused statements on its website, magazines and packaging. Id. at 824 (finding time and money spent continuing accused advertisements qualifies as prejudice). In addition, Pedersen was unable to recall details from his tests and

Out RAGE did not retain his data. His lack of memory and the missing documentation are central to Out RAGE's defense with respect to these two testing statements. In Smith v. Caterpillar, Inc., 338 F.3d 730, 733 (7th Cir. 2003), the court of appeals found the district court appropriately granted summary judgment on a laches defense when (1) some witness testimony was difficult to procure; (2) witnesses' memories faded; (3) "the inadvertent loss, or even intentional destruction in the course of business, of relevant . . . documents . . . would seriously impair [the defendant's] ability to present a defense"; and (4) the delay increased the defendant's liability. All of these factors but the first are present in this case. New Archery did not respond to Out RAGE's arguments regarding prejudice. Dkt. #234 at 71. Because New Archery has not established a genuine dispute with respect to its diligence or Out RAGE's prejudice, I will grant Out RAGE's motion for summary judgment on its laches defense with respect to Out RAGE's statements about the depth of penetration and the width of the entry holes for the various types of broadheads.

2. False or misleading

New Archery produced no evidence that the remaining three statements were false or misleading. The type of evidence that a plaintiff needs to produce to establish the defendant's statements were false varies depending on the content of the statements. BASF Corp. v. Old World Trading Co., Inc., 41 F.3d 1081, 1090-91 (7th Cir. 1994). When the defendant makes simple or comparative assertions of fact, the plaintiff must produce "affirmative proof of falsity to establish liability." Id. at 1090. However, "if the challenged

advertisement makes implicit or explicit references to tests, the plaintiff may satisfy its burden by showing that those tests do not prove the proposition,” because “[s]tatements in the form ‘tests show x’ are literally false if tests do not establish x.” Id. at 1091. The latter type of statements are often called “establishment claims.” Id.

First, New Archery submitted no evidence that Out RAGE’s claim that over-the-top broadheads can deflect on angled shots is false or misleading. New Archery argued that it tested its over-the-top expandables at high angles of incidence, but it mentioned these tests only in its response brief and in its response to Out RAGE’s proposed facts, and I have disregarded those proposed facts because they violated this court’s procedures. Even if I had considered them, New Archery admits that it did not test any over-the-top expandable broadheads from other companies. Tests of its arrowheads alone would not prove Out RAGE’s claim false.

Second, New Archery has not produced evidence that Out RAGE’s assertion that RAGE broadheads “perform without failure” when being shot into a concrete block is false or misleading. New Archery argues it is false because the broadheads could not be reused after being shot into the concrete block, and Out RAGE argues the assertion is true because the blades penetrated the block and remained intact. Even if New Archery is correct that the blades were not reusable, that would not establish that Out RAGE’s statement is false. Because Out RAGE did not state that the blades were reusable, At most, New Archery has shown that Out RAGE’s statement was ambiguous. However, New Archery produced no evidence of actual confusion, which is necessary for it to establish that this ambiguous

statement was misleading. Abbott Laboratories, 971 F.2d at 13; United Industries Corp. v. Clorox Co., 140 F.3d 1175, 1180 (7th Cir. 1998). This lack of evidence is not surprising, because it is unlikely any reasonable buyer would make purchasing decisions based on such obvious hyperbole as whether arrowheads “perform flawlessly” when shot into concrete.

The final contested statement is Out RAGE’s claim that tests show over-the-top expandable broadheads do not open fully until inside the animal. Although it would seem to have been simple for New Archery to test these factual assertions, New Archery has no affirmative evidence that this assertion is false. (New Archery cites testimony of McKee, New Archery’s creative director, in which he states that he has “personal experience of an over-the-top broadhead opening before it was inside the animal,” but this statement lacks any foundation. New Archery Resp to Out RAGE’s PFOF ¶ 19, dkt. #240.) Instead, New Archery argues primarily that the ballistics gel tests that Pedersen performed for Field Logic, Out RAGE’s predecessor, were unreliable.

As I explained in Riddell, Inc. v. Schutt Sports, Inc., 724 F. Supp. 2d 963, 972 (W.D. Wis. 2010), it remains uncertain in the Seventh Circuit what degree of “unreliability” is required to show that a testing claim is false. A number of circuits have held that an establishment claim is literally false if the cited study is “not sufficiently reliable to permit one to conclude with reasonable certainty that it established the proposition for which it was cited,” even if the study reached the advertised conclusion. E.g., Rhone-Poulenc Rorer Pharmaceuticals, Inc. v. Marion Merrell Dow, Inc., 93 F.3d 511, 514-15 (8th Cir. 1996); Mylan Laboratories, Inc. v. Matkari, 7 F.3d 1130, 1138 (4th Cir. 1993); Castrol, Inc. v.

Quaker State Corp., 977 F.2d 57, 62-63 (2d Cir. 1992). In Riddell, 724 F. Supp. 2d at 972, I expressed skepticism about this standard because an advertisement citing unreliable tests seems misleading rather than false. Nevertheless, I accepted the parties' position that an establishment claim may be false if the cited study is "not sufficiently reliable" and concluded that a study is insufficiently reliable if its "methods or findings are not acceptable to the relevant scientific community." Id. at 973.

Neither party in this case cited any particular standard of reliability. As in Riddell, I will assume for purposes of this motion that establishment claims citing unreliable tests are false if they are not acceptable to the relevant scientific community. Under this standard, New Archery has not established a genuine dispute about whether Pedersen's tests establish that over-the-top expandable broadheads do not open fully until inside the target or animal.

Pedersen took high speed video of over-the-top expandable broadheads entering ballistics gel through 1/8" cowhide. Still images of the video show that the blades are not fully deployed until well inside the gel. New Archery's only argument challenging Pedersen's test is that ballistics gel tests are not a reliable indicator of broadhead performance with live animals. However, New Archery did not offer any affirmative evidence about the standards of testing in the relevant scientific community. Its only evidence for this proposition is the bare assertion of its officers, which is insufficient to raise a genuine dispute. Out RAGE has uncontroverted expert testimony that ballistic gel tests are a typical method to test broadhead performance, several of New Archery's employees testified similarly and The American Society for Testing and Materials recommends ballistics gel tests in its "Standard

Guide for Fixed Blade Broadhead Performance and Safety Standards.” Out Rage’s Reply in Supp. of PFOF ¶ 19, dkt. #240.

3. Materiality and injury

In addition, New Archery produced no evidence that Out RAGE’s statements about the concrete block tests and the likelihood that over-the-top expandable broadheads will deflect are material to consumers decisions or caused any injury to New Archery. New Archery relies on the testing by its expert, Dr. Parikh, to demonstrate materiality and injury but her survey produced no evidence about these two statements. She asked consumers about the factors they consider when purchasing broadheads, but her list did not include any questions about whether the broadhead will deflect on angled shots or whether it will survive being shot into a concrete block. Parikh Exp. Rpt., dkt. #162, at 12. (She did ask the respondents to rate the importance of the “Reliability of the broadhead’s deployment mechanism (i.e., blades deploy at impact, not before or after).” Id.) In addition, she asked the participants about their purchasing intentions before and after seeing a package of RAGE broadheads but the package that she used did not include statements that the RAGE broadheads perform flawlessly in concrete block tests or that over-the-top expandable broadheads may deflect on angled shots.

E. Motion for Fees

Out RAGE has filed a motion for attorney fees, arguing that this is an “exceptional”

case under the Lanham Act. A defendant may obtain reasonable attorney fees under the Lanham Act if “the losing party was the plaintiff and was guilty of abuse of process in suing.” Nightingale Home Healthcare, Inc. v. Anodyne Therapy, LLC, 626 F.3d 958, 963 (7th Cir. 2010). Although Out RAGE contends that New Archery should have known about the various evidentiary defects in its claims sooner, Out RAGE has not shown that New Archery used its Lanham Act claims “to obtain an advantage unrelated to obtaining a favorable judgment” or that New Archery’s claims were so “objectively unreasonable . . . that a rational litigant would pursue [them] only because it would impose disproportionate costs on his opponent.” Id. at 965. Therefore, I will deny the motion for fees.

ORDER

1. New Archery Products, Corp.'s motion to exclude testimony of Dr. Ulmer, Case No. 11-701-bbc, dkt. #200; Case No. 12-122-bbc, dkt. #177, is GRANTED IN PART and any opinions by Ulmer regarding the likelihood of consumer confusion are EXCLUDED. The motion is DENIED in all other respects.

2. New Archery’s motion to exclude the declarations of William Pendersen is GRANTED IN PART and paragraphs 8-9 and 12-17 of the declaration of William Pendersen, dkt. #236, are EXCLUDED. The motion is DENIED in all other respects.

3. New Archery’s motion to strike the declaration of Richard Krause is GRANTED IN PART and any opinions by Krause regarding market shares or technical details of the accused products are EXCLUDED. The motion is DENIED in all other respects.

4. New Archery's motion to dismiss count III of Out RAGE first amended complaint in light of Out RAGE's covenant not to sue, Case No. 11-701-bbc, dkt. #206; Case No. 12-122-bbc, dkt. #183, is GRANTED.

5. New Archery's motion for summary judgment with respect to Out RAGE's '586 patent, Case No. 11-701-bbc, dkt. #186; Case No. 12-122-bbc, dkt. #163, is DENIED.

6. Out RAGE's motion for summary judgment, Case No. 11-701-bbc, dkt. #183; Case No. 12-122-bbc, dkt. #160, is GRANTED IN PART, as follows:

a. New Archery's fifth and seventh counterclaims for infringement of U.S. Pats. Nos. 6,174,252 and 6,398,676 are DISMISSED;

b. New Archery's claim that Version 1 of the RAGE 2-blade practice broadheads infringes U.S. Pat. No. 5,941,784 is DISMISSED;

c. New Archery's claim that the RAGE 2 and 3-blade practice broadheads infringe claim 11 of U.S. Pat. No. 5,941,784 is DISMISSED;

d. New Archery's eighth, nine and tenth counterclaims for trademark infringement under the Lanham Act and Illinois state law are DISMISSED;

e. New Archery's eleventh and twelfth counterclaims for false advertisement under the Lanham Act and for unfair competition or deceptive trade practices under Illinois state law are DISMISSED.

The motion is DENIED in all other respects.

7. By July 12, 2013, both parties should file with the court a brief list of the legal and factual issues that it believes remain in dispute in light of this opinion and the parties'

disclosures during discovery. If a party objects to the opposing party's proposed list of disputed legal and factual issues because it believes the issue is no longer in dispute, it may file its objection as a motion in limine.

Entered this 25th day of June, 2013.

BY THE COURT:
/s/
BARBARA B. CRABB
District Judge