

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW HAMPSHIRE**

Davies Innovations, Inc.

v.

Civil No. 16-cv-352-LM  
Opinion No. 2017 DNH 028

SIG Sauer, Inc. and  
Sturm, Ruger & Company, Inc.

**O R D E R**

Plaintiff Davies Innovations, Inc. brought separate patent infringement lawsuits against SIG Sauer, Inc. ("SIG Sauer") and Sturm, Ruger & Company, Inc. ("Ruger") in the United States District Court for the Southern District of Texas, Galveston Division. See Davies Innovations, Inc. v. SIG Sauer, Inc., No. 3:15-cv-00281 (S.D. Tex. filed Oct. 9, 2015); Davies Innovations, Inc. v. Sturm, Ruger & Company, Inc., No. 3:15-cv-00282 (S.D. Tex. filed Oct. 9, 2015). In both actions, plaintiff alleged infringement of the same patent, United States Patent No. 7,827,722 (the "'722 Patent"), which discloses a rifle.

Defendants separately moved in their respective actions to transfer their cases to this court, and both motions were granted. Once transferred, the court consolidated the two cases for pre-trial purposes.

Ruger moves for summary judgment of noninfringement (doc. no. 49), asserting that the '722 patent requires that the

rifle's handguard have an "open" forward end "to permit access" to certain components of the rifle's operating system. Ruger asserts that its rifles that allegedly infringe the '722 patent (the "accused rifles") lack this feature. Plaintiff objects, arguing that summary judgment is inappropriate.<sup>1</sup>

### **Background**

The '722 patent issued on November 9, 2010. The patent was issued to Robert Davies, who was the President of Advance Device Design and RF Power Devices, Inc. After Mr. Davies passed away in October 2012, the '722 patent was assigned, first to Mr. Davies' friend, David Stanowski, and subsequently, on October 7, 2015, to Davies Innovations, Inc. ("Davies"), the plaintiff in this case. Two days after the assignment, Davies filed the instant lawsuits against SIG Sauer and Ruger, alleging that both defendants infringe the '722 patent by offering to sell and selling rifles covered by the patent's claims. [See 35 U.S.C. § 271\(a\)](#).

The '722 patent generally discloses a gas-piston driven rifle having an upper receiver, a bolt carrier, a barrel, a

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<sup>1</sup> Ruger moved for summary judgment before the court approved the parties' proposed discovery plan. At the scheduling conference, the parties agreed that Ruger's motion would, if granted, entirely dispose of the claims against Ruger. The court agreed to entertain Ruger's motion at this early stage of the litigation and to issue an expedited ruling thereon.

handguard, and a gas-piston operating system that is at least partially removable through a plug in the front of a barrel coupling that serves to redirect gases from the discharge of the weapon to a piston assembly. The gases force the piston assembly rearward, causing a force to be exerted on the bolt carrier, which forces the bolt carrier rearward to eject the spent cartridge casing.

The dispute in this summary judgment motion centers on the handguard. Every claim of the '722 patent requires that the rifle have a handguard with an open forward end to permit access to certain components of the rifle's operating system.<sup>2</sup>

Specifically, Claim 1 of the '722 patent provides:

1. A rifle having an upper receiver carrying a bolt carrier and a barrel attached to the upper receiver, the rifle further comprising:

an operating system extending forwardly along the barrel and terminating in a barrel coupling including a piston assembly coupled to the barrel for receiving propelling gasses from the barrel, the piston assembly having a cylinder with an open forward end, a piston moveable between a retracted position and an extended position within the cylinder, and an end plug removably closing the open forward end of the cylinder to permit passage of the piston therethrough when the plug is removed.

a tubular handguard having a forward end, a rearward end, a central void extending between the forward end

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<sup>2</sup> The parties agree that the purpose of this requirement is to allow the user to perform various maintenance tasks, such as modifying the gas intake or cleaning the operating system components without disassembling the handguard.

and the rearward end, and a channel extending therealong adjacent the central void, the tubular handguard received about the barrel with the channel providing clearance for the operating system and **the forward end being open to permit access to the barrel coupling and end plug of the operating system;** and

a barrel nut coupling the barrel to the receiver, and the tubular handguard encircling the barrel is received about and coupled to the barrel nut.

Doc. no. 1-1 at 22, Claim 1 (emphasis added). The '722 patent shows a view of the tubular handguard surrounding the barrel with the forward end being open to permit access to components of the operating system in Figure 9. Figure 9 is reproduced below with a graphic (rectangle) added by the court to identify the open forward end of the handguard:

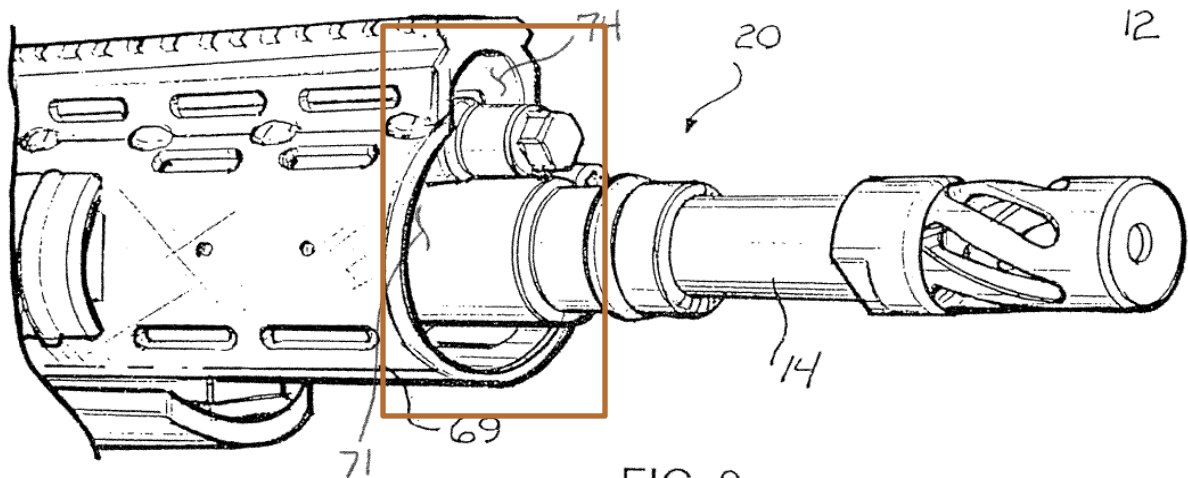


FIG. 9

Doc. no. 1-1 at 7, Fig. 9.<sup>3</sup>

<sup>3</sup> The end plug itself can be seen in Figure 9, immediately above the barrel and extending past the handguard.

Ruger moves for summary judgment, arguing that it does not infringe the '722 patent because its accused rifles do not have a handguard with "the forward end being open to permit access to the barrel coupling and end plug of the operating system."<sup>4</sup> Davies disagrees with that argument. Because the construction of the claim is relevant to whether certain of SIG Sauer's rifles are covered by the patent's claims, the court allowed SIG Sauer to brief the claim construction issue, and allowed Davies to respond to SIG Sauer's brief. The court held a hearing on Ruger's motion on December 2, 2016, during which Davies, Ruger, and SIG Sauer presented argument and/or evidence.

#### **Standard of Review**

"Evaluation of summary judgment of noninfringement is a two-part inquiry: first, a court construes the scope and meaning of the asserted patent claims, and then compares the construed claims to the accused product." [Medgraph, Inc. v. Medtronic, Inc.](#), 843 F.3d 942, 949 (Fed. Cir. 2016); see also [Markman v. Westview Instruments, Inc.](#), 517 U.S. 370, 384-85 (1996). The

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<sup>4</sup> Two additional claims contain identical language but describe access to other components of the rifle's operating system. See doc. no. 1-1 at 22, Claim 5 (forward end of the handguard being open to permit access to the piston assembly); id. at 22, Claim 8 (forward end of the handguard being open to permit access to the barrel coupling). For simplicity, the court references only Claim 1. Its construction of the claim language and summary judgment determinations apply equally to Claims 5 and 8.

construction of patent claims is a matter of law exclusively for the court. [UCB, Inc. v. Yeda Research and Dev. Co., Ltd.](#), 837 F.3d 1256, 1259 (Fed. Cir. 2016). The determination of infringement, however, is a question of fact. [Bai v. L & L Wings, Inc.](#), 160 F.3d 1350, 1353 (Fed. Cir. 1998). As such, the court should grant summary judgment of noninfringement only when it determines that, after construction of the claim and drawing all reasonable factual inferences in favor of the nonmovant, no rational factfinder could find that the accused products infringe the patent at issue. [Medgraph](#), 843 F.3d at 949.

## **Discussion**

### **I. Claim Construction**

In construing the scope and meaning of patent claim terms, a court looks first to the evidence intrinsic to the patent. [Astrazeneca AB v. Mut. Pharm. Co., Inc.](#), 384 F.3d 1333, 1336-37 (Fed. Cir. 2004). The court begins by looking to “the claim language itself to define the scope of the patented invention,” and to the patent’s specification “[w]hen the claim language itself lacks sufficient clarity to ascertain the scope of the claims.” [Chimie v. PPG Indus., Inc.](#), 402 F.3d 1371, 1377 (Fed. Cir. 2005) (internal quotation marks and citation omitted). Finally, the prosecution history, if in evidence, is examined “to discern the applicant’s express acquiescence with or

distinction of the prior art as further indication of the scope of the claims.” Id.

Though “less significant than the intrinsic record” to claim construction, the court may also “rely on extrinsic evidence, which consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” Phillips v. AWH Corp., 415 F.3d 1303, 1317 (Fed. Cir. 2005) (internal quotation marks and citation omitted). “[E]vidence extrinsic to the patent is useful insofar as it ‘can shed useful light on the relevant art—and thus better allow a court to place itself in the shoes of a person of ordinary skill in the art’ reading the claims alongside the rest of the specification.” Astrazeneca, 384 F.3d at 1337 (quoting Vanderlande Indus. Nederland BV v. Int’l Trade Comm’n, 366 F.3d 1311, 1318 (Fed. Cir. 2004)). “Relying on extrinsic evidence to construe a claim is ‘proper only when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence.’” Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1332 (Fed. Cir. 2001) (quoting Bell & Howell Document Mgmt. Prods. Co. v. Altek Sys., 132 F.3d 701, 706 (Fed. Cir. 1997)).

Both Ruger and Davies assert that formal claim construction is unnecessary because the claim limitation of a tubular

handguard with “the forward end being open to permit access to the barrel coupling and end plug of the operating system” uses common terminology, and a construction of the limitation beyond the plain and ordinary meaning of its terms would not aid the jury.<sup>5</sup> After considering the intrinsic evidence, the court agrees that nothing in the intrinsic evidence suggests the patentee intended those terms to carry some alternative definition beyond their plain and ordinary meaning.

Claim construction, however, is still necessary. Although the parties agree on the definition of the terms in the “open to permit access” limitation, they dispute the scope of the limitation itself. Therefore, the court must construe the claim in order to settle the meaning of the disputed terms as they are used in the ‘722 patent and the scope of the claims in which the terms appear. See [O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.](#), 521 F.3d 1351, 1362-63 (Fed. Cir. 2008) (Markman requires district courts to resolve disputes between the parties as to claim terms’ meaning or scope).

There are two components of the “open to permit access” limitation that are relevant to Ruger’s motion: “being open” and

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<sup>5</sup> The court will refer to this claim limitation as the “‘open to permit access’ limitation.”



“to permit access.” The court addresses the components separately.

A. “Being Open”

As discussed above, the parties agree that the phrase “being open” invokes the plain and ordinary meaning of those terms, and nothing in the intrinsic evidence suggests otherwise. The parties, however, disagree as to whether the handguard on the accused rifles is open under the plain and ordinary meaning of that term. Therefore, the court will “clarify and . . . explain what the patentee covered by the claims, for use in the determination of infringement.” [U.S. Surgical v. Ethicon, Inc.](#), 103 F.3d 1554, 1568 (Fed. Cir. 1997).

During the prosecution of the '722 patent, the examiner twice rejected the patentee's claim as obvious in light of the combination of U.S. Patent No. 4,244,273 (“Langendorfer”) with other patents. [See 35 U.S.C. § 103](#). The Langendorfer patent disclosed a rifle in which the forward end of the handguard attached to the rifle's front sight assembly. Mr. Davies, the patentee, distinguished Langendorfer on the grounds that, unlike the rifle disclosed in the '722 patent, the forward end of the handguard on the Langendorfer rifle was not open: “Additionally, Langendorfer does not teach an open end to the handguard. The handguards are attached at the front sight assembly. There is

no provision, structure or possibility that the handguards of Langendorfer can be open at the forward end.” Doc. no. 52-16 at 12. The patentee later noted that “[e]limination of the front sight assembly to provide an open fronted handguard would render it inoperable for its intended purpose.” Id. at 13.

The patentee’s invocation of the term “open” in this manner indicates that the forward end of the handguard on the Langendorfer rifle is not open because it is attached to another portion of the rifle, i.e., the front sight assembly. It also indicates that the forward end of the handguard on the Langendorfer rifle would be open were it not attached to the front sight assembly.

Thus, the prosecution history confirms that the plain and ordinary meaning of the phrase “being open” is properly applied to the “open to permit access” limitation. The court agrees with the parties that the phrase “being open” is clear in the context of the ’722 patent without the need for elaboration. To the extent the parties advance an argument suggesting that the plain and ordinary meaning of the phrase “being open” is inconsistent with the prosecution history discussed above, that argument is without merit.

B. "To Permit Access"

The court next turns to the phrase "to permit access." Although the parties agree that the phrase should be given its plain and ordinary meaning, they again dispute the scope of the limitation.

Davies refers at various points in its objection to the phrase "to permit access" as meaning "does not in any way prevent access," doc. no. 52-1 at 15, and "without any portion of the handguard preventing access," id. at 16. Thus, Davies appears to assert that the phrase "to permit access" has the plain and ordinary meaning of "not preventing access."

The court disagrees with that assertion. First, that meaning ignores the word "to" at the beginning of the phrase "to permit access," which suggests that the handguard's forward end is open for the purpose of providing access to the operating system's components. See [Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.](#), 381 F.3d 1111, 1119 (Fed. Cir. 2004) ("[A]ll claim terms are presumed to have meaning in a claim.").

Second, Davies' interpretation of the plain meaning of the phrase "to permit access" would seemingly require a finding that any rifle with an open-fronted handguard could infringe the '722 patent, regardless of how the user accessed the operating system

components. For example, under Davies' proposal, a rifle with its operating system components at the rear of and behind the handguard could still infringe the '722 patent if it had a handguard with an open forward end, because the handguard does not prevent access to the operating system components. Nothing in the intrinsic evidence supports so broad a definition.

Instead, the '722 patent's prosecution history shows that the patentee contemplated that the open forward end of the handguard would provide access to the operating system's components. See doc. no. 64-5 at 12 (noting that the "open end of the channel provides access to the barrel coupling"); see also doc. no. 52-16 at 14 ("Again this specifies that the piston can be removed from the forward end . . . ."). This construction is further supported by "the grammatical structure of the claim language itself," HowLink Glob. LLC v. Network Commc'ns Int'l Corp., 561 F. App'x 898, 903 (Fed. Cir. 2014), because the use of the infinitive, "to permit," necessarily means "in order to permit." Thus, the prosecution history shows that permitting access to the operating system's components is the reason for the handguard's forward end being open.

Although the parties assert that the phrase "to permit access" invokes its plain and ordinary meaning and that the court need not construe the phrase beyond the original language,

Davies' briefing suggests that some clarification of the phrase's meaning is necessary. Therefore, the court construes the phrase "to permit access" to mean "for the purpose of permitting access."

C. Summary

The court construes the "open to permit access" limitation of Claim 1 to mean a tubular handguard with "the forward end being open for the purpose of permitting access to the barrel coupling and end plug of the operating system."

II. Infringement

"In order to prove infringement, the patentee must show that an accused product embodies all limitations of the claim either literally or by the doctrine of equivalents.'" [Millipore Corp. v. W.L. Gore & Assocs., Inc.](#), 750 F. Supp. 2d 253, 271 (D. Mass. 2010) (quoting [Amgen Inc. v. F. Hoffman-LA Roche Ltd.](#), 580 F.3d 1340, 1374 (Fed. Cir. 2009) (alterations omitted)).

Accordingly, the court may grant summary judgment of non-infringement only if, upon construction of the claims and with all reasonable factual inferences drawn in favor of the non-movant, there is no genuine issue as to whether the accused product is encompassed by the patent claims either literally or under the doctrine of equivalents. [Novartis Corp. v. Ben Venue](#)

Labs., Inc., 271 F.3d 1043, 1046 (Fed. Cir. 2001); see also Bai, 160 F.3d at 1353-54.

A. Literal Infringement

“To establish literal infringement, every limitation set forth in a claim must be found in an accused product, exactly. Thus, if any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” Becton, Dickinson and Co. v. Tyco Healthcare Grp., LP, 616 F.3d 1249, 1253 (Fed. Cir. 2010) (internal quotation marks, citations, and alterations omitted). “Literal infringement of a properly construed claim is a question of fact.” Applied Med. Res. Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006). Therefore, the court must determine whether, after resolving all inferences in favor of the patentee, a reasonable jury could find literal infringement. Akzo Nobel Coatings, Inc. v. Dow Chem. Co., 811 F.3d 1334, 1341 (Fed. Cir. 2016).

As shown in the manual for Ruger’s SR-556 rifle, one of the accused rifles, the lower portion of the forward end of the rifle’s handguard extends past the upper portion:



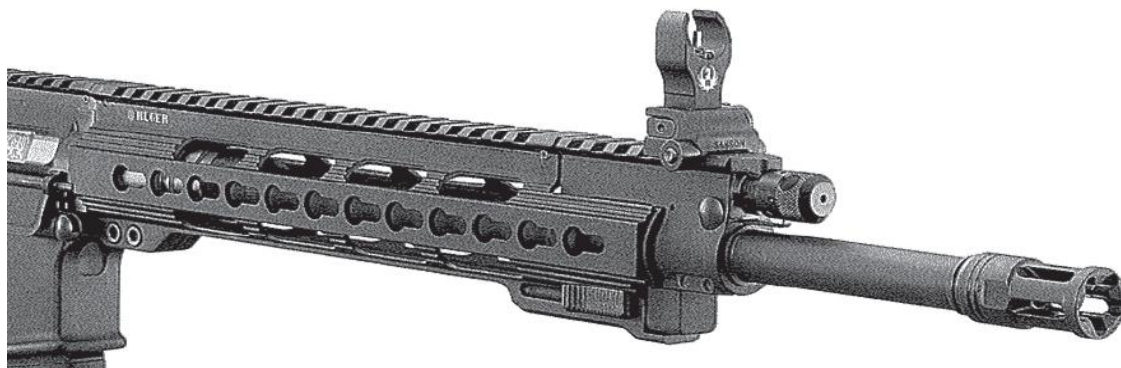
Doc. no. [52-11](#) at 11-12.<sup>6</sup> The piston assembly and end plug are atop the barrel coupling, which is attached to the barrel of the rifle:



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<sup>6</sup> The parties agree that, for purposes of this motion, the other accused rifle, the SR-762 AR-style rifle, has the same features as the SR-556 AR-style rifle.

Id. at 11.<sup>7</sup> When the rifle is fully assembled, a portion of the operating system sits on top of the lower portion of the handguard, leaving certain parts of the barrel coupling, as well as the end plug, in front of the handguard:



Doc. no. 49-4 at 4.

Ruger argues that there is no genuine issue of material fact as to whether the accused rifles literally infringe the '722 patent because the accused rifles' handguard is not open to permit access to operating system components. Davies disagrees. Rather, according to Davies, the Ruger handguard "cuts away to allow the barrel coupling and the end plug of the rifle to be

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<sup>7</sup> At the December 2 hearing, the parties disagreed over what part of the components attached to the barrel represented the barrel coupling in the picture above. Ruger asserted that the barrel coupling consisted only of the front portion of the components directly wrapped around the barrel. Davies asserted that everything other than the end plug and the front sight (which sits above the other components and stands straight up) represents the barrel coupling. At this stage, because the court is obligated to give Davies every reasonable inference, the court assumes without deciding that Davies' assertion is correct.



accessed without restriction from the handguard.” Doc. no. [52-1](#) at 15.

If the '722 patent claimed only a handguard, then Davies' argument that the forward end of the accused rifles' handguard is open may have merit. The '722 patent, however, claims a rifle and, therefore, the court must look to whether the fully assembled rifle meets the limitations of the asserted claims. See, e.g., [Sunbeam Prods., Inc. v. HoMedics, Inc.](#), 412 F. App'x 263, 268 (Fed. Cir. 2010) (holding that the patent at issue “claims a utility scale, not an unassembled scale or a method of assembling a scale, so the relevant state for purposes of infringement is the fully assembled scale”).

When assembled, the barrel coupling and the end plug of the operating system sit within and/or extend past the cut-away portion of the forward end of the handguard. By doing so, those components block the forward end of the handguard. In other words, when the accused rifles are assembled, the forward end of the handguard is not “open to permit access” to the relevant components of the operating system.

Davies contends that because the lower portion of the handguard on the accused rifles extends past the upper portion, the handguard is open. As discussed above, however, that argument is directly contradicted by the '722 patent's

prosecution history. The patentee distinguished the Langendorfer rifle by asserting that the forward end of the Langendorfer handguard is not "open" if it is obstructed by or attached to another portion of the rifle, including operating system components. Doc. no. [52-16](#) at 12.

Here, when assembled, the forward end of the accused rifles' handguard is obstructed by and attached to the barrel coupling and end plug. Thus, when assembled, the forward end of the accused rifles' handguard is not "open." Therefore, even giving Davies every reasonable inference, the accused rifles do not literally infringe the '722 patent. Accordingly, Ruger is entitled to summary judgment as to literal infringement.

#### B. Doctrine of Equivalents

Ruger also seeks summary judgment of noninfringement under the doctrine of equivalents. Under the doctrine of equivalents, a product that does not literally infringe the express terms of a patent claim may nonetheless be found to infringe if there is "equivalence" between the elements of the accused product and the claimed elements of the patented invention. See [Graver Tank & Mfg. Co. v. Linde Air Prods. Co.](#), 339 U.S. 605, 609 (1950). "[T]he doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole."

[Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.](#), 520 U.S. 17, 29 (1997).

In applying the doctrine of equivalents, the court must ask “whether an asserted equivalent represents an ‘insubstantial difference’ from the claimed element, or ‘whether the substitute element matches the function, way, and result of the claimed element.’” [Deere & Co. v. Bush Hog, LLC](#), 703 F.3d 1349, 1356 (Fed. Cir. 2012) (quoting [Warner-Jenkinson](#), 520 U.S. at 40). Thus, to be awarded summary judgment of noninfringement under the doctrine of equivalents, defendant must show that, giving the patentee every reasonable inference, the accused products do not meet each prong of the function-way-result test or the insubstantial differences test. [Augme Techs., Inc. v. Yahoo! Inc.](#), 755 F.3d 1326, 1336 (Fed. Cir. 2014).

There are certain limitations to the doctrine of equivalents. Ruger invokes two of them. One such limitation is prosecution history estoppel, whereby “the surrender of subject matter during patent prosecution creates a presumption that the patentee is precluded from recapturing that subject matter through the doctrine of equivalents.” [AquaTex Indus., Inc. v. Techniche Sols.](#), 479 F.3d 1320, 1325 (Fed. Cir. 2007). As another, “if a court determines that a finding of infringement under the doctrine of equivalents ‘would entirely vitiate a

particular claim[ed] element,' then the court should rule that there is no infringement under the doctrine of equivalents." [Lockheed Martin Corp. v. Space Sys./Loral, Inc.](#), 324 F.3d 1308, 1321 (Fed. Cir. 2003) (quoting [Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.](#), 262 F.3d 1258, 1280 (Fed. Cir. 2001)).

Ruger does not address whether its accused rifles meet the "open to permit access" limitation via equivalence, either by way of the insubstantial differences test or the function-way-result test. Instead, Ruger argues only that both prosecution history estoppel and vitiation require a finding that the accused rifles do not infringe the '722 patent by virtue of the doctrine of equivalents.

1. Prosecution History Estoppel

It is well-settled that "[t]he doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes." [Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.](#), 535 U.S. 722, 733 (2002) ("Festo I"). "'However, prosecution history estoppel may bar the patentee from asserting equivalents if the scope of the claims has been narrowed by amendment during prosecution.'" [Felix v. Am. Honda Motor Co., Inc.](#), 562 F.3d 1167, 1181-82 (Fed.

Cir. 2009) (quoting [Honeywell Int'l, Inc. v. Hamilton Sundstrand Corp.](#), 370 F.3d 1131, 1139 (Fed. Cir. 2004) (en banc)). Whether prosecution history estoppel bars the availability of the doctrine of equivalents in an infringement action is a question of law. See [Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.](#), 344 F.3d 1359, 1367 (Fed. Cir. 2003).

"[P]rosecution history estoppel can occur during prosecution in one of two ways, either (1) by making a narrowing amendment to the claim ('amendment-based estoppel') or (2) by surrendering claim scope through argument to the patent examiner ('argument-based estoppel')." [Conoco, Inc. v. Energy & Env'tl. Int'l, L.C.](#), 460 F.3d 1349, 1363 (Fed. Cir. 2006). Here, Ruger invokes amendment-based estoppel.<sup>8</sup> Under that doctrine, "a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel." [Festo I](#), 535 U.S. at 736. "A patentee's decision to narrow his claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim." [Id.](#) at 740. The rationale is that "the inventor might [otherwise] avoid the PTO's gatekeeping role and seek to

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<sup>8</sup> Both in its reply memorandum and at the hearing on its motion for summary judgment, Ruger expressly disclaimed application of argument-based estoppel.

recapture in an infringement action the very subject matter surrendered as a condition of receiving the patent.” Id. at 734.

The patentee filed the application that matured into the '722 patent on June 14, 2006. This application was a divisional patent application.<sup>9</sup> Its claims as originally filed were directed at the composition of a rifle's operating system.<sup>10</sup>

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<sup>9</sup> A divisional application is “[a] later application for an independent or distinct invention, carved out of a pending application and disclosing and claiming only subject matter disclosed in the earlier or parent application.” Pfizer, Inc. v. Teva Pharm. USA, Inc., 518 F.3d 1353, 1360 (Fed. Cir. 2008) (quoting Manual of Patent Examining Procedure § 201.06 (8th ed., Rev.5, 2006)).

<sup>10</sup> For example, Claim 1 as originally filed recited:

In a rifle having an upper receiver carrying a bolt carrier and a barrel attached to the upper receiver, an operating system comprising:

a piston assembly coupled to the barrel for receiving propelling gasses from the barrel, the piston assembly including a piston moveable between a retracted position and an extended position;

the piston being coupled to the bolt carrier for movement of the bolt carrier from a closed position to an open position as the piston moves from the retracted position to the extended position; and

a resilient member positioned between the piston and the bolt carrier for delaying and storing a portion of force generated by the propelling gases.

None of the claims so much as mentioned a handguard. On June 16, 2006, the patentee submitted a pre-examination amendment. See doc. no. 52-13. By that amendment, the patentee cancelled all original claims and submitted a set of new claims: those that eventually matured into the '722 patent. These claims were directed at a rifle with an operating system and a tubular handguard.<sup>11</sup> The new handguard limitation included the requirement of "the end [of the handguard] being open to permit access" to certain components. Id. at 4.

Ruger argues that this amendment prevents Davies from challenging as infringing any equivalent form of a handguard. Prosecution history estoppel, however, does not apply unless the

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<sup>11</sup> For example, Claim 30 (which matured into Claim 1 of the '722 patent) recited:

A rifle having an upper receiver carrying a bolt carrier and a barrel attached to the upper receiver, the rifle further comprising:  
an operating system extending along the barrel and terminating in a barrel coupling; and  
a tubular handguard having an end and a channel extending therealong, the tubular handguard received about the barrel with the channel providing clearance for the operating system and the end being open to permit access to the barrel coupling of the operating system.

Doc. no. 52-13 at 3.

patentee makes an amendment that “narrows the patent’s scope.”<sup>12</sup> [Felix](#), 562 F.3d at 1182 (quoting [Festo I](#), 535 U.S. at 736).

As demonstrated here, the patentee did not amend his prior claims to “add” the handguard limitation and thereby narrow them; he cancelled the prior claims and submitted a new set of claims directed at a distinct invention—the handguard.<sup>13</sup> This is not the variety of “narrowing amendment” whereby the patentee, by surrendering subject matter, may be estopped from asserting its equivalent. See, e.g., [Desper Prods., Inc. v. QSound Labs, Inc.](#), 157 F.3d 1325, 1338 (Fed. Cir. 1998) (“In determining the scope of what, if any, subject matter has been surrendered, the standard is an objective one: what would a reasonable competitor reading the prosecution history conclude has been surrendered.”). Were Ruger to have its way, prosecution history estoppel would bar invocation of the doctrine of equivalents for almost any claim that matures from a

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<sup>12</sup> The Supreme Court in [Festo I](#) set forth this principle in the context of prosecution history disclaimer. However, the “same general tenets” apply to both prosecution history disclaimer and prosecution history estoppel, [Trivascular, Inc. v. Samuels](#), 812 F.3d 1056, 1063 (Fed. Cir. 2016) (citing cases), and courts apply the principle to prosecution history estoppel, see [Felix](#), 562 F.3d at 1182; [Regents of Univ. of Cal. v. Dakocytomation Cal., Inc.](#), 517 F.3d 1364, 1377 (Fed. Cir. 2008).

<sup>13</sup> That the patentee ultimately reintroduced claim limitations directed at the piston assembly in his October 7, 2009 amendments, see doc. no. 52-16 at 4, does not bear on the effects of his earlier June 16, 2006 amendments.



divisional patent application. That simply is not the law. See, e.g., [Invitrogen Corp. v. Clontech Labs., Inc.](#), 429 F.3d 1052, 1078 (Fed. Cir. 2005) (prosecution history estoppel did not apply to a divisional application).

Therefore, Ruger has not shown that prosecution history estoppel bars a claim under the doctrine of equivalents for the handguard limitation, including the “open to permit access” limitation.

## 2. Vitiation

The concept of vitiation derives from the requirement that the doctrine of equivalents must be applied to claims “on an element-by-element basis,” so that every claimed element of the invention—or its equivalent—is present in the accused product. [Warner-Jenkinson](#), 520 U.S. at 40. “[I]f a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment should be rendered by the court.” [Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.](#), 843 F.3d 1315, 1344 (Fed. Cir. 2016) (quoting [Warner-Jenkinson](#), 520 U.S. at 40).

“Of course, in every case applying the doctrine of equivalents, at least one claimed element is not literally present in the accused product.” [Deere](#), 703 F.3d at 1356. “Thus, the doctrine of equivalents, by its very nature, assumes

that some element is missing from the literal claim language but may be supplied by an equivalent substitute.” Id. Vitiating is “a legal determination that the evidence is such that no reasonable jury could determine two elements to be equivalent.” [Brilliant Instruments, Inc. v. Guidetech, LLC](#), 707 F.3d 1342, 1347 (Fed. Cir. 2013) (internal quotation marks and citation omitted); see also [Charles Mach. Works, Inc. v. Vermeer Mfg. Co.](#), 723 F.3d 1376, 1380 (Fed. Cir. 2013) (“Saying that a claim element would be vitiated is akin to saying that there is no equivalent to the claim element in the accused device based on the well-established ‘function-way-result’ or ‘insubstantial differences’ tests.” (internal quotation marks, citation, and alteration omitted)).

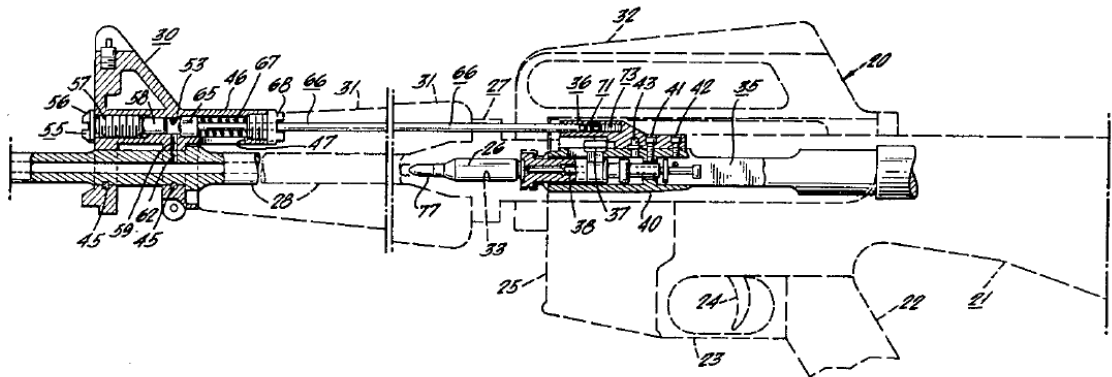
“There is no set formula for determining whether a finding of equivalence would vitiate a claim limitation, and thereby violate the all limitations rule.” [Freedman Seating Co. v. Am. Seating Co.](#), 420 F.3d 1350, 1359 (Fed. Cir. 2005). “Rather, courts must consider the totality of the circumstances of each case and determine whether the alleged equivalent can be fairly characterized as an insubstantial change from the claimed subject matter without rendering the pertinent limitation meaningless.” Id.

Ruger argues that a jury could not find that the accused rifles infringe the '722 patent under the doctrine of equivalents without vitiating the limitation requiring the handguard to have a forward end being "open to permit access." Specifically, Ruger argues that because its handguard could not be considered "open" under any claim construction, any finding of equivalency would read out that limitation.

As discussed above, the court agrees that the handguard in the accused rifles does not satisfy the court's construction of the "open to permit access" limitation, and thus the accused rifles do not literally infringe the claims of the '722 patent. It is not so clear, however, that Ruger has demonstrated that its rifles are "an entirely different structure" from that claimed, doc. no. [49-1](#) at 16, such that the court can conclude, as a matter of law, that a finding of equivalence would vitiate the "open to permit access" limitation.

In support of its vitiation argument, Ruger likens its rifles to the rifle of the Langendorfer patent, which the patentee distinguished during prosecution. In so doing, Ruger appears to be relying on argument-based estoppel, a doctrine distinct from vitiation and one that Ruger expressly disclaimed in its reply memorandum and at the hearing.

Ruger's argument goes like this. The Langendorfer patent discloses a rifle, the operating system components of which sit outside of and in front of the handguard, which is shown in the dotted lines on the left portion of the diagram below:



Doc. no. 52-18 at 2. During prosecution of the '722 patent, the patentee distinguished the Langendorfer rifle because it did not have an open-fronted handguard.

Ruger argues that, like the Langendorfer rifle, "access to the operating systems of [its] rifles occurs well in front of the Ruger handguard." Doc. no. 49-1 at 16. According to Ruger, that shows that its handguard is not "open" in a manner that permits access to the operating system components. In other words, Ruger argues that because the accused rifles contain the same structure as the Langendorfer rifle, a finding that the accused rifles infringe the '722 patent would vitiate the requirement that the handguard be open.

Assuming without deciding that the accused rifles contain the same structure as the Langendorfer rifle, Ruger fails to explain how that similarity of structure would vitiate the “open to permit access” limitation of the ‘722 patent as applied to Ruger’s rifle. In short, while the patentee’s representations regarding the Langendorfer rifle during prosecution of the ‘722 patent may support a theory of argument-based estoppel, Ruger has not shown that those representations support its argument based on vitiation. See, e.g., [Tritek Techs., Inc. v. United States](#), 67 Fed. Cl. 735, 752 (Fed. Cl. 2005), aff’d, 208 F. App’x 869 (Fed. Cir. 2006) (noting the differences between argument-based estoppel, which relies on representations made by the patentee during the prosecution history, and vitiation, which is a legal determination that application of the doctrine of equivalents to this claim limitation would “effectively erase that limitation from the claim”).

To support its vitiation argument, Ruger relies on [Panduit Corp. v. HellermannTyton Corp.](#), 451 F.3d 819 (Fed. Cir. 2006). In [Panduit](#), the Federal Circuit Court of Appeals held that vitiation precluded application of the doctrine of equivalents. The patent at issue in [Panduit](#) disclosed a “modular offset power box and communication extension for a multi-channel power and communication wiring and raceway system.” Id. at 821 (internal

quotation marks omitted). Claim 1 of that patent “require[d] an opening in an abutment portion through which wires may pass from a trunking duct into an offset power box.” Id. at 830. In the accused product, “the wall abutting the trunking duct [was] solid with no cutaway,” and the wires in the accused product circumvented the abutment. Id. at 824. The Court of Appeals concluded that, “[t]o extend the scope of the claim to encompass an accused device in which wires bypass the abutment portion altogether would necessarily read the ‘opening’ limitation out of the claim.” Id. at 830.

Ruger contends that, similar to Panduit, application of the doctrine of equivalents to this case would read the “open to permit access” limitation out of Claim 1 in the ‘722 patent because Ruger’s handguard is not open. The holding of Panduit may have supported Ruger’s argument if the relevant limitation at issue in this case were simply a handguard with an open forward end. As the parties made clear in their filings and at the hearing, however, the relevant limitation is a handguard with a forward end “being open to permit access” to certain components of the operating system. Thus, while Ruger’s handguard is not literally open, that fact does not necessarily preclude application of the doctrine of equivalents to the “open to permit access” limitation. See [Nova Biomedical Corp. v. i-](#)

[Stat Corp.](#), 215 F.3d 1351, 1999 WL 693881, at \*5 (Fed. Cir. Sept. 3, 1999) (per curiam) (unpublished decision) (reversing the district court's grant of summary judgment of noninfringement based on vitiation "because not every word in a claim is a separate limitation . . . . [and] [t]he limitation here includes many other components"); [Perkin-Elmer Corp. v. Westinghouse Elec. Corp.](#), 822 F.2d 1528, 1533 n.9 (Fed. Cir. 1987) ("It is the limitation of a claim that counts in determining both validity and infringement, and a limitation may include descriptive terms . . . .").

In [Panduit](#), the court held that to find that an accused device in which wires circumvent the abutment portion entirely would render meaningless, and thus vitiate, the limitation that the abutment portion have an opening for wires to pass through. [Panduit](#), 451 F.3d at 830. In contrast, viewing the evidence in the light most favorable to Davies, application of the doctrine of equivalents to Ruger's rifle would not render meaningless the limitation of a tubular handguard being open to permit access to operating system components. Although the forward end of the Ruger handguard is not "open" under the court's claim construction, the cut-out in the upper portion of the forward end of the handguard allows the user to access operating system components. In other words, the Ruger handguard is designed to

allow access to the operating system components by having them sit in a cut-out portion of the front end of the handguard. Thus, applying the doctrine of equivalents to the Ruger handguard does not read the "open to permit access" limitation out of Claim 1. [Cordis Corp. v. Bos. Sci. Corp.](#), 561 F.3d 1319, 1330 (Fed. Cir. 2009) (affirming district court's finding that an accused product's "circular arcs" did not vitiate the limitation that the product must have "corners"); [Wright Med. Tech., Inc. v. Osteoics Corp.](#), 122 F.3d 1440, 1442-45 (Fed. Cir. 1997) (reversing summary judgment of lack of infringement under the doctrine of equivalents because it was a question of fact as to whether the element of "an intermedullary rod portion adapted to . . . extend through the narrowest portion of the human femur" could be met by equivalence with an accused intermedullary rod that did not extend through the femur).<sup>14</sup>

For these reasons, Ruger has not persuaded the court that the doctrine of vitiation applies here.<sup>15</sup>

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<sup>14</sup> Although at least a portion of the relevant operating system components extends beyond the Ruger handguard, that fact is not dispositive in Ruger's favor. As discussed above, the end plug in the rifle disclosed in the '722 patent extends past the handguard.

<sup>15</sup> For similar reasons, none of the other cases cited by Ruger in support of its vitiation argument changes the court's analysis above.



### 3. Infringement by Equivalence

Ruger argues only that prosecution history estoppel and vitiation preclude a finding of infringement by virtue of the doctrine of equivalents. It does not argue that its products do not infringe under either the insubstantial differences test or the function-way-result test. "An element in the accused product is equivalent to a claimed element if the differences between the two elements are 'insubstantial' to one of ordinary skill in the art." [Wi-LAN, Inc. v. Apple Inc.](#), 811 F.3d 455, 463 (Fed. Cir. 2016) (quoting [Warner-Jenkinson](#), 520 U.S. at 40). One way of demonstrating this is to show, "on an element-by-element basis that 'the accused product performs substantially the same function in substantially the same way with substantially the same result as each claim limitation of the patented product.'" [Intendis GMBH v. Glenmark Pharm. Inc., USA](#), 822 F.3d 1355, 1360 (Fed. Cir. 2016) (quoting [Crown Packaging Tech., Inc. v. Rexam Beverage Can Co.](#), 559 F.3d 1308, 1312 (Fed. Cir. 2009)).

As discussed above, the design of the accused rifles' handguard allows for access to the end plug and barrel coupling because Ruger cut out the upper portion of the forward end of the handguard. The barrel coupling sits, at least in part, within the cut-out portion of the handguard, and the design of

the handguard thereby allows the operator to clean the operating system by accessing the end plug and barrel coupling without disassembling the handguard. Viewing the evidence in the light most favorable to Davies, there is a genuine issue of material fact as to whether the handguard in the accused rifles, while not literally having a forward end "being open to permit access," performs substantially the same function in the same way and with the same result as the one described in the '722 patent with respect to the "open to permit access" limitation.

Therefore, Ruger is not entitled to summary judgment with respect to infringement under the doctrine of equivalents.

### **Conclusion**

For the foregoing reasons, Sturm, Ruger & Company, Inc.'s motion for summary judgment (doc. no. 49) is granted with respect to literal infringement of the '722 patent, but denied with respect to infringement of the '722 patent under the doctrine of equivalents.

SO ORDERED.



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Landya McCafferty  
United States District Judge

February 15, 2017

cc: Laura L. Carroll, Esq.  
Zachary Rush Gates, Esq.  
Chloe F.P. Golden, Esq.

James F. Laboe, Esq.  
Tod M. Melgar, Esq.  
Robert H. Miller, Esq.  
Glenn Schuyler Orman, Esq.  
Michael J. Pisko, Esq.  
Scott D. Stimpson, Esq.  
Jonathan T. Suder, Esq.  
Brian David Thomas, Esq.  
Decker A. Cammack, Esq.