IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No. 16-cv-02275-STV

FRAC SHACK INC.,

Plaintiff,

v.

FUEL AUTOMATION STATION, LLC, and
ATLAS OIL COMPANY,

Defendants.

ORDER

Magistrate Judge Scott T. Varholak

This matter is before the Court on Plaintiff's request for construction of the terms "a" and "the" used with the term "controller" in claims 1, 3, and 8-11 in United States Patent No. 9,346,662 (the "'662 Patent"). The parties have consented to proceed before the undersigned United States Magistrate Judge for all proceedings, including entry of a final judgment. [##20, 34] The matter is now ripe for consideration. [*See* ##100, 115-17] This Court has carefully considered the briefing and the applicable case law. The Court construes the terms "a" and "the" used with the term "controller" in claims 1, 3, and 8-11 as set forth below.

I. BACKGROUND

According to the Amended Complaint, Frac Shack, Inc. ("Frac Shack") "provides modular solutions for fuel delivery that reduce significantly the health, safety and environmental risks associated with fueling operations during hydraulic fracturing." [#30

at ¶ 10] Frac Shack is the owner of the '662 Patent, which was issued on May 24, 2016. [*Id.* at ¶ 9] The Preamble describes the '662 Patent as "[a] fuel delivery system for fuel delivery to multiple pieces of equipment at a work site." [#1-1 at 10] The Summary of the '662 Patent states that "[a] fuel delivery system and method is presented for reducing the likelihood that a fuel tank of equipment at a well site during fracturing of a well will run out of fuel." [*Id.* at 7]

Frac Shack alleges that Defendant Atlas Oil Company ("Atlas") has been using modular solutions for refueling during hydraulic fracturing operations in the United States. [#30 at ¶ 12] Frac Shack alleges that one of these solutions, the Atlas Fuel Automation Station, infringes Claims 1-4 and 7-12 of the '662 Patent. [*Id.* at ¶¶ 12-13] Defendant Fuel Automation Station, LLC ("Fuel Automation") allegedly leases the Atlas Fuel Automation Station to Atlas. [*Id.* at ¶ 12]

On March 9, 2018, this Court issued its Order construing each of the claims that the parties had designated for construction (the "Claim Construction Order"). [#92] On March 27, 2018, Defendants filed a "Motion for Clarification of the [Claim Construction] Order" (the "Clarification Motion"), asking the Court to reconsider certain aspects of its Claim Construction Order. [#93] On May 17, 2018, this Court: (1) denied the Clarification Motion to the extent it asked the Court to reconsider the preamble, (2) granted the Motion to the extent it asked the Court to reconsider whether Claim Seven was indefinite, and (3) concluded that Claim Seven was not indefinite. [#99]

On May 23, 2018, Plaintiff filed a Motion for Leave for Limited Claim Construction Briefing and to Reopen Claim Construction (the "Reopen Motion"). [#100] Through the Reopen Motion, Plaintiff asked the Court to reopen claim construction and construe the

articles “a” and “the” used with “controller” in claims 1, 3, and 8-11. [*Id.*] On August 2, 2018, this Court granted the Reopen Motion and ordered the parties to file supplemental briefs on the construction of “a” and “the” used with “controller” in claims 1, 3, and 8-11. [#115] The parties each filed supplemental briefs. [##116, 117]

II. STANDARD OF REVIEW

In construing patent claims, courts are guided by the precedent of the Federal Circuit. *See Sun Tiger, Inc. v. Sci. Research Funding Grp.*, 189 F.3d 1327, 1333 (Fed. Cir. 1999). A patent infringement claim involves a two-step analysis. First, the Court “must determine as a matter of law the correct scope and meaning of a disputed claim term.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1365 (Fed. Cir. 2002). Second, the properly construed patent claims must be compared to the accused device to determine whether the accused device contains all the limitations of the claimed invention. *Id.*

The first step, claim construction, is a matter of law for the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996). “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). “When construing claim terms, [courts] first look to, and primarily rely on, the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent, which is usually dispositive.” *Sunovion Pharm., Inc. v. Teva Pharm. USA, Inc.*, 731 F.3d 1271, 1276 (Fed. Cir. 2013). “[T]he words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips*, 415 F.3d at 1312 (quoting

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313.

"The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *Id.* "Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* While "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the claims do not stand alone. *Id.* at 1314-15. "Rather, they are part of a fully integrated written instrument, consisting principally of a specification that concludes with the claims." *Id.* at 1315 (quotation omitted). As a result, "the specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (*quoting Vitronics*, 90 F.3d at 1582). Nevertheless, "there is a fine line between reading a claim *in light of* the written description and reading a limitation into the claim from the written description." *Howmedica Osteonics Corp. v. Zimmer, Inc.*, 822 F.3d 1312, 1321 (Fed. Cir. 2016).

In addition to the claims and the specification, courts should also consider the patent's prosecution history, if it is in evidence. *Phillips*, 415 F.3d at 1317. The prosecution history is part of the "intrinsic evidence," and it "consists of the complete record of the proceedings before the [Patent and Trademark Office ("PTO")] and includes the prior art cited during the examination of the patent." *Id.* "Like the specification, the

prosecution history provides evidence of how the PTO and the inventor understood the patent." *Id.* Nonetheless, the prosecution history "often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.*

In addition to this intrinsic evidence, courts may also rely on "extrinsic evidence," consisting "of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* (quoting *Markman*, 52 F.3d at 980). But, "while extrinsic evidence can shed useful light on the relevant art, . . . it is less significant than the intrinsic record in determining the legally operative meaning of claim language." *Id.* (quotations omitted). As a result, "extrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1319.

III. ANALYSIS

At the heart of the instant issue is whether the terms "a" and "the" as used with the term "controller," mean one controller or multiple controllers. The terms "a" and "the" used with "controller," appear in claims 1, 3, and 8-11. Claim 1 of the '662 Patent claims, in relevant part, "[a] fuel delivery system for fuel delivery to multiple pieces of equipment at a work site comprising:"

> [A] controller responsive to signals supplied from each sensor through respective communication channels, the controller being configured to provide control signals to open and close the respective electrically operable valves; and
>
> in which the controller is responsive to the detection of the low fuel condition, to display an indication of the low fuel condition or to open at least one of the electrically operable valves for each of the multiple pieces of equipment that is associated with the low fuel condition.

[#1-1 at 11] The remaining claims at issue here, claims 3 and 8-11, further claim as follows: "The fuel delivery system of claim 1 in which,"

- "the controller is configured to log fuel requirements of each piece of the multiple pieces of equipment being fueled." (Claim 3) [*Id.*]

- "the controller being responsive to the detection of the low fuel condition further comprises displaying an indication of the low fuel condition for each of the multiple pieces of equipment when the piece of equipment is associated with the low fuel condition." (Claim 8) [*Id.*]

- "the controller is configured to allow an operator to provide control signals to open and close the respective electrically operable valves." (Claim 9) [*Id.*]

- "the controller is responsive to a low fuel level signal representative of the low fuel condition of each one of the multiple pieces of equipment to which fuel is to be delivered to start fuel flow to the one of the multiple pieces of equipment independently of flow to other pieces of equipment." (Claim 10) [*Id.*]

- "the controller is responsive to a high fuel level signal from each one of the multiple pieces of equipment to which fuel is delivered to stop fuel flow to the one of the multiple pieces of equipment independently of flow to other pieces of equipment." [*Id.*] (Claim 11)

Plaintiff maintains that the articles "a" and "the" used with controller in these claims means a single controller. [#116] Defendant, on the other hand, contends that these articles mean one or more controllers. [#117]

The Federal Circuit "has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.'" *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008) (quoting *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000)). "That 'a' or 'an' can mean 'one or more' is best described as a rule, rather than merely as a presumption or even a convention." *Id.* As a result, the "exceptions to this rule are extremely limited: a patentee must 'evince[] a clear intent' to limit 'a' or 'an' to 'one.'" *Id.* (quoting *KCJ Corp.*, 223 F.3d at 1356).

Here, claim 1 is an open-ended claim containing the transitional word "comprising." [#1-1 at 11] As a result, the use of "a" before "controller" shall be construed as meaning "one or more," absent a showing of a "clear intent" that the patentee intended to limit the controller to "one." Plaintiff, who seeks such a limitation, has not demonstrated such a clear intent.

First, citing to Dictionary.com, Plaintiff argues that the plain meaning of "a" and "the" suggest a singular definition. [#116 at 6; #116-1] But, as outlined above, the Federal Circuit, *as a rule with extremely limited exception*, has stated that "a" means "one or more" when used in open-ended claims containing the transitional phrase comprising. *Baldwin Graphic Sys.*, 512 F.3d at 1342. Plaintiff does not point to any authority suggesting that a dictionary definition can outweigh that general rule. Plaintiff also argues that the plain meaning of "the" refers to a particular noun, *i.e.*, a singular noun, that has been previously identified. [#116 at 6] But the "subsequent use of definite articles 'the' or 'said' in a claim to refer back to the same claim term does not change the general plural rule [of 'a' and 'an'], but simply reinvokes that non-singular meaning." *Id.* Thus, subsequent use of the term "the," following the use of the term "a," reinvokes the plural rule.

Second, Plaintiff argues that the claims description of other terms in the plural reinforces that "a controller" is singular. [#116 at 6-8] For example, the claims refer to "a controller," while the claims describe such controller receiving plural signals, through more than one channel from multiple sensors, and controlling multiple valves. [*Id.*] Plaintiff contends that the description of other terms in the plural provides clear proof that the controller is singular. [*Id.*] In support of that proposition, Plaintiff cites to two Federal

Circuit opinions, *Harari v. Lee*, 656 F.3d 1331 (Fed. Cir. 2011) and *In re Varma*, 816 F.3d 1352 (Fed. Cir. 2016). [#116 at 7]

In *Harari*, the Federal Circuit found that the claim's repeated distinction between the plural (control gates, memory cells) and the singular (a/said bit line) provided clear indication that there was a single bit line. 656 F.3d at 1341. At each step of the disputed claim in *Harari*, there was no language to suggest "more than one bit line when activating the number of memory cells." *Id.* Each step "expressly distinguish[ed] between the singular," with respect to bit line, and the "plural," with respect to memory cells and control gates, and that distinction was consistent and reinforced throughout the claims. *Id.* Here, the intent is not as straightforward. For example, while the '662 Patent does at times clearly use the plural to define items (multiple pieces of equipment, signals), the distinction between singular and plural is not always clear. For example, the '662 Patent describes "a sensor," "a valve," "a cap," and "a fuel tank" without any clear indication that these items are defined singularly. [#1-1 at 11] Indeed, Claim Six describes "a valve on each fuel outlet" [*id.*], but the specification states that the valve arrangement at each fuel outlet "*may* be a single valve" [#1-1 at 7 (emphasis added)], implying that it may also be more than one valve. "This intrinsic evidence at the very least shows that it is unclear whether the patentees intended the term [a controller] to mean . . . 'one' [controller] or . . . 'one or more' [controllers]." *Indus. Tech. Research Inst. v. LG Elecs., Inc.*, No. 12cv393-IEG (JMA), 2012 WL 13035475, at *6 (S.D. Cal. Aug. 21, 2012). In the face of such ambiguity, "the general rule that 'a' ordinarily means 'one or more' governs." *Id.* (citing *Baldwin Graphic Sys.*, 512 F.3d at 1342).

In *Varma*, the Federal Circuit interpreted the phrase "a statistical analysis request corresponding to two or more selected investments." 816 F.3d at 1362. The Patent Trial and Appeal Board ("PTAB") had relied on the claim's use of "a" before "statistical analysis report" to conclude that the claim embraced a request that called for a statistical analysis of a single investment, because two requests could be made to accomplish an analysis of two or more investments. *Id.* The Federal Circuit rejected that interpretation. According to the Federal Circuit:

> [T]he question is not whether there can be more than one request in a claim-covered system: there can. Rather, the question is whether "a" can serve to negate what is required by the language following "a": a "request" (a singular term) that "correspond[s]" to "two or more selected investments." It cannot. For a dog owner to have "a dog that rolls over and fetches sticks," it does not suffice that he have two dogs, each able to perform just one of the tasks. In the present case, no matter how many requests there may be, no matter the variety of the requests the system may receive, the system must be adapted to receive a request that itself corresponds to at least two investments.

Id. at 1362-63. Applying that rationale to the instant case, the "question is not whether there can be more than one [controllers] in a claim-covered system: there can." *Id.* Each of these controllers must be able to both respond to multiple signals from sensors, and provide multiple signals to valves. Each controller must also be able to perform each of the additional functions required of a controller by the various claims. But, provided each controller can perform these functions, the system may have multiple controllers.

Finally, pointing to the specification, Plaintiff argues that the "specification never discloses any embodiment using multiple controllers" and that the only visual depiction of the invention "shows a unitary centralized controller." [#116 at 8] The fact that the specification shows a preferred embodiment with a single controller, however, does not necessitate a departure from the general rule that "a" represents "one or more." *See 01*

Communique Lab., Inc. v. LogMeIn, Inc., 687 F.3d 1292, 1297 (Fed. Cir. 2012) ("[T]he fact that a locator server computer is represented by a single box in some of the figures [of the specification] does not 'necessitate' a departure from the general rule that 'a' locator server computer may mean 'one or more' locator server computers."); *Conceal City, L.L.C. v. Looper Law Enforcement*, *LLC*, No. 3:10-CV-2506-D, 2012 WL 5830518, at *4 (N.D. Tex. Nov. 16, 2012) ("The Federal Circuit has 'repeatedly warned' against confining claims to the specific embodiments depicted in the specification." (*quoting Phillips*, 415 F.3d at 1323)).

Thus, the Court concludes that Plaintiff has not overcome the general rule that "a" represents "one or more." The Court's conclusion is bolstered by the specification, which provides that "[t]he indefinite article 'a' before a claim feature does not exclude more than one of the feature being present." [#1-1 at 7]; *see also Harari*, 656 F.3d at 1341 (noting the Federal Court "read[s] the limitation [of 'a'] in light of the claim and specification to discern its meaning"). While Plaintiff offers an alternative explanation for this broad definition of the term "a" [#116 at 7-8], that explanation is not sufficient to overcome the rule that "a" means "one or more."

IV. CONCLUSION

For the foregoing reasons, the Court construes the terms "a" and "the" used with "controller" in claims 1, 3, and 8-11 of the '662 Patent to mean "one or more."

DATED: November 5, 2018

BY THE COURT:

s/Scott T. Varholak
United States Magistrate Judge