UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF KENTUCKY
PADUCAH DIVISION
CIVIL ACTION NO. 5:11-CV-00135-TBR

PADUCAH RIVER PAINTING, INC.

Plaintiff

v.

McNATIONAL, INC., et al.

Defendants

CLAIMS CONSTRUCTION MEMORANDUM OPINION AND ORDER

This matter is before the Court upon the parties' respective Claim Construction Briefs. (Docket Nos. 79; 80.) The Court held a *Markman* hearing regarding the disputed claim terms on April 30, 2012. (*See* Docket No. 83.) That hearing addressed the sundry of disputed claim terms submitted by the parties in their Joint Claim Construction Statement. (*See* Docket No. 78.) The parties have responded to one another's Claim Construction Briefs, (Docket Nos. 81; 82), and also have submitted post-*Markman* Hearing Briefs in support of their respective constructions of the disputed terms, (Docket Nos. 86; 87). These matters now are fully briefed and ripe for adjudication. Upon considering the parties' respective Briefs, the evidence of record, and the arguments and testimony presented at the *Markman* hearing, the Court construes the disputed claim terms as set forth herein. This Opinion does not address the merits of the underlying patent infringement claim.

STANDARD

The interpretation and construction of a patent claim are questions of law to be answered by the Court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (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) (en banc) (internal quotation marks omitted). The terms of a patent claim are to be given the ordinary and customary meaning from the perspective of a person of ordinary skill in the art at the time the patent is filed. *Chamberlain Grp., Inc. v. Lear Corp.*, 516 F.3d 1331, 1335 (Fed. Cir. 2008). "[T]he 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." *Phillips*, 415 F.3d at 1313.

When construing claim terms, the Federal Circuit emphasizes that courts should look principally to the "intrinsic record," which consists of the claims themselves, the patent specification, and the prosecution history. *Id.* at 1313-17. First, "the claims themselves provide substantial guidance as to the meaning of particular claim terms," *id.* at 1314 (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996); *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003)), and "the context in which term is used in the asserted claim can be highly instructive," *id.* Second, because they "do not stand alone" but instead "are part of a fully integrated written instrument," the "claims must be read in view of the specification, of which they are a part." *Id.* at 1315 (internal quotation marks omitted). On this point, the Federal Circuit advises that: "[T]he 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. (internal quotation marks omitted) (quoting Vitronics, 90 F.3d at When reviewing the specification, however, courts must avoid reading 1582). limitations from the specification into the claims. *Id.* at 1323. To avoid importing limitations, a court must consider the purposes of the specification, which are to teach and enable those of skill in the art to make and use the invention and to provide the best way for doing so. Id. Third, "a court should also consider the patent's prosecution history, if it is in evidence." Id. at 1317 (internal quotation marks omitted). The prosecution history consists of the complete record of the proceedings before the U.S. 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 . . . [and also] like the specification, the prosecution history was created by the patentee in attempting to explain and obtain the patent." Id. Typically, repeated words or phrases in the patent are construed to have the same meaning. *Id.* at 1314.

In addition to intrinsic evidence, courts may look to extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* (internal quotation marks omitted). "However, 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.* (internal quotation marks omitted) (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 862 (Fed. Cir. 2004)).

"Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (citing *Markman*, 517 U.S. at 389). "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* Therefore, "[a] claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent." *Id.*

DISCUSSION

Plaintiff Paducah River Painting, Inc., filed this action alleging patent infringement against Defendants McNational, Inc.; McGinnis, Inc.; and National Maintenance & Repair of Kentucky, Inc. Plaintiff alleges that Defendants are infringing upon U.S. Patent No. 7,837,410 (hereinafter the '410 Patent), which outlines a system for refurbishing river barges. (*See* Docket Nos. 1; 1-1.) River barges are flat-bottomed boats used to transport goods and other cargo on inland waterways. Over time, their painted hulls begin to corrode and must be refurbished in order to extend the life of the barge and improve its performance. Refurbishment, generally speaking, requires that the rust, debris, corrosion, etc., be removed from the barge's hull, which is then repainted or recoated before the barge is returned to service. Prior to the '410 Patent, one method by which refurbishment was accomplished was by removing the barge from the river, dry-docking it, blasting the hull with some abrasive media (*i.e.*, sandblasting), repainting the hull, and then returning the barge to the river.

The parties presently dispute the proper construction of twenty some-odd claim terms, phrases, or clauses with respect to the '410 Patent. In their Joint Claim Construction Statement, the parties have listed, in table format, each of the disputed claim terms along with their respective proposed construction of that term. Claim construction has two practical implications. First, construing the claims enables a fact finder to determine whether a patent may be invalid for failing to meet requirements of patentability. See Amazon.com, Inc. v. Barnesandnoble.com, Inc., 239 F.3d 1343, 1351 (Fed. Cir. 2001). Second, construing the claims allows for the determination whether an alleged infringer has infringed on a patent by doing that which is covered by any of the patent's claims. See id. In the following discussion, the Court will address each of the disputed terms in the order they are presented in the parties' Joint Claim Construction Statement. The Court will begin by reciting the parties' proposed construction of each disputed claim term. Then, employing the above principles of claim construction and considering the parties' proposals, the Court will set forth its construction of the disputed term.

A. "transport system"

The term "transport system" appears in Claims 1, 2, 3, 5, 6, 7, and 18. Claims 1 and 18 are independent claims, whereas Claims 2, 3, 5, 6, and 7 depend on Claim 1. The parties propose the following competing constructions of the term "transport system":

¹ "Independent" claims stand alone, whereas "dependent" claims expressly refer to an earlier claim, such as "The method of claim 1 further comprising" Dependent claims incorporate all of the limitations of the claim from which they depend and add further limitations specific to the dependent claim. Thus, independent claims have the broadest coverage while dependent claims necessarily are narrower than the claim from they depend. *See generally* FED. JUD. CTR., ANATOMY OF A PATENT CASE 97 (2d ed. 2012).

Plaintiff's Proposed Construction	Defendants' Proposed Construction
a transport system ² that conveys the barge	a frame with wheels that is connected to
from one place or location to another, as	and carried by another frame with wheels
defined by the terms "securely supports	
the barge" and "up an embankment to an	
on-land position"	

Claim 1 reads, in relevant part:

A method of refurbishing a barge . . . the method comprising: submerging a **transport system** into a waterway; moving the barge over the submerged **transport system**; moving the **transport system** in contact with the barge such that the **transport system** securely supports the barge; moving the **transport system** and barge from the waterway, up an embankment to an on-land position and away from the waterway;

(Docket No. 1-1, at 27 (emphasis added).) For purposes of this disputed term, the limitations expressed in the body of Claim 18 are substantially similar to those in Claim 1. (*See* Docket No. 1-1, at 28.) The language of Claims 1 and 18 requires that the transport system be submerged, moved in contact with the barge such that it securely supports the barge, and then moved with the barge from the waterway up an embankment to an on-land position. The specification does not expressly define "transport system." The specification does, however, describe one embodiment as having a "first transport system" comprising a dolly having a "frame[] connected to casters or wheels," or comprising "a rectangular base assembly connected to wheels." (Docket No. 1-1, at 22.)

² In their briefing, Plaintiff proposed the following construction for "transport system": "a group of interrelated elements that conveys the barge from one place or location to another, as defined by the terms 'securely supports the barge' and 'up an embankment to an on-land position."" (*See, e.g.*, Docket No. 78, at 1-2.) During the *Markman* hearing, Plaintiff stated that it wished to abandon the language "group of interrelated elements" and in its place merely use the words "transport system." (Docket No. 83, at 35.)

Plaintiff argues that "transport system" is a simple and unambiguous term that should be construed using its ordinary meaning. Defendants disagree, pointing to the patent specification to argue that "[t]he first transport system must necessarily be 'a frame with wheels that is connected to and carried by another frame with wheels."" (Docket No. 80, at 10.) Plaintiff insists that the Defendants' proposed construction "is a clear—indeed classic—attempt to limit the scope of the patent claim to the specific embodiment disclosed in the patent specification by importing limitations from the patent specification into the patent claim." (Docket No. 79, at 9-10.)

In a recent decision, Arlington Industries, Inc. v. Bridgeport Fittings, Inc., the Federal Circuit reaffirmed the notion that "even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words of expressions of manifest exclusion or restriction." 632 F.3d 1246, 1254 (Fed. Cir. 2011) (quoting Martek Biosci. Corp. v. Nutrinova, Inc., 579 F.3d 1363 1381 (Fed. Cir. 2009); Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004)); accord Phillips, 415 F.3d at 1323 ("[W]e have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment."). The '410 Patent does not show a clear intent to limit the claim to an embodiment where "transport system" means "a frame with wheels that is connected by another frame with wheels," as Defendants urge. Therefore, to adopt the Defendants' proposed construction would impermissibly limit the scope of the patent claims to the preferred embodiment. Instead, the Court agrees with Plaintiff that "transport system" does not mean anything other than "a system that transports something from one point to another." Furthermore, in light of the other limitations expressed in the body of Claim 1, it is clear that the transport system must be "submerged," must "securely support[] the barge," and must be moved with the barge "from the waterway, up an embankment to an on-land position." (*See* Docket No. 1-1, at 27.) These limitations provide the necessary scope for the proper construction of the term "transport system."

Therefore, in light of the intrinsic record, the Court finds that the ordinary and customary meaning of "transport system," as understood in the context of the claimed invention by one skilled in the art at the time of the invention, is "a transport system that conveys the barge from one place to another" as limited by the terms and phrases in Claim 1, column 14, lines 32 - 38, and in Claim 18, column 16, lines 47 - 53.

B. "another transport system"

The term "another transport system" appears in Claims 1, 2, 3, 5, 6, and 7.³ The parties propose the following competing constructions of the term "another transport system":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
a transport system that conveys the barge from one place or location to another, as defined by the terms "securely supports the barge" and "up an embankment to an on-land position"	

³ The parties' Joint Claim Construction Statement identifies the term "another transport system" as appearing in Claims 1, 2, 3, 5, 6, and 7. (Docket No. 78, at 2.) The language "another transport system" appears in independent Claim 1. Claims 2, 3, 5, 6, and 7 depend upon Claim 1, but do not themselves contain the exact language "another transport system." (Claims 6 and 7 do contain the language "other transport system," however.) Claims 4 and 8 also depend upon Claim 1, and Claim 8 contains the language "other transport system." (*See* Docket No. 1-1, at 27-28.) Thus, it is not clear to the Court why the parties did not also identify these claims. Many of the other disputed claim terms have similar issues with the claim numbers that the parties identify as containing a particular disputed term. Regardless, throughout this Opinion, the Court will use the claim numbers specifically identified by the parties in their Joint Claim Construction Statement.

The Court's construction of "transport system" *supra* Part A would appear to dispose of the dispute over the instant term "another transport system." The only difference in the two terms is the addition of the word "another." The term "another" has no specific definition in the '410 Patent and thus is interpreted using its plain and ordinary meaning, which is simply a transport system other than the transport system first mentioned in Claim 1. Thus, the Court concludes that no further construction of this term is necessary.

C. "transferring the barge from the transport system to another transport system"

The term "transferring the barge from the transport system to another transport system" appears in Claims 1, 2, 3, 5, 6, and 7. The parties propose the following competing constructions of this term:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	at the on-land position, transferring the barge from the transport system to another transport system ⁴

Defendants argue that because the preferred embodiment contemplates that the barge is transferred at an on-land position, the meaning of this term should be informed by the specification to require that the "transferring" occur at the on-land position. (Docket No. 80, at 16.) Thus, Defendants urge that the proper construction should include the

⁴ Defendants' original proposed construction of this term was "at the on-land position, raising the barge off the transport system and lowering it onto another transport system." (Docket No. 78, at 2.) Defendants subsequently abandoned this proposed construction in favor of the construction, "at the onland position, transferring the barge from the transport system to another transport system." (Docket No. 80, at 16 & n.3.)

added language "at the on-land position." The Court disagrees and again declines to import this limitation from the patent specification into Claim 1. Accordingly, the Court concludes that no further construction of this term is necessary.

D. "securely supports the barge"

The term "securely supports the barge" appears in Claims 1, 2, 3, 5, 6, 7, and 18. The parties propose the following competing constructions of the term "securely supports the barge":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
the barge rests on the transport system	the barge is securely connected to the frame which carries it and stabilizes the barge in a level orientation

As noted *supra* Part A, the term "securely supports the barge" appears in independent Claims 1 and 18 in the limiting language "moving the transport system in contact with the barge such that the transport system securely supports the barge." (Docket No. 1-1, at 27-28.)

In this instance, neither party's proposed construction is particularly compelling. The Defendants' proposed construction seeks to import a number of limitations from the preferred embodiment into the patent claims, such as by defining "securely supports" to mean "securely connected," by limiting the transport system to a "frame," and by requiring that the transport system carry and stabilize "the barge in a level orientation." On the other hand, Plaintiff's proposed construction seeks to broaden the scope of the claim language by effectively rendering the modifying adverb "securely" superfluous. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) (instructing that claims should be "interpreted with an eye toward giving effect to all terms in the

claim"). The parties' respective experts and their reports are also of little help. Ultimately though, the Court finds that the term "securely supports the barge" is relatively clear and unambiguous as written. Webster's Dictionary defines "securely" as "in a secure manner." Webster's Third International Dictionary (2013) [hereinafter Webster's], http://unabridged.merriam-webster.com/unabridged/securely. The Court is of the opinion that the word "securely" in the term "securely supports the barge" can be readily understood by a jury to have its plain, ordinary meaning of "supporting the barge in a secure manner." As such, the Court declines to adopt either party's proposed construction and instead finds that no further construction of this term is necessary.

E. "up an embankment to an on-land position"

The term "up an embankment to an on-land position" appears in Claims 1, 2, 3, 5, 6, 7, 17, and 18. The parties propose the following competing constructions of the term "up an embankment to an on-land position":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
a location above the bank of the waterway	_
	from the embankment

The crux of the dispute over this claim term appears to be whether "an embankment" and "an on-land position" are mutually exclusive or, instead, whether the embankment itself can be considered an on-land position. In essence, Plaintiff argues that the embankment is an on-land position because the embankment is, in fact, on land and not in the waterway. Defendants, on the other hand, point to the preferred embodiment to

argue that the barge must move to some location past the embankment (such as onto the shelf or berth) in order to reach "an on-land position."

In this instance, the Court finds that the prosecution history of the '410 Patent makes clear that "on-land position" merely means a position on land and out of the waterway. In its back-and-forth with the PTO, Plaintiff distinguished the '410 Patent from prior art in which a dry dock is positioned in the waterway, stating that the '410 Patent teaches "a method for refurbishing the barge or a system for refurbishing the barge that moves the barge out and away from the waterway and to a position on land." (Docket No. 80-2, at 109.) Plaintiff thus made clear that "on-land position" was meant to refer to a position that "is located out and away from the waterway." (Docket No. 80-2, at 109.) In view of the intrinsic evidence, the Court is left with the certain impression that this claim language simply refers to a position "out of and away from the waterway." This position may be on the embankment itself, or it may be farther inland on the shelf or berth. The Defendants' proposed construction again seeks to import unnecessary limitations into the claim language. Therefore, the Court concludes that the ordinary and customary meaning of "up an embankment to an on-land position," as understood in the context of the claimed invention by one skilled in the art at the time of the invention, is "up an embankment to a position out of and away from the waterway."

F. "an exterior surface of the barge"

The term "an exterior surface of the barge" appears in Claims 1, 2, 3, 5, 6, 7, 9, 10, 11, 12, 18, and 19. The parties propose the following competing constructions of the term "an exterior surface of the barge":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	the outside of the hull of the barge

Each of the independent claims (Claims 1, 9, 18, and 19) uses the article "an," as in "an exterior surface of the barge," whereas each of the dependent claims (Claims 2, 3, 5, 6, 7, 10, 11, and 12) uses the article "the." (Docket No. 1-1, at 27-29.)

This disputed term turns on whether "an exterior surface of the barge" necessarily means "the entire outside of the hull of the barge," as Defendants argue. (See Docket No. 80, at 22.) Defendants, in their briefing, play loose with the interchangeability of "an" and "the." But these articles have distinct and settled meanings in the context of claim construction. In Baldwin Graphic Systems, Inc. v. Siebert, Inc., the Federal Circuit unequivocally defined the meaning of the term "an," writing: "[T]his court has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.' 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." 512 F.3d 1338, 1342 (Fed. Cir. 2008) (internal quotation marks and citation omitted) (quoting KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1356 (Fed. Cir. 2000)). "An exception to the general rule that 'a' or 'an' means more than one only arises where the language of the claims themselves, the specification, or the prosecution history necessitate a departure from the rule." Id. at 1342 (citing Abtox, Inc. v. Exitron Corp., 122 F.3d 1019 (Fed. Cir. 1997); Insituform Techs., Inc. v. Cat Contracting, Inc., 99 F.3d 1098 (Fed. Cir. 1996)). Here, the record does not contain a clear indication that Plaintiff intended to depart from this rule, as nothing in the claim language, specification, or prosecution history compels an alternate reading of the indefinite article "an." Furthermore, the use of the definite article "the" in the dependent claims does not mandate a different construction for those terms. *See id.* ("[T]he use of a definite article ('said' or 'the') to refer back to an initial indefinite article does not implicate, let alone mandate the singular.")

Of additional note, Defendants suggest that "exterior surface of the barge" must refer to the hull of the barge and not any of the top surfaces of the barge, such as the weather decks and hatch coverings, which are not typically blasted. Plaintiff does not appear to contest this point.

Accordingly, the Court concludes that the ordinary and customary meaning of "an exterior surface of the barge," as understood in the context of the claimed invention by one skilled in the art at the time of the invention, is "one or more exterior surfaces of the hull of the barge."

G. "blast area" and "abrasive blast area"

The term "blast area" appears in Claims 1, 2, 3, 5, 6, 7, and 18. The term "abrasive blast area" appears in Claim 17. The parties propose the following competing interpretations of the terms "blast area" and "abrasive blast area":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
a housing or building in which the barge is abrasively blasted	an area within a refurbishing system in which a covered blast system is located and which is distinct from the covered coating area

In independent Claims 1 and 18, the term "blast area" is preceded by the modifier "covered" to read "covered blast area." Claims 1 reads, in relevant part:

abrasive blasting an exterior surface of the barge with an abrasive media while the barge is positioned within the covered **blast** area;

moving the other transport system and barge to a covered coating area; and

applying a coating to the exterior surface of the barge while the barge is positioned within the covered coating area.

(Docket No. 1-1, at 27 (emphasis added).)

Defendants argue that, based on the patent specifications, the "blast area" must be distinct from the "coating area." Defendants reason that Plaintiff's proposed construction would provide that the entire building in which the barge is blasted is the "blast area" and that the entire building in which the barge is coated is the "coating area." Defendants insist that if the blasting and coating were performed in the same building, this would lead to the improper overlap of separate claim elements.

As the Federal Circuit advised in *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, "[c]laim construction 'begins and ends in all cases with the actual words of the claim." 616 F.3d 1249, 1254 (Fed. Cir. 2010) (quoting *Renishaw*, 158 F.3d at 1248). "Where a claim lists elements separately, 'the clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." *Id.* (alteration in original) (quoting *Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)); *see also CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co.*, 224 F.3d 1308, 1317 (Fed. Cir. 2000); *Engel Indus., Inc. v. Lockformer Co.*, 96 F.3d 1398, 1404-05 (Fed. Cir. 1996). In this instance, Claim 1 lists "covered blast area" and "covered coating area" as separate elements. That Claim 1 states that the barge is "mov[ed]" to a covered coating area further confirms that the two areas are separate and distinct within the meaning of that claim. The Court thus reads Claim 1 to require a covered blast area

that is distinct from the covered coating area. Construing the "covered blast area" and "covered coating area" as distinct areas does not, however, mean that those two areas necessarily must be in separate buildings or separate structures. What it does mean is that the "blast area" and "coating area" must be distinct and separate areas if both are located in the same building or housing. Accordingly, for purposes of Claim 1, the Court construes "blast area" as "an area in which the barge is abrasively blasted and which is distinct from the covered coating area."

Claims 17 and 18, on the other hand, do not identify a coating area that is separate and distinct from the "abrasive blast area" in Claim 17 or the "covered blast area" in Claim 18. Claim 17 is addressed to the blasting process and does not mention the term "coating." Claim 18 reads, in relevant part:

abrasive blasting an exterior surface of the barge with an abrasive media while the barge is positioned within the covered **blast area**; and apply a coating to the exterior surface of the barge.

(Docket No. 1-1, at 28 (emphasis added).) In these instances, the Court finds no reason to similarly require that the "blast area" be distinct from the area in which the barge is coated. Therefore, the Court construes "abrasive blast area" in Claim 17 and "blast area" in Claim 18 to mean "an area in which the barge is abrasively blasted."

H. "abrasive blasting"

The term "abrasive blasting" appears in Claims 1, 2, 3, 5, 6, 7, and 18. The parties propose the following competing interpretations of the term "abrasive blasting":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	operatively controlled blast processing

Plaintiff insists that there is no reason to construe the term "abrasive blasting" because that term is easily understood, even by a layperson. Defendants argue that "the abrasive blasting . . . must be automatic such that it is operatively controlled without human intervention." (Docket No. 80, at 26.) Defendants further posit that "[b]ecause a core component of [Plaintiff]'s invention is a highly automated system wherein blasting is 'automatic' without human intervention . . . the claims must be construed accordingly." (Docket No. 82, at 9.) Plaintiff responds, arguing: "[T]here is nothing in claim 1 that requires the abrasive blasting to be performed by machine. Instead, 'abrasive blasting' as used in claim 1 encompasses both machine and manual abrasive blasting [C]laim 1 merely requires 'abrasive blasting,' not how it is performed." (Docket No. 81, at 14-15.)

Again, Defendants seek to import limitations from the preferred embodiment into the patent claims. Nowhere in either Claim 1 or Claim 18 is it claimed or implied that the abrasive blasting must be "automatic" or "operatively controlled without human intervention." (*See* Docket No. 1-1, at 27-28.) The abstract of the '410 Patent, which provides a brief overview of the invention, similarly makes no mention of the refurbishing system as being "highly automated." (*See* Docket No. 1-1, at 1.) Defendants' out-of-context reference to the prosecution history and the inventor's declaration also is unavailing. Therefore, the Court declines to adopt the Defendants' proposed construction and, accordingly, concludes that no further construction of this term is necessary.

I. "the barge is positioned within the covered blast area"

This term appears in Claims 1, 2, 3, 5, 6, 7, and 18. The parties propose the following constructions of the term "the barge is positioned within the covered blast area":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
the barge is located within a housing or	the barge is contained within the covered
building in which the barge is blasted	blast area

The dispute over this term centers on whether "positioned within" means "contained within."

Defendants insist that "'positioned within' means the whole barge is contained within [the covered blast area]." (Docket No. 83, at 63; see also Docket No. 80, at 20 (arguing that "positioned within" means that "the entire barge must be contained within the blast area while being abrasively blasted").) The Court disagrees. The Defendants' proposed construction would render the patent claims inconsistent with the embodiment disclosed in patent. See Phillips, 415 F.3d at 1316 (instructing that "claims must be construed so as to be consistent with the specification"); Merck & Co. v. Teva Pharm. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003) (same). In Figure 12 of the '410 Patent's drawings, the forward portion of the barge is abrasively blasted while the rear portion of the barge extends outside the covered blast area. (See Docket No. 1-1, at 12.) Thus, the patent itself shows that the entire barge is not necessarily contained within the blast area at the time that a portion of the barge is abrasively blasted. Accordingly, the Court declines to rewrite the claim term "positioned within" as "contained within." The word "positioned" in the term "positioned within the covered blast area" means exactly what it says and can be readily understood by a jury to have its plain, ordinary meaning of "placed," "situated," or "located" within the covered blast area (as the term "blast area" is construed *supra* Part G). As such, the Court declines to adopt either party's proposed construction and instead finds that no further construction of this term is necessary.

J. "moving the other transport system and barge"

The term "moving the other transport system and barge" appears in Claims 1, 2, 3, 5, 6, and 7. The parties propose the following competing constructions:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[This term need not be construed.]	moving the other transport system and barge after completion of abrasive blasting

The principal contest to the construction of this term is whether "moving the other transport system and barge" means "moving the other transport system and barge after completion of the abrasive blasting." The disputed claim term appears twice in the body of Claim 1:

moving the other transport system and barge from the on-land position into a covered blast area;

abrasive blasting an exterior surface of the barge with an abrasive media while the barge is positioned within the covered blast area;

moving the other transport system and barge to a covered coating area; and

applying the coating to the exterior surface of the barge while the barge is positioned within the covered coating area.

(Docket No. 1-1, at 27 (emphasis added).)

Defendants propose that the latter appearance of the term should be construed with the appended language "after the completion of the abrasive blasting."

(Defendants presumably do not propose such construction with the former appearance

of the term.) In essence, Defendants seek to have the claim require that the blasting process be completed before the coating process begins. The Court finds that the Defendants' proposed construction imports an unnecessary limitation into the already clear language of Claim 1. Moreover, such a construction would be inconsistent with the Court's construction of the terms "blast area" and "abrasive blast area" *supra* Part G. As such, the Court declines to adopt the Defendants' proposed construction and concludes that no further construction of this term is necessary.

K. "coating area"

The disputed term "coating area" appears in Claims 1, 2, 3, 5, 6, and 7. The parties propose the following competing constructions of the term "coating area":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
If construed, the term "coating area" must be construed as "a covered coating area" and it would be understood by one of ordinary skill in the art to mean a housing or building in which the barge is coated or painted	blast area

In Claim 1, the term "coating area" is preceded by the modifier "covered":

moving the other transport system and barge to a covered **coating area**; and applying a coating to the exterior surface of the barge while the barge is positioned within the covered **coating area**.

(Docket No. 1-1, at 27.) The dispute over the proper construction of "coating area" is much the same as the dispute over the term "blast area," which was dealt with earlier in this Opinion. Upon considering the parties' instant arguments, the Court finds that its reasoning in Part G, *supra*, applies with equal force to the construction of the term "coating area." Therefore, for purposes of Claim 1, the Court construes "coating area"

to mean "an area in which the barge is coated or painted and which is distinct from the covered blast area."

L. "the barge is positioned within the covered coating area"

This term appears in Claims 1, 2, 3, 5, 6, and 7. The parties propose the following competing constructions of the term "the barge is positioned within the covered coating area":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
the barge is located within a housing or building in which the barge is coated or painted	C

The dispute over the proper construction of "positioned within the covered coating area" is much the same as the previously discussed dispute regarding the term "positioned within the covered blast area." The Court finds that its reasoning in Part I, *supra*, applies with equal force to the construction of the term "the barge is positioned within the covered coating area." Just as the Court concluded above, the word "positioned" in the term "positioned within the covered coating area" means exactly what it says and can be readily understood by a jury to have its plain, ordinary meaning of "placed," "situated," or "located" within the covered coating area. Thus, the Court again declines to rewrite the claim term "positioned within" as "contained within," as Defendants urge. Accordingly, the Court declines to adopt either party's proposed construction and again finds that no further construction of this term is necessary.

M. "discharge the abrasive media"

The term "discharge the abrasive media" appears in Claim 19. The parties propose the following competing constructions of the term "discharge the abrasive media":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	being operative controlled to uniformly distribute the abrasive media based on movement of a transportation system

Claim 19 reads, in pertinent part:

A refurbishing system for refurbishing a barge on land, the system, comprising:

- a covered blast system positioned on land, the covered blast system having a blast media storage tank which stores abrasive media, the covered blast system further having a blast media discharge system in communication with the blast media storage tank, the blast media discharge system comprising a plurality of blast discharge nozzles;
- a transportation system having rails, the rails being positioned within the covered blast system and positioned under blast discharge nozzles of the plurality of blast discharge nozzles, the transportation system being configured to move the barge into the covered blast system wherein the plurality of blast discharge nozzles **discharge the abrasive media** against an exterior surface of the barge

(Docket No. 1-1, at 28-29 (emphasis added).)

Plaintiff argues that the Court need not construe the term "discharge the abrasive media" because that term "is simple, straightforward, unambiguous, and simply means 'discharge the abrasive media." (Docket No. 79, at 25.) Defendants argue that the term should be construed as "being operatively controlled" because "the abrasive

blasting . . . must be automatic such that it is operatively controlled without human intervention." (Docket No. 80, at 26.) Defendants also argue that the term should be construed to require the "uniform distribution of the abrasive media," as set out in the specification. (Docket No. 80, at 27-28.) Finally, Defendants insist that the term should be construed with the limitation that the automatic abrasive blasting be "based on the movement of the barge or the transportation system." (Docket No. 80, at 27-28.)

The Court finds that the Defendants' proposed construction improperly imports limitations from the patent specifications into Claim 19. See, e.g., Arlington Indus., 632 F.3d at 1254 (holding that "even where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words of expressions of manifest exclusion or restriction"). Nowhere in Claim 19 is it claimed or implied that the "discharge [of] the abrasive media" must be either "automatic" or "operatively controlled without human intervention." (See Docket No. 1-1, at 28-29.) Again, the abstract of the '410 Patent makes no mention of the refurbishing system as being "highly automated." (See Docket No. 1-1, at 1.) Further, Defendants' references to the prosecution history and the inventor's declaration do not compel the conclusion Defendants advance. In sum, the additional limitations Defendants propose—operative control, uniform distribution, and that the discharge be based on the movement of the barge or transportation system would serve to improperly limit the scope of the claim to the only embodiment disclosed in the specification. See, e.g., Phillips, 415 F.3d at 1323. Therefore, the Court declines to adopt the Defendants' proposed construction and, instead, concludes that no further construction of this term is necessary.

N. "configured to discharge the abrasive media"

The term "configured to discharge the abrasive media" appears in Claims 9, 10, 11, and 12. The parties propose the following competing constructions of this term:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
"configured to discharge the abrasive	operatively controlled to uniformly
media" means that a plurality of nozzles	•
can propel a substance with sufficient	movement of a transportation system
force to remove debris, rust, corrosion,	
etc. from an exterior surface of the barge	

Claim 9 reads, in relevant part:

A refurbishing system for refurbishing a barge, the system, comprising:

a covered blast system having a blast media storage tank which stores abrasive media, the covered blast system further having a blast media discharge system in communication with the blast media storage tank, the blast media discharge system comprising a plurality of blast discharge nozzles which are **configured to discharge the abrasive media** against an exterior surface of the barge;

. . .

a transportation system, the transportation system having rails and a wheeled platform, the rails being positioned within the covered blast system and positioned under blast discharge nozzles of the plurality of blast discharge nozzles, the wheeled platform being operatively connected to the rails and is configured to move the barge through the covered blast system.

(Docket No. 1-1, at 28 (emphasis added).)

Defendants propose the same construction for this term as they did for the term "discharge the abrasive media." The Court's reasoning in Part M, *supra*, applies with equal force to the construction of the term "configured to discharge the abrasive media"

appearing in Claim 9. The meaning of the term "configured" does not appear to be disputed. As used in Claim 9, "configured" means exactly what it says and can be readily understood by a jury to have its plain, ordinary meaning of "to set up for operation or use especially in a particular way." *See* WEBSTER'S, http://unabridged.merriam-webster.com/unabridged/configured. As such, the Court declines to adopt either party's proposed construction and concludes that no further construction of this term is necessary.

O. "causing the blast media discharge system to discharge blast media"

This term appears in Claim 17. The parties propose the following competing constructions of the term "causing the blast media discharge system to discharge blast media":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
If construed, one of ordinary skill understand that the term "causing discharge system to discharge blast effecting the propelling of (e.g. blasting) a substance with sufficient force to remove debris, rust, corrosion, etc. from the exterior of the barge ⁵	distributes abrasive media based on

Claim 17 reads:

A method of refurbishing a barge, the method comprising laterally moving the barge from an inland waterway up an embankment to position on-land, and thereafter longitudinally moving the barge into an enclosed abrasive blast area, the blast area comprising a blast media discharge system, producing relative movement between the barge and the blast media discharge system while **causing the blast media discharge**

⁵ Plaintiff's proposed construction, which is recited here exactly as it appears in the Joint Claim Construction Statement, (Docket No. 78, at 8), and in their Brief, (Docket No. 79, at 27), is unclear to the Court as written.

system to discharge blast media in a predetermined pattern into contact with sides and bottom of the barge, and automatically controlling at least one of the producing relative movement and the **causing the blast media discharge system to discharge blast media** in a predetermined pattern.

(Docket No. 1-1, at 28 (emphasis added).)

Plaintiff argues that this term "simply means that the blast media is discharged to remove debris, rust, corrosion, etc. from an exterior surface of the barge." (Docket No. 79, at 27.) Defendants propose that the term should be construed to mean that the abrasive blast media is discharged "based on the movement of the barge." (Docket No. 80, at 27.) Claim 17 appears to already include this limitation. (See Docket No. 1-1, at 28 ("the method comprising . . . producing relative movement between the barge and the blast media discharge system . . . and automatically controlling at least one of the producing relative movement").) It is therefore unclear to the Court precisely what Defendants seek by their proposed construction. Plaintiff's proposed construction, which itself is unclear, offers little help. It seems that Defendants seeks to construe the broader phrasing of Claim 17 with the summary construction "based on the movement of the barge"—that is, Defendants seem to propose a construction that summarizes both the disputed term and other terms in Claim 17. But such a construction would appear unnecessary when reading Claim 17 in its entirety. Ultimately, the Court is at something of a loss as to what the parties actually dispute here. As such, the Court declines to adopt either party's proposed construction and concludes that no further construction of this term is necessary.

P. "configured to move the barge through the covered blast system"

The term "configured to move the barge through the covered blast system" appears in Claims 9, 10, 11, and 12. The parties propose the following competing constructions of that term:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
<u> </u>	operatively controlled to continuously move the barge through the covered blast system

The body of independent Claim 9 contains the following limitation:

a transportation system, the transportation system having rails and a wheeled platform, the rails being positioned within the covered blast system and positioned under blast discharge nozzles of the plurality of blast discharge nozzles, the wheeled platform being operatively connected to the rails and is configured to move the barge through the covered blast system.

(Docket No. 1-1, at 28 (emphasis added).)

Defendants point to the specification and also reference the prosecution history to argue that "configured to move" must mean "operatively controlled to continuously move." (Docket No. 80, at 35-36.) Plaintiff maintains that the term "simply means that the wheeled platform . . . conveys the barge through the portion of the building in which the blast system is contained." (Docket No. 79, at 28.)

The ultimate dispute here is whether "configured to move" should be construed as "operatively controlled to continuously move." While Claim 9 states that "the wheeled platform be[] operatively connected to the rails," nowhere is it either claimed or implied that the wheeled platform be "operatively controlled" or that it move the

barge "continuously," as Defendants propose. Again, the Court declines to import such limitations from the patent specification into Claim 9.

Furthermore, Defendants' reference to the prosecution history is unpersuasive. Specifically, Defendants first point to the patent examiner's "interview summary" dated February 17, 2010, which reads: "Applicant and his counsel argued that . . . the prior art method differs from the claimed invention in that it is not performed in a continuous manner at a single location. The examiner advised Applicant to amend the claims to include limitations believed to be salient." (Docket No. 80-2, at 85.) Defendants then point to "Amendment C," which is dated April 14, 2010, and in which Plaintiff amended what would become Claim 9 to include the instant disputed claim term. (*See* Docket No. 80-2, at 87, 92.) But that amendment to what would become Claim 9 makes no mention of the terms "operatively controlled" or "continuously." In fact, as best the Court can tell, those terms do not appear at all in Amendment C. Thus, the Court is unpersuaded that the examiner's interview notes somehow require that the instant disputed term be construed in the way Defendants propose.

Plaintiff's proposes construction must be rejected for different reasons. For one, Plaintiff's proposed construction introduces more ambiguity than clarity. For another, the construction Plaintiff proposes for this term is inconsistent with the construction it proposes for the substantially similar term "configured to move the barge into the covered blast system," which will be discussed *infra* Part Q.

Accordingly, the Court must decline to adopt either party's proposed construction. The Court previously found that, as used in Claim 9, "configured" means exactly what it says and can be readily understood by a jury to have its plain, ordinary

meaning of "to set up for operation or use especially in a particular way." Therefore, the Court again concludes that no further construction of this term is necessary.

Q. "configured to move the barge into the covered blast system"

This disputed claim term appears in Claim 19. The parties propose the following competing constructions:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
the transportation system is adapted to convey the barge into a building or housing that contains the blast system	1 ,

The body of Claim 19 contains the following limitation:

a transportation system having rails, the rails being positioned within the covered blast system and positioned under blast discharge nozzles of the plurality of blast discharge nozzles, the transportation system being **configured to move the barge into the covered blast system** wherein the plurality of blast discharge nozzles discharge the abrasive media against an exterior surface of the barge

(Docket No. 1-1, at 28-29 (emphasis added).)

Defendants propose a construction for this term identical to the construction they proposed for "configured to move the barge through the covered blast system" in Claim 9. For the same reasons discussed *supra* Part P, the Court declines to adopt either party's proposed construction and again concludes that no further construction of this term is necessary.

R. "control system which automatically controls the wheeled platform and the blast system"

This disputed term appears in dependent Claim 10. The parties propose the following competing constructions:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	control system which operatively controls the wheeled platform and the blast system

Claim 10 depends on independent Claim 9. Thus, Claim 10 incorporates all of the limitations of Claim 9 and adds a further limitation: "The refurbishing system of claim 9 further comprising a control system which automatically controls the wheeled platform and the blast system." (Docket No. 1-1, at 28.)

The only dispute here appears to be whether the term "automatically" should be construed as "operatively." Defendants argue that "operatively controls" is synonymous with "automatically controls," and propose that "automatically" should be construed as "operatively" based on the patent specification's use of that term. Defendants also point the Court to several items of extrinsic evidence in support of its position. First, Defendants reference the Dictionary of Computer Science, Engineering, and Technology, which defines "automatic" as "property pertaining to a process or device which functions without intervention by a human operator under specified conditions." (Docket No. 80-7, at 4.) Second, Defendants state that the parties' respective experts agree that the term "automatically controlling" means "no human control" or "without human intervention." (Docket No. 80, at 39.) But despite arguing their proposed construction at some length, Defendants fail to explain why "automatically" should necessarily be construed as "operatively." Ultimately, the dispute here appears to be more over the meaning of the term than over its scope, which leads the Court to question whether construction is even proper. Cf. O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360-61 (Fed. Cir. 2008) (advising that courts must resolve disputes over the scope of claim language even if the meanings of the

words themselves are clear). Regardless, the Court finds no reason to rewrite Claim 10 as Defendants propose. The term "automatically" is commonly understood. Indeed, the Defendants' proposed construction would seem to make the language of Claim 10 less clear. Accordingly, the Court concludes that no further construction of this term is necessary.

S. "producing relative movement [between the barge and the blast media discharge system]"

The term "producing relative movement" appears in Claim 17. The parties propose the following competing constructions of that term:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
causing the barge and/or the blast media	the barge continuously moves through the
discharge system to move with respect to	, ,
one another	discharge system

Claim 17 reads:

A method of refurbishing a barge, the method comprising laterally moving the barge from an inland waterway up an embankment to position on-land, and thereafter longitudinally moving the barge into an enclosed abrasive blast area, the blast area comprising a blast media discharge system, **producing relative movement between the barge and the blast media discharge system** while causing the blast media discharge system to discharge blast media in a predetermined pattern into contact with sides and bottom of the barge, and automatically controlling at least one of the producing relative movement and the causing the blast media discharge system to discharge blast media in a predetermined pattern.

(Docket No. 1-1, at 28 (emphasis added).)

Defendants argue that the term "producing relative movement" should be interpreted consistently with the terms "configured to move the barge through the

covered blast system" and "configured to move the barge into the covered blast system." (Docket No. 80, at 33.) Much like the Court reasoned in its discussion of those terms in Parts P & Q, *supra*, nowhere in Claim 17 is it either claimed or implied that the barge must move continuously. Accordingly, the Court declines to import such a limitation into Claim 17.

Furthermore, Plaintiff explains that the relative movement between the barge and the blast media discharge system could occur in several different ways: one, the barge could move while the blast media discharge system remains stationary; two, the barge could remain stationary while the blast media discharge system is moved; or three, both the barge and the blast media discharge system could be moving at the same time. Plaintiff insists that the language in Claim 17 "was clearly designed to encompass all three of those situations." (Docket No. 79, at 30-31.) The Court agrees and, in this instance, finds that Plaintiff's proposed construction appropriately captures the meaning of "producing relative movement," as that term would be understood in the context of the claimed invention by one skilled in the art at the time of the invention. Therefore, the Court construes "producing relative movement between the barge and the blast media discharge system" to mean "causing the barge and/or the blast media discharge system to move with respect to one another."

T. "predetermined pattern"

This term also appears in Claim 17. The parties propose the following competing constructions of the term "predetermined pattern":

Plaintiff's Proposed Construction	Defendants' Proposed Construction
	a uniform distribution pattern determined prior to moving the barge into the abrasive blast area

Once again, Claim 17 reads:

A method of refurbishing a barge, the method comprising laterally moving the barge from an inland waterway up an embankment to position on-land, and thereafter longitudinally moving the barge into an enclosed abrasive blast area, the blast area comprising a blast media discharge system, producing relative movement between the barge and the blast media discharge system while causing the blast media discharge system to discharge blast media in a **predetermined pattern** into contact with sides and bottom of the barge, and automatically controlling at least one of the producing relative movement and the causing the blast media discharge system to discharge blast media in a **predetermined pattern**.

(Docket No. 1-1, at 28 (emphasis added).)

Defendants argue that "[t]he specification requires that the predetermined pattern of abrasive media be a uniform distribution." (Docket No. 80, at 32.) Defendants further argue that "[t]he uniform distribution pattern must be determined prior to moving the barge into the abrasive blast area." (Docket No. 80, at 32.) Plaintiff disagrees, insisting that "[t]he phrase 'predetermined pattern' is simple, straightforward, and unambiguous," and that there is no basis to import the limitations proposed by Defendants. (Docket No. 79, at 31-31.) In this regard, Plaintiff posits that "there is no reason why the 'predetermined pattern' cannot be decided <u>after</u> the barge is moved into the blast area, but <u>before</u> blasting begins." (Docket No. 81, at 16 (emphasis in original).)

Webster's Dictionary defines "predetermine" as "to determine beforehand" or "to settle in advance." WEBSTER'S, http://unabridged.merriam-webster.com/unabridged/predetermined. However, that the pattern for distribution must be "determined beforehand" does not mean that the pattern must be "determined prior to moving the barge into the abrasive blast area," as Defendants suggest. Thus, the Court finds no reason to import this limitation into the language of Claim 17.

Furthermore, that the specification discloses a preferred embodiment where the "discharge nozzles [are] configured to uniformly distribute the abrasive media" does not require that the term "predetermined pattern" be construed as "a uniform distribution pattern." Again, the Defendants' proposed construction seeks to impermissibly import limitations from the patent specification into Claim 17, thereby limiting the scope of the patent claim to the preferred embodiment disclosed in the specification. *See, e.g.*, *Phillips*, 415 F.3d at 1323.

Plaintiff's proposed construction offers little help because it effectively ignores the term "predetermined." The Court agrees with Defendants that every term must be given some effect. *See Bicon*, 441 F.3d at 950. The Court is of the opinion that the word "predetermined" can be readily understood by a jury to have its plain, ordinary meaning of "determined beforehand" or "settled in advance." The Court reads Claim 17 merely as requiring that the pattern be determined before the blast media is discharged. Therefore, in giving effect to the term "predetermined," the Court construes the phrase "to discharge blast media in a predetermined pattern," for purposes of Claim 17, to mean "to discharge blast media in a pattern determined before the blast media is discharged."

U. "automatically controlling"

The term "automatically controlling" appears in Claim 17. The parties' propose the following competing constructions of this disputed claim term:

Plaintiff's Proposed Construction	Defendants' Proposed Construction
[The term need not be construed.]	operatively controlling the activation of

Defendants advance essentially the same argument for this term as it did for the term "automatically controls" in Claim 10. (*See* Docket No. 80, at 38-39.) For the same reasons discussed *supra* Part R, the Court finds no reason to rewrite this claim term.

CONCLUSION

For the reasons discussed herein, the Court has determined that the disputed claims are to be construed pursuant to this Claims Construction Memorandum Opinion and Order.

IT IS SO ORDERED.

Date: December 18, 2013

Thomas B. Russell, Senior Judge United States District Court

cc: Counsel