

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

MANNATECH, INC.,

Plaintiff,

v.

WELLNESS QUEST, LLC, *et al.*,

Defendants.

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Civil Action No. 3:14-CV-2497-N

ORDER

This Order addresses the issue of claim construction of the patents in suit, U.S. Patent Number 7,157,431 (“the ’431 Patent”) and U.S. Patent Number 7,202,220 (“the ’220 Patent”). The Court has reviewed the parties’ briefs and all related filings and evidence, including the patents in suit, the specifications, the patent prosecution histories to the extent it was submitted by the parties, as well as the parties’ proposed claim constructions. The Court hereby construes the disputed claims according to *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 360 (1996).

I. BACKGROUND

A. The Patents in Suit

The ’220 Patent, entitled “Composition of Plant Carbohydrates as Dietary Supplements,” was issued by the USPTO on April 10, 2007. It was assigned to Mannatech, which is the sole owner of the entire right, title, and interest in the ’220 Patent. The ’431 Patent, entitled “Composition of Plant Carbohydrates as Dietary Supplements,” was issued

by the USPTO on January 2, 2007. It was also assigned to Mannatech, which is the sole owner of the entire right, title, and interest in the '431 Patent.

The two patents in suit cover very similar subject matter. Both disclose and claim the use and formulations of dietary supplements containing saccharides. Saccharides are carbohydrate compounds that occur in nature and can be extracted from various plants, such as aloe vera. In addition, saccharides may exist in various forms including: a monomer form, which is an individual saccharide molecule; an oligomer form, which is a short chain of saccharides connected together by chemical bonds; and a polymeric form, which is a long chain of saccharides connected together by chemical bonds. According to the patents, use of saccharide containing dietary supplements can promote good health.

II. APPLICABLE LAW

A. Principles of Claim Construction

Claim construction is a question of law for the Court, *see Markman*, 517 U.S. at 391, although it may involve subsidiary factual questions. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 836-39 (2015). In construing the claims of a patent, the words comprising the claims “are generally given their ordinary and customary meaning” as understood by “a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (citations and internal quotation marks omitted). Accordingly, courts must determine the meaning of claim terms in light of the resources that a person with such skill would review to understand the patented technology. *See id.* at 1313 (citing *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133

F.3d 1473, 1477 (Fed. Cir. 1998)). First, “the person of ordinary skill in the art is deemed to read the claim term . . . in the context of the entire patent, including the specification.” *Id.* If the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess . . . , the inventor’s lexicography governs.” *Id.* at 1316. Likewise, if “the specification . . . reveal[s] an intentional disclaimer, or disavowal, of claim scope by the inventor . . . [,] the inventor’s intention, as expressed in the specification, is regarded as dispositive.” *Id.* (citation omitted). While the claims themselves provide significant guidance as to the meaning of a claim term, the specification is generally dispositive as “it is the single best guide to the meaning of a disputed term.” *Id.* at 1314-15 (internal quotation marks omitted).

In addition to the specification, courts must examine the patent’s prosecution history – that is, the “complete record of the proceedings before the PTO and includ[ing] the prior art cited during the examination of the patent.” *Id.* at 1317 (citation omitted). “Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.” *Id.* (citation omitted). In particular, courts must look to the prosecution history to determine “whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* (citations omitted). “[W]here the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003).

Finally, in addition to evidence intrinsic to the patent at issue and its prosecution history, 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.’” *Phillips*, 415 F.3d at 1317 (quoting *Markman*, 52 F.3d at 980). In general, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.* at 1318.

When the intrinsic evidence, that is the patent specification and prosecution history, unambiguously describes the scope of a patented invention, reliance on extrinsic evidence, which is everything outside the specification and prosecution history, is improper. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). While the Court may consult extrinsic evidence to educate itself about the invention and relevant technology, it may not rely upon extrinsic evidence to reach a claim construction that is clearly at odds with a construction mandated by the intrinsic evidence. *See Key Pharm. v. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998).¹

B. Prior Constructions of the Claims of the Patents in Suit

The Court notes that this is not the first time these patents have been involved in litigation in the Northern District of Texas. The patents and construction of the claims have previously been considered in *Mannatech v. Glycobiotics, International, Inc.*, 513 F. Supp. 2d 754 (N.D. Tex. 2007) (“*Mannatech I*”), in 2007, and *Mannatech, Inc. v. Techmedica*

¹Because the Court here is able to construe the claims based solely on the intrinsic evidence, it finds no need to make *Teva* fact findings.

Health, Inc., Civil Action No. 3:06-CV-0813-P (N.D. Tex. 2009), Findings and Recommendation of the United States Magistrate Judge [dkt. 109], *adopted by* Order [dkt. 116] (“*Mannatech II*”), in 2009. The Court has reviewed the disputed claim terms that were construed in the previous litigation that was presented by the parties in this matter. These constructions provide persuasive authority and constructive guidance to the Court in construction of the claims in this matter, but the previous constructions are not binding on the Court. Accordingly, the Court provides due deference to these previous claim constructions.

III. CONSTRUCTION OF THE PATENT CLAIMS AND TERMS

A. The Disputed Claim Phrases

The parties dispute the meaning of certain phrases used in the claim language of the patents in suit. The parties disagree to as to the meaning of the following phrases:

“dietary supplement composition,”

“isolated and purified,”

“acetylated mannose,”

“saccharides,”

“monomeric, oligomeric, and/or polymeric forms,” and

“bio-absorption aid.”

The full language of all of the claims of the patents in suit are in the record before the Court and the Court has fully reviewed all the claims of the patents, including those containing the disputed phrases. The Court finds no need to repeat the full language of those

claims in this order.

B. Construction of Disputed Claim Phrases

1. “dietary supplement composition”

The parties proposed constructions of this disputed phrase are:

Plaintiff’s Proposed Construction: a product composed of two or more different substances that is intended to promote good health by supplementing the diet with vitamins, minerals, herbal extracts, saccharides, or other non-toxic nutrients.

Defendants’ Proposed Construction: combination of two or more isolated and purified saccharides that promotes good health in mammals.

The Court is of the opinion that the phrase does not need construction because the phrase is one that would be easily understood by the jury and because the words of the phrase are used with their normal meanings. In addition, the Court notes that this disputed phrase first appears in the preamble of the claims and as such would only need construction if this was necessary to bring life to the body of the claim language or if it recited essential structure needed to give meaning to the claim. That is not the case presented here.

The words of the disputed phrase are not used in a technical manner that a juror would not understand nor are they given any special meaning in the patents in suit. A “dietary supplement composition” is just that, i.e. a composition that is intended to act as a supplement to ones diet, presumably with some beneficial effect. The parties’ own proposed constructions confirm this common understanding because both proposed constructions include this concept.

But, the parties go on to include additional information regarding the possible components of the dietary supplement composition. Mannatach includes information about vitamins, minerals, herbal extracts, saccharides, and other non-toxic nutrients possible components of the composition. Defendants include a requirement that the composition contain two or more saccharides.

The Court finds this additional information unnecessary. First, there is no need to go beyond the normal meanings of the words of the disputed phrase to include specific types of components in the composition, and, second, the claims already speak for themselves as to what components are required in the dietary supplement composition. Inclusion of additional components, by adopting the parties' proposed constructions, would unnecessarily confuse what components are required to be in the composition. For example, some of the claims of the patents require a combination of a few saccharides and others go on to expand upon this relatively simple claim to include other components such as bio-absorption aids and various vitamins and minerals. Including these specific component types in the construction of the preamble language of all of the claims confuses the matter of required components of the claimed compositions because the language would differ from the requirements of the claim limitations included in the body of the claim.

In addition, since this disputed phrase first occurs in the preamble to the claims, there is no need to construe this preamble language unless this is necessary to give life to the claim body or to provide necessary structure to the claim body. This is not the case here. All of the claims have claim body language that fully sets out the claim with a structure and life of

their own. For example, Claim 1 of the '431 Patent reads as follows:

A dietary supplement composition comprising:
a nutritionally effective amount of isolated and purified acetylated mannose;
and a nutritionally effective amount of at least five isolated and purified
saccharides selected from: galactose, glucose, mannose, xylose, N-
acetylneuraminic acid, fucose, N-acetylgalatosamine, N-acetylglucosamine,
arabinose, glucuronic acid, galacturonic acid, iduroninc acid, and
arabinogalactam.

'431 Patent at 20:47-55.

This claim language already speaks for itself and provides all the structure needed in the claim. Construing the preamble “dietary supplement composition” language is not necessary to bring meaning to this claim. Since the claims have a structure of their own without construction of this disputed phrase, it is clear that the preamble language is simply an indication of the intended use of the claimed inventions and not a phrase that needs construction.

For these reasons, the Court holds that no construction of “dietary supplement composition” is needed.

2. “isolated and purified”

The parties proposed constructions of this disputed phrase are:

Plaintiff’s Proposed Construction: Separated from other, unwanted substances. Isolated and purified does not mean that the saccharides have to be individually isolated and separated from each other.

Defendants’ Proposed Construction: “Isolate” means, in general, to free from other components in a mixture by precipitation, extraction, crystallization, or chromatography. To

make “pure” means to reduce to the simplest form of a compound; similarly, to “purify” means in general to make a pure component or compound.

The Court agrees with Mannatech’s proposed construction, which is also the same construction given to this disputed phrase in *Mannatech II*. This construction captures the correct meaning of “isolated and purified,” as it is used in the context of the patents in suit and the area of science addressed by the patents in suit. It also correctly addresses the issue of whether or not the individual saccharides are separated from each other.

Defendants’ proposed construction does not correctly capture these ideas. Instead Defendants’ proposed construction uses strict definitions of “isolate” and “pure” that are not necessarily applicable to the field of the inventions or supported by the patents’ specifications. Defendants’ proposed construction applies rigorous meanings to these words. Application of these strict definitions to the constructions results in a construction of “isolate and purify” that, without explicitly stating so, requires an isolated and purified compound to be essentially one hundred percent pure, requires the individual saccharide monomers to be separated from their oligomer and polymer forms, and in the case of claim limitations reciting mixtures of saccharides, requires these to be isolated from each other. These meanings may be correct in certain contexts, but they are not correct in this context, especially when the claims are read in light of the specifications. Instead the specifications disclose that saccharides may be isolated and purified from source plants by various methods and that what is needed to use the saccharides in a dietary composition is that the saccharides be separated from other unwanted substances, such as plant fibers or harmful impurities.

Absolute purity is not required or described by the specifications of the patents in suit and to impose Defendants' proposed construction on the claim language would not be construing the claims in light of the specifications.

In addition, Defendants' proposed construction also improperly imposes specific purification methods on the construction of "isolate and purify." Under Defendants' construction, the saccharides must be purified by precipitation, extraction, crystallization, or chromatography. While these are very common methods of purification of compounds, there is nothing in the patents that requires any particular method of purification of saccharides. So, there is no support to require that the saccharides be subjected to precipitation, extraction, crystallization, or chromatography.

On the other hand, Mannatech's proposed construction correctly captures the meaning of this disputed phrase. As just discussed, when this claim language is read in light of the specifications, to isolate and purify a saccharide means that the saccharide is separated from other unwanted substances, so that it is suitable for use in a dietary supplement. That is all that is contemplated and discussed by the specifications of the patents in suit and all that should be imposed on the claim language.

Mannatech's construction also indicates that the isolated and purified sacharride need not be individually isolated and separated, which was included in the construction of the court in *Mannatech II*. Mannatech argues that this is necessary to specify that an isolated and purified saccharide can be a mixture of monmer, oligomer, and polymer forms of the saccharide.

The Court agrees with Mannatech on this point. When read in light of the specifications this assertion is correct. The specifications repeatedly describe the invention as containing mixtures of monomeric, oligomeric, and polymeric saccharides. The patents repeatedly discuss saccharides in general as existing in these various forms. When the claim language is read in light of the specification, it is clear that when the inventor referred to a saccharides they were referring to all of the forms that a saccharide may exist in and that there is no particular requirement to isolate and purify a particular form of a saccharide.

In addition, the requirement that the saccharides need not be separated from each other applies to the mixtures of saccharides claimed as a limitation. For example, the second limitation of Claim 1 of the patents requires at least five other saccharides from a possible list. As indicated by the patents, for example in Table 3, many natural sources of saccharides do not contain only one saccharide. Instead, the natural source itself produces a mixture of saccharides, and this mixture could be used to be the saccharide source for the claimed inventions. There is no indication that there is any need to separate these different types of saccharides before including them in the dietary supplement composition. What is necessary is that they be separated from unwanted substances. So, Mannatech's proposed construction, which does not require the individual saccharides to be separated from each other, is just as correct and applicable to the claims in the case of separating the different types of saccharides as it is to separating the different forms of one type of saccharide.

For the foregoing reasons, the Court construes "isolated and purified" to mean "separated from other, unwanted substances. Isolated and purified does not mean that the

saccharides have to be individually isolated and separated from each other.”

3. “acetylated mannose”

The parties proposed constructions of this disputed phrase are:

Plaintiff’s Proposed Construction: A derivative of mannose containing an acetyl group (CH₃CO-) in the form of a monomer, or as a constituent part of an oligomer and/or polymer.

Defendants’ Proposed Construction: The sugar mannose with an acetyl group (CH₃-C=O) bonded to it.

The Court agrees with Mannatech’s proposed construction. The key difference between the two proposed constructions is that Defendants’ construction requires acetylated mannose to be in its monomeric form only and Mannatech’s proposed construction allows the acetylated mannose to be in monomeric, oligomeric, and/or polymeric forms.

In support of its argument that the acetylated mannose can be in any of these forms or a mixture of these forms, Mannatech points out to the Court that the specifications repeatedly discuss that sugars, like acetylated mannose, can and do exist in these various forms; that the invention can be made from all forms of these sugars; and that a person of ordinary skill in that art would understand that the “acetylated mannose” of the patent claims refers to all of these possibilities.

In support of their assertion that the “acetylated mannose” of the patent claims refers only to the monomeric form, Defendants argue that a person of ordinary skill in the art would understand that a reference to acetylated mannose is only referring to the monomeric form

of this sugar.

The Court agrees with Mannatech in its assertion that the intrinsic evidence, in particular the patent specifications, indicates that the acetylated mannose is not limited to the monomeric form only. The specifications of the patents repeatedly indicate that sugars exist in these various forms. For example the '431 Patent states, “a first embodiment of the invention provides a dietary supplement for providing nutritional product saccharides comprising . . . at least one saccharide, in monomeric, oligomeric or polymeric and derivatized or underivatized form,” '431 Patent at 5:60-67, and “the saccharides of the invention can be found in nature as mono-, oligo-, and/or polysaccharides. Thus, the compositions of the invention can contain the saccharides in their monomeric, oligomeric and/or polymeric forms” '431 Patent at 8:19-22. These are just two examples of the many times the patent references and discusses the fact that the saccharides of the invention can be in any of these forms.

In addition, the specifications explicitly explain that, as it is used in the patents, “the term ‘carbohydrate’ is used interchangeably with the terms ‘saccharide’, ‘polysaccharide’, ‘oligosaccharide’ and ‘sugar’” '431 Patent at 8:57-59. So, in addition to repeatedly stating that the invention can be made from any of the possible saccharide forms, the inventors specifically state that, as far as the words of the patent are concerned, there is no effective difference between a saccharide, an oligosaccharide, and a polysaccharide.

Defendants rely heavily on their expert, Dr. Goux, to support their assertion that the “acetylated mannose” that is referred to in the claims is only the monomeric form of this

saccharide. Dr. Goux asserts that at the time of the invention a person having ordinary skill in the art would understand that “acetylated mannose” referred specifically to the monomeric form of mannose that has been derivatized with an acetyl group; that the polymeric form of mannose is mannan; and that if the inventors wished to include polymeric mannose in the claims, then mannan would have been the correct description of the this compound.

Even if the assertions of Dr. Goux are all correct, the Court is not persuaded by this argument. First, the Court notes that Dr. Goux’s testimony regarding this issue is extrinsic evidence, but the specification’s discussion of the nature of the sacchrides of the invention is intrinsic evidence. Considering the specification is usually the one best place to turn to for explanation of claim term meanings and that if the intrinsic record fully explains the meaning of a claim term it is unnecessary and improper to rely on extrinsic evidence to contradict this meaning, Dr. Goux’s testimony does not carry much weight if the specification already provides a meaning for the disputed claim language.

In this case, not only does the specification repeatedly and consistently describe the invention as being composed of all the saccharide forms, it also goes on to provide a specific definition that equates the three possible forms as equivalents. Dr. Goux’s testimony cannot be used to overcome what the patent specifications state. Defendants are correct in their assertion that “acetylated mannose” itself is not specifically defined in the specifications. The definition only explicitly defines the general meaning of “carbohydrates,” “saccharides,” “oligosaccharides,” “polysaccharides,” and “sugars.” But, this general definition, combined with the repeated indication that any form of the saccharides can be used in the invention,

supports an understanding that the inventors did not attempt to make any distinction between the various possible forms of any particular saccharide, i.e. a reference to one form includes all forms.

Both parties also assert claim differentiation arguments to support their respective claim constructions. These arguments are based on Independent Claim 1 and Dependent Claim 9. Claim 1 does not make any requirement as to a monomeric, oligomeric, or polymeric form of the various required saccharides. Claim 9, which depends on Claim 1, requires that “the acetylated mannose and the at least five isolated and purified saccharides are provided in monomeric, oligomeric, and/or polymeric forms.” ’431 Patent at 22:7-10. Defendants argue that Claim 9 must be narrower than Claim 1; that the inventors asserted that this was the case; and that because of this Claim 1 must refer to only the monomer form of acetylated mannose. Mannatech argues that under its construction Claim 1 is broader than Claim 9 and that application of Defendants’ proposed construction to these claims would negate the oligomeric and polymeric language of Claim 9.

The Court does not find either claim differentiation argument persuasive. Under Mannatech’s interpretation of “acetylated mannose” and “saccharide,” Claim 1 would already include the oligomer and polymeric forms of the saccharides. This would render Claim 9 redundant. Under Defendants’ proposed construction of these terms, Claim 1 would include only the monomeric form of “acetylated mannose.” This would make the monomeric language of Claim 9 redundant. In addition, it is unclear in the record before the Court whether a dependent claim requiring a polymeric form of molecule instead of the monomeric

form that is required by the independent claim is broader or narrower than the dependent claim. On one hand, the polymer could be considered a more specific form of the monomer, but on the other hand, the polymer could be considered a completely distinct molecule from the monomer. This issue is not made any more clear by the fact that Claim 9 allows the saccharides to be in a mixture of the various forms because it recites “and/or,” indicating that various combinations of the different forms are claimed under this dependent claim.

Considering these issues, the Court is of the opinion that, regardless of the inventors’ assertion and the examiner’s assumed understanding, that Claim 9 is in fact broader in scope than Claim 1, there may not be any operative difference between these two claims. Considering this, neither parties claim differentiation argument assists the Court in construction of this disputed phrase.

For these reasons, the Court construes “actylated mannose” to mean “a derivative of mannose containing an acetyl group (CH₃CO-) in the form of a monomer, or as a constituent part of an oligomer and/or polymer.”

4. “saccharides”

The parties proposed constructions of this disputed phrase are:

Plaintiff’s Proposed Construction: carbohydrates or sugars which can be in the form of mono-, oligo-, and/or polysaccharides.

Defendants’ Proposed Construction: monosaccharides and not polysaccharides or oligosaccharides.

The parties’ dispute over the term “saccharide” is focused on the issue of whether or

not the saccharides of the claims of the patents in suit can be in the monomer, oligomer, and/or polymer forms, as is asserted by Mannatech, or if the saccharides must be in the monomer form only, as asserted by Defendants. The arguments and assertions of the parties regarding this disputed phrase are the same as those discussed in the construction of “acetylated mannose.” The Court construed acetylated mannose to include all possible forms of this saccharide. These considerations are just as applicable, if not more applicable, to the more generic term “saccharide.” So, without readdressing the same issues, the Court construes “saccharide” to mean “carbohydrates or sugars which can be in the form of mono-, oligo-, and/or polysaccharides.”

5. “monomeric, oligomeric and/or polymeric forms”

The parties proposed constructions of this disputed phrase are:

Plaintiff’s Proposed Construction: In the form of a monomer, an oligomer and/or a polymer where a “monomer” is a single molecule that can be combined with a number of like or unlike molecules to form an oligomer or a polymer; an “oligomer” is a single molecule made up of two, three or four like or unlike monomers; and a “polymer” is a single molecule made up of many repeating structural units of like or unlike monomers.

Defendants’ Proposed Construction: monomeric form only.

Like in the construction of “saccharide,” the issue in dispute for this construction is the same issue already presented and discussed in the construction of “acetylated mannose.” So, the Court will construe the disputed phrase in agreement with the constructions of “acetylated mannose” and “saccharide.” In addition, Defendants do not assert any

disagreement as to Mannatech's proposed definitions of monomer, oligomer, and polymer. Instead the Defendants assert that oligomer and polymer should not be included in the construction. The Court is of the opinion that the disputed phrase should be construed in agreement with the other related disputed phrases and using Mannatech's definitions of monomer, oligomer, and polymer.

So, the Court construes "monomeric, oligomeric and/or polymeric forms" to mean "in the form of a monomer, an oligomer and/or a polymer where a 'monomer' is a single molecule that can be combined with a number of like or unlike molecules to form an oligomer or a polymer; an 'oligomer' is a single molecule made up of two, three or four like or unlike monomers; and a 'polymer' is a single molecule made up of many repeating structural units of like or unlike monomers."

6. "bio-absorption aid"

The parties proposed constructions of this disputed phrase are:

Plaintiff's Proposed Construction: A first substance which enhances the body's ability to absorb a second substance.

Defendants' Proposed Construction: aid whereby a substance is absorbed by a mammal's body.

The Court agrees with Mannatech's proposed construction of this disputed phrase. Defendants argue that Mannatech's proposed construction may lead to jury confusion because it refers to a first and second substance and, as asserted by Defendants, the jury may think this is referencing digestion products of the composition and not products of the dietary

supplement composition. Defendants do not explain how a juror would come to this conclusion, they simply make this assertion. In addition, Defendants' proposed construction does not attempt to define "aid." It simply repeats this word without a full explanation as to the function of a bio-absorption aid.

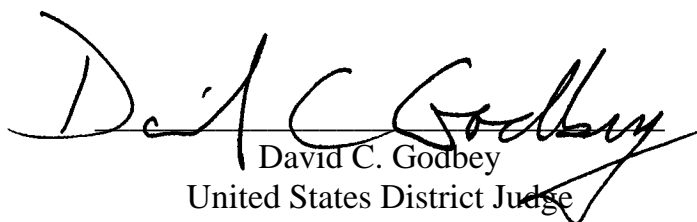
Mannatech's proposed construction, however, correctly describes a bio-absorption aid. A bio-absorption aid is a substance that helps the body absorb another substance. This is exactly what the Plaintiff's proposed construction explains.

For these reasons, the Court construes "bio-absorption aid" to mean "a first substance which enhances the body's ability to absorb a second substance."

IV. AGREED TERMS/PHRASES

The Court notes that the parties have submitted to the Court certain terms in which the parties assert construction is necessary, but that the parties agree to the construction of those remaining terms and phrases. The Court approves and adopts the agreed constructions of the parties.

Signed July 20, 2015.


David C. Godbey
United States District Judge