

UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

URETEK HOLDINGS, INC., URETEK
USA, INC. and BENEFIL WORLDWIDE
OY,

Plaintiffs,

v.

Case No: 8:15-cv-472-T-36JSS

YD WEST COAST HOMES, INC.,
GEOPOLYMER SINKHOLE
SPECIALIST, INC., YAMIL
DOMINIGUEZ and JOHN DOES 1-5,

Defendants.

ORDER

This cause comes before the Court upon the claim construction briefs submitted by Plaintiffs/Counter-Defendants Uretek Holdings, Inc., Uretek USA, Inc., and Benefil Worldwide Oy (collectively, “Plaintiffs”), and Defendants/Counter-Plaintiffs YD West Coast Homes, Inc., Geopolymer Sinkhole Specialist, Inc., and Yamil Dominguez d/b/a YD West Coast Homes and d/b/a Geopolymer Sinkhole Specialist Inc. (collectively, “Defendants”) (Docs. 47, 48). Each party responded in opposition to the other’s opening brief (Docs. 52, 50). On April 21, 2016, the Court held a claim construction hearing. *See* Doc. 59; *see also* Doc. 61 (“Tr.”). Having reviewed the parties’ submissions and heard the arguments of counsel, and being fully advised in the premises, the Court now construes the disputed claim terms as set forth herein.

I. BACKGROUND

This case concerns, *inter alia*, the alleged infringement of United States Patent No. 6,634,831 (the “’831 Patent”). The ‘831 Patent is entitled “Method for Increasing the Bearing Capacity of Foundation Soils for Built Structures,” and teaches a technique for increasing the

bearing capacity of foundation soils by injecting expandable substances into foundation soils to compact the contiguous soil. *See* '831 Patent at Abstract.

Claim 1 is representative and recites as follows:

1. A method for increasing the bearing capacity of foundation soils for built a structures comprising:

providing a plurality of holes spaced from each other, under the foundation of a built structure, deep in the foundation soil;

injecting into the foundation soil, through said holes, a substance which expands as a consequence of a chemical reaction;

producing compaction of the foundation soil contiguous to the injection zone due to the expansion of said substance injected into the soil;

constantly monitoring level variations of the soil and/or built structures overlying the injection zone to detect the moment when the built structures and/or the solid surface, overlying the injection zone, begins to raise which is the moment in which the compaction of the foundation soil has reached levels generally higher than a required minimum value at which the soil lying below and around said injection zone withstands and rejects dynamic and static weights exerted thereon by said built structures and by overlying and adjacent soil masses, and

wherein the expansion of the injected substance is very fast with a potential increase in volume of the expanded substance being at least five times the volume of the substance before expansion.

See Doc. 1, Exh. A.

Plaintiffs allege that Defendants infringed claims 1, 2, 4, 15, 20, 21, and 22 of the '831 Patent. *See* Doc. 47 at 6. The parties now dispute the scope and meaning of four claim terms: "deep," "very fast," "foundation soil," and "immediate."

II. LEGAL STANDARD

Claim construction is an issue of law reserved for the district court. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (*en banc*), *affirmed*, 517 U.S. 370 (1996). To ascertain the meaning of claims, the district court uses three primary sources constituting the intrinsic record: (1) the claims, (2) the specification, and (3) the prosecution history. *Id.* at 979.

Claim construction begins with the language of the claims. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005); *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (“[w]e look to the words of the claims themselves . . . to define the scope of the patented invention.”). “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*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)); *see also Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (“A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention.”). The words of a claim generally are given the ordinary and customary meaning they have to persons of ordinary skill in the art in question at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Vitronics*, 90 F.3d at 1582. Moreover, claim terms are presumed to be used consistently throughout the patent, such that the usage of a term in one claim can often illuminate the meaning of the same term in other claims. *Phillips*, 415 F.3d at 1314-15; *Vitronics*, 90 F.3d at 1582.

While the language of the claims is the first source for interpretation, “[t]he claims, of course, do not stand alone.” *Phillips*, 415 F.3d at 1315. Rather, they are part of a fully integrated written instrument that includes a specification. *Id.* (citing *Markman*, 52 F.3d at 978).

Accordingly, “claims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman*, 52 F.3d at 979).

The prosecution history is another component of the intrinsic evidence used to supply the proper context for claim construction. *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004). The prosecution history is comprised of the complete record of the proceedings before the United States Patent and Trademark Office (“PTO”), including prior art cited during examination. *Phillips*, 415 F.3d at 1317; *Vitronics*, 90 F.3d at 1582-83; *Markman*, 52 F.3d at 980. It also includes communications between the examiner and the applicant that may reveal if the applicant limited the invention in the course of prosecution, with the effect of making the claim scope narrower than it would otherwise be. *Phillips*, 415 F.3d at 1317. The history can indicate the inventor’s understanding of the invention, and “whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*

In addition to intrinsic evidence, courts may also rely on extrinsic evidence, which “consists of all evidence external to the patent and prosecution history.” *Markman*, 52 F.3d at 980. Such evidence typically includes dictionaries, treatises, and testimony of the inventor or experts. *Id.* at 980. Extrinsic evidence, however, is “less significant than the intrinsic record in determining the legally operative meaning of claim language,” and is appropriate only when the available intrinsic evidence is not dispositive. *Phillips*, 415 F.3d at 1317, 1319.

III. DISCUSSION

At the outset, the Court notes that the ‘831 Patent has been litigated through the claim construction phase in two other instances. *See Uretek USA, Inc. v. Applied Polymerics, Inc.*, Case No. 3:11-cv-542 (E.D. Va.) (“*Applied Polymerics*”); *Uretek Holdings, Inc. v. Hayward Baker, Inc.*,

Case No. 8:13-cv-430 (M.D. Fla.) (“*Hayward Baker*”). In *Applied Polymerics*, the court construed two terms at issue here: “deep” and “foundation soil.” See *Applied Polymerics*, Doc. 56. In *Hayward Baker*, a court in this district also construed two terms at issue here: “deep” and “very fast.” See *Hayward Baker*, Doc. 52. Subsequent to the issuance of the claim construction orders in those cases, however, the Supreme Court issued its opinion in *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014) (“*Nautilus*”), which announced a new standard for evaluating the definiteness requirement of 35 U.S.C. § 112. Therefore, while the Court recognizes the importance of uniformity in the treatment of a given patent and will afford due deference to the constructions given by the other courts, it will also consider the parties’ positions with fresh eyes to the extent the parties have raised new arguments concerning the construction and scope of the previously construed terms.

A. Terms challenged as indefinite

Defendants challenge two terms—“deep” and “very fast”—as indefinite. For the reasons stated below, however, the Court at this stage will consider Defendants’ indefiniteness challenges only to the extent necessary to determine whether the challenged terms are amenable to any proposed construction.

1. Indefiniteness standard

A patent must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b). A claim is invalid for indefiniteness if its language, viewed in light of the specification and prosecution history, “fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus*, 134 S. Ct. at 2124. A patent is presumed to be

valid, *see* 35 U.S.C. § 282(a), so an invalidity defense must be proved by clear and convincing evidence, *see Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011).

Although “general principles of claim construction” apply in the face of an allegation of indefiniteness, *Biosig Instr., Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (quotation marks and citation omitted), “[s]everal well-settled principles [] tend to discourage rulings on indefiniteness at the *Markman* stage,” *CSB-System Int’l, Inc. v. SAP America, Inc.*, Case No. 10-cv-2156, 2011 WL 3240838, at *17 (E.D. Pa. July 28, 2011). *First*, the burden of proof is higher for establishing indefiniteness than it is for establishing a term’s construction. *Second*, the legal standard for evaluating indefiniteness is different from that for determining a term’s construction. These differences arise from the fact that “unlike a *Markman* proceeding that gives meaning to patent claims, indefiniteness invalidates the claims entirely.” *Id.* at *18. Indeed, perhaps in recognition of these fundamental differences, the Federal Circuit has made clear that “[it has] certainly not endorsed a regime in which validity analysis is a regular component of claim construction.” *Phillips*, 415 F.3d at 1327.

In light of these considerations, numerous courts around the country, including courts in this district, have declined to make invalidity determinations at the claim construction stage. *See, e.g., Johnson & Johnson Vision Care, Inc. v. Ciba Vision Corp.*, 540 F. Supp. 2d 1233, 1243 (M.D. Fla. 2008) (“The Court must first attempt to determine what the claim means before it can determine whether it is invalid for indefiniteness. . . . The issue of indefiniteness is not properly before the Court when construing claims.”); *Intergraph Hardware Techs. Co. v. Toshiba Corp.*, 508 F. Supp. 2d 752, 773 n.3 (N.D. Cal. 2007) (“[The] indefiniteness argument is inappropriate at the claim construction stage.”); *Pharmastem Therapeutics, Inc. v. Viacell, Inc.*, Case No. 02-cv-148, 2003 WL 124149, at *1 n.1 (D. Del. Jan. 13, 2003) (deferring ruling on the defendants’

indefiniteness defense at the claim construction stage because “it is clear that the court must first attempt to determine what a claim means before it can determine whether the claim is invalid for indefiniteness.”); *CSB-System Int’l*, 2011 WL 3240838, at *18.

The Court agrees with those courts that have declined to rule on indefiniteness at the *Markman* stage, and finds that it would be more appropriate and logical to defer the full consideration of any potential indefiniteness challenge to the summary judgment stage, after all fact and expert discovery has been completed. Therefore, for purposes of this order, the Court will consider Defendants’ indefiniteness arguments “to determine only whether such claims are amenable to construction and, if so, what construction is appropriate for the claimed ambiguous terms in light of the present intrinsic and extrinsic evidence provided,” *CSB-System Int’l*, 2011 WL 3240838, at *18; *see also Vapor Point LLC v. Moorhead*, Case No. 11-cv-4639, 2013 WL 11275459, at *16 (S.D. Tex. Dec. 18, 2013). Any construction given by the Court shall be without prejudice to Defendants’ ability to challenge the validity of the claims for indefiniteness at the summary judgment stage. *Accord CSB-System Int’l*, 2011 WL 3240838, at *18.

2. “deep”

The term “deep” is used in the ‘831 Patent to describe the depth of the holes through which the expandable substance is injected. *See, e.g.*, ‘831 Patent, Claim 1 (“providing a plurality of holes spaced from each other, under the foundation of a built structure, *deep* in the foundation soil”) (emphasis added). Plaintiffs argue that the term “deep” means “at sufficient depth within the foundation soil and away from the immediate vicinity of the foundation so as to affect the foundation soil,” whereas Defendants argue only that the term is indefinite.

The Court will adopt Plaintiffs’ proposed construction, because the term “deep” is amenable to construction and Plaintiffs’ proposed construction is supported by the intrinsic

evidence. *First*, the claim language makes clear that the hole is at some depth “in the foundation soil.” ‘831 Patent, Claim 1. *Second*, as noted in the prosecution history, “injection[s] are provided in depth so as to affect the foundation soil” Doc. 47-7 at 9. Because the injections are made through the holes, the holes therefore must also be at a depth “so as to affect the foundation soil.” *Finally*, in the January 21, 2002 Amendment, the inventor distinguished the invention claimed in the ‘831 Patent from certain prior art on the basis that the prior art did not “hint[] whatsoever to an in-depth extension, *away from the immediate vicinity of the foundation in the foundation soil*, of the injection area.” *Id.* (emphasis added); *see also* Doc. 47-8 at 3 (distinguishing the ‘831 Patent from prior art because the prior art “always teaches injection points located immediately under, *i.e.* at the ‘bottom’ of the foundations”). The inventor’s position regarding the novelty of the invention thus requires that the depth of the holes, which define the injection area, also be “away from the immediate vicinity of the foundation.”

Defendants appear to argue (aside from the issue of indefiniteness) that Plaintiffs’ proposed construction is incorrect because, according to Defendants, the inventor defined “deep” to be “at least twice as deep as that of the (bottom of the) foundation,” and therefore disclaimed a scope encompassing “sufficient depth to affect the foundation soil.” *See* Doc. 48 at 23-24. Defendants’ argument is unpersuasive. Although the inventor did use the specific phrase “at least twice as deep as that of the (bottom of the) foundation” in the January 21, 2002 Amendment to describe the depth of the holes, that phrase, when read in context, was used to describe one specific embodiment of the claimed invention. *See* Doc. 47-8 at 3 (“Thus the injection depth claimed is ‘variable’, but within the range given by at least the extension depth of the pressure bulb, *as documented by figures 5-6 of the application*, where it is clearly shown as the injections/consolidation goes further than the bottom of the foundation, for a distance being at least twice as deep as that of the (bottom

of the) foundation.”) (emphasis added). Indeed, in the next paragraph, the inventor proceeded to note that “deep into the foundation soil” includes depths “all through the pressure bulb covered mass.” *Id.* It is thus clear that the inventor’s statement was not intended to limit the invention to using holes that were at least twice as deep as that of the bottom of the foundation. Moreover, even if the inventor had somehow defined “deep” to be “at least twice as deep as that of the (bottom of the) foundation,” it does not logically follow that by doing so, he thereby disclaimed a scope encompassing “sufficient depth to affect the foundation soil.” Rather, as noted above, it is eminently clear that the holes must be at a depth “so as to affect the foundation soil.” Doc. 47-7 at 9.

For the reasons stated above, the Court will construe “deep” as “at sufficient depth within the foundation soil and away from the immediate vicinity of the foundation so as to affect the foundation soil.” *Accord Hayward Baker* at 8.¹

3. “very fast”

The term “very fast” is used in the ‘831 Patent to describe the expansion of the injected substance. *See, e.g.*, ‘831 Patent, Claim 1 (“wherein the expansion of the injected substance is *very fast*”) (emphasis added). Plaintiffs argue that the term “very fast” means “fast enough to limit migration of injected material from the targeted foundation soil,” whereas Defendants argue only that the term is indefinite.

¹ The Court recognizes that its construction is different from the one given this term by the court in *Applied Polymerics*. The Court’s departure is explained by two additional reasons separate from the discussion above. *First*, neither of the parties argued that this term should be given the same construction it was given in *Applied Polymerics*. *Second*, the Court gives little weight to the claim constructions given in *Applied Polymerics*, because the order fails to discuss or explain in any way the construction given to each term and this Court has no knowledge as to the bases for the constructions.

The Court will adopt Plaintiffs’ proposed construction, because the term “very fast” is amenable to construction and Plaintiffs’ proposed construction is supported by the intrinsic evidence. *First*, Plaintiffs’ proposed construction is supported by the specification, which notes that the expansion of the injected substance “prevents its migration to faraway areas,” ‘831 Patent at 4:13-15, and that this expansion is “very fast,” *id.* at 5:1-4. These statements make clear that the “very fast” nature of the expansion serves to prevent the migration of the injected substance from the targeted area. *Second*, Plaintiffs’ proposed construction is supported by the claim language, which teaches that the “expansion of said substance injected into the soil” serves to “produc[e] compaction of the foundation soil contiguous to the injection zone,” and that “the expansion of the injected substance is very fast.” ‘831 Patent, Claim 1. The claim language thus requires that the “very fast” expansion must be fast enough to limit migration of the injected material from the targeted foundation soil, because otherwise the expansion would fail to serve its purpose of compacting the foundation soil contiguous to the injection zone.

The Court, therefore, will construe “very fast” as “fast enough to limit migration of injected material from the targeted foundation soil.” *Accord Hayward Baker* at 13.

B. Other disputed terms

1. “foundation soil”

Plaintiffs argue that the term “foundation soil” means “the part of the soil mass affected by the dynamic and static weights of the overlying structure.” Defendants’ proposed construction is largely identical, but includes an additional clause—“the part of the soil mass, *as contoured by the pressure bulb*, which is affected by the dynamic and static weights of the overlying structure.” (emphasis added).

After careful consideration, the Court agrees with Plaintiffs' proposed construction. As defined in the specification, "[t]he term 'foundation soil' is intended to designate that part of the soil having influence on the overlying built structure or that the direct or indirect influence of the built structure." '831 Patent at 2:8-12. Further, as the claim language indicates, the foundation soil is "that part of soil having to withstand dynamic and static weights exerted by a built structure" '831 Patent, Claim 22; *see also* '831 Patent, Claims 1, 20. Finally, as noted in the February 22, 2001 Amendment, "[t]he general knowledge in the technical pertinent field . . . teaches that the 'foundation soil' is that mass of soil affected by pressures, generated by static and dynamic weights exerted by any built structure" Doc. 47-6 at 7.

In support of their proposed construction, Defendants point to the remainder of the sentence in the February 22, 2001 Amendment discussing the definition of "foundation soil," which ends by noting that the pressures affecting the soil act "according to curves of equal pressure having the shape of a bulb called the 'bulb of pressure.'" *Id.* This language, however, fails to support Defendants' suggestion that the "bulb of pressure" is a separate defining feature of the soil mass comprising the foundation soil; rather, it is clear that the "bulb of pressure" is used as a descriptor of the shape of the equal pressure curves generated by the static and dynamic weights exerted by the built structure. Because the fact that the foundation soil is contoured by the pressure bulb is already implicit in Plaintiffs' proposed construction, the Court finds the additional language proposed by Defendant—"as contoured by the pressure bulb"—to be redundant.

At bottom, it appears that the parties' proposed constructions are the same in substance. Defendants' proposed construction, however, needlessly complicates the definition of "foundation

soil” by using additional words without increasing clarity. The Court, therefore, will adopt Plaintiffs’ proposed construction.²

2. “immediate”

Plaintiffs argue that the term “immediate” should be given its plain and ordinary meaning, while Defendants argue that the term means “the onset of the chemical reaction starting without delay.” Notably, as the parties acknowledge, this term does not appear in any of the asserted claims. Defendants state that they seek a construction of this term to support their claim differentiation argument for the term “very fast.” *See* Tr. at 17-19. However, while it would be entirely appropriate for Defendants to make a claim differentiation argument based on their interpretation of the scope of Claim 7, a separate, explicit construction of the terms in Claim 7 is not necessary for Defendants to make that argument. Accordingly, as stated during the claim construction hearing, the Court will not construe the term “immediate.” *See* Tr. at 22; *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1311 (Fed. Cir. 2005) (“Terms not used in claims in controversy . . . need not be construed.”), *abrogated on other grounds, see Zoltek Corp. v. United States*, 672 F.3d 1309, 1323 (Fed. Cir. 2012).

IV. CONCLUSION

As stated in Section III.B.2, *supra*, the Court declines to construe the disputed claim term “immediate.” The remaining disputed claim terms are hereby **CONSTRUED** as follows:

1. “**deep**” means “at sufficient depth within the foundation soil and away from the immediate vicinity of the foundation so as to affect the foundation soil”;

² As with the term “deep,” the Court’s construction for the term “foundation soil” is different from the one given by the court in *Applied Polymerics*. The Court’s departure is explained by the same two reasons: neither of the parties argued that this term should be given the same construction it was given in *Applied Polymerics*, and the Court affords little weight to the claim construction order in *Applied Polymerics*. *See* fn.1, *supra*.

2. **“very fast”** means “fast enough to limit migration of injected material from the targeted foundation soil”; and
3. **“foundation soil”** means “the part of the soil mass affected by the dynamic and static weights of the overlying structure.”

DONE AND ORDERED in Tampa, Florida on May 26, 2016.


Charlene Edwards Honeywell
United States District Judge

Copies to:
Counsel of Record and Unrepresented Parties, if any