Paper 79 Date: June 24, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THE SCOTTS COMPANY LLC Petitioner

v.

ENCAP, LLC Patent Owner

Case IPR2013-00110 Patent 6,209,259

Before MICHAEL P. TIERNEY, LORA M. GREEN, and RAMA G. ELLURU, *Administrative Patent Judges.* ¹

PER CURIAM.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

¹ Floyd, Administrative Patent Judge, who participated in the oral hearing held on January 30, 2014, has left the Board; accordingly, Tierney, Administrative Patent Judge, has been added to the panel.

I. BACKGROUND

Petitioner, The Scotts Company LLC ("Scotts Company"), filed a Petition on January 10, 2013, for an *inter partes* review of claims 1-5, 7-11, 13, and 14 ("the challenged claims") of U.S. Patent No. 6,209,259 ("the '259 patent") pursuant to 35 U.S.C. §§ 311-319. Paper 2. On April 15, 2013, Patent Owner, Encap, LLC ("Encap"), filed a Preliminary Response. Paper 9. On July 3, 2013, the Board granted an *inter partes* review for all challenged claims on less than all of the grounds of unpatentability alleged in the Petition. Paper 12, ("Dec."). The Board also stayed concurrent reexamination of the '259 patent. Paper 10.

After institution of trial, Encap filed a Corrected Patent Owner's Response. Paper 48. Encap also filed a Corrected Contingent Motion to Amend Claims that requests substituting proposed new claims 15-24 for claims 2-5, 8-11, 13, and 14, respectively—contingent upon a determination of unpatentability. Paper 47. Scotts Company filed a Reply to Patent Owner's Response (Paper 30), and an Opposition to Encap's Motion to Amend Claims (Paper 33). Encap then filed a Corrected Reply to Scotts Company's Opposition to Encap's Motion to Amend Claims. Paper 49.

Additionally, Scotts Company filed a Motion to Exclude Evidence (Paper 52), to which Encap responded (Paper 64) and submitted supplemental evidence (Paper 58). Scotts Company filed a Reply in further support of its Motion to Exclude. Paper 68.

Encap also filed a Motion to Exclude Evidence (Paper 54) to which Scotts Company responded (Paper 60). Encap, with authorization (Paper 70), filed a Supplement to its Motion to Exclude (Paper 66), as well as a Reply (Paper 67).

Oral hearing was held on January 30, 2014.²

The Board has jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

Scotts Company has shown by a preponderance of the evidence that claims 1-5, 7-11, 13, and 14 of the '259 patent are unpatentable. Encap's Motion to Amend Claims is denied.

A. The '259 Patent

The '259 patent is directed to a combination seed capsule, comprising at least one viable seed, a coating of a composition comprising a soil conditioning material mounted proximate and disposed outwardly of the outer surface of the seed, and optionally including one or more of inorganic chemical fertilizers, growth enhancer, binder, and/or an anti-fungal agent. Ex. 1001, Abstract, 4:5-11. According to the '259 patent Specification, the primary object of the invention is to "provide solid plant seed capsule products that supply both soil conditioning properties and the seed, which can benefit from such conditioned soil, in a given seed capsule particle." *Id.* at 3:28-31.

B. Illustrative Claim

Claims 1 and 7 are the only independent claims in the '259 patent, and are directed to a "[a] combination seed capsule." The only difference between these claims is that claim 7 additionally states that the seed coating is applied by an agglomeration process. The remaining challenged claims depend from either claim 1 or 7. Claim 1 is illustrative of the claimed subject matter, and is reproduced below.

² A transcript of the oral hearing is included in the record as Paper 78.

1. A combination seed capsule comprising:

one viable seed;

said seed acting as a core or pseudo core of said combination seed capsule;

a coating of a composition comprising soil conditioning materials; said soil conditioning materials being in a solid state at time of coating.

C. Prior Art Supporting the Instituted Challenges

Name	Reference	Issue or	Exhibit
		Publication	
Schreiber	U.S. Patent No. 3,698,133	Oct. 17, 1972	Ex. 1002
Roth	U.S. Patent No. 4,065,287	Dec. 27, 1977	Ex. 1003
Lowe	U.S. Patent No. 5,019,564	May 28, 1991	Ex. 1004
Matthews	GB670,461	Apr. 16, 1952	Ex. 1007

D. The Instituted Challenges of Unpatentability

References	Grounds	Claims
Schreiber	§ 102(b)	Claims 1, 7, and 13
Schreiber and Roth	§ 103(a)	Claims 2, 5, 8, 11, and 14
Schreiber and Lowe	§ 103(a)	Claims 3, 4, 9, and 10
Matthews	§ 102(b)	Claims 1, 2, 7, 8, 13, and 14
Roth	§ 102(b)	Claims 1, 2, 5, 7, 8, 11, 13, and 14
Roth and Lowe	§ 103(a)	Claims 1-5, 7-11, 13, and 14

II. DISCUSSION

A. Evidentiary Matters

1. Scotts Company's Reply (Paper 30)

In a conference call held on December 3, 2013, Encap asserted that Scotts Company had raised new arguments and evidence in its Reply to Patent Owner's Response to Decision to Institute. Order (Paper 37), 2. The Board denied Encap's request to file a surreply, or to enlarge the page limit of Encap's Reply in support of its Motion to Amend. *Id.* We indicated, however, that we would determine whether Scotts Company's Reply and supporting evidence contain material exceeding the proper scope of a reply. *Id.*

We find that Scotts Company's Reply, and in particular, the supporting Declarations of Mr. Fredrick Sundstrom (Ex. 1039) and Mr. Krishna Pagilla (Ex. 1040) contain material outside the proper scope of a reply. 37 C.F.R. § 42.23(b) (reply is limited to arguments raised in Patent Owner's Response). Specifically, both Declarations contain materials in support of Scotts Company's Petition, and therefore, untimely filed. For example, Mr. Sundstrom includes analyses of claim construction (e.g., Ex. 1039 ¶¶ 7-9), as well as analyses of the Schreiber (e.g., *id.* at ¶¶ 10-13), Matthews (e.g., *id.* at ¶¶ 28, 29), Roth (e.g., *id.* at ¶¶ 34), Simmons (*id.* at ¶¶ 36, 38), and Evans (*id.* at ¶¶ 43, 44, 46, 48) references. Likewise, Mr. Pagilla addresses claim construction, as well as the references upon which Scotts Company sought institution. *See, e.g.*, Ex. 1040 ¶¶ 9-13, 23-27, 32, 33, 36-38. Specifically, we hold that the new evidence could have been included with the motion. By waiting to serve this evidence on Encap in Scotts Company's Reply, Encap was denied the opportunity to file responsive evidence. Thus, we

have not considered the untimely Declarations of Mr. Sundstrom and Mr. Pagilla, nor the arguments based thereon.³

2. Scotts Company's Motion to Exclude

Scotts Company filed a Motion to exclude: portions of the deposition testimony of Mr. Michael Krysiak taken by Encap on November 6, 2013 (Ex. 2002) and December 23, 2013 (Ex. 1038); and the Second Krysiak Declaration, which includes Attachments A and B (Ex. 2016). Pet. Mot. Excl. (Paper 52), 1. Mr. Krysiak, Encap's witness, submitted a second Declaration (Ex. 2012) in support of its Reply to Petitioner's Opposition to Encap's Motion to Amend (Paper 49). Encap responded to Scotts Company's Motion to Exclude and filed supplemental evidence. PO Resp. Mot. Excl. (Paper 64); PO Supp. Evid. (Paper 58), respectively. Scotts Company filed a Reply. Paper 68. We grant-in-part Scotts Company's Motion to Exclude Evidence.

Scotts Company asserts that Mr. Krysiak's deposition testimony in response to two questions (i.e., Ex. 2002, 207, 1. 9; Ex. 1038, 209, Il. 7-8) should be excluded. Pet. Mot. Excl. 9-10. As we did not rely upon this deposition testimony that Scotts Company seeks to exclude, Scotts Company's Motion is moot with respect to such testimony.

Scotts Company also moves to exclude the Second Declaration of Mr. Krysiak (Ex. 2012). Scotts Company's primary objection is that the Declaration is untimely, as it should have been submitted with Encap's Motion to

³ The fact that two declarations may contain some material appropriate for a response does not require our consideration of them, as the Board will not attempt to sort the proper from the improper portions. *See Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012).

Amend (Paper 47). Pet. Mot. Excl., 11-14; *see* 37 C.F.R. § 42.23(b) ("All arguments for the relief requested in a motion must be made in the motion. A reply may only respond to arguments raised in the corresponding opposition or patent owner response."). In support of Scotts Company's Opposition to Encap's Motion to Amend (Paper 33), it relied upon the Declaration of Mr. Sundstrom (Ex. 1039), which was not considered, as discussed above. Encap asserts that Mr. Krysiak's Second Declaration is in rebuttal to Declarations and deposition testimony of Mr. Sundstrom and Mr. Pagilla. PO Resp. Mot. Excl. 10-11. Encap proffers supplemental evidence—a revised Second Declaration of Mr. Krysiak with citations to the Declaration and deposition of Mr. Sundstrom. Paper 58; Ex. 2016.

Reading Mr. Krysiak's Second Declaration, it is clear that the majority of the Declaration is in support of Encap's Motion to Amend rather than in rebuttal to Scotts Company's Opposition to Encap's Motion to Amnd or the Declarations and deposition testimony⁴ of Mr. Sundstrom and Mr. Pagilla, and is thus, untimely. For example, paragraphs 2-3 relate to written description and claim construction, which Encap has the burden of proving in its Motion to Amend. Additionally, paragraphs 6-12 describe the background of the technology, which could have been submitted with Encap's Motion to Amend opening brief, and thus, are not in rebuttal to testimony from Mr. Sundstrom or Mr. Pagilla. Likewise, paragraphs 25-53 and Schedule A attempt to distinguish over Matthews and Schreiber, which Encap should have done in Patent Owner's Motion to Amend. Furthermore, to the extent that portions of Mr. Krysiak's Second Declaration are in response to the

⁴ While not addressed, we do not suggest that filing a declaration in rebuttal to deposition testimony is appropriate.

Declarations of Mr. Sundstrom and Mr. Pagilla, which were excluded, they should likewise be excluded. Those errors were not corrected in the Supplemental Evidence (i.e., Ex. 2016) submitted by Encap.

In addition, Encap attempts to incorporate Mr. Krysiak's Second Declaration into its Reply to Scott's Opposition to the Motion to Amend by merely stating, "The proposed claims define over the prior art succinctly. *Id.* [Mr. Krysiak's Second Declaration] at ¶¶ 14-53." Reply Mot. Amend 5. In our Order of August 27, 2013, we admonished Encap to refrain from attempting to use an expert declaration in such fashion. We stated, "Encap's motion to amend may be supported by an expert declaration, but that the motion itself should set forth the arguments and explanations with appropriate pinpoint citations to the expert declaration, rather than incorporating by reference the expert declaration." Paper 17, 2-3. Thus, Scotts Company's Motion to Exclude Mr. Krysiak's Second Declaration (Ex. 2012) is granted, as Mr. Krysiak's Corrected Second Declaration (Ex. 2016) did not remedy the issues, it is not considered.

3. Encap's Motion to Exclude

Encap moves to exclude the Declaration of Mr. Sundstrom (Ex. 2014), Scott Company's witness who provided a declaration in support of Scott Company's Reply to Patent Owner's Response to Decision to Institute (Paper 30), on the basis that the declarant refused to answer certain questions during his deposition on the basis of confidentiality, even though a protective order was in place. PO Mot. Excl. (Paper 54), 5. Having found that Mr. Sundstrom's Declaration was untimely submitted, and thus, not considered, Encap's Motion to Exclude is dismissed as moot.

B. Claim Construction

Consistent with the statute and the legislative history of the AIA, the Board interprets claims by applying the broadest reasonable construction in the context of the specification in which the claims reside. 37 C.F.R. § 42.100(b); *see Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012). Claim terms also are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Two exceptions to the general rule that a claim term is given its ordinary meaning are: 1) when a patentee sets out a definition and acts as his own lexicographer; or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). If an inventor acts as his or her own lexicographer, the definition must be set forth in the specification with reasonable clarity, deliberateness, and precision. *Id*.

1. "soil conditioning materials"

All of the challenged claims require "a coating of a composition comprising soil conditioning materials." The '259 patent Specification states that "all soil conditioning materials contemplated herein beneficially modify soil to which they are applied, in some way other than direct provision of nitrogen, phosphorous, and/or potassium or other plant nutrients." Ex. 1001, col. 8, ll. 41-44 (emphasis added). The Specification further provides specific examples of soil conditioning materials, such as municipal or other sewage sludge, paper mill sludge, fly ash, and dust. *Id.* at col. 7, ll. 21-23. Accordingly, in the Decision to Institute, the Board construed "soil conditioning materials" as "materials that beneficially modify soil

to which they are applied, in some way other than direct provision of nitrogen, phosphorous, and/or potassium or other plant nutrients, including for example, municipal or other sewage sludge, paper mill sludge, fly ash, and dust." Dec. 6-7.

Although Scotts Company agrees with the Board's preliminary construction (Pet. Reply, 1-2), Encap asserts the construction is overly broad in view of the Specification (PO Resp., 8-9). Specifically, Encap asserts the construction should be amended to include that the soil conditioner not only enhances soil condition of the growth medium/soil to which it is applied, it also provides soil conditioning value to the seed so coated irrespective of the general tilth condition of the growth medium. *Id.* (citing Ex. 1001, col. 8, 1l. 42-52, 5 Abstract). Encap does not assert that its construction is the plain and ordinary meaning of "soil conditioning materials," but rather, that the Specification defines the phrase. PO Resp. at 8. Specifically, Encap asserts the following portion of the Specification defines "soil conditioning materials:"

However, all soil conditioning materials contemplated herein beneficially modify soil to which they are applied, in some way other than direct provision of nitrogen, phosphorous, and/or potassium or other plant nutrients. By use of soil conditioner in intimate association with the seed, this invention not only enhances soil condition of the growth medium/soil to which it is applied, it also provides soil conditioning value to the seed so coated, and in intimate association with the seed, irrespective of the general tilth condition of the growth medium into or onto which the seed capsule is applied.

Ex. 1001, col. 8, ll. 42-52.

Through the inclusion of "all soil conditioning materials contemplated herein," the first sentence requires the soil conditioning material to beneficially

⁵ Encap mistakenly refers to col. 15, l. 29–col. 16, l. 6.

modify the soil in some way, other than directly providing plant nutrients. The second sentence is an observation of benefits provided by "this invention;" it does not *require* the invention provide the observed benefits; much less require *just* the soil conditioning material of the invention provide such benefits.

Encap relies upon its experts, Mr. John Katers, Mr. Daniel Madigan, and Mr. Michael Krysiak, all of whom provide identical claim constructions, in support of its position. Ex. 2007 ¶ 11; Ex. 1020 ¶ 10; Ex. 1022 ¶ 13. The experts provide, however, no credible analysis in support of their claim constructions, and thus, are unpersuasive.

Encap asserts also that the examples included in the Board's preliminary claim construction should be omitted, because not *all* municipal or other sewage sludge, paper mill sludge, fly ash, or dust, necessarily modify the soil in a beneficial manner. PO Resp. 9. The Board's preliminary construction, however, requires the soil conditioning materials "modify soil to which they are applied, in some way other than direct provision of nitrogen, phosphorous, and/or potassium or other plant nutrients." The inclusion of the examples is intended to clarify, not modify, this requirement.

Accordingly, the Board maintains its construction of "soil conditioning materials" as:

Materials that beneficially modify soil to which they are applied, in some way other than direct provision of nitrogen, phosphorous, and/or potassium or other plant nutrients, including for example, municipal or other sewage sludge, paper mill sludge, fly ash, and dust.

2. "combination seed capsule"

The phrase "combination seed capsule" appears in the preamble of claims 1 and 7. Encap asserts that the Abstract of the '259 patent defines "combination seed capsule." PO Resp. 10-11. The Abstract reads:

This invention pertains to combination seed capsules wherein each seed capsule includes both moieties of at least one soil conditioner and at least one seed, and optionally, one or more inorganic chemical fertilizer, growth enhancer, binder, and/or antifungal agent. The combination seed capsules are made by physically combining the respective soil conditioner and seed with one other, in the absence of any requirement for chemical reactions in the process of so combining the respective materials. The combination seed capsules provide cooperative and beneficial effects of the soil conditioner and the optional inorganic fertilizer, working together in controlled intimate relation with the seed, to enhance the germination and growth processes of the seed, and the plant emergent therefrom, greater than when the soil conditioner and seed, and optionally inorganic chemical fertilizer, are applied to the soil separately; the improvement being a result of the intimate relationship of the respective materials in the combination seed capsule, whereby the respective materials cooperate with each other in support of germination and plant growth.

Ex. 1001, Abstract (emphases added). Encap asserts that the text that has been italicized is the definition of a "combination seed capsule." PO Resp. 11. Encap also relies upon its technical experts, Messrs. Baker, Madigan, and Krysiak. *Id.* at 11-12. The experts, however, provide no credible analysis in support of their claim constructions and are thus, unpersuasive.

Scotts Company asserts that the term "combination seed capsule" appears in the preamble of both independent claims (i.e., claims 1 and 7), and thus, is not limiting. Pet. Reply 2. Scotts Company also asserts that in 1998, when the application that matured into the '259 patent was filed, the rules prohibited relying

on the Abstract "for interpreting the scope of the claims." *Id.* at 3 (quoting 37 C.F.R. § 1.72(b)). Lastly, Scotts Company asserts that Encap is attempting to improperly import limitations into the claims. *Id.*

First, the Abstract does not provide a definition for a "combination seed capsule," but rather observes the benefits of the combination seed capsule. Second, the preamble term "combination seed capsule" is not limiting because the claim body describes a structurally complete invention. *Catalina Mktg. Int'l v. Coolsavings.com Inc.*, 62 USPQ2d 1781, 1785 (Fed. Cir. 2002). Thus, we need not construe "combination seed capsule," as it does not limit the claim.

3. "being in a solid state at time of coating"

Independent claim 1 recites, "being in a solid state at time of coating." Similarly, independent claim 7 recites, "are in a solid state at time of coating." Additionally, claim 7 recites, "said coating being applied to said viable seed by an agglomeration operation." Due to the inclusion of these three limitations, claims 1 and 7 were determined to be product-by-process claims in the Decision to Institute. Dec. 7-8.

Encap asserts that "in a solid state at time of coating" should be construed as "solid material in the form of particulate, fibrous, or a suspension of a particulate or fibrous material in a liquid carrier to form an agglomeration of said particulate and/or fibers." PO Resp. 12-13 (citing Ex. 1001, col. 8, ll. 1-5⁶). Scotts Company points out that the Specification reads, the soil conditioning raw material "*may* be a particulate powder, or *may* be fibrous, or *may* be a suspension of a powder or fibrous material in a liquid carrier, and is preferably coated onto the substrate seed

⁶ Encap erroneously cites to col. 14, ll. 24-28.

to form a seed capsule or other agglomeration of particles, fibers, *or the like*," and thus, does not support Encap's construction. Pet. Reply 3 (quoting Ex. 1001, col. 8, ll. 1-5 with emphasis added). We agree that the Specification does not support Encap's proposed construction.

Encap further asserts that during prosecution of the '259 patent application, Mr. Krysiak had discussions with the Examiner relating to "being in a solid state at the time of coating." PO Resp. 12 (citing Ex. 1022 ¶ 15). Encap's description of events does not provide support for its proposed claim construction. That is, it does not follow that adding the limitation to overcome Roth, defines the limitation to require "solid material in the form of particulate, fibrous, or a suspension of a particulate or fibrous material in a liquid carrier to form an agglomeration of said particulate and/or fibers." As before, Mr. Krysiak's opinion as to how the phrase should be construed includes no analysis, and thus, is unpersuasive.

Encap does establish that it disavowed claim scope, however, by adding the limitation "in a solid state at time of coating" to overcome Roth. That clear and unambiguous disavowal of claim scope causes us to modify the claim construction from that set forth in the Decision to Institute. Specifically, Encap narrowed the "in a solid state at time of coating" limitation to require the soil conditioning material be in a solid state at the time of coating the seed. Encap did not narrow "in a solid state at time of coating," however, to further require a particulate, fibrous, or a suspension of a particulate or fibrous material in a liquid carrier to form an agglomeration of said particulate and/or fibers, as suggested by Encap.

The Federal Circuit has addressed the issue of determining whether a claim has been narrowed in the related context of prosecution history estoppel.

In order to give due deference to public notice considerations under the *Warner–Jenkinson* framework, a patent holder seeking to establish the reason for an amendment must base his arguments solely upon the public record of the patent's prosecution, i.e., the patent's prosecution history. To hold otherwise—that is, to allow a patent holder to rely on evidence not in the public record to establish a reason for an amendment—would undermine the public notice function of the patent record.

Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558, 586 (Fed. Cir. 2000), vacated on other grounds, 535 U.S. 722 (2002).

An examination of the prosecution history of record reveals the following events which support our determination that Encap clearly disavowed the full scope of claims 1 and 7. On May 10, 2000, the Examiner issued a rejection to claim 77 as anticipated by Roth, and further rejected claims 77 and 85 as being obvious in view of Roth in combination with two other references. Ex. 1008, 171, 175. On August 8, 2000, the Examiner issued an interview summary, which indicates that a proposed claim amendment was discussed. Specifically, the Examiner stated that adding, "wherein said soil conditioning material, when added to the seed, are in a dry, solid form," to the claims would overcome Roth. The Examiner suggested "that the claims be written in a product by process form to clearly distinguish over Roth." Id. at 203. On September 8, 2000, the Examiner issued an Interview Summary indicating that claims 77 and 85 were discussed, and that "[b]ased on the proposed draft amendment and arguments recited therein, the prior art was overcome." Id. at 204. The record clearly shows that the only amendment made to claim 77 was the addition of the limitation, "said soil conditioning materials being in a solid state at time of coating." *Id.* at 200. Claim 85 was amended in similar fashion to recite, "wherein said soil conditioning

⁷ Claims 77 and 85, ultimately issued as claims 1 and 7, respectively.

materials are in a solid state at time of coating." *Id.* at 201. Claims 77 and 85 ultimately issued as claims 1 and 7, respectively.

Thus, Encap successfully overcame Roth by adding the "in a solid state at the time of coating" limitation to claims 1 and 7. Construing the phrase as a product-by-process limitation would not result in distinguishing over Roth, as no discussion was had, nor evidence provided, to suggest the end product of Roth had different characteristics than the claimed composition. The disavowal of claim scope is clear. The limitation "in a product by process form," therefore, must be construed to require the soil conditioning material be in a solid state at the time of coating. *See Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 978 (Fed. Cir. 2014).

Furthermore, Roth discloses a spray application of a MAS material that contains 0.1% to 2.5% solids at the time of coating. Ex. 1003, col. 3, ll. 50-51. Thus, the limitation "in a solid state at the time of coating" must further be construed to require more than 2.5% solids. Therefore, we construe "in a solid state at the time of coating" to mean that more than 2.5% of the soil conditioning material must be in a solid state at the time of coating the seed.

4. "agglomeration operation"

Independent claim 7 requires an "agglomeration operation," which we construed in our Decision to Institute to be a product-by-process limitation.

Dec. 8. Patent Owner concedes that claim 7 is a product-by-process claim. PO Resp. 16. Patent Owner, however, takes issue with the Board's "holding" that an agglomeration operation means using water and heat to bind a plurality of particles. *Id.* at 13.

We did not construe "agglomeration operation," other than to note that it is a product-by-process limitation. *In re Thorpe*, 777 F.2d 695, 698 (Fed. Cir. 1985). The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art. *See, e.g., In re Garnero*, 412 F.2d 276, 279 (CCPA 1969). That is especially true where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product. *Id.* Thus, the issue is not focused on what "agglomeration operation" means, but rather on what properties would be embodied in a product made by an agglomeration operation (i.e., an agglomerate). Here, the parties are in near agreement on the properties of an agglomerate.

Encap states that an agglomerate is an assemblage of particles adhering to each other, and thus, a magnified image of an agglomerate would reveal that the product is comprised of particulate. PO Resp. 13-16. Without credible explanation, Encap in its conclusion limits its final description of an agglomerate to an assemblage of *fine* particles. *Id.* at 16. Evidence cited by Encap that may support this additional limitation is an article by Wolfgang B. Pietsch, titled "The Agglomerative Behavior of Fine Particles." *Id.* at 13-14 (citing Ex. 1020 ¶ 11, Attachment A). As the title suggests, however, the article is specifically directed to agglomerates of fine particles. There is no credible suggestion in Mr. Madigan's Declaration (Ex. 1020) that an "agglomerate" is limited to fine particles. *See* Ex. 1020 ¶¶ 11-17.

Scotts Company appears to accept Encap's description of an agglomerate, but takes exception, as we do, with the limitation to fine particles. Pet. Reply 3-4.

Thus, we determine that an agglomerate is an assemblage of particles adhering to each other. The "agglomeration operation" limitation of claim 7 implies that the claimed "combination seed capsule" has a coating of a composition comprising soil conditioning materials comprised of particulate. As such, to satisfy the limitation of an "agglomeration operation," a reference must disclose a product with the structural limitation of being comprised of particulate, irrespective of the process used to make the product.

C. Anticipation by Roth—Claims 1, 2, 5, 7, 8, 11, 13, and 14

Roth explains that the MAS coating is "solid" after application. Roth, however, does not disclose the soil conditioning materials "being in a solid state at time of coating," because Roth discloses a spray application of a MAS material that is 97.5% to 99.9% liquid with the remainder "solids content." PO Resp. 31-32 (citing Ex. 1003, col. 3, Il. 50-51). While a tiny amount (i.e., 0.1% to 2.5%) of the soil conditioning material is in solid state at the time of coating, as discussed above, this is not enough to satisfy the limitation "in a solid state at time of coating," recited in claims 1 and 7. As such, Scotts Company has not shown, by a preponderance of the evidence, that Roth anticipates 1, 2, 5, 7, 8, 11, 13, and 14.

D. Obviousness over Roth and Lowe—Claims 1-5, 7-11, 13, and 14

Roth teaches the claimed "seed acting as a core or pseudo core" with a "coating of a composition comprising soil conditioning materials," as required by claims 1 and 7. Specifically, Roth describes coating seeds with a methanol treated "sludge" carrier having one or more agricultural chemicals dispersed therein, wherein the source material is "municipal sewage," as required by dependent claims 2, 5, 8, and 11. *See*, *e.g.*, Ex. 1003, col. 3, 11. 23-26. Roth also discloses that its coating may include a "binder," e.g., polyvinyl alcohol, starch derivatives,

and further may include a fertilizer, as recited in claims 13 and 14. *Id.* at col. 2, 11. 3-5, 48-51; col. 5, 11. 49-52. Thus, we determine that Roth discloses all the limitations of claims 1, 2, 5, 7, 8, 11, 13, and 14 with the exception of "in a solid state at time of coating," as required by independent claims 1 and 7.

Lowe discloses coating a seed with de-inked paper sludge having a "fiber content of the solids in the mixture should exceed at least 10%-15% by weight," thereby teaching "in a solid state at time of coating." Ex. 1004, col. 3, ll. 17-21. Lowe also discloses using "agglomeration" to combine the fibers to form individual granules. *Id.* at Abstract; col. 3, ll. 21-22. Thus, as discussed in greater detail below, Lowe in combination with Roth satisfies the limitations of independent claims 1 and 7 as the combination involves the use of known components for their known purpose to achieve a predictable result.

Lowe further teaches coating a seed with a material that is a byproduct of a "paper making process," and specifically that the byproduct is "paper sludge," as required by dependent claims 3, 4, 9, and 10. Lowe describes an agricultural granule for carrying and releasing agricultural chemicals that resembles a claybased granule. *Id.* at Abstract. The agricultural granule is made from using waste materials from paper manufacture, referred to as paper sludge. *Id.* at col. 1, 1. 68–col. 2, 1. 1; col. 2, 11. 40-44.

Scotts Company asserts that because Roth teaches a MAS carrier for agricultural chemicals that can coat a seed, and because Lowe likewise teaches an agricultural carrier consisting of paper sludge, a person of ordinary skill in the art would have had reason to substitute Lowe's paper mill sludge for Roth's MAS coating. Pet. 57.

Encap asserts that the proposed combination runs contrary to the disclosure of Roth. PO Resp. 43. In particular, Encap asserts that Lowe requires the fiber content of the finished particle be above 10%, which means, therefore, that the material is 90% or less filler. *Id.* (citing Ex. 1004, col. 4, ll. 65-66; col. 6, ll. 53-63). On the other hand, Roth discloses MAS that is 97.5%-99.9% liquid. *Id.* (citing Ex. 1003, col. 3, ll. 50-51). Encap asserts that a product that is 97.5% or more liquid could not be replaced by a product with 10% or more fiber content and still be sprayed. *Id.* (citing Ex. 1020 ¶ 22). We do not find Encap's argument persuasive because Roth is not limited to spray-on coatings. The MAS, and presumably Lowe's paper sludge, can be applied to the seeds "by dipping, soaking, spraying, or other conventional mode of application." Ex. 1003, col. 4, ll. 48-50.

Encap also asserts that Roth's disclosure of a coating with 0.1% to 2.5% solids teaches away from using Lowe's coating containing over 10% solids. PO Resp. 43. Roth, however, "does not criticize, discredit, or otherwise discourage" the use of a higher percentage of solids. *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). Thus, Encap's argument is not persuasive.

Encap further asserts that paper sludge and MAS have very different characteristics. PO Resp. 44-45. In particular, Encap asserts that attempting to coat a seed with paper sludge, using the agglomeration process disclosed in Lowe, would not have a reasonable likelihood of success. *Id.* at 46. In support of its assertion, Encap submits the Declaration of Mr. Madigan (Ex. 1020) who testifies as to the difficulties associated with coating seeds with paper sludge utilizing the agglomeration process of Lowe. *Id.* We do not credit Mr. Madigan's declaration as it fails to provide the underlying basis for his conclusions. For example, Mr. Madigan cites an attachment that purports to show what a final product of Lowe

would look like if seed is introduced into the agglomeration process of Lowe. Ex. 1020, ¶ 23 and Attachment 5. Mr. Madigan, however, does not provide sufficient details regarding the underlying testing upon which he appears to rely. 37 C.F.R. § 42.65. Further, Scotts Company combined the paper sludge of Lowe (not its agglomeration process) with Roth. *See, e.g.*, Pet. 57.

As to Encap's assertion that Roth in view of Lowe does not disclose a "combination seed capsule," as discussed above, the preamble recitation "combination seed capsule" is not an additional structural limitation on the claim. PO Resp. 47.

Lastly, Encap asserts that Lowe's paper sludge is not a "soil conditioning material." *Id.* (citing Ex. 2007 ¶ 19). Paragraph 19 of Mr. Katers' Declaration, however, does not support Encap's contention. Mr. Katers merely states that "[n]ot all paper sludge material would benefit the soil to which it is applied;" he does not state that Lowe's paper sludge is not beneficial to the soil. Ex. 2007 ¶ 19.

We, therefore, conclude that the ordinary artisan would have combined Roth and Lowe to arrive at the claimed composition.

E. Anticipation by Schreiber—Claims 1, 7, and 13

Schreiber discloses the limitations of claims 1 and 7. For example, Schreiber discloses a plant seed having multiple coatings thereon, which satisfies the claimed "seed acting as a core or pseudo core." Ex. 1002, col. 1, ll. 4-6; col. 9, ll. 38-43. Schreiber further discloses the claimed "coating of a composition comprising soil conditioning materials." Specifically, Schreiber describes a seed coating made of a composition comprising solid particulate coating material, such as ground peat moss, thereby satisfying the claimed "being in a solid state at time of coating," of claims 1 and 7. *Id.* at col. 2, ll. 34-49; col. 10, ll. 40-42. Schreiber

explains that its invention permits the tailoring of seed coatings for achieving optimum germination and growth, while allowing early planting within a wide time period. Schreiber also explains that other advantages also accrue from the invention. Schreiber, thus, satisfies our construction of "soil conditioning materials" because its coating provides better root development and drought resistance. *Id.* at col. 2, Il. 15-19; col. 9, Il. 44-49. Schreiber also discloses that the coating is an "agglomeration" of a plurality of types of materials, as Schreiber explains that the coating composition includes a "binder," required by claim 13, or a plasticizer, and that the coating layers may coalesce, thereby satisfying the agglomeration requirement of claim 7. *Id.* at col. 2, Il. 37-39, 55-56; col. 3, Il. 35-42; col. 6, Il. 23-32.

Encap asserts that Schreiber does not disclose a "combination seed capsule." PO Resp. 18-23. For the reasons discussed above, a "combination seed capsule" found in the preamble of claims 1 and 7 does not further limit the claim. Encap also asserts that Schreiber does not disclose a "soil conditioning material." *Id.* at 23-26. Schreiber, however, discloses peat moss, limestone, gypsum, and vermiculite. Ex. 1002, col. 2, ll. 44-49. Those materials are known to beneficially modify the soil in some way other than direct provision of plant nutrients, and are, thus, "soil conditioning materials," as recited in claims 1 and 7. *See, e.g.*, Exs. 1028-1031. Encap's expert, Mr. Baker, acknowledged that peat moss, limestone, gypsum, and vermiculite are all soil conditioning materials. Baker Depo., Ex. 2005, 88, l. 22–90, l. 9.8

⁸ We reference page numbers found in the lower right corner of the exhibit.

Encap seeks to distinguish Schreiber on a purported difference in the function of the Schreiber coating and those disclosed in the '259 patent. Specifically, Encap asserts that Schreiber discloses using a water-insoluble coating with a water-soluble binder (e.g., peat moss) to delay germination until growing conditions are favorable, whereas, the soil conditioning materials of the '259 patent enhance germination and plant growth. PO Resp. 25. For the reasons already discussed, the claim limitation "soil conditioning materials" does not require the material also provide soil conditioning value to the seed. Moreover, the '259 patent explicitly discloses that the coating may be used to delay germination. Ex. 1001, col. 4, ll. 12-20; col. 25, ll. 8-17. Just because Schreiber's coating also serves to delay germination does not mean that it is not a "soil conditioning material," so long as it beneficially modifies the soil, in some way other than direct provision of plant nutrients.

In summary, we hold that Scotts Company has shown, by a preponderance of the evidence, that claims 1, 7, and 13 are anticipated by Schreiber, under 35 U.S.C. § 102(b).

F. Obviousness over Schreiber and Roth—Claims 2, 5, 8, 11, and 14⁹

As discussed above, Schreiber discloses the elements of independent claims 1 and 7. Scotts Company proposes using Roth's MAS in place of Schreiber's peat moss. Pet. 38-39. Scotts Company's proposed combination would result in a seed coated with Roth's MAS, and as discussed above, MAS does not satisfy the claim limitation that the soil conditioning material be "in a solid state at the time of coating."

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⁹ In its Response, Encap references claim 15 instead of 14. We have interpreted Encap's reference as intended to be to claim 14. PO Resp. 26-27.

Therefore, we hold that Scotts Company has not shown, by a preponderance of the evidence, that claims 2, 5, 8, 11, and 14 are unpatentable over Schreiber and Roth, under 35 U.S.C. § 103(a).

G. Obviousness over Schreiber and Lowe—Claims 3, 4, 9, and 10

As discussed above, Schreiber discloses the elements of independent claims 1 and 7. Lowe further teaches a material that is a byproduct of a "paper making process," and specifically that the byproduct is "paper sludge" as required by dependent claims 3, 4, 9, and 10. Lowe describes an agricultural granule for carrying and releasing agricultural chemicals that resembles a clay-based granule. Ex. 1004, Abstract. The agricultural granule is made from using waste materials from paper manufacture, referred to as paper sludge. *Id.* at col. 1, 1. 68–col. 2, Il. 1, 40-44. Scotts Company asserts that because Lowe teaches an agricultural granule made from paper sludge for carrying and releasing incorporated agricultural chemicals that resembles a clay-based granule (*id.* at Abstract; col. 2, l. 1), a person of ordinary skill would have had reason to substitute Schreiber's water-insoluble, solid, clay-like, agricultural inner coating material with Lowe's paper sludge materials. Pet. 40.

Schreiber discloses that its inner coating controls permeability of water and is typically water insoluble. Ex. 1002, col. 2, ll. 34-39. Encap asserts that there is no evidence that Lowe's material, derived from paper sludge, would operate to control water permeability (i.e., is water insoluble)—a trait important to the teachings of Schreiber. PO Resp. 28. Scotts Company does not respond to Encap's argument, and fails to provide any evidence that Lowe's agricultural granule is water insoluble. If Lowe's material is water soluble, it would not be a

suitable replacement for Schreiber's inner coating, as it would frustrate Schreiber's objective of delayed germination.

In summary, we hold that Scotts Company has failed to show, by a preponderance of the evidence, that claims 3, 4, 9, and 10 are unpatentable over Schreiber and Lowe under 35 U.S.C. § 103(a).

H. Anticipation by Matthews—Claims 1, 2, 7, 8, 13, and 14

Matthews discloses the claimed "seed acting as a core or pseudo core" with a "solid" "coating of a composition comprising soil condition materials," as required by claims 1 and 7. Ex. 1007, 2, 11, 41-89. Specifically, Matthews describes a seed pellet product coated with "fly ash," as required by dependent claims 2 and 8. *Id.* at 2, 11. 10-12, 61-64. Mathews further describes alternatingly spraying and dusting the seed with the coating until the desired thickness is reached, after which the seed pellets are dried. *Id.* at 2, ll. 81-84, 88-89. Matthews also discloses that the coating is an "agglomeration" of a plurality of types of materials, as required by claim 7, because Matthews explains that the coating of dust particles is bound by an adhesive water-soluble plastic, such as polyvinyl alcohol or methyl cellulose, around and about the original seed particle. Id. at 2, 11. 42-45, 50-54; 3, 11. 5-9. Matthews describes applying a "binder," as required by dependent claim 13, to the seed capsule, e.g., polyvinyl alcohol, to hold the coating substances firmly on the seed. *Id.* at 2, 11. 42-45; 3, 11. 5-9. Further, the Matthews seed coating may include "fertilizer," thus satisfying dependent claim 14. Id. at 5, 11. 25-27.

Encap asserts that Matthews does not disclose a "combination seed capsule." PO Resp. 38. As discussed above, the preamble recitation "combination seed capsule" does not further limit the claim. In addition, Encap unpersuasively asserts

that Matthews' fly ash may not be necessarily beneficial to the seed (id.)—a requirement lacking from our claim construction of "soil conditioning material." Relying upon Messrs. Baker and Katers, Encap asserts that Matthews' fly ash does not *necessarily* modify the soil in a beneficial manner, and hence, has not been proved to be a soil conditioning material. *Id.* at 39-42 (citing Ex. 2011 ¶ 21; Ex. 2007 \ 24). Essentially, Encap's argument is that while fly ash is specifically identified in the '259 patent as a soil conditioning material (see, e.g., Ex. 1001, col. 7, 11. 21-25), not all fly ash is suitable—indeed, some types of fly ash are toxic. Id. Matthews, however, states that "[e]ach material must be stable and non-toxic." Ex. 1007, 8, 11. 9-10. Moreover, Mr. Baker also acknowledged that a person of ordinary skill would have understood that a non-toxic fly ash could be used to coat a seed as a soil condition material, and that using toxic materials harmful to the seed should be avoided. Ex. 2005, 150, 1. 18–151, 1. 20. Lastly, Matthews also discloses that the use of its coating materials "aid in germination" and "growth of the plant." Ex. 1007, 2, 11. 33-39. Thus, we determine that a person of ordinary skill would interpret Matthews as using non-toxic fly ash, beneficial to the soil.

Matthews also discloses using lime (*id.* at 5, 1l. 28-35), which Mr. Krysiak admitted was a soil condition material (Ex. 2002, 148, 1l. 18-23).

Therefore, we hold that Scotts Company has shown, by a preponderance of the evidence, that claims 1, 2, 7, 8, 13, and 14 are anticipated by Matthews under 35 U.S.C. § 102(b).

I. Secondary Considerations

Before we can determine that the combination of Roth and Lowe (*see* Section D, above), renders the challenged claims unpatentable as obvious, we must consider the evidence of obviousness anew in light of any evidence of secondary

considerations of nonobviousness presented by Encap. *See Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966) ("Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy."); *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012) ("This objective evidence must be 'considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing the art.") (quoting *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538-39 (Fed. Cir. 1983)).

Encap alleges copying by others, long felt need, and commercial success as secondary considerations of non-obviousness. PO Resp. 48-49. Encap, however, fails to provide sufficient credible evidence to support its allegations.

Encap alleges that Scotts Company's Miracle-Gro® Turf Builder Grass Seed with Water Smart® is a copy of the product of the '259 patent. *Id.* at 48. To support its allegations, Encap submits a copy of marketing brochures for EncapSeed™ products (Ex. 1009, 89-97), a copy of the packaging from Scotts Company's Turf Builder Grass Seed with Water Smart® (*id.* at 98-101; Ex. 2013, 342-43, 346-47), a copy of a website print out pertaining to Scotts Company's TurfBuilder (Ex. 2013, 344-45), a Declaration by Mr. Krysiak dated October 31, 2012 and submitted during an *ex parte* reexamination (Ex. 1009, 118-131), and a Declaration by Mr. Krysiak (Ex. 1022 ¶¶ 41, 42). None of the evidence submitted by Encap, however, demonstrates that Scotts Company's Miracle-Gro® Turf Builder Grass Seed with Water Smart® product falls within the scope of any claim of the '259 patent, that Scotts Company was aware of the '259 patent prior to

developing its product, or that Scotts Company developed its product by copying the '259 patent.

Encap also asserts that there was a long-felt need for invention disclosed in the '259 patent. PO Resp. 48-49. Specifically, Encap asserts that many homeowners could not get their grass seed to grow because of inappropriate watering. *Id.* at 48. Encap, however, presents no credible evidence this need was satisfied by the '259 patented invention.

Lastly, Encap asserts commercial success because Meadowland took a license to the '259 patent. *Id.* at 49. Encap, however, does not allege that Meadowland's licensed product was commercially successful, or that any such commercial success was attributable to the patented features of the product. Encap also asserts that Scotts Company's product was commercially successful. *Id.* Encap, however, does not provide persuasive evidence that Scotts Company's product is covered by any claim of the '259 patent, that such product was commercially successful, or that such success was attributable to the patented feature.

After weighing all the evidence of obviousness and nonobviousness of record, on balance, we conclude that the strong evidence of obviousness outweighs the weak evidence of nonobviousness. For the foregoing reasons, we conclude that Scotts Company has shown, by a preponderance of the evidence, that claims 1-5, 7-11, 13, and 14 are unpatentable under 35 U.S.C. § 103(a) over Roth and Lowe.

J. Encap's Corrected Motion to Amend Claims

Encap filed a Motion to Amend Claims (Paper 24), which was later corrected (Paper 47) ("Mot."). In the Corrected Motion, Encap proposes substitute

claims 15-24, to replace claims 2-5, 8-11, 13, and 14, ¹⁰ respectively. Mot. 1. The Corrected Motion is contingent, meaning that a proposed substitute claim is at issue and would be considered only if "the original claims of the '259 patent are found unpatentable." *Id.* While somewhat ambiguous, we interpret Encap's motion as proposing a substitute claim if the claim it replaces is found unpatentable, as opposed to being contingent on all of the challenged claims being found unpatentable. Scotts Company has demonstrated the unpatentability of claims 1-5, 7-11, 13, and 14. Therefore, the contingency has materialized, and thus, we consider the Corrected Motion on the merits.

As the moving party, Encap bears the burden of proof to establish that it is entitled to the relief requested. 37 C.F.R. § 42.20(c). The proposed amendment is not entered automatically, but only upon Encap's having demonstrated the patentability of those substitute claims. Here, we find that Encap has failed to demonstrate that the added limitations distinguish over the known prior art, for example, Roth in combination with Lowe. Hence, Encap's Motion to Amend is denied.

In a conference call on August 26, 2013, we provided Encap guidance on filing a motion to amend the claims, and specifically directed the parties to the analysis in *Idle Free Sys. v. Bergstrom, Inc.*, IPR2012-00027, Paper 26 (PTAB June 11, 2013). The summary of the call is reflected in Paper 17 of the record. *Idle Free* holds that a patent owner should specifically identify features added to

¹⁰ Encap later identifies the substitution as claims 15-24 in place of claims 2-5 and 11-13. Mot. 2-5. Thus, it is unclear whether claims 23-24 are proposed as replacement for claims 13 and 14, or for claims 12 and 13. However, as we discuss below, the issue is moot.

each substitute claim, and come forward with technical facts and reasoning about those features, including construction of new claim terms. *Idle Free*, slip op. at 7. The patent owner should also discuss the "significance and usefulness" of the added features "from the perspective of one with ordinary skill in the art." *Id.* We agree with the reasoning in *Idle Free*, and conclude that Encap has failed to satisfy its burden to demonstrate the patentability of the proposed substitute claims by a preponderance of the evidence.

While Encap identifies nineteen separate "structural limitations," presumed to be new, it does not identify how each of these structural limitations differs from what is previously recited in the claims. 37 C.F.R. § 42.221(b) ("A motion to amend claims must . . . show the changes clearly"). Specifically, Encap's listing of proposed claims 15-24 does not show, by redline or discussion, how the claims being replaced have been modified. Mot. 1-5. Moreover, Encap fails to construe any new claim limitation, and also fails to proffer any technical facts and reasoning about the amended features. *Idle Free*, slip op. at 7. Encap's failure to comply with the Board's directive places Scotts Company in the unfair position of having to ascertain the claim amendments and then make assumptions about which of the amendments are considered by Encap to be significant. For amended claims, however, the burden "is not on the petitioner to show unpatentability;" it is "on the patent owner to show patentable distinction over the prior art." *Id.* at 7. Encap has not met its burden.

For example, to determine the differences between original claim 2 and its proposed substitute, claim 15, the following comparison was created, with bracketed text indicating material deleted from claim 2, and underlined text indicating material inserted into claim 2 (paragraphing added).

- [2] 15. The combination seed capsule of claim 1 wherein [material of said soil conditioning materials are comprised of sludge or fly ash] said combination seed capsules provides cooperative and beneficial effects of said soil conditioning material working together in controlled intimate relation with said seed, to enhance the germination and growth processes of said seed and the plant emergent therefrom, said effects being greater than when said soil conditioning material and said seed are applied to the soil separately; wherein said effects result from an intimate relationship of said soil conditioning materials in said combination seed capsule, whereby said materials cooperate with each other in support of said germination and growth processes;
- said soil conditioning material is a material that beneficially modifies soil in some way other than direct provision of fertilizer, used with said seed to provide soil conditioning value to said seed so coated, irrespective of general tilth condition of the growth medium into or onto which the seed capsule is applied;
- said solid state at time of coating comprising materials in form of a particulate material, fibrous material, a suspension of said particulate and/or fibrous material in a liquid suspension, or any combination thereof; said soil conditioning value of said soil conditioning material to said seed comprises the enhanced control of moisture about said seed; said enhanced control consists of absorbing and holding water;

said coating of said combination seed capsule comprises a plurality of particles.

Encap does not explain why each new feature is "significant and useful," does not construe any of the new claim limitations, nor proffer any technical facts and reasoning about the amended features. Instead, Encap provides conclusory statements only, such as "Roth does not provide the cooperative and beneficial

effects of this structural limitation." Mot. 6. Encap does not provide a proposed interpretation of the recited "cooperative and beneficial effects" of proposed substitute claim 15, nor does it explain whether Roth provides some of the "effects of this structural limitation," and not others or why.

Encap asserts that the structural limitations themselves provide the technical facts and reasoning, as well as the significance and usefulness of the limitations. Pet. Reply 3. Encap asserts also that the "[c]laim construction of the structural limitations is found within the limitations themselves." *Id.* We disagree. Providing "cooperative and beneficial effects" is vague and not self-defining, in any meaningful way. Consequently, the usefulness and significance of the limitation is not self-evident. The same can be said of, "working together in controlled intimate relation."

Encap also fails to "provide meaningful reasons" for making additional changes to dependent claims. *Idle Free*, slip op. at 9. For example, claim 18, which depends from claim 15, adds three new limitations. *See* Mot. at 3; *see also id.* at 3-4 (claims 19 and 20 both depend from claim 17, and only differ by inclusion of a fungicide in claim 19). But Encap fails to explain why the additional features were added to these dependent claims. *Idle Free*, slip op. at 9-10 ("Adding features for no meaningful reason is . . . not responsive to an alleged ground of unpatentability.").

In addition, *Idle Free* further instructs patent owners to consider and distinguish "prior art," both "of record" and "not of record but known to the patent owner." *Id.* at 7. Moreover, we specifically explained to Encap that "[a] conclusory statement that no prior art is known to the patent owner . . . is insufficient." IPR2013-00110, Paper 17, 2. On page 1 of its Motion (Paper 47),

Encap states, "No closer art than the prior art cited in the underlying *inter partes* review is known to PO." Encap, however, was aware of additional relevant prior art, including Simmons and Evans, which were cited in Scotts Company's request for *inter partes* review, but which were deemed cumulative of the adopted grounds of rejection. *See* Pet. at 41-49; Prelim. Resp. at 25. While those references may have been cumulative over the original claims, they are not be cumulative in view of Encap's proposed substitute claims, and should be addressed. Encap's proposed claim 15 recites that the soil conditioning material "comprises enhanced control of moisture about said seed" consisting of "absorbing and holding water." Encap distinguishes the prior art in this *inter partes* review by arguing that it does not teach enhancing moisture about the seed. Mot. at 9-10. Simmons and Evans specifically disclose coating a seed with a water-absorbable polymer. Yet, Encap failed to distinguish its proposed claims over those two material prior art references.

Encap attempts to correct some of its errors by filing an expert declaration with its Corrected Reply to Motion to Amend. Paper 49; Ex. 2012. As already addressed, however, we exclude this Declaration as untimely and improperly incorporated by reference into Encap's Motion. In addition, as discussed above, the proffered "corrected" Second Declaration of Mr. Krysiak does not overcome Scotts Company's objections, and is thus, excluded.

For the above reasons, Encap's Corrected Motion to Amend Claims is denied as it fails to distinguish over the prior art, for example, Roth in combination with Lowe.

III. CONCLUSION

Scotts Company has shown by a preponderance of the evidence that: (1) claims 1, 7, and 13 of the '259 patent are unpatentable under 35 U.S.C. § 102(b) as anticipated by Schreiber; (2) claims 1, 2, 7, 8, 13, and 14 are unpatentable under 35 U.S.C. § 102(b) as anticipated by Matthews; and (3) claims 1-5, 7-11, 13, and 14 are unpatentable under 35 U.S.C. § 103(a) as obvious over Roth and Lowe.

Scotts Company has not shown by a preponderance of the evidence that: (1) claims 1, 2, 5, 7, 8, 11, 13, and 14 of the '259 patent are unpatentable under 35 U.S.C. § 102(b) as anticipated by Roth; (2) claims 2, 5, 8, 11, and 14 are unpatentable under 35 U.S.C. § 103(a) as obvious over Schreiber and Roth; or (3) claims 3, 4, 9, and 10 are unpatentable under 35 U.S.C. § 103(a) as obvious over Schreiber and Lowe.

Encap has not shown by a preponderance of the evidence that its proposed substitute claims 15-24 are patentable over the prior art.

IV. ORDER

In consideration of the foregoing, it is hereby ORDERED that:

Scotts Company's Motion to Exclude Mr. Krysiak's Second Declaration (Ex. 2016) is granted and all other relief requested in the motion is denied;

Encap's Motion to Exclude Mr. Sundstrom's Declaration (Ex. 1039) is dismissed as moot;

Claims 1-5, 7-11, 13, and 14 of the '259 patent are determined to be unpatentable; and

Encap's Corrected Motion to Amend Claims is denied.

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This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2013-00110 Patent 6,209,259

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