

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MASCHIO GASPARDO S.p.A.,

Plaintiff/Counterdefendant,

v.

PRECISION PLANTING LLC,

Defendant/Counterclaimant.

Civil Action No. 22-1394-RGA

MEMORANDUM OPINION

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November 27, 2023


ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is the issue of claim construction of multiple terms in U.S. Patent Nos. 8,770,121 (“the ’121 patent”) and RE47,447 (“the ’447 patent”). The parties submitted a Joint Claim Construction Brief and Appendix for each patent. (D.I. 57, 58, 61, 62). I heard oral argument on November 6, 2023.¹

I. BACKGROUND

On October 24, 2022, Maschio Gaspardo filed a complaint against Precision Planting, alleging infringement of the ’121 patent. (D.I. 1 at 3). The ’121 patent discloses “a seed distribution element for precision pneumatic seed drills, a sowing element for such machines and a seed drill including a plurality of such sowing elements.” (’121 patent at 1:15–18). Precision then filed an answer with defenses and counterclaims, alleging that Maschio infringes the ’447 patent. (D.I. 9 at 12–13). The ’447 patent discloses “a seed singulator for use with a vacuum disk having a seed face and a shoulder.” (’447 patent at 2:30–31).

II. LEGAL STANDARD

“It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (cleaned up). “[T]here is no magic formula or catechism for conducting claim construction.’ Instead, the court is free to attach the appropriate weight to appropriate sources ‘in light of the statutes and policies that inform patent law.’” *SoftView LLC v. Apple Inc.*, 2013 WL 4758195, at *1 (D. Del. Sept. 4, 2013) (alteration in original) (quoting *Phillips*, 415 F.3d at 1324). When construing patent claims, a court considers the literal

¹ Citations to the transcript of the argument, which is not yet docketed, are in the format “Markman Tr. at ____.”

language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). Of these sources, “the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (cleaned up). “While claim terms are understood in light of the specification, a claim construction must not import limitations from the specification into the claims.” *Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1354 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1323).

“[T]he words of a claim ‘are generally given their ordinary and customary meaning.’ . . . [It is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13 (citations omitted). “[T]he ‘ordinary meaning’ of a claim term is its meaning to [an] ordinary artisan after reading the entire patent.” *Id.* at 1321. “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

When a court relies solely on the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court’s construction is a determination of law. *See Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331 (2015). The court may also make factual findings based on consideration of 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 1317–19 (quoting *Markman*, 52 F.3d at 980). Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms

to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

III. CONSTRUCTION OF AGREED-UPON TERMS

I adopt the following agreed-upon construction (D.I. 57 at 65–67):

Claim Term	Claim	Construction
plate	'121 patent, claims 3, 4, 6	plain and ordinary meaning, which is “generally flat surface”

IV. CONSTRUCTION OF DISPUTED TERMS

The parties agree that claims 1, 3, and 10 of the '121 patent and claims 8 and 12 of the '447 patent² are representative for the purpose of claim construction. Those claims state:

1. A seed distribution element for precision pneumatic seed drills, comprising:
a sowing disc which is rotated by a motor-driven *transmission drive shaft* at controlled speed,
a housing with a *fixed portion* and a *portion* which is *movable* relative to the *fixed portion* and can be closed against the *fixed portion*,
a seed collection chamber being defined in the *fixed portion*,
a pneumatic suction chamber being defined in the *movable portion*,
the sowing disc being interposed between the *fixed* and *movable portions* and having opposed surfaces delimiting the chambers,
the sowing disc having at least one ring of selector holes extending between the opposed surfaces, and
a seal which is arranged on the *movable portion* and is capable of sliding contact with the facing surface of the disc when the *fixed* and *movable portions* are closed against one another,
wherein a pressure differential is provided between the opposed surfaces in the region of a circumferential segment of the ring of holes,
wherein the seed distribution element further comprises a *thrust-bearing* element of the sowing disc, which *thrust-bearing* element is *supported rotatably in the movable portion in order to withstand at least some of the axial load produced by the disc on the seal*.

('121 patent at 4:13–40 (disputed terms bolded and italicized)).

3. The seed distribution element according to claim 1, wherein the *thrust-bearing*

² Claim 8 of the '447 patent may no longer be asserted. (Markman Tr. at 73:16-22).

element comprises a *thrust-bearing* plate which can bear on that surface of the sowing disc which faces the seal, in a zone radially inside of the ring of holes.

('121 patent at 4:45–49 (disputed terms bolded and italicized)).

10. A kit for the retrofitting of seed distribution elements of precision pneumatic seed drills wherein the distribution elements are of the type including:
a sowing disc which is rotated by a motor-driven *transmission drive shaft* at controlled speed,
a housing with a *fixed portion* and a *portion* which is *movable* relative to the *fixed portion* and can be closed against the *fixed portion*,
a seed collection chamber being defined in the *fixed portion*,
a pneumatic suction chamber being defined in the *movable portion*,
the sowing disc being interposed between the *fixed* and *movable portions* and having opposed surfaces delimiting the chambers,
the sowing disc having at least one ring of selector holes extending between the opposed surfaces, and
a seal which is arranged on the *movable portion* and is capable of sliding contact with the facing surface of the disc when the portions are closed against one another,
wherein a pressure differential is provided between the opposed surfaces in the region of a circumferential segment of the ring of holes,
wherein the kit comprises:
the *movable portion* pre-assembled with: a *thrust-bearing* element of the sowing disc, which *thrust-bearing* element is *supported rotatably in the movable portion in order to withstand at least some of the axial load produced by the disc on the seal*.

('121 patent at 5:4–6:6 (disputed terms bolded and italicized)).

8. A seed meter comprising:
a seed disc rotating about a central rotational axis in a direction of rotation, said seed disc having a plurality of seed apertures disposed in a seed plane, said seed disc disposed to entrain seeds from a seed pool onto said seed apertures by vacuum as said seed apertures rotate in said direction of rotation through said seed pool, said seed disc having a shoulder; and
a *singulator* disposed after said seed pool in said direction of rotation, said *singulator* having a plurality of lobes disposed to cover at least a portion of each of said plurality of seed apertures rotating in said direction of rotation past said lobes so as to bump said seeds entrained onto each of said plurality of seed apertures to remove excess seeds from said seed apertures such that only one seed remains entrained on each of said plurality of seed apertures, said plurality of lobes configured to float with at least one of said seed plane and said shoulder of said seed disc as said seed disc rotates about said central rotational axis.

('447 patent at 6:26–45 (disputed terms bolded and italicized)).

12. A seed meter comprising:

- a seed disc having a central rotational axis and plurality of seed apertures disposed along an aperture path radius from said central rotational axis, each of said plurality of seed apertures having a top side defined by an outer radius from said central rotational axis which is greater than said aperture path radius, each of said plurality of seed apertures having a bottom side defined by an inner radius from said central rotational axis which is less than said aperture path radius; and
- a *singulator* having lobes disposed relative to said aperture path radius, said lobes disposed to make contact with seed entrained on said plurality of apertures three times along said top side and two times along said bottom side as each of said plurality of seed apertures rotates past said *singulator* as said seed disc rotates about said central rotational axis.

(’447 patent at 6:53–7:2 (disputed terms bolded and italicized)).

1. “fixed portion” (’121 patent, claims 1–3, 8, and 10–12)

- a. *Maschio’s proposed construction*: the portion of the housing that is fixed to the framework of the respective sowing element
- b. *Precision’s proposed construction*: the portion of the housing that is fixed to the framework of the sowing elements
- c. *Court’s construction*: portion of the housing that is fixed to the framework of the sowing elements

I ruled at oral argument that I would adopt Precision’s proposed construction. (Markman Tr. at 18:14–17). I construe the term “fixed portion” as “portion of the housing that is fixed to the framework of the sowing elements.” (*See id.* at 18:18–20). As I stated at oral argument, the word “respective” in Maschio’s proposed construction does not add anything. (*Id.* at 19:6–11 (“I agree with . . . Precision that the claim itself is sufficiently instructive as to what the relationship with the fixed portion is to any movable portion.”)).

2. “movable portion” (’121 patent, claims 1–3, 8, and 10–12)

- a. *Maschio’s proposed construction*: the portion of the housing that is movable relative to the portion that is fixed to the framework of the sowing elements
- b. *Precision’s proposed construction*: the portion of the housing that is movable relative to the portion that is fixed to the framework of the sowing elements
- c. *Court’s construction*: portion of the housing that is movable relative to the portion that is fixed to the framework of the sowing elements

I ruled at oral argument that I would adopt the parties' agreed-upon construction for the term "movable portion." (Markman Tr. at 18:14–17). I noted, however, that I would not include the first "the" from the proposed construction because the term to be construed does not start with "the." (*Id.* at 18:24–25; *id.* at 19:3–4). I thus construe the term "movable portion" as "portion of the housing that is movable relative to the portion that is fixed to the framework of the sowing elements." (*Id.* at 18:25–19:3).

3. "transmission drive shaft" ('121 patent, claims 1–3, 8, and 10–12)

- a. *Maschio's proposed construction*: a shaft which is driven by a motor
- b. *Precision's proposed construction*: a drive shaft mounted on the fixed portion of the housing and centered relative to the sowing disc
- c. *Court's construction*: plain and ordinary meaning

Maschio contends the term "transmission drive shaft" does not need to be construed because a person of ordinary skill in the art would understand that its plain and ordinary meaning is "a shaft which is driven by a motor." (D.I. 57 at 24). Maschio argues claim 1 of the '121 patent indicates that "the sowing disc is rotated by the shaft which is driven by a motor." (*Id.*).

Precision argues that adopting Maschio's proposed construction would render some of the claim language "redundant and superfluous" because the claim would be read as "a motor-driven *shaft which is driven by a motor*." (*Id.* at 25). Although Precision notes that "limitations to the claims may not be added when such limitations are found only in the specification," Precision argues that the specification contains mandatory language that limits the term's scope. (*Id.* at 27–28). The specification states, "The presence of the transmission requires the shaft 20 to be mounted on the fixed portion 11 of the housing 10." ('121 patent at 2:64–65). It also states, "[I]t is obligatory to mount on the fixed portion the transmission which drives in rotation the motor-driven shaft which rotates the disc." (*Id.* at 1:63–65)). Precision contends these

sentences support construing “transmission drive shaft” as a drive shaft mounted on the fixed portion of the housing. (D.I. 57 at 27).

Precision also argues that statements made to the European Patent Office about the ’121 patent’s European counterpart further limit the term’s scope. (*Id.* at 28). Maschio indicated to the EPO that a prior art reference “does not disclose[] a motor-driven transmission shaft rotated at controlled speed a sowing disc. It can be clearly seen from e.g. Fig. 39 in page 53 that the sowing disc is toothed and it is driven by a gear provided in the fixed portion.” (D.I. 43-1 at 754 of 787; D.I. 44-1 at 156–57 of 775). Precision contends these statements show that a transmission drive shaft is centered relative to the sowing disc. (D.I. 57 at 30).

Maschio relies on the ’121 patent’s prosecution history to argue that the applicant “disclaimed” the limitation “mounted on the fixed portion of the housing.” (*Id.* at 31). Maschio points to an amendment, which shows a change in claim language from “a housing with a fixed portion in which the shaft is supported” to “a housing with a fixed portion.” (*Id.* at 31–32). Maschio contends this amendment removed an unnecessary limitation. (*Id.* at 32).

Maschio also argues that the ’121 patent’s claims and specification do not require limiting the “transmission drive shaft” to a transmission drive shaft that is “centered relative to the sowing disc.” (*Id.* at 33). Maschio contends that the drive element, not the drive shaft, is self-centered. (*Id.* at 33–34). Maschio also notes that Precision filed a patent application whose claims, but not the specification, are identical to the ’121 patent. (*Id.* at 36–38). Maschio argues that Precision’s description of “transmission drive shaft” in that application “is completely at odds” with its proposed construction in the present case. (*Id.* at 38).

The parties thus dispute whether the term “transmission drive shaft” should be construed to have its plain and ordinary meaning, or whether two limitations—“mounted on the fixed portion of the housing” and “centered relative to the sowing disc”—should be added.

I think there is insufficient evidence to import the limitation “mounted on the fixed portion of the housing” into the claim term.

First, neither the claim language nor the specification support adding “mounted on the fixed portion of the housing” to the term. The claim language does not suggest that a transmission drive shaft must be mounted on the fixed portion of the housing. As for the specification, Precision relies on two sentences to support its position. One sentence states, “[I]t is obligatory to mount on the fixed portion the transmission which drives in rotation the motor-driven shaft which rotates the disc.” (’121 patent at 1:63–65). This sentence, however, is not directed to the invention at issue; it is part of a paragraph describing the prior art. (*See id.* at 1:53–65). Whereas seed drills in the prior art had thrust-bearing elements mounted on the fixed portion, for example, the claims at issue recite a thrust-bearing element “supported rotatably in the movable portion.” (*Compare id.* at 1:55–59 (describing the prior art), *with id.* at 4:36–40 (reciting part of claim 1)). The present invention, in other words, has different features than seed drills in the prior art. It does not follow from the “obligatory” sentence that a transmission drive shaft must be mounted on the fixed portion of the housing.

The other sentence Precision relies on states, “The presence of the transmission requires the shaft 20 to be mounted on the fixed portion 11 of the housing 10.” (*Id.* at 2:64–65). This language only describes a preferred embodiment. (*See id.* at 2:20–24 (“The features and advantages of the invention will become clearer from the following detailed description of a preferred exemplary embodiment thereof, illustrated by way of non-limiting example . . .”)).

Without evidence that the patentee clearly intended to import a limitation from this preferred embodiment into the claims, “transmission drive shaft” should not be construed to include the limitation. This is true even if the patent only discloses one embodiment. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004) (“[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.”); *Phillips*, 415 F.3d at 1323 (“In particular, we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.”). I do not think there is evidence of clear intent here. Precision’s citations to the specification thus do not support importing the limitation “mounted on the fixed portion of the housing” into the term “transmission drive shaft.”

Second, the prosecution history does not support importing the limitation either. Maschio appears to be relying on a claim amendment³ to argue that the claim is broader than it was before. (D.I. 57 at 31–32). Disclaimer, however, generally narrows a claim’s scope during prosecution; it does not broaden the scope. *See Heuft Systemtechnik GmbH v. Indus. Dynamics Co.*, 282 F. App’x 836, 839 (Fed. Cir. 2008) (“Prosecution disclaimer occurs when a patentee, either through argument or amendment, surrenders claim scope during the course of prosecution.”); *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013) (“[W]hen the patentee unequivocally and unambiguously disavows a certain meaning to obtain a patent, the doctrine of prosecution history disclaimer narrows the meaning of the claim consistent with the scope of the claim surrendered.”). I do not think the claim amendment

³ The amendment changed the claim language “a housing with a fixed portion in which the shaft is supported” to “a housing with a fixed portion.” (D.I. 57 at 31–32).

constitutes a disclaimer. The amendment is nevertheless relevant as part of the prosecution history, and it is consistent with the term's plain and ordinary meaning.

I also think there is insufficient evidence to import the limitation "centered relative to the sowing disc" into the term "transmission drive shaft."

First, the specification does not show that the transmission drive shaft must be centered relative to the sowing disc. To the extent that the specification discusses centering or self-centering, those references relate to the drive element, not the drive shaft. (*See, e.g.*, '121 patent at 3:53–54 ("The drive element 32 is thus self-centring relative to the drive shaft 20 by which it is driven.")).⁴ The '121 patent teaches that the drive shaft is different than the drive element. (*See id.*). The specification thus does not support Precision's proposed construction.

Second, I do not think Maschio's statements to the EPO require importing a "centering" limitation to the term. "[S]tatements made before foreign patent offices are sometimes relevant to interpreting the claims." *Starhome GmbH v. AT&T Mobility LLC*, 743 F.3d 849, 858 (Fed. Cir. 2014). The Federal Circuit, however, "cautions against indiscriminate reliance on the prosecution of corresponding foreign applications in the claim construction analysis." *ALA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1279 (Fed. Cir. 2011). Even assuming the EPO statements are relevant to the present dispute, the evidence is unpersuasive. Maschio merely stated: (1) that a document "does not disclose[] a motor-driven transmission shaft rotated at controlled speed a sowing disc," and (2) that a figure in the document shows "the sowing disc is toothed and it is driven by a gear provided in the fixed portion." (D.I. 43-1 at 754 of 787). These sentences do not rise to the level of clear and unmistakable disclaimer.

⁴ The specification also mentions centering in relation to the thrust-bearing element. ('121 patent at 4:4–5 ("[T]he thrust-bearing element is self-centring . . .")). The parties do not seem to dispute, however, that a transmission drive shaft is different than a thrust-bearing element.

Third, the '881 application is consistent with construing “transmission drive shaft” to have its plain and ordinary meaning. But I agree with Precision that another unrelated patent’s specification does not govern the claim construction of terms in the '121 patent. Thus, I do not rely upon the '881 application.

I therefore reject Precision’s proposed construction. As I stated at oral argument, however, Maschio’s proposed construction “is, at best, an attempt to restate the claim.” (Markman Tr. at 20:2–6).⁵ I do not think it is necessary. I have rejected Precision’s two proposed limitations. I do not think the parties disagree about the usual meaning of “transmission drive shaft.” Thus, I construe it to have its plain and ordinary meaning.

4. “thrust-bearing” ('121 patent, claims 1–3, 8, and 10–12)

- a. *Maschio’s proposed construction*: plain and ordinary meaning, which is “a rolling bearing that supports against axial load”
- b. *Precision’s proposed construction*: supporting against axial load
- c. *Court’s construction*: “thrust-bearing element” is an “element that supports against axial load”; “thrust-bearing plate” is a “plate that supports against axial load”

I ruled at oral argument that the term “thrust-bearing” is an adjective. (See Markman Tr. at 45:17–19; *see also id.* at 47:7–8).⁶ I therefore reject Maschio’s proposed construction. I

⁵ I note that Precision’s argument about redundant claim language is unpersuasive. Although the claim may be “clumsily drafted,” the plain and ordinary meaning of “transmission drive shaft” is clear. The intrinsic evidence does not support departing from that meaning. *See VLSI Tech. LLC v. Intel Corp.*, 53 F.4th 646, 653 (Fed. Cir. 2022) (“While a construction that introduces redundancy into a claim is disfavored, it is not foreclosed. That is particularly true where . . . intrinsic evidence makes it clear that the ‘redundant’ construction is correct.”).

⁶ The noun “thrust bearing” and the adjective “thrust-bearing” are not interchangeable. The adjective “thrust-bearing” modifies the nouns “element” and “plate” in the '121 patent’s claims. *See The Chicago Manual of Style* ¶ 5.92 (17th ed. 2017) (“A phrasal adjective (also called a *compound modifier*) is a phrase that functions as a unit to modify a noun. A phrasal adjective follows these basic rules: (1) Generally, if placed before a noun, the phrase should be hyphenated to avoid misdirecting the reader There may be a considerable difference between the hyphenated and the unhyphenated forms”).

construe “thrust-bearing element” as an “element that supports against axial load,” and I construe “thrust-bearing plate” as a “plate that supports against axial load.” (*See id.* at 47:3–8).

5. “supported rotatably in the movable portion in order to withstand at least some of the axial load produced by the disc on the seal” (’121 patent, claims 1–3, 8, and 10–12)

- a. *Maschio’s proposed construction*: plain and ordinary meaning, which is “supported rotatably on the movable portion in a manner that allows the thrust bearing element to bear at least some of the axial load”
- b. *Precision’s proposed construction*: “in the movable portion” – located within the space defined by the movable portion, however supported; “at least some of the axial load” – any non-zero amount of axial load
- c. *Court’s construction*: plain and ordinary meaning

At oral argument, Maschio agreed to withdraw its proposal to replace “in the movable portion” with “on the movable portion,” and Precision agreed to withdraw the extra verbiage it had proposed. (Markman Tr. at 55:8–13). Given that the parties were able to meet in the middle, this term does not need to be construed. (*Id.*). The term “supported rotatably in the movable portion in order to withstand at least some of the axial load produced by the disc on the seal” has its plain and ordinary meaning.

6. “singulator” (’447 patent, claim 12)

- a. *Maschio’s proposed construction*: singulator being a single unitary element
- b. *Precision’s proposed construction*: plain and ordinary meaning, which is not a “single unitary element”
- c. *Court’s construction*: plain and ordinary meaning, which is “structure that is designed to accurately dispense one seed and one seed only at the proper timing”

The parties dispute whether a “singulator” must be a single unitary element.

Precision notes that the phrase “single unitary element” does not appear in claim 12 or in the specification of the ’447 patent. (D.I. 58 at 5).⁷ Precision contends that a “singulator” cannot be a single unitary element because the specification describes the singulator as having multiple

⁷ Precision also notes that claim 12 uses the word “singulator” but not the phrase “singulator assembly.” (D.I. 58 at 27).

members, with each member having multiple lobes. (*Id.*). Precision further argues that the specification uses the terms “singulator,” “singulator assembly,” “seed singulator,” and “seed singulator assembly” interchangeably. (*Id.* at 27).

Precision also advances a claim differentiation argument based on canceled claims. The ’447 patent is the third reissue of U.S. Patent No. 7,699,009 (“the ’009 patent”). (*See* ’447 patent). In the ’009 patent, dependent claim 4 stated, “The combination of claim 3 wherein said first member and said second member of said singulator comprise a single unitary element.” (D.I. 42-2 at 368 of 813). Claim 4 was canceled in the second reissue of the ’009 patent. (D.I. 58 at 7). Precision contends that the canceled claim is nevertheless part of the patent family and supports not reading “single unitary element” into the term “singulator.” (*Id.* at 8–10).

In response, Maschio argues that the ’447 patent differentiates between a “singulator” and a “singulator assembly.” (*Id.* at 12). Only the latter, Maschio contends, contains “many individual pieces.” (*Id.* at 13). Maschio contends that the figures support its position because they show the rail, divergent arms, and lobes as an integrated whole. (*Id.* at 14). Maschio also argues that the invention’s lobes must be able to move “in various degrees of freedom.” (*Id.* at 13). Under Precision’s proposed construction, however, Maschio argues “it would be impossible that each of the lobes could be at the same time co-planar with the other lobes.” (*Id.*).

Maschio cites to the prosecution history to further support its proposed construction.

During prosecution of the application that led to the ’009 patent, the applicant stated:

Claim 14 depends from claim 5 which recites that the first and second members “comprise a single unitary element.” Thus, as recited in claim 1 from which claim 5 depends and from which claim 14 depends, because the upper and lower lobes are biased axially against the seed plane, and because the first member has a surface that is biased radially toward the annular shoulder, and because the first and second members “comprise a single unitary member”

(D.I. 42-2 at 422 of 813). Maschio argues that this statement disclaims definitions of “singulator” other than a single unitary element. (D.I. 58 at 16). If “singulator” were construed as “not a [single] unitary element,” Maschio argues claim 12 would be rendered invalid. (*Id.* at 17).

At oral argument, the parties agreed that the term “singulator” ordinarily means “structure that is designed to accurately dispense one seed and one seed only at the proper timing.” (Markman Tr. at 57:13–16; *id.* at 58:2–9). I turn to the claim language, specification, and prosecution history to determine whether the evidence requires adding the limitation “single unitary element” to the term’s plain and ordinary meaning.

I do not think that the ’447 patent clearly differentiates between a “singulator” and a “singulator assembly.” Claim 12 does not mention a “single unitary element.” (’447 patent at 6:53–7:2). Maschio’s references to the specification, meanwhile, are unpersuasive; they do not show what the purported differences between a singulator and a singulator assembly are. If anything, the specification uses the terms interchangeably in some places, calling the reference number 900 both a “singulator” and a “singulator assembly.” (*See, e.g., id.* at 5:23–25 (“A further advantage of the preferred embodiment of the spring suspension system of the singulator 900 is that the singulator assembly 900”). Descriptions of the figures also use the terms interchangeably. (*Compare id.* at 2:53–56 (“FIG. 5 is an exploded perspective view of a preferred embodiment of the seed singulator”), *with id.* at 2:57–58 (“FIG. 6 is a detailed perspective view showing the singulator assembly of FIG. 5 in use on an offset disk.”)). The specification thus does not support defining “singulator” differently than “singulator assembly” or adding the limitation “single unitary element” to the term “singulator.”

I also disagree that the canceled claims of the '009 patent form the basis for a claim differentiation argument. (*See* Markman Tr. at 74:5–6 (“[I]t seems to me like a claim that doesn’t exist can’t actually be used to differentiate.”)). The canceled claims are, however, relevant as part of the prosecution history. (*Id.* at 74:7–9). The additional limitation in dependent claim 4 of the '009 patent—“wherein said first member and said second member of said singulator comprise a single unitary element”—narrows the term “singulator” to only singulators that are a single unitary element. Dependent claim 4 is thus consistent with construing “singulator” to have its plain and ordinary meaning.

Maschio’s reliance on other parts of the prosecution history is also unpersuasive. Claim terms are “generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1313). Two exceptions apply: (1) when patentees act as their own lexicographers, and (2) when patentees disavow a claim term’s full scope during prosecution or in the specification. *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1580 (Fed. Cir. 1996)). The lexicography exception does not apply here because the specification does not provide a definition of “singulator” that differs from the term’s plain and ordinary meaning. As explained below, the use of the term “singulator” does not meet the disavowal exception either.

“Prosecution disclaimer occurs when a patentee, either through argument or amendment, surrenders claim scope during the course of prosecution.” *Heuft*, 282 F. App’x at 839. “[F]or prosecution disclaimer to attach, . . . the alleged disavowing actions or statements made during prosecution [must] be both clear and unmistakable.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325–26 (Fed. Cir. 2003). Here, Maschio cites to statements made during

prosecution about a “single unitary element” in the context of claims 1, 5, and 14. At oral argument, I stated that this language is too unclear to constitute disclaimer. (*See* Markman Tr. at 65:18–20). The prosecution history does not support Maschio’s attempt to import a limitation.

I am also unpersuaded by Maschio’s argument that a singulator’s lobes are only co-planar when the singulator is a single unitary element. Claim 12 does not recite the word “co-planar” (*see* ’447 patent at 6:53–7:2), and the specification merely mentions “co-planar surfaces” in the context of a preferred embodiment (*see id.* at 4:33–39; *id.* at 4:44–47). The intrinsic evidence is insufficient to read a co-planarity limitation into the “singulator” term. *See Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”). Besides, I do not think that such a limitation would clarify whether a singulator must be a “single unitary element,” and Maschio has not submitted any expert testimony to support its position.

Lastly, I am unpersuaded by Maschio’s argument that adopting Precision’s construction would render claim 12 invalid. At this stage, Maschio has not submitted any expert testimony to support this argument.

I therefore find that Maschio’s proposed construction would import a limitation into the term “singulator.” Such a construction would contradict the claim’s plain language. *See Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998) (“The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.”). I reject Maschio’s proposed construction, and I adopt Precision’s proposed construction. I construe the term “singulator” to have its plain and ordinary meaning, which is “structure that is designed to accurately dispense one seed and one seed only at the proper timing.”

V. CONCLUSION

Within five days the parties shall submit a proposed order consistent with this Memorandum Opinion.