

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

CARGILL, INCORPORATED AND  
INTERNATIONAL FLORA  
TECHNOLOGIES, LTD.

Plaintiffs,

v.

VANTAGE SPECIALTY CHEMICALS,  
INC.

Defendant.

Civil Action No. 22-979-RGA

MEMORANDUM OPINION

Robert M. Oakes, FISH & RICHARDSON P.C., Wilmington, DE; Ahmed J. Davis (argued), Joshua Rosefelt (argued), FISH & RICHARDSON P.C., Washington, DC; Elizabeth Flanagan, Brianna Chamberlin, FISH & RICHARDSON P.C., Minneapolis, MN.

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June 5, 2023

/s/ Richard G. Andrews

**ANDREWS, U.S. DISTRICT JUDGE:**

Before me is the issue of claim construction of three terms in U.S. Patent No. 11,248,245 (the “’245 patent”). The parties submitted a Joint Claim Construction Brief (D.I. 47) and Appendix (D.I. 48), and I heard oral argument on June 2, 2023.

## **I. BACKGROUND**

“The ’245 patent relates to processes for transesterifying jojoba wax esters by contacting a feedstock that contains the wax esters with an enzyme called a lipase.” (D.I. 47 at 1). “Jojoba oil derived from the seeds of the jojoba plant contains wax esters and other components that have been noted to be useful for various functions. These include steryl esters, sterols, and various hydrocarbons that can be useful as skin conditioning agents in cosmetics and personal care products.” (’245 patent, col. 6:57-63).

## **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) (internal quotation marks omitted). “[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 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 (internal quotation marks omitted).

“[T]he words of a claim are generally given their ordinary and customary meaning. . . . [Which 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.” *Id.* at 1312–13 (citations and internal quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). “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 upon 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 upon 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 constructions:

Claim Term	Claims	Construction
“lipase”	’245 patent claims 1-2	“any enzyme or protein capable of being used in a transesterification reaction of a wax ester.”
“consists essentially of the jojoba wax esters and the hydrogenated jojoba wax esters” <sup>1</sup>	’245 patent claim 2	“consists of the jojoba wax esters and the hydrogenated jojoba wax esters and only those additional materials that do not materially affect OSI or any other basic and novel characteristics of the invention.”

### IV. CONSTRUCTION OF DISPUTED TERMS

Plaintiffs assert claims 1 and 2 of the ’245 patent against Defendant. (D.I. 47 at 7 n.1). The two claims are recited here.

1. A process for transesterifying wax esters, the process comprising: providing a ***feedstock*** comprising jojoba wax esters and hydrogenated jojoba wax esters, wherein the amount of hydrogenated jojoba wax esters is 20% to 50% by weight of the ***feedstock***; contacting the ***feedstock*** with a lipase; and transesterifying the jojoba wax esters and the hydrogenated jojoba wax esters in the ***feedstock*** with the lipase to form ***a transesterified product***; wherein ***an oxidative stability index (OSI) of the transesterified product is greater than an OSI of the feedstock.***
2. The process of claim 1, wherein the ***feedstock*** consists essentially of the jojoba wax esters and the hydrogenated jojoba wax esters.

(’245 patent, col. 19:9-20:10 (disputed terms italicized and bolded)).

#### 1. “feedstock” (’245 patent claims 1 and 2).

- a. *Plaintiff’s proposed construction*: Plain and ordinary meaning, which is “the raw material used in a process, here a wax ester, which is subject to a transesterification reaction and thereby converted into a product.
- b. *Defendants’ proposed construction*: “all of the material contacted by the lipase.”

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<sup>1</sup> This term was originally in dispute. (D.I. 47 at 40). The parties agreed to this construction over the course of the briefing. (*Id.* at 45-46).

c. *Court's construction*: “all of the material contacted by the lipase.”

The parties dispute what materials may be included in the term “feedstock.”

Plaintiffs argue that “feedstock” should be limited to wax esters and the naturally occurring components that accompany them, such as the trace amounts of tocopherols, sterols, and volatiles. (D.I. 47 at 8). Plaintiffs maintain that a person of ordinary skilled in the art (POSA) would understand that “feedstock” would not include other, non-naturally occurring additives. (*Id.* at 8-9). Plaintiffs argue that providing such additives would constitute an additional step in the process, rather than another component of the feedstock. (*Id.* at 22-24). Plaintiffs contend that the prosecution history supports their construction as the Examiner defined “feedstock” to mean “the raw material which is subject to a transesterification reaction to form a ‘transesterified product.’” (*Id.* at 13 (citing D.I. 48, Ex. B, CARGILL\_00001057)).

Defendant counters that “feedstock” should not be limited to just wax esters and the naturally occurring components that accompany them. First, Defendant cites to the plain language of the claim. Defendant argues that the phrase “feedstock comprising” is open language, which means that the feedstock can contain other components. (D.I. 47 at 14-15). Defendant further argues that claim 1 specifies that the transesterified jojoba wax esters are in the feedstock, which means that the feedstock can include components beyond the wax esters and naturally occurring components. (*Id.* at 15).

Second, Defendant argues that the specification supports their construction. For example, the specification recites, “The feedstock may further include an antioxidant . . . .” (’245 patent, col. 1:32). In the following paragraph, the specification recites, “The feedstock may further include a skin conditioning agent and a volatile compound . . . .” (*Id.*, col. 1:37-38). Defendant argues that because skin conditioning agents and antioxidants do not undergo transesterification, but can be

part of the feedstock, “feedstock” should be construed to be broader than just the wax esters and the naturally occurring components that accompany them. (D.I. 47 at 17-18).

I agree with Defendant’s construction. First, the claim language uses the term “comprising,” which is open language that would permit the inclusion of additional components. *See, e.g., Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997) (“‘Comprising’ is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.”). Furthermore, the claim recites that the jojoba wax esters “in the feedstock,” rather than the feedstock, are transesterified to form the transesterified product. This phrasing indicates that feedstock could include components beyond just the wax esters. Second, as Defendant notes, the specification indicates that the feedstock can include other components, such as antioxidants, skin conditioning agents, and volatiles. The specification does not qualify the antioxidant, skin conditioning agent, or volatile compound as only those that are naturally occurring. (*See* ’245 patent, col. 1:32-42).

While the Examiner defined “feedstock” in a way that aligns with Plaintiffs’ proposed construction, I am not persuaded that “feedstock” should be construed this way. The Examiner was not addressing the issue of whether the feedstock was only limited to wax esters and naturally occurring components that accompany them. The Examiner was addressing whether the term “feedstock product,” which was a term in the then-proposed claim, meant the same thing as “transesterified product.” (D.I. 48, Ex. B at CARGILL\_00001057). I am not persuaded by the Examiner’s definition because the Examiner developed its definition in addressing a different issue.

I agree with Plaintiffs that because the claim contains the word “comprising” twice, the first pertaining to process steps and the second pertaining to components of the feedstock, the

claim can cover processes that have additional steps. (D.I. 47 at 22-23). I disagree with Plaintiffs that this means a POSA would read the claim to mean that non-naturally occurring additives can only be added through an additional step, and not as part of the feedstock. The open language of the claim does not foreclose this option. Reading such a restriction into the claim would contradict the plain language of the claim. *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.”).

Therefore, I adopt Defendant’s proposed construction.

**2. “a/the transesterified product” (’245 patent claims 1 and 2).**

- a. *Plaintiff’s proposed construction*: Plain and ordinary meaning, which is “the product produced by the transesterification with the lipase of the feedstock.”
- b. *Defendants’ proposed construction*: “a/the product formed by the transesterification with lipase of only the jojoba wax esters and the hydrogenated jojoba wax esters in the feedstock.”
- c. *Court’s construction*: “a/the product formed by the transesterification with lipase of the jojoba wax esters and the hydrogenated jojoba wax esters.”

The parties dispute whether transesterified product is tied to the entire feedstock or only the jojoba wax esters and hydrogenated jojoba wax esters in the feedstock. (D.I. 47 at 37). The construction of this term, therefore, depends on my construction of “feedstock.” Above, I construe “feedstock” to mean “all of the material contacted by the lipase.”

Plaintiffs argue that Defendant’s construction would exclude other wax esters (i.e., non-jojoba wax esters) that could be included in the feedstock. (D.I. 47 at 33). Plaintiffs contend that because the claim covers a process for transesterifying wax esters generally, the transesterified product should include the products from transesterifying all the different types of wax esters that undergo transesterification. (*Id.*).

Defendant argues that its construction is proper based on the claim language. Defendant maintains that because the claim recites that the transesterified product is formed from “transesterifying the jojoba wax esters and the hydrogenated jojoba wax esters in the feedstock” (’245 patent, cl. 1), the transesterified product is tied to the jojoba wax esters, and not other wax esters. (D.I. 47 at 33-34).

I agree with Defendant’s construction. The claim recites “transesterifying the jojoba wax esters and the hydrogenated jojoba wax esters in the feedstock with the lipase to form a transesterified product; . . . .” (’245 patent, cl. 1). The claim language links the transesterified product to the esterification of the jojoba wax esters. To expand the definition of “transesterified product” to include the products of other wax esters that undergo transesterification would be contrary to the plain language of the claims.

Because I have construed “feedstock” to be “all of the material that contacts the lipase,” the words “only” and “in the feedstock” in Defendant’s proposed construction are unnecessary. Therefore, I construe “a/the transesterified product” to mean “a/the product formed by the transesterification with lipase of the jojoba wax esters and the hydrogenated jojoba wax esters.”

**3. “an oxidative stability index (OSI) of the transesterified product is greater than an OSI of the feedstock” (’245 claims 1 and 2).**

- a. *Plaintiff’s proposed construction*: Plain and ordinary meaning.
- b. *Defendants’ proposed construction*: Indefinite. In the alternative, “an oxidative index (OSI) of the transesterified product is more than 175% higher than an OSI of the feedstock.
- c. *Court’s construction*: Plain and ordinary meaning.

The parties dispute over whether the term “greater than” is indefinite or not.

Defendant argues that the Applicant disclaimed the plain and ordinary meaning of the term “greater than” in the prosecution history and redefined the term into “a term of degree



without objective boundaries.” (D.I. 47 at 51). Defendant cites to two instances where the Applicant distinguished their invention from prior art that disclosed reactions yielding products with increases in OSI relative to the feedstock. (*Id.* at 52-57).

Plaintiffs maintain that these statements in the prosecution history do not rise to the level of clear and unmistakable disclaimer or lexicography.

I agree with Plaintiffs that the plain and ordinary meaning of the term “greater than” was not disclaimed or redefined in the prosecution history.

The first instance Defendant cites to is when the Applicant distinguished the Steinke prior art. The Applicant distinguished their invention from Steinke on the basis that Steinke did not show a “quantitatively significant increase in OSI over the OSI of the feedstock.” (D.I. 48, Ex. B, 00000495). The Applicant conducted experiments following Steinke’s process, which yielded an average increase of OSI of 175%. (D.I. 48, Ex. B at CARGILL\_00000493-94). The Applicant, however, noted that the increase in OSI value was “merely 1 hour.” (*Id.*, Ex. B at CARGILL\_00000494). The Applicant elaborated, “An increase of 1 hour under the OSI evaluation is not actually significant.” (*Id.*, Ex. B at CARGILL\_00000494). The Applicant clarified, “[I]t is difficult to conclusively argue that the OSI of the crambe products is really higher than the OSI of the original feedstock materials to the transesterification reaction.” (*Id.*, Ex. B at CARGILL\_00000495; *see also id.*, Ex. B at CARGILL\_0000506 (“Also, it is important to note that the observed OSI increase for crambe oil is within the level of measurement noise for OSI—an increase of a single hour is very little actual increase and not one that would be commercially significant or observable as a practical matter.”)). These statements just question whether Steinke disclosed a reaction where the OSI of the product was actually greater than the feedstock because of the small difference measured and the inherent noise in the measurement. To put it another way,

the Applicant just argued that the measured increase in OSI in Steinke was due to the noise of the OSI measurement, not the underlying reaction. These statements do not rise to the level of clear and unmistakable disclaimer or lexicography. *See Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012) (“To constitute disclaimer, there must be a clear and unmistakable disclaimer.”).

The second instance Defendant cites to is when the Applicant distinguished the Austic prior art. Austic disclosed a chemical reaction that showed a product with an OSI that was 4.7 hours (14%) higher than the feedstock. (D.I. 48, Ex. B at CARGILL\_00001101).<sup>2</sup> The Applicant acknowledged that the results of the chemical reaction from Austic “showed a small increase in OSI relative to the feedstock.” (D.I. 48, Ex. B at CARGILL\_00001102). The Applicant, however, did not distinguish Austic on the basis of the size of the increase in OSI alone. The Applicant, instead, argued, “[D]ue to the imprecision present in OSI measurements, I regard the 4.7 hour difference in the measurements as being a result that is functionally the same (i.e., the OSI data shows essentially that the OSI did not practically change between the feedstock and the chemically catalyzed product).” (D.I. 48, Ex. B at CARGILL\_00001102-03).

I do not read these statements as redefining the term “greater than” or disclaiming differences smaller than 4.7 hours or 14%. Plaintiffs distinguished Austic because the measured increase in OSI may not have been real, but just an artifact of the imprecision of the measurement.

Defendant cites the experiments the Applicant ran with respect to Steinke to argue that the error bars for OSI measurements would be between 1.455-1.955 hours. (D.I. 47 at 56). Based on that error bar, Defendant argues that the change of 4.7 hours in Austic would be statistically

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<sup>2</sup> The results on the page indicate the increase in OSI may have only been 4.2 hours, but the statements in the prosecution history state an increase of 4.7 hours. (*See* D.I. 48, Ex. B at CARGILL\_00001101-03). The precise value is not relevant to my decision.

significant, and not simply a product of the imprecision in the OSI measurements. (*Id.*). I disagree that this comparison establishes that the result in Austic is statistically significant. The values of the error bars come from the set of experiments that distinguished Steinke, not the experiments pertaining to Austic. In the context of Steinke, the Applicant represented only that those were the “+/-” values for those experiments, not error bars for OSI measurements generally. (D.I. 48, Ex. B at CARGILL\_00000494 (“The OSI evaluation for the jojoba derivative had a “+/-” of 1.455 to 1.955 hours on its own, . . .”). Therefore, I do not read the Applicant’s statements distinguishing Austic as disclaiming statistically significant increases in OSI.

The Applicant did not redefine the term “greater than” or disclaim the scope of the plain and ordinary meaning of this term. Therefore, I construe this term to have its plain and ordinary meaning.

## **V. CONCLUSION**

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