

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

GENESIS ALKALI WYOMING, LP,)	
)	
Plaintiff,)	
)	
v.)	
)	C.A. No. 18-1879-LPS-JLH
CINER RESOURCES LP, et al.,)	
)	
Defendants.)	
)	

REPORT AND RECOMMENDATION

Pending before the Court are the parties' claim construction disputes related to terms in United States Patent No. 6,589,497 (the "497 Patent"). I held a *Markman* hearing on October 5, 2020. I recommend that the Court adopt the constructions set forth below.

I recommend that the claim terms with agreed-upon constructions be construed as follows:

	Term	Court
1	"a concentrated brine" (Claim 1)	"a brine with an increased amount of sodium carbonate"
2	"separating the sodium carbonate monohydrate crystals from the first mother liquor" (Claim 1)	"separating out the sodium carbonate monohydrate crystals suspended in the first mother liquor"
3	"separating the sodium carbonate decahydrate crystals from the second mother liquor" (Claim 1)	"separating out the sodium carbonate decahydrate crystals suspended in the second mother liquor"
4	"the recovered mine brine" (Claim 1)	Plain and ordinary meaning.

Further, as announced at the hearing, I recommend that the following disputed claim terms be construed as follows:

	Term	Court
1	Steps 1(a) to 1(g) (Claim 1)	Steps 1(a) to 1(g) must be performed sequentially.
2	“first mother liquor” (Claims 1, 8, 9)	Not indefinite.
3	“an evaporation-stripping step” (Claim 1)	“a step including evaporation and/or stripping”
4	“the concentrated brine” (Claim 1)	“concentrated brine produced in step 1(a)”
5	“the crystallizable solution” (Claim 1)	“crystallizable solution produced in step 1(b)”

I. LEGAL STANDARDS

A. Claim Construction

The purpose of the claim construction process is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). When the parties have an actual dispute regarding the proper scope of claim terms, their dispute must be resolved by the judge, not the jury. *Id.* at 979. The Court only needs to construe a claim term if there is a dispute over its meaning, and it only needs to be construed to the extent necessary to resolve the dispute. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

“[T]here is no magic formula or catechism for conducting claim construction.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005). But there are guiding principles. *Id.*

“The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.” *Id.* at 1313. In some cases, the ordinary meaning of a claim term, as understood by a person of ordinary skill in the art, is readily apparent even to a lay person and requires “little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314. Where the meaning is not readily apparent, however, the court may look to “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004). Those sources include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

“The claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314. For example, “the context in which a term is used in the asserted claim can be highly instructive.” *Id.* Considering other, unasserted claims can also be helpful. *Id.* “For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15.

In addition, the “claims must be read in view of the specification, of which they are a part.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The specification “is always highly relevant to the claim construction analysis.” *Id.* (quoting *Vitronics*, 90 F.3d at 1582). The specification may contain a special definition given to a claim term by the patentee, in which case, the patentee’s lexicography governs. *Id.* at 1316. The specification may also reveal an intentional disclaimer or disavowal of claim scope. *Id.* However, “even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal marks omitted).

Courts should also consider the patent’s prosecution history. *Phillips*, 415 F.3d at 1317. It may inform “the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* Statements made by a patentee or patent owner during inter partes review may also be considered. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1362 (Fed. Cir. 2017).

In appropriate cases, courts may also consider extrinsic evidence, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at 980. For example, dictionaries, especially technical dictionaries, can be helpful resources during claim construction by providing insight into commonly accepted meanings of a term to those of skill in the art. *Phillips*, 415 F.3d at 1318. Expert testimony can also be useful “to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” *Id.*; see also *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331-32 (2015).

B. Indefiniteness

Section 112 of Title 35 imposes a definiteness requirement on patent claims. 35 U.S.C. § 112(b) (requiring that the claims “particularly point[] out and distinctly claim[] the subject matter which the inventor . . . regards as the invention”). “The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, *e.g.*, competitors of the patent owner, can determine whether or not they infringe.” *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779-80 (Fed. Cir. 2002).

“A patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). Definiteness, like claim construction, should be assessed from the viewpoint of a person of ordinary skill in the art at the time the patent was filed, and it should be considered in view of the patent’s specification and prosecution history. *Id.* at 908.

The party asserting indefiniteness has the burden to prove it by clear and convincing evidence. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017).

II. THE COURT'S RULING

My Report and Recommendation regarding the disputed claim terms of the '497 Patent was announced from the bench at the conclusion of the hearing as follows:

I want to emphasize before I announce my decisions that while I am not issuing a separate written opinion, we have followed a full and thorough process before making the decisions I am about to state. We have carefully reviewed the patent-in-suit. There was also full briefing on each of the disputed terms. The parties submitted their briefing in accordance with Chief Judge Stark's procedures, which are consistent with my procedures. Each side had the opportunity to submit two briefs, and they were combined into one joint claim construction brief incorporating all arguments; that is, arguments from Plaintiff's opening brief, Defendants' answering brief, Plaintiff's reply, and Defendants' sur-reply.

The parties' joint claim construction brief and chart also attached several exhibits. Those exhibits included portions of the prosecution histories relied on by the parties as well as certain extrinsic evidence. Neither party elected to put on live expert testimony or submit any declarations, but the Court permitted lengthy oral argument here today. All of that has been carefully considered.

And to be clear, while my oral ruling will cite to the intrinsic and extrinsic evidence that I conclude best supports my recommended constructions, my failure to cite to other evidence provided by the parties does not mean that I ignored or failed to consider it. As I have stated, I have considered all of the arguments and evidence cited by the parties.

Now as to my rulings. As an initial matter, I am not going to read into the record my understanding of the general legal principles of claim construction. I set forth the legal standards in my opinion in *3Shape A/S v. Align Tech., Inc.*, C.A. No. 18-886-LPS, 2020 WL 2188857, at *1-2 (D. Del. May 6, 2020), and I incorporate that articulation by reference. That opinion also sets forth the legal standard governing indefiniteness. *Id.* at *2. I also incorporate that recitation by reference.

Of course, a claim term is supposed to be given the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention. And I note here that neither side has argued that any difference the parties may have in defining a person of ordinary skill in the art impacts how I should resolve the disputes before me today.

All of the disputed terms are found in U.S. Patent No. 6,589,497, entitled “Process for Preparing Soda Ash from Solution Mined Bicarbonate Brines.” Claim 1 is directed to a particular process to recover sodium carbonate monohydrate from a mine brine obtained by dissolution of an underground ore body. The claimed process has a number of required steps, which are set forth in elements 1(a) through 1(g).¹

¹ Claim 1 reads as follows:

1. A process to optimize the recovery of sodium carbonate monohydrate from a mine brine derived by in situ dissolution of an underground sodium bicarbonate ore body, the mine brine containing quantities of sodium bicarbonate comprising:
 - a. feeding the recovered mine brine to an evaporation-stripping step to concentrate sodium content in the mine brine and to convert at least a portion of sodium bicarbonate therein to sodium carbonate to form a concentrated brine;
 - b. neutralizing at least a portion of remaining sodium bicarbonate in the concentrated brine to form additional sodium carbonate to form a crystallizable solution having concentrations of sodium carbonate from which monohydrate crystals of sodium carbonate will form upon evaporation of water from the crystallizable solution;
 - c. feeding the crystallizable solution to a monohydrate crystallizing step in which water is evaporated to form a slurry comprising sodium carbonate monohydrate crystals and a first mother liquor containing dissolved sodium carbonate in a concentration suitable as feed to a sodium carbonate decahydrate crystallization step;
 - d. separating the sodium carbonate monohydrate crystals from the first mother liquor to form a first mother liquor and to recover monohydrate crystals;
 - e. feeding at least a portion of the first mother liquor to a sodium carbonate decahydrate crystallization step to crystallize sodium carbonate decahydrate crystals as a slurry in a second mother liquor;
 - f. separating the sodium carbonate decahydrate crystals from the second mother liquor; and
 - g. recycling the sodium carbonate decahydrate crystals to the monohydrate crystallization step.

(‘497 Patent, Claim 1.)

The parties have agreed on the construction of a number of terms, and I recommend to Chief Judge Stark that he adopt those agreed-upon constructions.

1. Order of elements 1(a)-1(g)

The first dispute between the parties has to do with whether the steps set forth in elements 1(a) through 1(g) must occur “sequentially.” Genesis asks for a construction that “steps 1(a) to 1(g) do not need to be performed sequentially.” Ciner asks for a construction that “steps 1(a) to 1(g) must be performed sequentially.”

The essence of the dispute can be summed up as follows. Genesis acknowledges that steps 1(a) through 1(c) and 1(e) through 1(g) must occur sequentially. For example, step 1(b) uses the output of step 1(a), and step 1(c) uses the output of step 1(b). But Genesis argues that steps 1(c) through 1(e) do not require order because the first mother liquor from step 1(c) may be fed directly to the sodium carbonate decahydrate crystallizer of step 1(e) without undergoing the separation of step 1(d). To be clear, Genesis acknowledges that, under the law, step 1(d) must be performed to infringe the claimed process, but Genesis’s point is that the input to step 1(e) does not need to come from step 1(d). Rather, the input to step 1(e) can come from step 1(c).

Ciner says that the input to step 1(e) comes from step 1(d), and, thus, steps 1(d) and 1(e) must be performed sequentially.

As an initial matter, in making this ruling, I am cognizant of Genesis’s point that the claimed process occurs in a continuous loop and that the claimed steps can be performed simultaneously. I am fully aware of that concept, as illustrated, for example, in Figure 2, which is a simplified version of a process flow diagram. The question I am being asked to answer and the question I am answering is the sequence of steps in the process flow.

In *Interactive Gift* and *Altiris*, the Federal Circuit set out a two-part test for determining if the steps of a method claim that do not otherwise recite an order must nonetheless be performed in the order in which they are written.² The Federal Circuit instructs me

² See *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369–70 (Fed. Cir. 2003); *Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342–43 (Fed. Cir. 2001); see also *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1309 (Fed. Cir. 2014), *overruled on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (en banc).

to first look at the claim language to determine if, as a matter of grammar or logic, they must be performed in the order written. If the logic and grammar of the claim language do not require an order, then I turn to step 2, and I look to the rest of the specification to determine whether it “directly or implicitly requires such a narrow construction.”³ If not, the sequence in which the steps are written is not a requirement.

In my view, the language of the claims resolves this dispute at the first step of the *Altiris* test. The output of step 1(c) is a slurry. That step goes on to say what the slurry is comprised of, namely, a mixture of sodium carbonate monohydrate crystals and a first mother liquor. But the result of the step is a slurry. Step 1(d) starts with that slurry and it “separat[es] the sodium carbonate monohydrate crystals from the first mother liquor to form a first mother liquor.” To repeat, the claim language says that a first mother liquor is “form[ed]” in step 1(d). Step 1(e) says that a portion of “the first mother liquor” gets fed into the sodium carbonate decahydrate crystallization step. Since the claim itself says that the first mother liquor is formed in step 1(d), I agree with Ciner that the input to step 1(e) comes from step 1(d).

I recognize, of course, that the mother liquor and the mono crystals are created as a result of a chemical reaction that takes place in step 1(c), but the result of that reaction is a slurry that has more than one component: the mono crystals and the mother liquor. Those components are physically separated in step 1(d), resulting in what the claim refers to as the formation of the first mother liquor, *i.e.*, mother liquor that is separated from the mono crystals. And I conclude that it is the separated mother liquor from step 1(d) that is referred to in step 1(e).

While this dispute can be resolved solely with reference to the claim language, I also note that my conclusion is consistent with the specification, which describes the creation of a slurry in the monohydrate crystallizer that contains mono crystals and a first mother liquor. The crystals are then physically separated from the first mother liquor. The first mother liquor “separated from slurry” may be fed to a decahydrate crystallizer. (*See, e.g.*, ’497 Patent, 9:18-28, 9:42-58, 13:24-32.)

Genesis points to a sentence in the specification that discloses recovering the first mother liquor directly from the sodium

³ *Altiris*, 318 F.3d at 1369.

carbonate monohydrate crystallizer. (*Id.*, 9:64-10:5.) The parties dispute whether that portion of the specification refers to an embodiment that informs the construction of Claim 1. Either way, it does not change the fact that the claim states that the mother liquor is formed in step 1(d).

If Genesis has some infringement argument under which recovering mono mother liquor from the monohydrate crystallizer involves separating the mother liquor from the crystals as described in step 1(d)—and its argument today and Footnote 3 of the joint claim construction brief suggest that it does—my ruling today does not foreclose that argument. The argument hasn't been briefed by the parties as a claim construction issue and Ciner's proposed construction doesn't necessarily foreclose it. No one has asked me to construe the separating step of step 1(d). My ruling today is only that the mother liquor input into step 1(e) has to come from step 1(d), and for that reason, I adopt Ciner's construction.

Again, although I think this dispute is resolved on the claim language, I note that my construction is not inconsistent with the cited portions of the prosecution history. A previous version of the claim referred to the input of step 1(e) as a "substantially crystal-free mother liquor. (D.I. 51, Ex. C at GENESIS00000539.) The "substantially crystal-free" language was rejected as indefinite as to what the metes and bounds were, and that language was subsequently removed from the claim. While I give that portion of the prosecution history no weight in reaching my conclusion, I note that my conclusion is not inconsistent with the applicant having an understanding that the mother liquor obtained as a result of separating it from the crystals in step 1(d) was the mother liquor that would be fed into step 1(e).

2. "first mother liquor"

With that, I will jump forward to the last dispute in the briefs. That dispute is over the phrase "first mother liquor" in element 1(e) of Claim 1, and in Claims 8 and 9. Ciner argues that the phrase is indefinite. Essentially, Ciner argues that if I side with Genesis on the parties' order-of-steps dispute, that means there are actually two "first mother liquor[s]" described in the claim: one in step 1(c) and one in step 1(d). And because step 1(e) refers to "the first mother liquor," a person of ordinary skill in the art would be unable to tell which of the two first mother liquors is being referenced.

At page 63, Footnote 11 of the joint claim construction brief, Ciner states that if the Court adopts its construction on the order of steps, the “first mother liquor” in step 1(e) would not be indefinite. (D.I 71 at 63 n.11.) As I have resolved the parties’ order-of-steps dispute in favor of Ciner, [the “first mother liquor” in element 1(e) is not indefinite].

As to Claims 8 and 9, Ciner says in the same footnote that the “first mother liquor” in Claims 8 and 9 is indefinite under any construction. But Ciner does not explain why that would be the case for Claims 8 and 9 but not step 1(e) except in a single sentence on page 66 of the joint claim construction brief that says, “under any construction, Claims 8 and 9 are invalid as indefinite because they do not inform, with reasonable certainty, to which of those first mother liquors ‘the first mother liquor’ in Claims 8 and 9 refer.” (*Id.* at 66.)

It is Ciner’s burden to prove by clear and convincing evidence that the disputed phrase is indefinite in Claims 8 and 9. On this record, I find that Ciner has failed to meet its burden to show that Claims 8 and 9 are indefinite. My ruling is without prejudice for Ciner to renew its motion as to Claims 8 and 9 at the summary judgment stage.

3. “evaporation-stripping step”

The next phrase is “evaporation-stripping step.” There is a hyphen between the words “evaporation” and “stripping.” Genesis construes the phrase as “a step including evaporation and/or stripping.” Ciner construes the phrase as “a step including an evaporator and a stripper.” According to Genesis, there are two disputes here: (1) does the hyphen mean “and” or “and/or”?; and (2) does the claim require evaporator and stripper apparatuses or just the functions of evaporation and/or stripping? After reading the briefs and hearing the arguments today, I agree with Genesis’s characterization of the parties’ disputes over this term.

First, let’s look at the claim itself. Step 1(a) in its entirety requires

- a. feeding the recovered mine brine to an evaporation-stripping step to concentrate sodium content in the mine brine and to convert at least a portion of sodium bicarbonate therein to sodium carbonate to form a concentrated brine[.]

(’497 Patent, Claim 1.) It is clear to me, and the parties do not dispute, that step 1(a) requires two results: (1) concentrating sodium content in the mine brine; and (2) converting at least a portion of sodium bicarbonate to sodium carbonate. It is not clear, looking solely at the claim language, whether both of those results can be achieved by evaporation alone or stripping alone or whether they require an evaporator apparatus and a stripping apparatus.

Genesis’s interpretation that the hyphen means “and/or” is not unreasonable. Indeed, the claim refers to step 1(a) as a single step. On the other hand, as Ciner points out, the patentee could have said “and/or” if he meant “and/or.”

Both sides make claim differentiation arguments based on Claim 6, but reference to dependent Claim 6 does not provide much help. Claim 6 refers to “[t]he process of Claim 1, wherein the evaporation-stripping step comprises a first stripping step to decompose sodium bicarbonate to carbon dioxide and sodium carbonate followed by an evaporation step to evaporate water to concentrate the sodium values in the concentrated brine”

Genesis says Claim 6 supports its interpretation that Claim 1 requires evaporating and/or stripping because Claim 6 is further limiting in that it requires both. While Ciner says Claim 6 supports its interpretation that Claim 1 requires both evaporating and stripping because Claim 6 is further limiting in that it specifies the order of operations. As both are reasonable interpretations, I don’t think reference to Claim 6 provides much help.

Turning to the specification, Genesis points to column 2, lines 52 to 59, which states:

The invention, more specifically, provides a process for optimizing sodium carbonate monohydrate recovery from a mine brine containing significant quantities of sodium bicarbonate and minimal impurities by evaporating and/or stripping such a mine brine to concentrate sodium values in the mine brine and convert at least a portion of the remaining sodium bicarbonate therein to sodium carbonate to form a concentrated brine.

(’497 Patent, 2:52-59.) That portion of the specification contemplates that the term “evaporation-stripping step” might refer to a step that uses evaporation “and/or” stripping to accomplish the claimed results.

Genesis also points to column 6, lines 23 to 36, where it states that a stripper is “optional, although generally preferred,” and that “[a] combined concentrator-stripper may be utilized.” (*Id.*, 6:23-36.) Those portions of the specification suggest that the evaporation-stripping step should not be construed to require both an evaporator apparatus and a stripping apparatus, as argued by Ciner and, for that reason, I reject Ciner’s construction.

Although a closer call, I also side with Genesis to the extent that Ciner is arguing that the phrase requires both evaporating and stripping. Genesis points to portions of the specification that support its position that the processes of evaporation and stripping are each independently capable of accomplishing the claimed results, which are concentrating sodium content in the mine brine (*see, e.g., id.*, 6:55-60, 5:59-67), and converting at least a portion of sodium bicarbonate in the mine brine to sodium carbonate (*see, e.g., id.*, 6:55-57, 3:60-66, 6:1-14).

For example, Genesis points to column 5, lines 59 to 67, which refers to a technique called flashing that can result in the evaporation of water, thus increasing the concentration of sodium carbonate in the brine. (*Id.*, 5:59-67.) Genesis argues that evaporation can happen in a stripper alone via flashing. The cited passage refers to the evaporation of water and release of carbon dioxide gas as “stream 111,” which, in Figure 1, is shown coming out of the box labeled “stripping column.”⁴

Accordingly, I will construe “evaporation-stripping step” as “a step including evaporation and/or stripping.”

4. “the concentrated brine” and “the crystallizable solution”

That brings me to the last two terms: “the concentrated brine” in step 1(b) and “the crystallizable solution” in step 1(c). Genesis requests that I construe “the concentrated brine” in step 1(b) to have its plain and ordinary meaning or, if construction is necessary, to mean “concentrated brine produced in step 1(a).”

⁴ Ciner points out that Figure 2 illustrates the claimed embodiment, not Figure 1. But the specification states the following about the relationship between Figures 1 and 2: “In comparing FIG. 1 and FIG. 2, it is seen that process 100 and process 200 are identical through the brine neutralization step. The numbering of the steps and streams are equivalent in FIG. 1 and FIG. 2” (’497 Patent, 12:65-13:3.)

Ciner requests that I construe the phrase as “all of the concentrated brine produced in step 1(a).”

Genesis requests that I construe “the crystallizable solution” in step 1(c) to have its plain and ordinary meaning or, if construction is necessary, to mean “crystallizable solution produced in step 1(b).” Ciner requests that I construe the phrase as “all of the crystallizable solution produced in step 1(b).”

The gist of the dispute is that, under Genesis’s constructions, a portion of the outputs from steps 1(a) and 1(b) can be diverted from the claimed process and purged or used for other things. Under Ciner’s constructions, all of the outputs from steps 1(a) and 1(b) go to steps 1(b) and 1(c), respectively. In support of its argument, Ciner points out that, in step 1(e), only “at least a portion of” the first mother liquor formed in step 1(d) is fed to the deca crystallizer. According to Ciner, the patentee’s use of the “at least a portion of” language in step 1(e), and the absence of such language in steps 1(b) and 1(c), mean that the Court should construe the claims to require that all of the outputs from steps 1(a) and 1(b) must be fed to steps 1(b) and 1(c), respectively.

Citing the Federal Circuit’s *Enzo Biochem* and *Core Wireless* decisions,⁵ Ciner argues that the patentee knew how to craft language that would permit diverting portions of streams (as in the first mother liquor fed into step 1(e)) and that its choice not to use that language implies an intent not to permit the disputed concentrated brine and crystallizable solution streams to be partially diverted.

Genesis argues that Ciner’s reliance on *Enzo Biochem* and *Core Wireless* is misplaced because those cases dealt with the patentee’s use of narrowing language in other parts of the claims, and the patentee’s choice not to use narrowing language with respect to a disputed term implied a broader construction of that term. This case is different, says Genesis, because Ciner wants a narrow construction of the disputed terms. It wants to require that all of the outputs from steps 1(a) and 1(b) go to steps 1(b) and 1(c). Genesis says that Ciner’s argument is backwards because Ciner essentially is arguing that because the patentee knew how to use a broader term, as in step 1(e), the Court should adopt a narrower construction in steps 1(b) and 1(c).

⁵ See *Core Wireless Licensing S.A.R.L. v. L.G. Elecs., Inc.*, 880 F.3d 1356, 1366 (Fed. Cir. 2018); *Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1333 (Fed. Cir. 2010).

Genesis also points out that the specification shows multiple examples of diverting portions of streams. Indeed, the specification states that the disputed concentrated brine stream can be partially diverted to other processes. (*See, e.g.*, '497 Patent, 7:50-59.)

I side with Genesis. Nothing in the claim requires all of the outputs of step 1(a) and 1(b) to be fed to 1(b) and 1(c). Moreover, the portion of the specification I just cited is consistent with Genesis's contention that the concentrated brine stream can be used for other processes.⁶

Ciner's argument that the "at least a portion of" language in step 1(e) informs the disputed constructions certainly has some appeal. Where a claim uses language to describe a given term but doesn't use the same language in another term, the choice may suggest an understanding of the patentee, and that logic applies regardless of whether the language used in other parts of the claim is broadening or narrowing language. But I don't think it wins the day here for the reasons I already discussed. And while not dispositive, there are two other reasons why I think Genesis's construction is better.

First, this is a process claim that uses the word "comprising." Ciner's proposed constructions essentially seek to turn this claim into a "consisting essentially of" claim. Ciner is basically arguing that even if it performs the claimed steps of the process, it can escape infringement if it performs other steps in addition to those steps. That is not the law.

Second, read in view of the rest of the specification, the "feeding at least a portion of the first mother liquor" language in step 1(e) might be understood to refer to what I see as one of the improvements specific to Claim 1 and Figure 2, that is, instead of taking the first mother liquor stream and either sending it back to the mono feed prep or purging it, as shown in Figure 1, step 1(e) requires that at least some of the first mother liquor stream be fed to the deca crystallization step, as described, for example, at column 9, lines 42 to 61, and as shown in Figure 2 as line 263. The "at least a portion of" language in step 1(e) is consistent with the specification's description of a particular embodiment where a portion of the mono mother liquor is diverted to the deca crystallizer instead of put to the other uses described in the specification. When step 1(e) is read in

⁶ As to Ciner's argument that the cited portion of the specification refers to an unclaimed embodiment, *see* note 4, *supra*.

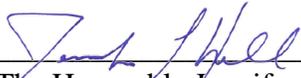
light of the specification, I can't conclude that its reference to feeding "at least a portion of" the first mother liquor outputted from step 1(d) would suggest to a person of ordinary skill in the art that the entire output of steps 1(a) and 1(b) must be fed to steps 1(b) and 1(c), respectively.

Finally, just to complete the record, I recognize that Claim 1 uses the "at least a portion of" language in two other places, in step 1(a) and in step 1(b), but I don't find that particularly informative here. Steps 1(a) and 1(b) use that phrase in the context of chemical yield. I find that it would not inform a person of ordinary skill in the art one way or the other about the question in dispute here, which is whether the outputs of steps 1(a) and 1(b) must all be fed to steps 1(b) and 1(c). And that concludes my report and recommendation.

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), (C), Federal Rule of Civil Procedure 72(b)(1), and District of Delaware Local Rule 72.1. Any objections to the Report and Recommendation shall be filed within fourteen days and limited to ten pages. Any response shall be filed within fourteen days thereafter and limited to ten pages. The failure of a party to object to legal conclusions may result in the loss of the right to *de novo* review in the district court.

The parties are directed to the Court's "Standing Order for Objections Filed Under Fed. R. Civ. P. 72," dated October 9, 2013, a copy of which can be found on the Court's website.

Dated: October 14, 2020



The Honorable Jennifer L. Hall
United States Magistrate Judge