IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

SEMCON	TECH.	LLC.
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Plaintiff,

v.

Civil Action No. 12-532-RGA

MICRON TECHNOLOGY, INC.,

Defendant.

MEMORANDUM OPINION

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September _____, 2014

ANDREWS, U.S. DISTRICT JUDGE:

Pending before this Court is the issue of claim construction for numerous disputed terms found in U.S. Patent No. 7,156,717 ("the '717 patent").

I. BACKGROUND

Semcon filed this suit against Micron on April 27, 2012, alleging infringement of the '717 patent. (D.I. 1). The method of claim 1 is representative of the more than 100 claims contained in the '717 patent:

A method of finishing a tracked semiconductor wafer having a semiconductor wafer surface and a finishing cycle time, the method comprising the steps of:

providing the tracked semiconductor wafer having tracked information; providing a finishing surface;

providing a finishing aid to an interface formed between the finishing surface and the semiconductor wafer surface;

providing a finishing control subsystem having:

at least three operative process sensors for sensing in situ process information during the finishing cycle time;

access to the tracked information; and

a processor to evaluate the in situ process information and the tracked information;

applying an operative finishing motion in the interface forming at least one region having the finishing aid and wherein the at least one region has a tangential force of friction; and

changing a plurality of control parameters in response to an evaluation of both the in situ process information sensed with the at least three operative process sensors and the tracked information and wherein changing the control parameters changes the tangential force of friction in the at least one region having the finishing aid during at least a portion of the finishing cycle time.

'717 patent, claim 1. The Court has considered the parties' Joint Claim Construction Brief (D.I. 68), appendix (D.I. 69), a letter from Semcon revising several of its constructions (D.I. 88), and oral argument on June 26, 2014. (D.I. 89).

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) (quoting *Phillips*, 415 F.3d at 1324). When construing patent claims, a matter of law, 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 quotations and citations omitted).

Furthermore, "the 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." *Phillips*, 415 F.3d at 1312-13 (internal citations and 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 (internal citations omitted).

A court may consider extrinsic evidence, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises," in order to assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art and how the invention works. *Id.* at 1317-19 (internal quotation marks and citations omitted). However, extrinsic evidence is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

Moreover, "[a] claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent." *Renishaw PLC v. Marposs Societa'* per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct interpretation." *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (internal quotation marks and citation omitted).

III. CONSTRUCTION OF DISPUTED TERMS

A. The '717 Patent

- 1. "tracked information"
- a. *Plaintiff's proposed construction*: Pre-polishing information about the wafer being polished that is associated with the wafer.
- b. *Defendants' proposed construction*: Pre-polishing information about the fabrication of the wafer being polished that is associated with the wafer.
- c. *Court's construction*: Pre-polishing information about the wafer being polished that is associated with the wafer.

After Semcon revised its construction (D.I. 88, p. 2), the only remaining issue is whether Micron correctly limits the tracked information to information about "the fabrication of" the

wafer being polished. Micron relies on the claims to support the inclusion of this language. Specifically, all of the asserted claims require an evaluation of the tracked information to determine a change in control parameters. *See, e.g.*, '717 patent, claim 1. Micron contends the claim language makes clear that "only information about the fabrication of the wafer, such as topography information from a prior fabrication step," can be meaningfully evaluated to determine changes to the control parameters. (D.I. 68, pp. 4-5).

The intrinsic evidence is insufficient to support the narrow construction sought by Micron. Nothing in the claims explicitly limits "tracked information" to information about the fabrication of the wafer, and neither does the specification. Rather, the specification broadly refers to "tracking the workpiece during manufacture" so that "improved information for in real time (in situ) control of finishing rate(s) and differential finishing rate(s)" can be effected, and teaches the need "to use tracking information during finishing." *See* '717 patent, 3:5-12. This is broader than information about "the fabrication of" the wafer.

2. "control parameters"

- a. *Plaintiff's proposed construction*: Variables which are subject to adjustment that adjust the tangential force of friction, the polishing rate, polishing uniformity, cost of manufacture, differential lubrication, thickness of lubricating film, local and/or macro coefficient of friction, and/or boundary layer.
- b. *Defendants' proposed construction*: Process settings set in the finishing control subsystem that control the tangential force of friction (for Claims 1, 12, 19, 119) or the polishing rate (for Claims 37, 56, 59, 61, 76, 97).
 - c. Court's construction: Process settings set by the finishing control subsystem.

Semcon offers three constructions, none of which are particularly helpful. The first construction is the plain and ordinary meaning, the second proposal is essentially a lengthy list of every variable that is subject to adjustment, and the third construction is a modified version of Micron's proposal. (D.I. 68, p. 18; D.I. 88, pp. 2-3). Micron's proposal is much more manageable in length, and Micron agreed to further shorten its construction by adding a period after "subsystem" in its construction. (D.I. 89 at 64-65).

The finishing control subsystem sets the control parameters, which are process settings. The claim language requires a "finishing control subsystem" having: process sensors "for sensing in situ process information during the finishing cycle time," access to tracked information, and a "processor to evaluate the in situ process information and the tracked information." '717 patent, claim 1. The claims further require "changing a plurality of control parameters" in response to the processor's evaluation of the in situ process information and the tracked information, "wherein changing the control parameters changes the tangential force of friction . . . during at least a portion of the finishing cycle time." Id. This claim structure makes it clear that the control parameters are changed based on the evaluation performed by the processor, which is part of the finishing control subsystem, to effect the finishing; in other words, the finishing control subsystem sets the control parameters. This conclusion is reinforced by the specification, which recognizes that, "[A] control subsystem is a combination of an operative sensor operatively connected to a processor which is operatively connected to a controller which in turn can change finishing control parameters. A preferred finishing control subsystem has real time access to tracked information on the workpiece being finished to improve control of finishing control parameters in real time (in situ) during the finishing cycle time (or a portion of the finishing cycle time)." Id. at 55:44-52.

Semcon objects to Micron's proposal because the specification describes control parameters more generally. For example, Semcon cites a portion of the specification describing the finishing temperature, which states: "Finishing temperature is a preferred process control parameter. Finishing temperature can be controlled by changing the heat supplied to the platen or heat supplied to the finishing composition. Alternat[ively], friction can also change the finishing temperature and can be controlled by changes in lubrication, applied pressure during finishing, and relative operative finishing motion velocity." *Id.* at 53:16-23. As I understand the parties' arguments, nothing in the construction I adopt today would prevent the finishing temperature, a preferred embodiment, from being set by the finishing control subsystem. The fact that temperature can also be changed as a result of changes in the friction or lubrication, meaning that temperature is not directly set by the finishing control subsystem, does not change my opinion. Every embodiment does not have to be claimed in order for a construction to be valid.

3. "finishing cycle time"

- a. *Plaintiff's proposed construction*: The time during CMP prior to the time that the endpoint of CMP is reached. The finishing cycle referred to in this claim phrase refers to CMP and not to other processes related to semiconductor manufacturing such as etching.
- b. *Defendants' proposed construction*: This term should be construed in the context in which it appears in the claims. Alternatively, should the Court determine that a separate construction is necessary: The duration of a single polishing step. Or, alternatively, should the Court determine that a separate construction is necessary: The time that the wafer is being finished without interruption on a single finishing surface.

c. Court's construction: The elapsed time in minutes that the workpiece is being finished.

When the patentee stated in the specification that, "The finishing cycle time is the elapsed time in minutes that the workpiece is being finished," '717 patent, 10:4-5, he acted as his own lexicographer. Both parties agree. (D.I. 91 & 92). The disagreement now centers on the meaning of "is being" as used by the patentee in his lexicographic definition. During the *Markman* hearing, I requested supplemental letter briefs addressing whether I have to construe a patentee's lexicographic definition. (D.I. 89 at 96).

Micron submitted Federal Circuit authority affirming a district court's "derivative construction" of a patentee's lexicographic definition. *See Advanced Fiber Techs. (AFT) Trust v. J & L Fiber Servs., Inc.*, 674 F.3d 1365, 1373-74 (Fed. Cir. 2012). During the prosecution of the patent in *Advanced Fiber Techs*, the patentee expressly limited "screening medium" to "a barrier that is 'perforated." *Id.* at 1374. The parties then disputed the meaning of the word "perforated," and the district court provided a construction for that term, even though it does not appear in the claim language. *Id.* Although the Federal Circuit reversed the district court's construction of "perforated" because the definition was based solely on extrinsic evidence, it affirmed the lower court's ability to construe a term that is not a part of any claim. *Id.* at 1373-75 ("[I]n those cases in which the correct construction of a claim term necessitates a derivative construction of a non-claim term, a court may perform the derivative construction in order to elucidate the claim's meaning.").

This case stands for the proposition that, if necessary to reach the correct construction, a district court may elucidate a claim's meaning by providing a derivative construction of a non-claim term. However, additional judicial guidance regarding the definition of "is being" is not

needed to reach the correct construction here. *See Carotek, Inc. v. Kobayashi Ventures*, *LLC*, 2011 WL 4056746, at *11 (S.D.N.Y. Sept. 8, 2011) ("Although Carotek's proposed construction may provide added clarity, because the patentee acted as its own lexicographer and clearly set forth a definition of the disputed claim term, the definition in the specification controls."). I adopt the lexicographic definition provided by the patentee in the specification as controlling.

- 4. "in situ finishing information" / "in situ process information"
- a. Plaintiff's proposed construction: Information that is sensed or measured, or derived from analysis of information that is sensed or measured, from the wafer currently undergoing CMP, including but not limited to information about changes in friction derived from an analysis of current changes on electric motors rotating the wafer being finished and/or the platen or the output from thermal sensors, information about film thickness derived from a measurement of reflected laser light, interferometry, or thermal analysis; and lubrication information.
- b. *Defendants' proposed construction*: This term should be construed in the context in which it appears in the claims. Alternatively, should the Court determine that a separate construction is necessary: "Information that is sensed from the wafer currently undergoing CMP." The phrase "in situ process information" should likewise be construed in the context in which it appears in the claims. Alternatively, should the Court determine that a separate construction is necessary: "Information that is sensed from the wafer currently undergoing CMP."
- c. Court's construction: Information that is sensed from the wafer currently undergoing CMP.¹

¹ It is the Court's understanding that the meaning of "CMP" will be made clear to the jury during the trial.

The crux of the disagreement between the parties is whether the in situ information must be sensed from the wafer, as Micron argues, or whether it can also be measured or derived from information that is sensed or measured. Semcon cites several examples from the specification (and appends them to its construction) that it claims qualify as in situ finishing information or in situ process information even though they are not directly sensed; instead, these examples are "generated through calculations performed on some other physical quantity that is sensed from the wafer." (D.I. 68, pp. 40-42 (listing changes in friction, film thickness, and lubrication information)). Semcon contends that adopting Micron's construction would exclude these examples and create an inconsistency between the claims and specification. Micron, on the other hand, bases its argument on the claim language itself. Claim 1 references a finishing control subsystem having "process sensors for sensing in situ process information" and a separate step requiring an evaluation of "the in situ process information sensed with the at least three operative process sensors." '717 patent, claim 1. This, Micron argues, shows that the in situ process information is limited to information that is sensed and does not include information that is measured or derived from sensed information. (D.I. 68, pp. 42-44).

The Court adopts Micron's proposed construction. Claim 1 is an open-ended "comprising" claim. The pertinent claim language explicitly describes the in situ information as "sensed" by process sensors. '717 patent, claim 1. Nowhere in the portions of the specification cited by Semcon are its examples linked to the concept of in situ information. There is thus no compelling reason to add "measured" or "derived from" to the construction of this clear claim language.

- 5. "processor to evaluate the in situ process information and the tracked information" /
 "processor for processing: (i) the tracked information, and (ii) historical performance"
 - a. Plaintiff's proposed construction: Plain and ordinary meaning.
- b. Defendants' proposed construction: Means plus function term under 35 U.S.C. § 112 ¶ 6. Function: to calculate an adjustment for two or more control parameters for polishing of the wafer based on the results of analyzing the pre-polishing information about the fabrication of the wafer together with the real-time polishing information about the wafer measured by each of the three [or five] or more process sensors [for Claims 1, 12, 37, 56, and 59] or the performance information collected before the current finishing cycle [for Claims 19, 61, 76, 97, and 119]. Structure: Not sufficiently disclosed in the patent—the claims are indefinite.
 - c. Court's construction: Plain and ordinary meaning.

The "processor" terms in the '717 patent are not properly construed under § 112(f), previously § 112 ¶ 6, because the patent drafter did not use the word "means" in the claim language. A claim term that does not contain the word "means" is presumptively not subject to § 112(f). See CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1369 (Fed. Cir. 2002). The presumption "can be overcome if it is demonstrated that "the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function." Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed. Cir. 2004) (quoting CCS Fitness, 288 F.3d at 1369); Mass. Inst. of Tech. & Elecs. for Imaging, Inc. v. Abacus Software, 462 F.3d 1344, 1354 (Fed. Cir. 2006) ("MIT") ("Claim language that further defines a generic term like 'mechanism' can sometimes add sufficient structure to avoid 112 ¶ 6."). Despite being rebuttable, the Federal Circuit has cautioned that "the presumption flowing from the absence of the term 'means' is a strong one that is not readily

overcome." Lighting World, 382 F.3d at 1358. Indeed, "it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function." Id. at 1359-60. Courts can consider both intrinsic and extrinsic evidence when determining whether a claim limitation contains sufficient structure to avoid § 112(f)'s application. See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1364 (Fed. Cir. 2013).

The "strong" presumption against applying § 112(f) to a claim term that does not contain the word "means" has not been overcome because the '717 patent specification provides sufficient structure. Claim 1 recites a finishing control subsystem having at least three operative process sensors for sensing in situ information, access to tracked information, and "a processor to evaluate the in situ process information and the tracked information." '717 patent, claim 1. That the processor is a component of the finishing control subsystem is confirmed by the specification. *See id.*, fig.1 (depicting the processor, 510, operatively connected to the controller, 520, and the operative sensor, 500); *id.* at 12:64-13:2 ("The plurality of operative process sensors, the operative processor, and the operative controller together represent a preferred finishing control subsystem which . . . communicate[s] with and control[s] the finishing apparatus."). The specification describes a suitable processor as a microprocessor or ASIC (application specific integrated circuit) with computational and digital capabilities. *Id.* at 53:37-39. Non-limiting examples of the processor's capabilities are as follows:

[The] use of various mathematical equations, calculating specific parameters, memory look-up tables or databases for generating certain parameters such as historical performance or preferred parameters or constants, neural networks, fuzzy logic techniques for systematically computing or obtaining preferred parameter values. . . . Further preferred non-limiting processor capabilities includ[e] adding, subtracting, multiplying, dividing, use functions, look-up tables, noise subtraction

techniques, comparing signals, and adjusting signals in real time from various inputs and combinations thereof.

Id. at 53:40-55. The patentee also cited numerous patents purporting to explain neural networks and fuzzy logic, both of which the processor is capable of utilizing. See id. at 55:19-33. Taken together, the specification details the location of the processor within the invention, the type of processor suitable for carrying out the invention's requirements, and the desired capabilities possessed by a preferred processor. Although the structure in the specification is not the most robust, it is sufficient to prevent Micron from overcoming the "strong" presumption against § 112(f)'s application to the term "processor."

I also note that issued patents are presumptively valid, and Micron bears the burden of proving indefiniteness under § 112(f) by clear and convincing evidence. For complex technical matters, this usually requires the persuasive guidance of an expert in the field. Both parties submitted declarations from their experts in this case, and, not surprisingly, the experts disagree over whether the term "processor" connotes sufficiently definite structure to one of skill in the art. (*Compare* D.I. 69-2, pp. 12-13, *with* D.I. 69-4, pp. 13-14). Both experts' positions seem reasonable, and the Court cannot discern a basis for attributing anything but equal weight to the two declarations. This is not proof of invalidity by clear and convincing evidence, at least in the absence of live testimony subject to cross-examination. Micron's failure to carry its evidentiary burden constitutes another reason at this time to reject its invalidity argument under § 112(f).

Finally, courts have been particularly reluctant to construe terms in method claims as means-plus-function limitations, absent the drafter's use of the word "means" in the claim language. The Court requested supplemental letter briefing from the parties addressing whether the type of claim (*i.e.*, method instead of system or apparatus) affects the application of § 112(f). (D.I. 94). Semcon primarily relied on *Virginia Innovation Sciences, Inc. v. Samsung Electronics*

Co., 976 F. Supp. 2d 794 (E.D. Va. 2013). There, the court declined to invoke § 112(f) to construe "conversion module" because the method claim did not use the word "means." *Id.* at 829-33. The court noted, "The fact that a method discloses a device used in the performance of that method without specifying the structure of that device is not surprising, given the invention being claimed (i.e., the method)." *Id.* at 831. This reasoning is persuasive when applied to the current dispute. The inventive concept embodied in the '717 patent is the ability to dynamically adjust control parameters using real time information during the polishing of a semiconductor wafer. (D.I. 89 at 153). The particular processor used to evaluate these various pieces of information is not central to the invention, and the fact that it was not described in detail is neither surprising nor fatal to the '717 patent claims' validity.

Micron cited two cases in its letter brief, *On Demand Machine Corp.* and *J & M Corp.*, where the Federal Circuit affirmed the presence of means-plus-function limitations in method claims. (D.I. 95, pp. 1-2). Those cases are distinguishable, however, because the terms at issue in those cases contained the phrase "means." *See On Demand Mach. Corp. v. Ingram Indus.*, *Inc.*, 442 F.3d 1331, 1340-42 (Fed. Cir. 2006) (construing "providing means for a customer to visually review said sales information" in a method claim as a means-plus-function limitation); *J & M Corp. v. Harley-Davidson, Inc.*, 269 F.3d 1360, 1367 (Fed. Cir. 2001) (construing "gripping means" in a method claim as a means-plus function limitation). Instead of a presumption against applying § 112(f), as is the case with the '717 patent's "processor" term, there is a presumption in favor of its application in these cases.

Micron also offered a memorandum opinion on a motion for reconsideration as support.

Kensey Nash Corp. v. Perclose, Inc., 2001 WL 959399 (E.D. Pa. Aug. 21, 2001). In Kensey

Nash, the court was previously asked to construe the phrase "location detector," which appeared

in claims 1 and 25. Id. at *5-6. Claim 1 contained "means" language and was an apparatus claim, whereas claim 25 recited a method and did not use the word "means." The court concluded "location detector" was a means-plus-function limitation in claims 1 and 25, apparently under the mistaken belief that both claims contained "means" language. Id. at *6. In the motion for reconsideration, Kensey argued, among other things, that the method of claim 25 did not contain the word "means" and therefore claim 25's use of the phrase "location detector" should not be construed under § 112(f). The court acknowledged that claim 1 used "means" language² and claim 25 did not, but stated that "this error has no impact" on its interpretation of "location detector" because claim 25 uses "location detector" as a purely functional term and recites no specific structure. Id. at *6-7. This case is distinguishable because there are no other claims in the '717 patent that recite a "processor" using "means" language. Presumably the patentee in Kensey Nash did not intend different meanings for "location detector" in the different claims, *Phillips*, 415 F.3d at 1314 (noting that "claim terms are normally used consistently throughout the patent"), which is what would have happened if the court granted Kensey's motion for reconsideration with respect to claim 25. There is no similar risk of inconsistency here.

Because I have concluded that "processor" is not a means-plus-function term, I need not reach the issue of whether a general purpose computer without special programming can perform the recited functions or whether the '717 patent discloses an algorithm.

6. "[a multiplicity of] finishing information"

a. Plaintiff's proposed construction: Plain and ordinary meaning, or "[A multiplicity of] information about the performance of the polishing of the wafer."

² The court affirmed its construction of "location detector" in claim 1 as a means-plus-function term because it was drafted with "means" language.

- b. *Defendants' proposed construction*: [A multiplicity of] information about the performance of the polishing of the wafer that is in addition to the information measured by the three or more process sensors.
- c. Court's construction: [A multiplicity of] information about the performance of the polishing of the wafer that is in addition to the information measured by the three or more process sensors.

Micron persuasively argues that the multiplicity of information about the performance of the polishing of the wafer must exclude the information measured by the process sensors if redundancy in the claim limitations is to be avoided. Claim 19 contains three steps for finishing a semiconductor wafer having tracked information that are important to this analysis. Step H determines "a change for at least two process control parameters" based on four pieces of information, two of which are "(iii) the in situ finishing information, and (iv) the step (G) of evaluating the multiplicity of finishing information." '717 patent, claim 19. These two pieces of information are obtained in the preceding steps F and G, respectively. Step F requires "sensing an in situ finishing information with the at least three operative process sensors during a finishing cycle time." Id. Step G recites "evaluating a multiplicity of finishing information, and each having varying effects on the finishing with the finishing aid." Id. It would render the limitations redundant if the "multiplicity of finishing information" from step G included the "in situ finishing information" required by the immediately preceding step F. Moreover, step H enumerates these pieces of information separately when listing what information is considered for changing a control parameter. If steps F and G referred to the same information, step H would require that the same information be considered twice.

- 7. "tracked semiconductor wafer"
 - a. Plaintiff's proposed construction: Plain and ordinary meaning.
- b. Defendants' proposed construction: The wafer being polished with which the tracked information is associated.
- c. *Court's construction*: The wafer being polished with which the tracked information is associated.

It is not clear whether a dispute actually exists between the parties with respect to this term. The briefing was largely a carry-over of the arguments for the "tracked information" term, which has been construed above. Both parties appear to be advancing what the Court considers to be the plain and ordinary meaning of "tracked semiconductor wafer." Because Micron's proposal captures the plain meaning without adding confusion or superfluous limitations, it is adopted.

- 8. "a family of stored information" / "member [of / in] the family of stored information"
- a. Plaintiff's proposed construction: Plain and ordinary meaning, or "A group of related information that is stored" / "A member [of / in] the group of related information that is stored."
- b. *Defendants' proposed construction*: A group of related information generated and stored after the previously recited steps of the method have been performed / A member [of / in] the group of related information generated and stored after the previously recited steps of the method have been performed.
 - c. Court's construction: Plain and ordinary meaning.

The remaining terms received only a miniscule amount of briefing³ and were not addressed during the *Markman* hearing. This makes it difficult to hone in on the parties' disagreements, assuming they actually exist. The plain and ordinary meaning appears to capture the gist of Micron's proposal here. If, after expert reports are submitted, Micron can show there is a scope difference, the Court would be willing to reconsider the issue at that time.

9. "historical performance"

- a. *Plaintiff's proposed construction*: Plain and ordinary meaning or "Performance information collected before the current finishing cycle."
- b. *Defendants' proposed construction*: Performance information collected before the current single polishing step.
- c. *Court's construction*: Performance information collected before the current finishing cycle.

The parties dispute whether the performance information is collected before "the current single polishing step" or "the current finishing cycle." Micron believes limiting the historical performance to "the current single polishing step" is appropriate because the specification lists several examples of historical information that "were generated and existed before the start of the current polishing step." (D.I. 68, p. 57 (citing '717 patent, 53:59-54:37)). The fact that the patentee provided a list of examples of historical information in the specification is an insufficient justification for reading a limitation from the specification into the claims. The Court adopts Semcon's broader proposal because it does not contain such a narrowing limitation.

³ For example, the parties' combined briefing for this term occupies only 19 lines of text.

- 10. "a first uniform region" / "a second uniform region" / "one uniform region"
- a. Plaintiff's proposed construction: Plain and ordinary meaning. Alternatively, in the event the Court determines that a construction is necessary, "An area of a semiconductor wafer surface having uniform feature thickness, material composition, conduction, non-conduction, or other function(s)."
- b. *Defendants' proposed construction*: An area of a semiconductor wafer surface having uniform feature thickness and material composition.
 - c. Court's construction: Plain and ordinary meaning.

Micron proposes to narrow the term "uniform[ity]" based on several examples from the specification. Semcon's revised construction adopts Micron's proposal but appends several additional examples to the end. Neither of these are particularly helpful, and the Court sees no reason to import any of these limitations from the specification into the definition. The plain and ordinary meaning applies.

- 11. "heterogeneous semiconductor wafer surface" / "heterogeneous regions of a semiconductor wafer surface"
- a. Plaintiff's proposed construction: Plain and ordinary meaning. Alternatively, "A surface of a semiconductor wafer made of different materials / A surface of a semiconductor wafer having regions made of different materials."
- b. Defendants' proposed construction: A surface of a semiconductor wafer having multiple regions made of different materials.
 - c. Court's construction: Plain and ordinary meaning.

This term does not require construction. The jury can conceptualize what a heterogeneous wafer surface is without additional guidance from the Court.

12. The lengthy combination terms

The parties also dispute the meaning of several lengthy claim terms largely comprised of terms construed above. The terms that required construction have been construed. The remainder of the long phrases receive their plain and ordinary meaning.

IV. CONCLUSION

Within five days the parties shall submit a proposed Order consistent with this Memorandum Opinion suitable for submission to the jury.