

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SEMCON TECH, LLC,

Plaintiff;

v.

Civil Action No. 12-532-RGA

MICRON TECHNOLOGY, INC.,

Defendant.

MEMORANDUM OPINION

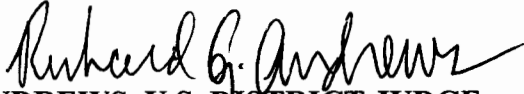
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Attorneys for Defendant

June 15, 2017


ANDREWS, U.S. DISTRICT JUDGE:

Presently before the Court are Plaintiff's Motion for Partial Summary Judgment of No Invalidity on Residual Grounds and for Dismissal of Defendant Micron Technology, Inc.'s Other Pleaded Defenses (D.I. 184) and related briefing (D.I. 185, 209, 226), Plaintiff's Motion for Partial Summary Judgment of No Invalidity for Anticipation Under 35 U.S.C. § 102 and Obviousness Under 35 U.S.C. § 103 (D.I. 186) and related briefing (D.I. 189, 206, 227), and Defendant's Motion for Summary Judgment of Noninfringement (D.I. 188) and related briefing (D.I. 190, 212, 224). The Court heard oral argument on January 17, 2017. (D.I. 270) ("Hr'g Tr."). For the reasons that follow, Plaintiff's Motion for Partial Summary Judgment of No Invalidity on Residual Grounds and for Dismissal of Defendant Micron Technology, Inc.'s Other Pleaded Defenses (D.I. 184) is granted-in-part and denied-in-part. Defendant's Sixth, Eighth, and Tenth Defenses are dismissed. Plaintiff's motion is denied as to the remaining defenses. Plaintiff's Motion for Partial Summary Judgment of No Invalidity for Anticipation Under 35 U.S.C. § 102 and Obviousness Under 35 U.S.C. § 103 (D.I. 186) and Defendant's Motion for Summary Judgment of Noninfringement (D.I. 188) are denied.

I. Background

Plaintiff brought this infringement action on April 27, 2012, alleging that Defendant infringes U.S. Patent No. 7,156,717 ("the '717 patent"). (D.I. 1). Defendant answered, raising ten defenses. (D.I. 10). The Court issued a Markman opinion construing disputed terms on September 9, 2014. (D.I. 98). On May 26, 2015, the parties filed cross-motions for Summary Judgment on a variety of grounds. (D.I. 184, 186, 187, 188). On August 17, 2015, the Court granted Defendant's Motion for Summary Judgment of Invalidity (D.I. 187) and dismissed the other pending Summary Judgment motions as moot. (D.I. 254). Plaintiff appealed. On August

19, 2016, the Federal Circuit vacated and remanded. (D.I. 262). Subsequently, both parties renewed the summary judgment motions previously dismissed as moot.

The '717 patent claims methods of finishing semiconductor wafers. Plaintiff has asserted claims 1, 12, 37, and 56. (D.I. 189 at 5; Hr'g Tr. at 5:2). Claim 1 is representative and reads:

1. 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).

II. Legal Standard

“The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). The moving party has the initial burden of proving the absence of a genuinely disputed material fact relative to the claims in question. *Celotex Corp. v. Catrett*, 477 U.S. 317, 330 (1986). Material facts are those “that could affect the outcome” of the proceeding, and “a

dispute about a material fact is ‘genuine’ if the evidence is sufficient to permit a reasonable jury to return a verdict for the nonmoving party.” *Lamont v. New Jersey*, 637 F.3d 177, 181 (3d Cir. 2011) (quoting *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). The burden on the moving party may be discharged by pointing out to the district court that there is an absence of evidence supporting the non-moving party’s case. *Celotex*, 477 U.S. at 323.

The burden then shifts to the non-movant to demonstrate the existence of a genuine issue for trial. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586–87 (1986); *Williams v. Borough of West Chester, Pa.*, 891 F.2d 458, 460–61 (3d Cir. 1989). A non-moving party asserting that a fact is genuinely disputed must support such an assertion by: “(A) citing to particular parts of materials in the record, including depositions, documents, electronically stored information, affidavits or declarations, stipulations . . . , admissions, interrogatory answers, or other materials; or (B) showing that the materials cited [by the opposing party] do not establish the absence . . . of a genuine dispute” FED. R. CIV. P. 56(c)(1).

When determining whether a genuine issue of material fact exists, the court must view the evidence in the light most favorable to the non-moving party and draw all reasonable inferences in that party’s favor. *Scott v. Harris*, 550 U.S. 372, 380 (2007); *Wishkin v. Potter*, 476 F.3d 180, 184 (3d Cir. 2007). A dispute is “genuine” only if the evidence is such that a reasonable jury could return a verdict for the non-moving party. *Anderson*, 477 U.S. at 247–49. If the non-moving party fails to make a sufficient showing on an essential element of its case with respect to which it has the burden of proof, the moving party is entitled to judgment as a matter of law. *See Celotex Corp.*, 477 U.S. at 322.

III. Discussion

A. Plaintiff's Motion for Partial Summary Judgment on Residual Grounds

Plaintiff seeks dismissal of Defendant's Third, Fifth, Sixth, Eighth, Ninth, and Tenth Defenses.¹ (D.I. 185 at 4-5). Plaintiff contends that Defendant has failed to provide sufficient evidence to support any of its pleaded invalidity defenses other than anticipation, obviousness, and lack of written description. (*Id.* at 4). Defendant responds that Plaintiff's motion is premature as the defenses it seeks to have dismissed are not ripe. (D.I. 209 at 5). Defendant further argues that Plaintiff has failed to meet its burden to establish that there is no dispute of material fact as to these defenses. (*Id.*).

Plaintiff argues for dismissal of Defendant's Third Defense of invalidity for lack of patentable subject matter or lack of enablement because Defendant's expert has not opined on the grounds for those defenses. (D.I. 185 at 7). Defendant responds that expert testimony is not required to show invalidity on these grounds. (D.I. 209 at 7). In reply, Plaintiff contends that Defendant has not presented any evidence at all in support of its Third Defense. (D.I. 226 at 6). I decline to consider this new argument raised for the first time in reply. Plaintiff's initial argument in support of summary judgment was that Defendant's expert had failed to opine on these defenses, not that Plaintiff had failed to come forward with any evidence at all. Expert testimony is not necessarily required to prove these defenses; therefore, I will deny Plaintiff's motion as to Defendant's Third Defense.

Plaintiff seeks dismissal of Defendant's Sixth Defense for lack of notice under 35 U.S.C.

¹ Plaintiff also initially sought dismissal of Defendant's First, Fourth and Seventh Defenses. (D.I. 185 at 5). In its reply, however, Plaintiff acknowledges that Defendant's Fourth and Seventh Defenses are not ripe. (D.I. 226 at 4). Defendant's First Defense is failure to state a claim under Fed. R. Civ. P. 12(b)(6), which, Defendant asserts, is not waived, does not require supporting evidence at this stage, and may be raised at trial. (D.I. 209 at 8). Plaintiff declined to respond in its reply.

§ 287, Eighth Defense as to the jurisdiction of the U.S. Court of Federal Claims, and Tenth Defense as to the statute of limitations under 35 U.S.C. § 286, arguing that Defendant has not come forward with evidence in support of these defenses. (D.I. 185 at 8). Defendant failed to respond. Therefore, Plaintiff's motion is granted as to Defendant's Sixth, Eighth, and Tenth Defenses.

As to Defendant's Fifth Defense of laches, waiver, acquiescence, and/or estoppel, and Ninth Defense of patent exhaustion, express or implied license, and/or first sale, Defendant has pointed to sufficient evidence in the record to at least raise a genuine dispute of material fact. (D.I. 209 at 9-12). Plaintiff's argument in reply as to both defenses goes to the merits of the defenses, not whether Defendant has met its burden of raising a genuine dispute of fact. Therefore, Plaintiff's motion is denied as to Defendant's Fifth and Ninth Defenses.

B. Plaintiff's Motion for Summary Judgment of No Invalidity

Plaintiff argues that Defendant's asserted prior art references do not anticipate or render obvious any of the asserted claims of the '717 patent. (D.I. 189 at 5). Plaintiff makes four arguments in support of its motion.² First, as to all of the asserted claims, Plaintiff argues the asserted references Sun, Hiyama, and Sandhu "do not disclose changing a plurality of control parameters in response to tracked information during the finishing cycle time." (*Id.* at 5). Second, Plaintiff argues the asserted references Yamada and Melvin do not meet the "in situ

² In briefing, Plaintiff made two additional arguments. First, Plaintiff argued that the asserted references Hiyama, Sun, Melvin, and Yamada do not disclose the claim limitation of "changing a plurality of control parameters in response to . . . in situ process information." (D.I. 189 at 5). During oral argument, Plaintiff withdrew this argument. (Hr'g Tr. at 57:10-15). Second, Plaintiff argued that the Sun and Litvak references fail to anticipate because Sun's incorporation by reference of Litvak "is insufficient as a matter of law." (D.I. 189 at 6). In my previous opinion on the motion for summary judgment of invalidity (D.I. 187), I held "as a matter of law that Litvak is entirely incorporated into Sun." (D.I. 253 at 6). Plaintiff acknowledged at oral argument that this finding was not disturbed by the Federal Circuit opinion vacating and remanding the summary judgment decision. (Hr'g Tr. at 57:24-58:5).

process information” limitation. (*Id.* at 16, 18) Third, as to claims 37 and 56, Plaintiff argues the asserted references do not disclose the claim limitation of “a first uniform region and a second uniform region.” (*Id.* at 5). Fourth, as to claim 12, Plaintiff argues the asserted references do not disclose the claim limitation of a “finishing aid which reacts with the semiconductor wafer surface.” (*Id.* at 6).

1. Changing Control Parameters in Response to Tracked Information

Plaintiff argues that the Sun, Hiyama, and Sandhu references do not anticipate the asserted claims as to the “changing . . . control parameters in response to . . . tracked information” limitation of the asserted claims. (D.I. 189 at 13-14).

i. Sun

I previously found that the ’711 patent was anticipated by Sun and granted Defendant’s motion for summary judgment. (D.I. 254). The Federal Circuit found that the portion of Sun relied on by Defendant’s expert, Dr. Dornfeld, does not disclose calculating a removal rate using the initial thickness of the wafer. *Semcon Tech, LLC v. Micron Technology, Inc.*, 660 F. App’x 908, 912 (Fed. Cir. 2016). Because of this, the Federal Circuit vacated my previous decision granting summary judgment that the ’711 patent is anticipated by Sun, but declined to grant Plaintiff’s motion for summary judgment of no anticipation by Sun. *Id.* at 915. Plaintiff now relies on the Federal Circuit’s reasoning to argue that because Sun does not disclose using the initial thickness in calculating the rate of removal, it necessarily does not anticipate the “changing . . . control parameters in response to . . . tracked information” limitation. (Hr’g Tr. at 47:1-49:14).

Defendant first responds that Sun incorporates Litvak by reference and Litvak discloses changing control parameters in response to tracked information, namely initial thickness, which

is used to determine remaining thickness during the polishing process. (Hr'g Tr. at 59:15-19, 60:10-17). Plaintiff counters that this argument was not made in Defendant's briefing and is, therefore, waived. (*Id.* at 70:4-11). I disagree. This is Plaintiff's motion and, in its opening brief, Plaintiff pointed to a specific portion of Sun as not disclosing the contested limitation. (D.I. 189 at 13-14). This is the argument Defendant responded to in its answering brief. (D.I. 206 at 10-11). It is undisputed that Defendant's expert, Dr. Dornfeld, relied on Litvak. (Hr'g Tr. at 60:5-8; 70:4-11). Litvak is not a new reference and this is not a new theory of invalidity.

Plaintiff also argues that a finding of no anticipation by Sun is necessitated by the Federal Circuit's finding that the portion of Sun that I relied on in my previous opinion, column 8, lines 41-67 and Figure 13, does not disclose this limitation. (Hr'g Tr. at 49:7-14). I disagree. The Federal Circuit held only that "a reasonable factfinder could conclude that Sun does not disclose" this limitation. *Semcon*, 660 F. App'x at 914. In this motion, it is Plaintiff's burden to show that no reasonable factfinder could conclude that Sun discloses this limitation. Plaintiff has not met its burden. Defendant has pointed to sufficient evidence in the record to create a genuine dispute of fact as to whether Sun anticipates the '717 patent, including passages from Sun other than those relied upon in my previous opinion. (D.I. 206 at 11 nn.5 & 6). Plaintiff's motion as to Sun is denied.

ii. Hiyama

Plaintiff argues that Hiyama cannot anticipate because it fails to disclose a comparison of tracked information during "the finishing cycle time," as required by the claims. (D.I. 189 at 13). Plaintiff points to statements made by Dr. Dornfeld at his deposition that, according to Plaintiff, reveal that Hiyama discloses making the comparison only before the polishing process begins, but not in real-time during the polishing process, which occurs during the finishing cycle.

(D.I. 189 at 13; D.I. 191-1 at 326:14-17, 328:21-25). Defendant responds that Dr. Dornfeld clarified his testimony during the deposition to emphasize that the comparison is done multiple times. (D.I. 206 at 11).

I think Defendant has pointed to sufficient evidence to raise a genuine dispute of fact. In the portion of the deposition Plaintiff points to, Dr. Dornfeld is asked whether Hiyama discloses “doing an additional comparison calculation between the measurement thickness during the polish and the initial thickness?” (D.I. 191-1 at 328:21-24). Dr. Dornfeld responds, “I don’t believe so.” (*Id.* at 328:25). Later in the deposition, however, Dr. Dornfeld testified that Hiyama discloses “a continuous comparison calculation made between the initial thickness measured and the value -- that is the value that was stored in advance during the polishing process and the value that's read by the sensor.” (*Id.* at 361:13-17). Dr. Dornfeld later reiterated that the comparison occurred “continuously” throughout the finishing cycle and pointed to specific statements in Hiyama as support for this conclusion. (*Id.* at 385:1-386:25). Upon further questioning about when the comparison using the initial thickness was made, Dr. Dornfeld stated multiple times that it occurred “during” the finishing cycle time. (*Id.* at 543:22-544:16).

Whether Dr. Dornfeld’s one statement that he didn’t “believe” Hiyama discloses “an additional comparison calculation” in response to a question that did not clearly and unambiguously ask whether a comparison is made during the finishing cycle is of greater weight than his numerous other, unambiguous statements that Hiyama does disclose a comparison made during the finishing cycle is a question of credibility. Defendant’s evidence is sufficient to raise a genuine dispute of material fact. Plaintiff’s motion as to Hiyama is denied.

iii. *Sandhu*

Plaintiff contends that Sandhu fails to disclose an evaluation of tracked information during the finishing cycle. (D.I. 189 at 14). Plaintiff cites a statement made by Dr. Dornfeld during his deposition in which, according to Plaintiff, he admitted that “control parameters are not changed in response to [tracked] information during the finishing cycle time.” (*Id.*). Defendant responds that the cited testimony “provides no support for [this] assertion.” (D.I. 206 at 12). Defendant provided citations to the record supporting its contention that Dr. Dornfeld identified with specificity how Sandhu discloses the evaluation of tracked information during the finishing cycle. (*Id.*).

I agree with Defendant that Dr. Dornfeld’s testimony does not constitute an admission that this limitation is not met. Plaintiff focused, in briefing and during Dr. Dornfeld’s deposition, on the fact that the measurement system that provides the pre-polish thickness about the wafer is not in a real-time loop with the polishing system. (D.I. 189 at 14; D.I. 191-1 at 428:1-20). This does not preclude a comparison of the tracked information, or initial thickness, during the finishing cycle. Defendant has pointed to sufficient evidence in the record to at least raise a genuine issue of fact. Therefore, I will deny Plaintiff’s motion as to Sandhu.

2. *In situ Process Information*

Plaintiff argues that the Yamada and Melvin references do not meet the “in situ process information” limitation of the asserted claims. (Hr’g Tr. at 54:8-10). Plaintiff contends that this is undisputed because Dr. Dornfeld admitted this at his deposition. (*Id.* at 54:8-14). Plaintiff further argues that Dr. Dornfeld’s opinion as to this limitation is improper as he compared the prior art to Plaintiff’s infringement contentions rather than making a comparison to the claims. (*Id.* at 55:12-14). Defendant counters that Dr. Dornfeld disagrees with Plaintiff’s experts about

the proper claim scope, specifically about whether, as Plaintiff argues in its infringement contentions, the pressure sensed from the chamber is “in situ process information.” (Hr’g Tr. at 67:14-20). According to Defendant, under Plaintiff’s understanding of the claim scope, Yamada and Melvin anticipate, but under Defendant’s understanding of the claim scope, they do not. (*Id.* at 67:22-68:20). This, in fact, is precisely what Dr. Dornfeld testified to.

It appears that the disagreement is about the proper scope of this claim limitation. I have construed “in situ process information” to mean “information that is sensed from the wafer currently undergoing CMP.” (D.I. 98 at 8). The dispute that I resolved when construing this term was whether “in situ process information” included information that was in some way derived from information that is sensed or measured. (*Id.* at 9). As I will discuss below, it seems to me that the pressure in the chamber is within the scope of the “in situ process information” limitation as I have construed the term. Therefore, Dr. Dornfeld’s opinion is comparing the prior art with the claims, and is not an improper “practicing the prior art” opinion. As Plaintiff has raised no other dispute with respect to these references, I will deny Plaintiff’s motion as to Yamada and Melvin.

3. *A First Uniform Region and a Second Uniform Region*

I have already construed the terms “first uniform region,” “second uniform region,” and “one uniform region” to have their plain and ordinary meaning. (D.I. 98 at 18). Plaintiff now requests that I “clarify” this construction and asserts that Defendant’s expert, Dr. Dornfeld, has adopted an “improper construction.” (D.I. 189 at 22). Plaintiff argues that “under a proper construction” of these terms, the asserted references do not anticipate or render obvious claims 37 and 56. (*Id.*).

As an initial matter, I note that Plaintiff appears to argue that the terms “first region” and “second region,” which appear in claim 56, are somehow equivalent to the terms “first uniform region” and “second uniform region,” which appear in claim 37 and which I have already construed. (D.I. 227 at 9 n.2). I am not convinced. Claim 56 includes reference to a “first uniform region” in addition to “a first region and a second region.” Claim 56 is also the only claim where the limitations “a first region” and “a second region” appear. As the parties have not requested that I construe these terms, nor have they provided argument as to their construction, I decline to opine on their meaning at this time other than to find that “first [or second] region” is not equivalent to “first [or second] uniform region.” As Plaintiff’s only argument with respect to claim 56 relates to the proper construction of the terms that include the “uniform” limitation, I will deny Plaintiff’s motion as to claim 56.

Plaintiff’s proposal as to the plain and ordinary meaning of the “uniform” terms appears to limit the meaning of “uniform” to uniformity of material thickness. (*Id.* at 21). Not only is this contrary to the construction Plaintiff argued for during claim construction, it is also contrary to my decision to reject both parties’ attempts to import limitations from the specification to narrow the meaning of this term. (D.I. 98 at 18). I reject Plaintiff’s attempt to re-litigate a position I already rejected.

Plaintiff argues for a narrower plain and ordinary meaning than that proposed by Defendant, suggesting that Defendant’s proposed meaning “would allegedly be met by all CMP processes,” rendering the “uniform region” limitations superfluous, in violation of the doctrine of claim differentiation. (D.I. 189 at 21). According to Plaintiff, the asserted claims are “limited to the field of CMP,” so adopting a meaning for “uniform region” that would be met by all CMP processes would read the “uniform region” limitation out of the claim. (*Id.*). I am not persuaded

by this argument. I fail to see how, even if Plaintiff's argument were correct, this would violate the doctrine of claim differentiation. This is not a situation where a limitation present in one claim is being read into a different claim. *See SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1122 (Fed. Cir. 1985). In fact, the phrase "chemical mechanical polishing" does not appear anywhere in any of the claims.

Each party's expert has offered an opinion as to what a person of ordinary skill in the art would understand "first uniform region" and "second uniform region" to mean. (D.I. 189 at 20-21). It seem to me that the experts' understandings are not substantially different with the exception of Plaintiff's attempt to narrow the definition to limit "uniform" to material thickness, a position I have already rejected, and which Plaintiff's expert may therefore not continue to maintain. Defendant has pointed to evidence in the record sufficient to raise a genuine dispute of fact as to whether the asserted references anticipate claim 37. Plaintiff chose not to respond to this evidence, relying instead on its claim construction arguments. Therefore, I will deny Plaintiff's motion as to claim 37.

4. *Finishing Aid Which Reacts with the Semiconductor Wafer Surface*

Plaintiff's argument that the asserted references do not anticipate the "finishing aid which reacts with the semiconductor wafer surface" limitation of claim 12 is predicated on 1) its understanding of the meaning of the terms "finishing aid" and "reacts," terms which were not at issue during claim construction, and 2) statements made by Defendant's expert, Dr. Dornfeld, that allegedly contradict the meanings of the terms. (D.I. 189 at 23).

Plaintiff contends that "reacts" requires a chemical reaction, rather than just a mechanical reaction. (*Id.*). According to Plaintiff, Dr. Dornfeld stated during his deposition that the asserted references disclose only a mechanical reaction. (*Id.*). This is, at best, a mischaracterization of

Dr. Dornfeld's testimony. Dr. Dornfeld testified that he understood the term "reactive" to refer to "both a physical and mechanical reaction as well as a chemical reaction." (D.I. 191-1 at 342:9-12). When asked whether the term "reacts," as he understood it, "would be met by either mechanical reaction or chemical reaction," Dr. Dornfeld stated, "It would be met by both." (*Id.* at 343:5-9). Dr. Dornfeld also discussed with specificity how at least one reference he relied on disclosed both a mechanical and a chemical reaction. (*Id.* at 351:7-353:21). Even if I were to agree that Plaintiff's definition were correct, I think it is clear that Defendant's evidence would at least raise a genuine dispute of fact as to whether the asserted references anticipate claim 12 as to the "reacts" limitation.

Plaintiff further argues that the "finishing aid" limitation, as understood by a person of ordinary skill in the art, refers to "abrasives and chemicals added to water to form a polishing slurry for CMP, but not the water itself." (D.I. 189 at 23). According to Plaintiff, Dr. Dornfeld contends that water alone meets the "finishing aid" limitation. (*Id.*). This again mischaracterizes Dr. Dornfeld's testimony. Dr. Dornfeld stated that the reaction with the semiconductor surface in CMP, as described in at least one of the asserted references, occurs "in the presence of a slurry which contains abrasive particles, usually, and a chemistry, like water." (D.I. 191-1 at 344:15-21). Dr. Dornfeld never suggested that water alone was the "finishing aid." Again, even if I were to adopt Plaintiff's proposed construction, Defendant would have provided sufficient evidence to raise a genuine dispute of fact as to whether the asserted references anticipate claim 12 as to the "finishing aid" limitation. Plaintiff's motion is denied as to claim 12.

C. Defendant's Motion for Summary Judgment of Noninfringement

Defendant makes two arguments in support of its motion for summary judgment of noninfringement. First, Defendant argues that Plaintiff cannot prove infringement of the asserted

claims because it cannot show that Defendant performs the claim limitation of “providing a finishing control subsystem having at least three operative process sensors for sensing in situ process information during the finishing cycle time.” (D.I. 190 at 4; ’717 patent, cl. 1). Second, Defendant argues that Plaintiff cannot show that Defendant performs the claim limitation of “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 . . . during at least a portion of the finishing cycle time.” (D.I. 190 at 4-5; ’717 patent, cl. 1).

Defendant’s first argument is predicated on its interpretation of the proper scope of the claim limitation “in situ process information.” (D.I. 190 at 4). Specifically, Defendant argues that the pressure sensors Plaintiff points to do not sense information “from the wafer” as required by my claim construction. (*Id.*). Plaintiff responds that the pressure measured by these sensors is the pressure in the chamber, which is necessarily the same as the pressure at the surface of the wafer and represents information about the wafer. (D.I. 212 at 14).

I agree with Plaintiff that the pressure sensed by the pressure sensors identified by Plaintiff meets the claim limitation “in situ process information.” During claim construction, the dispute between the parties centered on whether the “in situ process information” must be directly sensed or whether it could be derived from information that was sensed or measured. (D.I. 98 at 9). I found that the information must be directly sensed. (*Id.*). The pressure readings identified by Plaintiff are directly sensed, not derived from other measurements.

Defendant’s objection that these readings are not sensed “from the wafer” is misplaced. Defendant concedes for the purposes of the summary judgment motion that the pressure reading from the chamber accurately represents the pressure at the surface of the wafer, but argues that it

is irrelevant because the sensor was reading the pressure in the chamber rather than directly from the wafer. (Hr'g Tr. at 11:6-10). I do not think this is a compelling position. Defendant effectively seeks to import the word "directly" into my claim construction. I decline to do this. If the pressure sensed by the pressure sensors is equivalent to the pressure at the surface of the wafer, and Defendant has presented no evidence to convince me that Plaintiff's position is incorrect on this point, then this is information sensed from the wafer and is within the scope of this claim limitation. Plaintiff has, therefore, presented sufficient evidence to raise a genuine dispute of fact as to the issue of infringement of this limitation. I will deny Defendant's motion as to the "in situ process information" claim limitation.

Defendant's second argument is that the "control parameter" identified by Plaintiff is not changed in response to the evaluation of in situ process information from "at least three" sensors, nor is the control parameter changed in response to the tracked information. (D.I. 190 at 16-17). The only point of dispute on this claim limitation is about what Plaintiff has identified as the "control parameters."

Defendant claims that the only "control parameter" identified by Plaintiff is the "pressure setpoint." (*Id.* at 15). Plaintiff responds by identifying "the valve settings used in the pressure regulators" as the "control parameters." (D.I. 212 at 17). Plaintiff points to evidence in the record it contends show that the regulators were sufficiently disclosed as "control parameters." (Hr'g Tr. at 34:15-22). One item Plaintiff cites to is a claim chart produced by its expert, Dr. Glew, as part of his opening infringement report, where he discusses how the "pressure regulators . . . take into account the current actual back pressures measured by polisher transducers/pressure sensors . . . to adjust the pressures in the four outside pressure zones." (D.I. 213-14 at 241). Dr. Glew continues, "The downforce pressures applied to each of the four

outside pressure zones . . . constitute a plurality of control parameters that are changed in response to an evaluation of both the in situ process information . . . and the tracked information.” (*Id.*).

It seems to me that the “control parameters” Plaintiff’s expert identified in his report are not the pressure setpoints. Rather, I think it is clear that Dr. Glew identified “downforce pressures” which are changed in order to maintain the “pressure setpoints.” Defendant’s objection that this theory “was never mentioned” is unavailing based on the evidence. (Hr’g Tr. at 42:7-10). Whether there is inconsistency in the positions Dr. Glew took during his deposition as compared to his expert reports is a credibility issue and Defendant is free to cross-examine Dr. Glew about this at trial.

Defendant further argues that the “control parameters” are not changed in response to an evaluation of the “tracked information.” (D.I. 190 at 15). Defendant’s argument centers on its position that the only “tracked information” identified by Plaintiff is the “wafer ID.” (*Id.* at 17). Plaintiff argues in response that it has identified the cassette numbers, slot numbers, and the RTPC recipe information as “tracked information.” (D.I. 212 at 17). While it is true that Dr. Glew called out “wafer ID” specifically in his infringement chart, he did not clearly limit “tracked information” to only “wafer ID.” (D.I. 213-14 at 241 (identifying “tracked information (e.g. wafer ID)”). Plaintiff points to evidence that, among other things, Dr. Glew relied on RTPC recipe information as providing pressure setpoints in his opening report. (D.I. 212 at 18). This is sufficient to create a genuine dispute of fact on this issue. Defendant’s motion is denied as to the “control parameter” limitation.

IV. Conclusion

For the reasons set forth above, Plaintiff's Motion for Partial Summary Judgment of No Invalidity on Residual Grounds and for Dismissal of Defendant Micron Technology, Inc.'s Other Pleaded Defenses (D.I. 184) is granted-in-part and denied-in-part. Defendant's Sixth, Eighth, and Tenth Defenses are dismissed. Plaintiff's motion is denied as to the remaining defenses. Plaintiff's Motion for Partial Summary Judgment of No Invalidity for Anticipation Under 35 U.S.C. § 102 and Obviousness Under 35 U.S.C. § 103 (D.I. 186) and Defendant's Motion for Summary Judgment of Noninfringement (D.I. 188) are denied

An appropriate order will be entered.