IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLORADO Judge Philip A. Brimmer

Civil Action No. 09-cv-01257-PAB-MEH

BIAX CORPORATION,

Plaintiff,

٧.

NVIDIA CORPORATION, SONY COMPUTER ENTERTAINMENT AMERICA, INC., and SONY ELECTRONICS, INC.,

Defendants.

ORDER

This matter is before the Court on the motion for summary judgment on the defenses of new matter and inequitable conduct [Docket No. 326, 330] filed by defendant NVIDIA Corporation ("NVIDIA"). The motion is fully briefed and ripe for disposition.

I. BACKGROUND

Plaintiff BIAX Corporation ("BIAX") initiated this action on May 29, 2009, alleging infringement of U.S. Patent No. 5,517,628 (the "628 Patent") [Docket No. 146-1] and U.S. Patent No. 6,253,313 (the "313 Patent") [Docket No. 327-1] (collectively, the "patents"). Both patents are assigned to plaintiff BIAX Corporation ("BIAX"). The patents have the same specification, as both patents derive from U.S. Patent No. 4,847,755 (the "755 Patent"). See '628 Patent [Docket No. 146-1 at 49] ("Related U.S. Application Data"); '313 Patent [Docket No. 327-1 at 2] ("Related U.S. Application

Data"). As stated in their shared specification, the "invention generally relates to parallel processor computer systems and, more particularly, to parallel processor computer systems having software for detecting natural concurrencies in instruction streams and having a plurality of processor elements for processing the detected natural concurrencies." '313 Patent col. 1 II. 18-23.

The patents describe both software and hardware. The software, which is referred to as "TOLL" software, is capable of identifying "natural concurrencies" in the instructions. Instructions that are naturally concurrent do not depend on each other and can, therefore, be executed by processor elements simultaneously. Dependent instructions can be placed into sets of instructions that depend on each other and, "unlike the teachings of the prior art, the present invention teaches that it is not necessary for dependent instructions to execute on the same processor element." '313 Patent col. 9 II. 34-38. Rather, "[t]he determination of dependencies is needed only to determine condition code sets and to determine instruction firing times. . . . " '313 Patent col. 9 II. 37-39. By identifying natural concurrencies and dependencies, the software is then able to assign processor elements to the simultaneous execution of sets of instructions in the most efficient manner.

The invention relies on processor elements that access register files containing relevant information for subsequent processing of instructions. Included within the teachings of the invention are condition code register files containing multiple, addressable condition code registers, each of which contains condition codes indicating whether the results of executed instructions meet certain conditions. The condition codes can include indications of whether the next instruction in a series should be

executed or whether a branch must be taken, requiring a jump to an earlier or later instruction. The provision of multiple, addressable condition code registers is a central feature of the claimed invention.

During the original prosecution of the '755 Patent, BIAX filed a substitute specification prepared by attorney Gary Walpert, who replaced the attorney who first represented BIAX in initiating prosecution of the patent. Walpert prepared the specification in consultation with agents of BIAX, including Frederick Gluck, one of the '755 Patent inventors. The substitute specification changed some of the language describing the processor elements, including the language referring to processor elements as being "context free" and "identical." Furthermore, BIAX edited a description of conditional branch instructions found in the original specification.

Walpert represented to the United States Patent and Trademark Office ("PTO") that the changes did not constitute new matter. NVIDIA contends that this assertion was false and that Walpert instituted a plan to expand the scope of the patent through the filing of the substitute specification. Based on that alleged conduct, NVIDIA seeks summary judgment on its defenses of new matter and inequitable conduct.

II. STANDARD OF REVIEW

Summary judgment is warranted under Federal Rule of Civil Procedure 56 when 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); see Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248-50 (1986); Concrete Works, Inc. v. City & County of Denver, 36 F.3d 1513, 1517 (10th Cir. 1994); see also Ross v. The Board of

Regents of the University of New Mexico, 599 F.3d 1114, 1116 (10th Cir. 2010). A disputed fact is "material" if under the relevant substantive law it is essential to proper disposition of the claim. Wright v. Abbott Labs., Inc., 259 F.3d 1226, 1231-32 (10th Cir. 2001). Only disputes over material facts can create a genuine issue for trial and preclude summary judgment. Faustin v. City & County of Denver, 423 F.3d 1192, 1198 (10th Cir. 2005). An issue is "genuine" if the evidence is such that it might lead a reasonable jury to return a verdict for the nonmoving party. Allen v. Muskogee, 119 F.3d 837, 839 (10th Cir. 1997). When reviewing a motion for summary judgment, a court must view the evidence in the light most favorable to the non-moving party. Id.; see McBeth v. Himes, 598 F.3d 708, 715 (10th Cir. 2010).

III. DISCUSSION

A. New Matter

NVIDIA argues that BIAX introduced new matter in the amended specification of the '755 Patent. Section 132(a) of Title 35 of the United State Code provides that "[n]o amendment shall introduce new matter into the disclosure of the invention." Where, as here, "the applicant . . . amends his specification after the original filing date . . . , the . . . added material must find support in the original specification." *TurboCare Div. of Demag Delaval Turbomachinery Corp. v. General Electric Company*, 264 F.3d 1111, 1118 (Fed. Cir. 2001) (citing *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1352 (Fed. Cir. 2000)); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991). To not constitute new matter, the changes found in the amendment must have been "inherently contained in the original application." *Schering Corp.*, 222 F.3d at 1352. For

additional description in an amendment to be deemed inherent, "the missing descriptive matter must necessarily be present in the [original] application's specification such that one skilled in the art would recognize such a disclosure." *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998).

NVIDIA contends that the allegedly new matter in the '755 Patent should result in the invalidation of all the claims of the '628 and '313 patents for failure to comply with the written description requirement of 35 U.S.C. § 112 ¶ 1. See Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co., 598 F.3d 1336, 1348 (Fed. Cir. 2010) (noting that "§ 132 is an examiner's instruction" and that "prohibiting adding new matter to the claims has properly been held enforceable under § 112, first paragraph"); In re Curtis, 354 F.3d 1347, 1351 (Fed. Cir. 2004) ("Claims found in a later-filed application are entitled to the filing date of an earlier application if, inter alia, the disclosure in the earlier application provides an adequate written description of the later-filed claims under 35 U.S.C. § 112, ¶ 1. This requires the disclosure in the earlier application to reasonably convey to one of ordinary skill in the art that the inventors possessed the later-claimed subject matter when they filed the earlier application."); Amgen Inc. v. Hoechst Marion Roussel Inc., 314 F.3d 1313, 1330 (Fed. Cir. 2003) ("The purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not; the applicant for a patent is therefore required 'to recount his invention in such detail that his future claims can be determined to be encompassed within his original creation.") (quoting Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1561 (Fed. Cir. 1991)); see also 35 U.S.C. § 120. "The question whether new matter has been added

to an application is a question of fact." *Commonwealth Scientific and Indus. Research Organisation v. Buffalo Technology (USA), Inc.*, 542 F.3d 1363, 1380 (Fed. Cir. 2008). Patents are presumed to be valid, see 35 U.S.C. § 282, and "[i]n order to overcome the presumption of validity, the party challenging a patent must prove facts supporting a determination of invalidity by clear and convincing evidence." *Apotex USA, Inc. v. Merck & Co., Inc.*, 254 F.3d 1031, 1036 (Fed. Cir. 2001).

NVIDIA contends that a jury could reach only one supportable conclusion on the question of whether BIAX introduced new matter when amending the description of "processor elements" and "conditional branch instructions." More specifically, NVIDIA argues that "the substitute specification encompasses the following features that are not taught in the original specification: processor elements can store context information while executing a set of instructions, identical processor elements are not required, and conditional branch instructions need not contain a full target address." Docket No. 326 at 14.

"The presumption of validity, the need to present clear and convincing evidence, and the normal burdens associated with a summary judgment motion make [defendant's] road rather difficult," *Block Financial Corp. v. Lendingtree, LLC*, 2009 WL

¹In the context of new matter determinations, the parties dispute whether an "especially weighty presumption" of correctness attaches when the PTO allows an amendment without objection. See Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1574-75 (Fed. Cir. 1992); cf. Commonwealth Scientific and Indus. Research Organisation v. Buffalo Technology (USA), Inc., 542 F.3d 1363, 1380 (Fed. Cir. 2008). For reasons that will become clear below, NVIDIA has failed to establish its entitlement to summary judgment even in the absence of an "especially weighty" presumption of correctness, having failed to address how one of ordinary skill in the art would have understood the original specification.

2957905, at *2 (W.D. Mo. Sep. 10, 2009). NVIDIA is correct that the amended specification made many changes relating to the description of the "context free" and "identical" qualities of processor elements and also altered the description of conditional branch instructions. For instance, as the blacklined version of the substitute specification reveals, see Docket No. 182-4, the original specification consistently referred to processor elements as "context free," while the substitute specification omitted many such references and emphasized that "context free" processor elements were but a feature of "one particular embodiment." See Docket No. 182-4 at 29. The original specification also described "a system containing a plurality of identical processor elements. These processor elements are characterized by the fact that they contain no execution state information from the execution of previous instructions, i.e., they are "context free," which in the substitute specification was described as "a system containing a plurality of processor elements. In one embodiment of the invention, the processors are identical. The processor elements, in this illustrated embodiment, contain no execution state information from the execution of previous instructions, that is, they are context free." Docket No. 182-4 at 9. Furthermore, the original specification provided that conditional branch instructions "do not perform conventional next instruction address computation," '628 Patent, col. 41 l. 67 - col. 42 l. 1 (as originally issued), Docket No. 146-1 at 41,2 while the substitute specification replaced that with a description of a particular branch execution unit executing branch instructions "in a conventional manner." '313 Patent, col. 36 ll. 30-31.

²The '628 Patent was first issued with the original specification and later reissued with the substitute specification.

In support of its motion, NVIDIA does nothing more than point out such changes, asking the Court to do a "simple comparison of the original and substitute specifications," which will "reveal[] extensive substantive changes made by BIAX." Docket No. 326 at 14. While identifying changed language is simple, determining whether new matter has been introduced is less so. The analysis here turns on how one skilled in the art would have understood the original specification. See ICN Photonics, Ltd. v. Cynosure, Inc., 73 F. App'x 425, 429 (Fed. Cir. 2003) (noting that the court has "used varied language to express the test for determining whether a claim limitation added by amendment is inherent in the originally-filed specification," such as that the "one skilled in the art, reading the original disclosure, must immediately discern the limitation at issue in the claims," that "the missing descriptive matter must necessarily be present in the parent application's specification such that one skilled in the art would recognize such a disclosure," and that the "disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question.") (citation omitted, emphasis in ICN). NVIDIA's motion fails to mention this requirement, let alone describe how one of ordinary skill in the art would have understood the original specification. See Docket Nos. 326, 462. Furthermore, in light of the complexity of the technology described, resolution of the new matter issue depends on expert testimony, which NVIDIA does not provide, regarding whether one skilled in the art would have understood the original specification to cover the material described in the substitute specification. See Proveris Scientific Corp. v. Innovasystems, Inc., 536 F.3d 1256, 1267 (Fed. Cir. 2008) ("[T]he . . . patent teaches a

device used for calibrating drug delivery devices; this subject matter is sufficiently complex to fall beyond the grasp of an ordinary layperson. We thus are not prepared to say the district court abused its discretion in requiring Innova to present expert testimony in order to establish invalidity."); *Phillips Petroleum Co. v. U.S. Steel Corp.*, 673 F. Supp. 1278, 1330 (D. Del. 1987) ("It is axiomatic that the use of expert testimony is often required to aid the court in understanding what a disclosure means or meant to one of ordinary skill in the art.").

In response to NVIDIA's motion, BIAX contends that the changes are wholly consistent with correcting inconsistencies and errors that would have been readily apparent to one skilled in the art at the time. In support of that view, BIAX has supplied a declaration by Edward S. Davidson, a computer science expert.³ According to Davidson, "a person of skill in the art would have appreciated that the original specification disclosed context free and non-context free processor elements as well as identical and non-identical processor elements." Docket No. 373-1 at 5, ¶ 15.

Davidson points out that the original specification described pipelined processor elements, see Docket No. 373-1 at 8, ¶ 25, which is one of the processor element variants described by the substitute specification which is not strictly context free. See Docket No. 231 (Order Regarding Claim Construction) at 19-21. Furthermore, Davidson contends that the description of the TOLL software's ability to determine how best to assign instructions for processing reveals to one skilled in the art that the

³BIAX also submitted a declaration by Mark E. Nusbaum, a former patent examiner with the PTO.

processor elements need not be homogeneous. See Docket No. 373-1 at 12-13.⁴ Davidson also offers his opinion regarding why one skilled in the art would not have viewed the changed description of conditional branch instructions to have broadened the scope of the original specification. See Docket No. 373-1 at 19-21.

In its reply [Docket No. 462], NVIDIA does reference the analytically central question of how one skilled in the art would understand the original specification. It does so, however, only to challenge the weight the Court should give to Davidson's declaration. NVIDIA does not contend that Davidson's opinion is inadmissible pursuant to Federal Rule of Evidence 702, nor does it contend that an opinion regarding how one skilled in the art would have interpreted the original specification is irrelevant. Despite its request that the Court give Davidson's opinion "no weight," Docket No. 462 at 5, NVIDIA identifies no basis for the Court to weigh such evidence at the summary judgment stage.⁵ See Anderson, 477 U.S. at 249 (stating that "at the summary

⁴BIAX continues to assert that the original specification could be read to cover processor elements that are not context free at all, or in other words do "retain context information after the execution of an instruction or a set of instructions." See Docket No. 231 (Order Regarding Claim Construction) at 25. The Court, however, has construed the term processor element as a device that "does not retain context information after the execution of an instruction or a set of instructions." See id.

⁵Furthermore, the Court finds that the cases NVIDIA cites in support of the contention that "[n]umerous courts have held that expert declarations that ignore the key evidence relied upon by a moving party are not sufficient to create a triable issue of fact," Docket No. 462 at 9-10, are distinguishable. There has been no showing here that Davidson failed to address a key issue, see Davis v. Sonat Exploration Co., 103 F.3d 144, 1996 WL 705211 at *2 (10th Cir. Dec. 9, 1996) (unpublished); see also Thomas v. Int'l Bus. Machines, 48 F.3d 478, 486 (10th Cir. 1995), or avoided addressing his own deposition testimony on a relevant issue, see Thomas, 48 F.3d at 486, or that he failed to dispute the opinion of NVIDIA's expert, see Carnegie Mellon Univ. v. Hoffmann-La Roche Inc., 541 F.3d 1115, 1126 (Fed. Cir. 2008), or that he made speculative factual assumptions. See Merit Motors, Inc. v. Chrysler Corp., 569

judgment stage the judge's function is not himself to weigh the evidence"); see also Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150 (2000) (a court "may not make credibility determinations or weigh the evidence" in resolving a motion for summary judgment). In any event, even if the Court were to completely discount Davidson's opinions, the Court finds, as discussed above, that genuine issues of material fact concerning how one skilled in the art would have understood the changes to the original specification preclude summary judgment.

B. Inequitable Conduct

NVIDIA also seeks summary judgment on its inequitable conduct defense, arguing that Walpert engaged in inequitable conduct during the process of amending the specification of the '755 Patent. "[I]nequitable conduct includes affirmative misrepresentation of a material fact, failure to disclose material information, or submission of false material information, coupled with an intent to deceive." *Pharmacia Corp. v. Par Pharm., Inc.*, 417 F.3d 1369, 1373 (Fed. Cir. 2005) (quoting *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995)). "The inequitable conduct analysis is performed in two steps comprising 'first, a determination of whether the withheld reference meets a threshold level of materiality and intent to mislead, and second, a weighing of the materiality and intent in light of all the circumstances to determine whether the applicant's conduct is so culpable that the patent should be held unenforceable." *Dayco Products, Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1362-63 (Fed. Cir. 2003) (citation omitted); *Leviton Mfg. Co., Inc. v. Universal Secur.*

F.2d 666, 673 (D.C. Cir. 1977).

Instruments, Inc., 606 F.3d 1353, 1368 (Fed. Cir. 2010) ("Both elements, materiality and intent to deceive, are questions of fact, and at least a threshold level of each must be proven by clear and convincing evidence.").

In light of "the severity of the penalty . . .[,] courts must be vigilant in not permitting the defense to be applied too lightly." *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008). "Although it is not impermissible to grant summary judgment of inequitable conduct, [the Federal Circuit] 'urges caution' in making an inequitable conduct determination at the summary judgment stage." *M. Eagles Tool Warehouse, Inc. v. Fisher Tooling Co., Inc.*, 439 F.3d 1335, 1340 (Fed. Cir. 2006) (citation omitted); see *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345 (Fed. Cir. 2007). As the Federal Circuit has noted,

the alleged conduct must not amount merely to the improper performance of, or omission of, an act one ought to have performed. Rather, clear and convincing evidence must prove that an applicant had the specific intent to . . . mislead[] or deceiv[e] the PTO. In a case involving nondisclosure of information, clear and convincing evidence must show that the applicant made a deliberate decision to withhold a known material reference.

Molins PLC v. Textron, Inc., 48 F.3d 1172, 1181 (Fed. Cir. 1995).6

NVIDIA argues that Walpert's statements that the substitute specification did not include new matter were false. However, as noted above, NVIDIA has yet to establish that new matter was introduced. NVIDIA also argues that Walpert concealed a plan to broaden the scope of the patent. The evidence NVIDIA cites in support of that

⁶The Federal Circuit has a case under *en banc* review regarding the proper inequitable conduct standard. *See Therasense, Inc. v. Becton, Dickinson & Co. et al.*, 593 F.3d 1289, 1300 (Fed. Cir. 2010), *petition for rehearing en banc granted*, 2010 WL 1655391 (Fed. Cir. April 26, 2010).

contention also implicates the new matter question. Finally, NVIDIA contends that Walpert "made representations to the Patent Office suggesting he prepared the substitute specification without assistance from any of the inventors or others at BIAX, when in fact Gluck participated extensively in the effort." Docket No. 326 at 12, ¶ 9. What Walpert actually stated in the passage relied upon by NVIDIA, however, was that his "understanding of the details of the disclosed invention at that time came from the application itself" and that, because he was "not working in the computer field as an engineer or scientist, [his] own understanding (in addition to that which was generally known in the art), came solely from the application as filed." Docket No. 326 at 5-6. While NVIDIA has provided evidence showing how these statements could have been misleading, BIAX responds by pointing out that Walpert told the PTO that he had discussions with BIAX regarding his recommendations. BIAX also includes a declaration by Walpert, wherein he disputes NVIDIA's claim that he did not independently reach his conclusions regarding the proposed amendments to the original specification. See Docket No. 373-2 at 5, ¶ 14. Finally, BIAX cites contemporaneous evidence that Walpert reached his own independent understanding in support of the changes he recommended be included in a substitute specification. See Docket No. 326-3 at 10 (Aug. 6, 1986 letter to Gluck). In its reply, NVIDIA identifies evidence it believes undermines Walpert's credibility. See Docket No. 462 at 13-14. At the summary judgment stage, however, the Court "may not make credibility determinations, weigh the evidence, or decide which inferences to draw from the facts." Payne v. Pauley, 337 F.3d 767, 771 (7th Cir. 2003) (citing, inter alia, Anderson, 477 U.S. at 255); see Epco Products, Inc. v. Demon Industries, Inc., 1988 WL 82590, at *1

(N.D. III. Aug. 4, 1988) (concluding in a patent case that "it may be required that the

court will have to make important credibility assessments which cannot be properly

done on summary judgment."). Consequently, NVIDIA has failed to establish its

entitlement to summary judgment on its inequitable conduct defense.

IV. CONCLUSION

For the foregoing reasons, it is

ORDERED that defendant NVIDIA Corporation's motion for summary judgment

on its defenses of invalidity and unenforceability based on inequitable conduct [Docket

No. 326, 330] is DENIED.

DATED March 30, 2011.

BY THE COURT:

s/Philip A. Brimmer

PHILIP A. BRIMMER

United States District Judge

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