

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

CARL B. COLLINS and FARZIN	§	
DAVANLOO,	§	
<i>Plaintiffs,</i>	§	
	§	CIVIL ACTION NO. 2:09-cv-219-TJW
v.	§	
	§	
WESTERN DIGITAL TECHNOLOGIES,	§	
INC., et al.,	§	
<i>Defendants.</i>	§	

**MEMORANDUM OPINION AND ORDER**

Pending before the Court is Defendants Hitachi, Ltd., Hitachi America, Ltd, Hitachi Global Storage Technologies, Inc., and Western Digital Technologies, Inc.’s (collectively, “Hitachi and Western Digital” or “Defendants”) Motion to Dismiss for Lack of Standing (Dkt. No. 177). In their motion, Hitachi and Western Digital move the Court to dismiss the suit for lack of subject matter jurisdiction. The Court held a hearing on this motion on August 22, 2011. Having considered the arguments of the parties, the evidence presented, and the applicable law, the Court DENIES Defendants’ motion to dismiss for the reasons discussed below.

**I. Background**

Plaintiffs filed this patent infringement lawsuit on July 15, 2007 against numerous defendants, claiming that the defendants infringe the patents-in-suit by making, using, or selling various computer products, including hard drives, that contain a diamond like coating. United States Patent Nos. 5,411,797 (“the ‘797 patent”) and 5,478,650 (“the ‘660 patent”) (collectively the “patents-in-suit”) claim nanophase diamond films with specific properties (“patented nanophase diamond films”). The Plaintiffs developed the patented nanophase diamond films

while they were employed by the University of Texas at Dallas (“UTD”). Under Plaintiffs’ employment contracts with UTD, the Board of Regents of the University of Texas System (“UT System”) owned the patents-in-suit. In 2001, the UT System released the rights to the patents-in-suit to Plaintiffs. However, the release did not include language giving Plaintiffs the rights to sue for past, present, and future infringement. Accordingly, the UT System executed a Quit Claim Assignment of the patents-in-suit to Plaintiffs in 2003, which was drafted specifically to transfer the rights to sue for past, present, and future infringement.

## II. Legal Standard

Standing “determines the court’s fundamental power to hear [a] suit.” *Rivera v. Wyeth-Ayerst Labs.*, 283 F.3d 315, 319 (5th Cir. 2002). “Whether a party has standing to sue in federal court is a question of federal law.” *Paradise Creations, Inc. v. UV Sales, Inc.*, 315 F.3d 1304, 1308 (Fed. Cir. 2003). The party asserting jurisdiction has the burden of establishing jurisdiction.<sup>1</sup> *Id.*; *see also Rivera*, 283 F.3d at 318-19. In the context of patent infringement suits, there are two separate limitations on standing: constitutional and prudential. *See Morrow v. Microsoft, Corp.*, 499 F.3d 1332, 1338-39 (Fed. Cir. 2007) (differentiating constitutional and prudential standing). “Article III standing ... generally must be present at the inception of the lawsuit.” *Paradise*, 315 F.3d at 1308, *citing Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992). “[I]n order to assert standing for patent infringement, the plaintiff must demonstrate that

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<sup>1</sup> Plaintiffs argue that Defendants have the burden of demonstrating that that the Bayh-Dole Act applies to the patents-in-suit—i.e. of proving that conception or first actual reduction to practice of the invention occurred under the government contracts. *See Boeing Co. v. U.S.*, 80, U.S.P.Q.2d 1108, 1139 (Ct. Cl. 2006). *Boeing*, however, involves a license defense, not standing, and held that the defendant had the burden of proof for proving the license defense during a bench trial. *Id.* Because this case raises issues of standing and subject matter jurisdiction, Plaintiffs bear the burden of demonstrating that they have standing. *Gaia Tech*, 93 F.3d at 780; *Irwin v. Veterans Admin.*, 874 F.2d 1092, 1096 (5th Cir. 1089) (holding that, where a defendant makes a “factual attack” on the court’s jurisdiction by submitting evidentiary materials outside the pleadings, the plaintiff “must prove the existence of subject-matter jurisdiction by a preponderance of the evidence,” and is “obligated to submit facts through some evidentiary method to sustain his burden of proof.”).

it held enforceable title to the patent at the inception of the lawsuit.” *Id.* at 1309. State law governs the question of who has legal title. *MyMail, Ltd. v. America Online, Inc.*, 476 F.3d 1372, 1375 (Fed. Cir. 2007). Defects in prudential standing, however, are not fatal to the lawsuit, and if the plaintiff had constitutional standing at the inception of the lawsuit, prudential concerns may be cured after the lawsuit is filed. *See Schreiber Foods, Inc. v. Beatrice Cheese, Inc.*, 402 F.3d 1198, 1203 (Fed. Cir. 2005).

### **III. Analysis**

Hitachi and Western Digital make two arguments in their motion to dismiss for lack of standing. First, they argue that, under Texas law, the defect in title created in the 2001 release—because it did not contain language expressly giving Plaintiffs the rights to sue for past, present, and future infringement—could not be corrected by the Quit Claim Assignment executed in 2003. Therefore, Hitachi and Western Digital argue that Plaintiffs do not have the right to sue for infringement of the patents-in-suit. Second, Hitachi and Western Digital argue that the patented nanophase diamond films claimed by the patents-in-suit were developed as a result of a grant from the Navy and that the UT System failed to follow the required transfer protocol on government-funded inventions under the Bayh-Dole Act. As a result, Defendants argue that the assignment of the patents-in-suit to Plaintiffs was invalid and that Plaintiffs do not have standing to sue for infringement of the patents-in-suit. The Court addresses both arguments below.

#### **A. Texas Law Claim**

Hitachi and Western Digital argue that the 2001 releases did not vest full title to the patents-in-suit to Plaintiffs because they failed to transfer the rights to sue for past, present, and future infringement. Relying on *Adamson v. Doonbos*, Defendants argue that the 2003 Quit

Claim Assignment could not correct this defect because “[t]he law is established that a quitclaim deed is not a conveyance or muniment of title.” 587 S.W.2d 445, 447 (Tex.App. 1979). Defendants’ argument is flawed. Although a quitclaim deed does not *of itself* establish title, “[t]he quitclaim passes the interest of the grantor in the property.” *Id.* at 448 (quoting *McMahon v. Fender*, 350 S.W.2d 239, 240 (Tex.Civ.App. Waco 1961, writ ref’d n. r. e.)). In other words, a quitclaim deed passes whatever title the grantor holds in the subject property. In the present case, the 2001 releases and the 2003 Quit Claim Assignment together transferred full title of the patents-in-suit to Plaintiffs.

### **B. Bayh-Dole Act**

Hitachi and Western Digital also argue that the invention that is the subject of the patents-in-suit was developed as a result of several grants from the Naval Research Lab (“NRL” or “Navy”) and that the UT System failed to follow the required transfer protocol on government-funded inventions under the Bayh-Dole Act, 35 U.S.C. § 200 et seq. The Bayh-Dole Act requires title to inventions flowing from government-funded research to remain with the government in certain circumstances. *See* 35 U.S.C. § 202(a). In other circumstances, the Act makes available a procedure for nonprofit organizations and other “contractors” to follow if they wish to “retain title to any invention by the contractor developed pursuant to a government contract.” *Id.* The Bayh-Dole Act imposes numerous restrictions and requirements on such contractors, including invention disclosure requirements and restrictions on the assignment of rights to inventions. *See, e.g.*, 35 U.S.C. § 202. Specifically, the Bayh-Dole Act prohibits nonprofit organizations—such as the UT System—from assigning the rights to an invention

developed as a result of a government research contract without the approval of the funding agency. *Id.* § 202(c)(7).

Both parties agree that United States Patent No. 4, 987,007 (“the ‘007 patent”), the parent to the patents-in-suit, was developed using research funded by multiple Navy research contracts and, thus, was subject to the requirements of the Bayh-Dole Act. Both parties also appear to agree that the UT System followed the requirements of the Bayh-Dole Act as necessary to retain title to the ‘007 patent. However, Hitachi and Western Digital argue that the patents-in-suit are also subject to the provisions of the Bayh-Dole Act because they are continuations-in-part of the ‘007 patent and because the patented nanophase diamond films claimed by the patents-in-suit were first conceived using Navy funds. Because the UT System did not follow the disclosure requirements of the Bayh-Dole Act with respect to the patents-in-suit and did not obtain approval from the Navy before assigning the patents-in-suit to Plaintiffs, Hitachi and Western Digital claim that the UT System’s assignment of the patents-in-suit to Plaintiffs is invalid and that Plaintiffs do not have standing to sue for infringement of the patents-in-suit. Plaintiffs admit that they did not comply with the notice provisions of the Bayh-Dole Act with respect to the patents-in-suit, but argue that the patents-in-suit were not developed using Navy funds and, thus, are not subject to the Bayh-Dole Act. The only issue in dispute, then, is whether the patents-in-suit are subject to the Bayh-Dole Act—i.e. whether they were developed as a result of the Navy research contract that led to the ‘007 patent.

#### **A. The Bayh-Dole Act**

The Bayh-Dole Act applies only to a “subject invention” of the government-funded research project. *See* 35 U.S.C. § 201(e). A “subject invention” is any invention of the

“contractor” that was “conceived or first actually reduced to practice in the performance of work under a funding agreement.” *See* U.S.C. § 201(e). “Conception is the formation in the mind of the inventor, or a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.” *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (internal quotations omitted). Reduction to practice requires that the invention be sufficiently tested to show that it will work for its intended purpose. *See Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1445 (Fed. Cir. 1984). The Bayh-Dole Act does not permit the Navy to capture title to inventions developed in “related” projects that fall “outside the planned and committed activities of a government-funded project.” *See* 37 C.F.R. § 401.1.

The research contracts between UTD and the Navy provided for funding for a well-publicized investigation of gamma ray lasers under the “Star Wars’ funding initiative. According to Plaintiffs, during the early years of the Navy contracts, Plaintiffs investigated the use of ‘diamond-like carbon’ (“DLC”) films already in existence to further the gamma ray laser research. After the development of a method in 1988 to deposit DLC for use as host materials in the gamma ray research (“1988 DLC Films”), Plaintiffs soon abandoned their use within the gamma ray laser project. Years later, as part of a project funded solely by UTD and private, on-governmental sponsors, Plaintiffs conceived and reduce to practice a new material (the “patented nanophase diamond films”) having unique structural features and new commercial applications not possessed by previously-existing DLC films, including the 1988 DLC Films. These new patented nanophase diamond films, according the Plaintiffs, are what is claimed in the patents-in-suit. Plaintiff Collins led the gamma ray research that was the basis of the Navy

research grant. Plaintiff Davanloo was a research scientist working under Collins as part of the 1986 Navy contract to develop gamma ray lasers (the Gamma Ray Laser Project”). Davanloo led a group of researches developing flash x-ray devices that could be used to pump isomer materials for a gamma-ray laser. Another scientist, Dr. Suhas Wagal, led a group investigating potential materials in which the isomer being tested could be hosted to reduce undesirable “nuclear recoil” and to better manage heat transfer, as part of the evaluation of its feasibility on the gamma ray laser schemes. The work by Collins and Wagal led to the eventual examination of a material called “thin film diamond” and the discovery of a method to prepare the 1988 DCL Films for use as a host material in testing the laser candidates. This discovery was reported to the Navy. The UTD followed the requirements of the Bayh-Dole Act in order to retain title to this invention, which ultimately led to the ‘007 patent on a method and apparatus for producing layers of material on a substrate. Wagal then left UTD, and Davanloo took over the responsibilities for investigating the preparation of the 1988 DCL Films for potential use in the gamma ray research. UTD identified the 1988 DLC Films as a ‘by-product” of the 1986 Gamma Ray Laser Project funded by the Navy but noted that the applications for the methods used to prepare the 1988 DLC Films ‘will range far beyond the support of this gamma-ray laser project.”

The key issue in this case is whether the Patented Nanophase Diamond Films claimed in the patents-in-suit are a “subject invention” of the gamma ray research project funded by the Navy such that they were subject to the terms of the Bayh-Dole Act. Plaintiffs argue that the ‘007 patent represents neither a conception nor reduction to practice of the patented nanophse diamond films, and thus that the films are not a subject invention of the gamma ray research project. Plaintiffs contend that the patented nanophse diamond films are substantially different substances

than the 1988 DLC films and are not “subject inventions” of the Navy contract. Additionally, because the Bayh-Dole Act does not permit the Navy to capture title to inventions developed in related projects that fall outside the planned and committed activities of the government-funded project, Plaintiffs argue that even if the research that led to the patented nanophase diamond films was directly related to the research conducted under the Navy contracts, the patents-in-suit would still not be subject to the Bayh-Dole Act because the patented nanophase diamond films fall outside of the scope of the gamma ray laser project funded by the Navy. The Navy research dealt with the development of a gamma ray laser, not nanophase diamond films with the properties of the patented nanophase diamond films. Defendants, however, argue that the patents-in-suit are continuations-in-part of the ‘007 patent, which was developed using Navy funds and as part of the gamma ray laser project, and thus that the patents-in-suit are subject inventions of the gamma ray research project funded by the Navy. Defendants also argue that comparing the claims of the ‘007 patent to the patents-in-suit demonstrate that the nanophase diamond films claimed by the patents-in-suit are subject inventions of the gamma ray laser project.

The ‘007 patent discloses a particular method and apparatus for producing layers of material on a substrate. Defendants claim that while the application for the ‘007 patent was pending, plaintiffs disclosed in an invention Report to UTD that, while continuing work on the Navy research contract project, they allegedly had discovered a new material they described as “an amorphous form of diamond which can be deposited in thin films with optical quality.” Defendants argue that the Plaintiffs explicitly stated that the new material “emerged as a by product” of the Navy research contract. Defendants allege that a variety of other films for which a series of patent application was filed as continuations-in-part related to the ‘007 patent. According to



Defendants, one of these films was first disclosed to the patent office in a 1993 patent application—also filed as a continuation-in-part to the earlier patent family—that ultimately led to the patents-in-suit.

However, Plaintiffs argue that the nanophase diamond films claimed in the patents-in-suit were both conceived and reduced to practice in a project funded entirely by UTD and private, non-governmental sponsors. Thus, Plaintiffs argue that they are not subject to the Bayh-Dole Act. According to Plaintiffs, the 1988 DLC Films disclosed to the Navy during the gamma ray laser project has substantially different characteristics from the patented nanophase diamond films claimed in the patents-in-suit. Plaintiffs argue that although the method for producing the 1988 DLC Films was not considered useful in advancing the 1986 Gamma Ray Laser Project, Collins and Davanloo recognized that an improvement material could potentially be very useful for other applications. Accordingly, in 1988 a separate project, which Plaintiffs contend was wholly distinct from the 1986 Gamma Ray Laser Project funded by the Navy, was established to further explore the diamond material (“The UTD Diamond Project”). The funding for this project was from UTD and other non-governmental sources. Plaintiffs also state that a new laser was purchased for use in the UTD Diamond Project. Plaintiffs also argue that method used to create the 1988 DLC Films could not have produced the Patented Nanophse Diamond Films. The Patented Nanophse Diamond Films were developed using a method that include the use of greater laser pulse energies than the ‘007 patented process, a new graphite feedstock, alternate electrode configurations, alternate configurations of the deposition chamber, and proper positioning of the laser beam relative to the plasma plume. Plaintiffs argue that these changes were made as a result of the discovery that the early methods for producing the 1988 DLC Films would not produce a

diamond film having the properties necessary to make it a useful and commercially viable coating. Thus, Plaintiffs argue that the method described in the patents-in-suit was different and vastly improved compared to the method used in early 1988. Accordingly, Plaintiffs argue that the Patented Nanophase Diamond Films claimed in the patents-in-suit were not “subject inventions” of the Navy research contract and were not subject to the requirements of the Bayh-Dole Act.

Defendants argue that in a 1988 invention report to the Navy, Plaintiffs conceded that one of the basic problems of a gamma ray laser is nuclear recoil, so that a strong “diamond” material was needed to “allow[] the least recoil.” The invention report also stated: “To be useful [the material] must be prepared in a thin film and in the course of doing this, we found the [Optical Quality Amorphous]-diamond material.” Thus, Defendants argue that the Patented Nanophase Diamond Films fall within the scope of the gamma ray laser research and are a subject invention of that research. In making this argument, Defendants rely heavily on *Technical Development Corp. v. U.S.*, 597 F.2d 733 (Ct. Cl. 1979). In *Technical Development*, the government contract called for the development of an electronic fuel control for an aircraft engine. *Id.* at 742. The grant recipient developed and patented a “crossover circuit,” a “maximum fuel limit circuit,” and a “temperature-controlled circuit,” without reporting these inventions or acknowledging rights belonging to the government in these inventions. *Id.* at 735-36. The recipient tried to argue that these inventions were conceived and reduced to practice at times that fell outside the dates of the government contract, but the court held that “[t]he major goal of the contract was a working fuel control, proven by engine testing.” *Id.* at 749. In reaching this conclusion, the court held:

Inventions made under a Government contract are the product of expenditures from the public treasury in the course of a governmental function; the public, having in a sense ordered and paid for the invention through its representatives, should not again be taxed for its use, nor excluded from its use nor

permitted to use it upon restrictive conditions advantageous to no one but the patent owner. *Mine Safety Appliances Co. v. United States*, 364 F.2d 385, 392, 176 Ct.Cl. 777, 789 (1966) (quoting Investigation of Government Patent Practices and Policies, Report and Recommendations of the Attorney General to the President, Vol. I, pp. 88-89 (1947)).

Under such a liberal construction, it is enough that a significant feature of the invention was, itself, within the contractual scope, or resulted directly from the course of the contract performance. *Id.* 364 F.2d at 391, 176 Ct.Cl. at 787-88. The Government has the right to use, royalty-free, those inventions which have a ‘close an umbilical relationship’ to the work and research funded by the United States and were crystallized during performance of the federal contract. *Technitrol, Inc. v. United States*, 440 F.2d 1362, 1372, 194 Ct.Cl. 596, 613, 169 USPQ 732 (1971). If the invention is so tied to the work to be done under the contract as to contribute significantly to the results anticipated by that agreement, the Government is entitled to a license. *Mine Safety Appliances Co. v. United States*, 364 F.2d 385, 391, 176 Ct.Cl. 777, 787 (1966).

*Id.* at 745-46.

Citing *Technical Development*, Defendants argue that an invention is a “subject invention” if a significant feature of the invention was, itself, within the contractual scope or resulted directly from the course of the contract performance. Defendants then point out that the summary of the invention section of the ‘007 patent and the patents in suit are virtually identical. The ‘077 summary of the invention reads: “The present invention represents a major breakthrough in its ability to produce high quality diamond-like carbon layers . . . Diamond-like carbon layers produce in accordance with the present invention have extremely desirable properties such as physical hardness, electrical strength, high thermal conductivity, and optical transparency.” (‘007 patent, at 2:51-59). The summary of the invention of the patents-in-suit both include the following language: “The present invention represents a nanophse diamond films with has extremely desirable properties such as physical hardness, electrical strength, high thermal conductivity, and optical transparency.” (‘797 Patent at 4:13-18 and ‘650 patent at 4:5-9.1). Defendants argue that

significant features of the patented nanophase diamond films, such as optical transparency and physical hardness resulted directly from the course of the contract performance with the Navy.

However, it is the claims, not the summary of the invention, that defines the claimed invention, and the nanophase diamond films described in the claim language of the patents-in-suit are characterized by structural limitations, including nodules, that were not present in the 1988 DLC Films. Additionally, Plaintiffs have provided evidence demonstrating that the methods from early 1988 could not have produced the claimed films, and, in fact, the patents-in-suit claim a priority date of 1990, not 1988, the priority date of the '007 patent. Additionally, the ruling in *Technical Development*, upon which Defendants rely, issued before the Bayh-Dole Act was enacted in 1980. *See* 35 U.S.C. § 200, enacted December 12, 1980. Additionally, the regulations promulgated by the Secretary of Commerce, that cover the Bayh-Dole Act, more specifically define what constitutes a subject invention under the Bayh-Dole Act. In particular, the regulations state

To the extent that a non-government sponsor established a project which, although closely related, falls outside the planned and committed activities of a government-funded project and does not diminish or distract from the performance of such activities, inventions made in performance of the non-government sponsored project would not be subject to the conditions of these regulations. An example of such related but separate projects would be a government sponsored project having research objectives to expand scientific understanding in a field and a closely related industry sponsored project having as its objectives the application of such knew knowledge to develop new technology. The time relationship in conducting the two projects and the use of new fundamental knowledge from one in the performance of the other are not important determinants since most inventions rest on a knowledge base built up by numerous independent research efforts extending over many years.

37 C.F.R. § 401.1 (1991).

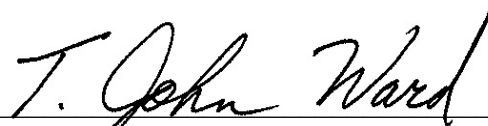
Plaintiffs argue that, at most, they built upon knowledge from the reach grants when developing the patented nanophase diamond films, but that this is not enough to make the patented

nanophase diamond films subject inventions of the gamma ray laser project funded by the Navy. The Court agrees. “[U]sing knowledge gained from governmental research to create a related advance does not transform that subsequent advance into a subject invention.” *Ciba-Geigy Corp. v. Alza Corp.*, 804 F. Supp. 614, 627-28 (D.N.J. 1992) (citing 35 U.S.C. § 201). Plaintiffs have provided abundant evidence that the patented nanophase diamond films claimed in the patents-in-suit were developed as part of a separate, privately funded research project from the gamma ray laser project funded by the Navy and that the patented nanophase diamond films have substantially different characteristics from the 1988 DLC Films disclosed to the Navy during the gamma ray laser project. Accordingly, the Court finds that the nanophase diamond films claimed in the patents-in-suit are not “subject inventions” of the Navy-funded gamma ray laser project and, therefore, that the patents-in-suit were not subject to the Bayh-Dole Act.

#### **IV. Conclusion**

For the reasons discussed above, the Court DENIES Hitachi and Western Digital’s Motion to Dismiss for Lack of Standing (Dkt. No. 177).

SIGNED this 29th day of August, 2011.



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T. JOHN WARD  
UNITED STATES DISTRICT JUDGE