UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE
AT KNOXVILLE

UNIVERSITY OF PITTSBURGH, Plaintiff, v. DAVID W. TOWNSEND; RONALD NUTT; CTI MOLECULAR IMAGING, INC.; and CTI PET SYSTEMS, INC., Defendants.	)	No. 3:04-cv-291 (Shirley)

MEMORANDUM OPINION

I. Introduction

In this action, the plaintiff University of Pittsburgh ("University") alleges that the defendants David W. Townsend, Ronald Nutt, CTI Molecular Imaging, Inc. ("CTI"), and CTI PET Systems, Inc. ("CPS")[1] (collectively "CTI/CPS"), subverted and misappropriated the University's rights and interests in valuable medical scanning technology, namely a combined PET/CT scanner, that the University alleges was developed collaboratively at its campus over the course of several years. The University alleges that the defendants' wrongful actions include breaches of, and

[1]At all times relevant to this litigation, CPS was a joint venture between CTI Molecular Imaging, Inc., successor by merger to CTI, Inc., and Siemens Medical Solutions USA, Inc., formerly known as Siemens Medical Systems, Inc. At all relevant times, CTI owned 50.1% of CPS. [Nutt Dep. at 28-29].

interference with, the University's contractual rights to joint ownership in the technology, as well as tortious misrepresentations and misappropriation. [Doc. 31, Amended Complaint at ¶1]. The University alleges that its ownership rights and interests include, but are not limited to, the inventions described in U.S. Patent No. 6,490,476 ("the '476 patent") and U.S. Patent No. 6,631,284 ("the '284 patent"), as well as the broader intellectual property, technology, development, and operational know-how associated with the PET/CT scanner; the attenuation correction methodology and related algorithms software programs/code utilized in the PET/CT scanner; and the PET/CT scanner test data generated at the University and utilized by the defendants. [Id. at ¶136].

This matter came to be heard on May 23, 2007 on the following motions:

(1) Defendants CTI Molecular Imaging, Inc. and CTI PET Systems, Inc.'s Motion for Summary Judgment [Doc. 50];

(2) Defendant Ronald Nutt's Motion for Summary Judgment [Doc. 51];

(3) Defendant David Townsend's Motion for Summary Judgment [Doc. 53];

(4) Plaintiff's Motion for Partial Summary Judgment [Doc. 56];

(5) Plaintiff's Motion for Leave to File Supplemental Brief in Opposition to Defendants' Motions for Summary Judgment [Doc. 130]; and

(6) Plaintiff's Motion for Leave to File Reply to Defendants' Response to Plaintiff's Supplemental Brief in Opposition to Summary Judgment [Doc. 137].

Participating at the hearing on behalf of the plaintiff were attorneys David G. Oberdick, and Andrew R. Tillman. Participating on behalf of the defendants were attorneys Daniel F. Diffley, Randall L.

Allen, and J. Chadwick Hatmaker. The Court **GRANTED** the plaintiff's motion for leave to file a supplemental brief [Doc. 130] at the May 23, 2007 hearing.

II. Relevant Facts

A. Relationship of the Parties

1. Dr. Townsend and the Other Defendants

The defendants David Townsend and Ronald Nutt met in the late 1980's. [Deposition of Ronald Nutt ("Nutt Dep.") at 31-32]. Dr. Nutt was a co-founder of CTI. [Id. at 24-25]. Dr. Nutt and Dr. Townsend worked on numerous projects together in the late 1980's and early 1990's while Dr. Townsend was on the faculty of the University of Geneva. [Id. at 31-32]. Their work focused primarily on Positron Emission Tomograph ("PET") imaging [id. at 31-33], a process by which diagnostic images are created based on the detection of radioactive isotopes injected into the patient prior to the scan.

In 1991, while in Geneva, Dr. Townsend and Dr. Nutt conceived the idea of combining a PET scanner with a CT scanner. A CT scanner is a device which uses special x-ray equipment to obtain image data from different angles around the body and then uses computer processing of the information to show a cross-section of body tissues and organs. [Id. at 34-36; Deposition of Marc Malandro as Plaintiff's Rule 30(b)(6) designee ("Malandro Dep.") at 53, 89].

In 1992, Dr. Townsend signed a consulting agreement with CTI. [Deposition of David Townsend ("Townsend Dep.") at 19]. Pursuant to this consulting agreement, which was

effective October 1, 1992, Dr. Townsend assigned all of his intellectual property rights to CTI. Specifically, the assignment provided as follows:

> All inventions, all patents, and all materials for which copyright protection may be obtained which are made, developed, discovered, composed or conceived by employees and consultants in the course and scope of their employment by CTI which relate in any way to CTI's actual or planned business, interests, or investigations are the sole property of CTI, unless specifically disclaimed by CTI in writing. Each employee and consultant is obligated to promptly bring these inventions, patents, and materials to management's attention. CTI continues to have ownership rights to these inventions and materials, even after an employee or consultant terminates employment with CTI.

[Townsend Dep. Ex. Y]. The Consulting Agreement was valid for the period of October 1, 1992 to September 30, 1993. [Id.]. Dr. Townsend entered into another year-long Consulting Agreement with CTI effective May 1, 1994 and continued to consult for CTI thereafter. All of his future consulting agreements incorporated the above-referenced terms regarding assignment of intellectual property. [Id.].

2. Dr. Townsend and the University

Dr. Townsend was recruited to join the University of Pittsburgh faculty while still on the faculty in Geneva. [Townsend Dep. at 15]. He joined the University of Pittsburgh faculty as an Associate Professor of Radiology on September 1, 1993. [Id. at 14-15; Declaration of David Townsend ("Townsend Dec.") at ¶2].[2] In connection with the start of his employment, Dr. Townsend was provided an engagement letter dated October 21, 1993. [Townsend Dep. Ex. N-1]. Enclosed with this letter, among other documents, was a copy of the Faculty Handbook. [Townsend

[2]Dr. Townsend was promoted to the position of Full Professor in 2000. [Affidavit of Mark Malandro ("Malandro Aff.") at ¶4].

Dep. Ex. O-1]. The Faculty Handbook contains a section entitled "University Policy on Patents" which provides, in pertinent part, as follows:

> **II. Title to Patents**
>
> A. *The University claims ownership and control of the worldwide patent rights that result from activities of its faculty, staff, and students.* University "faculty and staff" shall include all persons who hold any official faculty or staff relationship to the University, with the exception of those persons who render their services to the University on a gratuitous basis. This exception does not include faculty who are members of professional corporations affiliated with the University, even though the faculty may receive all or part of their compensation from the professional corporation. The inventor will normally receive 30 percent and the University 70 percent of the net financial returns from the sale, licensing, or other transfer of such patent rights.
>
> If, however, the inventor or another institution believes that the circumstances surrounding the invention, including such factors as support provided by other than the University, place where discovery was made, or lack of relevance to the regular work of the member of the faculty or staff, warrant another distribution, the inventor or the institution may request the University Patent Committee to review the circumstances. After review, the University Patent Committee may determine a different distribution of the net proceeds.
>
> B. The University, as determined by the Patent Committee, may choose to waive all rights to a patent, thus granting the inventor permission to proceed in whatever manner he or she shall deem appropriate.
>
> * * *
>
> D. Patent rights resulting from government-sponsored research grants, contracts, fellowships, or other such arrangement, are controlled by the terms of those agreements, but as between the University and faculty members and staff accepting such grants, Section A shall govern.
>
> E. Patent rights resulting from the research grants or contracts of non-government agencies or sources are, as between the University and faculty members and staff, subject to provisions of Section A above.

* * *

UNIVERSITY PROCEDURES FOR PATENTS

I. Application to Committee
Disclosure Statement

The inventor shall prepare and submit a Disclosure of Invention in triplicate to the Committee. The supporting information will include a description of the prior art, the problem solved or technical advantage, a full technical description of the development, an opinion on potential marketability, including possible commercial suggestions, and the potential long-term commercial interest.

II. Action by the Committee
Patentability Evaluation

A. The Committee may submit to counsel the disclosure statement to initiate a patentability evaluation including, if desirable, a patent search. Such a decision would be based on committee review, including consultation on a confidential basis with appropriate qualified University personnel.

B. *An assignment of all worldwide rights, title and interest by the inventor(s) to the University in the development and improvements therein will be obtained prior to initiating any patentability evaluation, search, patent application, or other legal costs.*

C. If patentable, the University may elect to file domestic or foreign patent applications as it in its sole discretion determines . . . .

D. If the Committee does not approve the disclosure for a search or filing of patent applications after meeting any sponsor's requirements (such as those of a government agency), the inventor will be provided a release from any constraints or interest on the part of the University subject to reservation or an irrevocable nontransferable royalty-free license in the University.

[Id. at 47-49 (emphasis added)]. The University Policy on Patents contained within the Faculty Handbook further provides that trade secrets or know-how, even though not patentable, are also

subject to the same policies as patentable inventions. [Id. at 51]. A disclaimer at the end of the Faculty Handbook states as follows:

> This handbook is prepared for the information of the members of the faculty of the University of Pittsburgh. The Handbook for Faculty is not intended to be a complete statement of all University faculty and academic policies. The policies and practices described are subject to change by the University. *They are not to be considered or otherwise relied upon as terms and conditions of employment and the language used in this handbook is not intended to create a contract between the University of Pittsburgh and its employees.* To the extent any policy contained in this handbook is inconsistent with law, such policy is superseded by law.

[Id. at 116 (emphasis added)]. While Dr. Townsend acknowledged receiving this letter and its various enclosures, he does not recall ever actually reviewing the Faculty Handbook. [Townsend Dep. at 21, 23].

The University was aware in 1993 that Dr. Townsend had a "relationship" with CTI/CPS. [Deposition of Chris Capelli as Plaintiff's Rule 30(b)(6) designee ("Capelli Dep.") at 101]. The University, however, never requested a copy of the consulting agreement or inquired about its terms. [Townsend Dep. at 19]. Dr. Townsend testified that he disclosed the existence of his CTI consulting agreement to the University through conflict of interest forms. [Townsend Dep. at 19-20, 24; Townsend Dec. at ¶3]. However, none of the conflict of interest forms executed by Dr. Townsend before 2001 are contained in the record. The two conflict of interest forms in the record are from 2001 and 2002, respectively. In the 2001 form, Dr. Townsend discloses that he is a paid consultant with CPS. [Townsend Dep. Ex. P-1 at UP04291]. In Part I of the 2002 form, which is in a different format and poses different questions than the 2001 form, the following question is posed regarding technology transfer activities: "Are you or a member of your immediate

family the inventor of any technology for which an invention disclosure has been filed or which is being developed or evaluated in connection with your research activities?" [Id. at UP04293]. Dr. Townsend responded "yes." In Part II of the 2002 form, the following question is posed:

> If you answered YES to the Technology Transfer question in Part I, please give a brief description of the technology in which you have an interest and any license agreements or other technology transfer agreements entered into for that technology. Even if you have not yet received any financial remuneration for the technology, please list those agreements for which you would be entitled to share in commercial proceeds under University of Pittsburgh or other institutions' technology transfer policies.

[Id. at UP 04296]. In response to this question, Dr. Townsend states as follows: "An application has been filed for a patent on the PET/CT scanner. The application was filed by CPS." [Id.].

Dr. Townsend testified that shortly after his arrival at the University, Dr. Townsend requested that the payments under his consulting agreement with CTI be sent directly to the University. [Nutt Dep. at 73]. According to Marc Malandro, however, the monthly payments received from CTI during Dr. Townsend's employment with the University were not identified or treated as payments under any consulting agreement and instead were set up as "gift" payments to the University. These payments were applied to the salary of Thomas Beyer, a Ph.D. student at the University, who was involved in the PET/CT scanner development project, and to related NIH grant work at the University. [Malandro Dec. at ¶2]. As CTI/CPS was providing other support for the development project, as noted in the First NIH Grant application, these payments did not stand out to the University as evidence of a consulting payment. [Id.].

B. Federal Grant Funds and the Prototype PET/CT Scanner

1. The First NIH Grant

In 1995, Dr. Townsend was awarded a grant (Grant No. CA65856) from the National Institutes of Health ("NIH") following the submittal of a grant application entitled, "A Combined PET and X-ray CT Tomograph for Clinical Use" (the "First NIH Grant"). [Townsend Dep. Ex. R-1]. Although federal research grants are applied for by professors, any funds awarded are paid directly to the applicable university. [Deposition of Allen DiPalma, Plaintiff's Rule 30(b)(6) designee ("DiPalma Dep.") at 27]. The grant term of the First NIH Grant was from July 1, 1995 through June 30, 1999. [Townsend Dep. Ex. X-1].

Dr. Townsend was listed as the Principal Investigator on the First NIH Grant. [Townsend Dep. Ex. R-1]. Five other professors employed by the University and associated with the University's Department of Radiology and PET Facility were listed as co-investigators. [Id.]. Dr. Nutt, who was then Vice President and Director of Technology for Siemens/CTI, was identified as one of several consultants. [Id.]. Submitted in support of the application for the First NIH grant was a letter from Dr. Nutt to Dr. Townsend dated October 13, 1994, which reads, in pertinent part:

> [A]s you know, one of the most important parameters in my decision to enter into a joint agreement to develop a PET/CT tomograph with you and [the University] is that you have already demonstrated the ability to initiate, direct and complete an important joint PET tomograph development with CPS.

[Id. at 78].

As defined in the "Specific Aims" of the First NIH Grant application, the development project for the PET/CT scanner had an engineering phase that involved the purchase of commercially available PET and CT scanning systems and components and the mounting of these

separate scanning systems on a single support such that the scanning operations could be conducted independently. [Townsend Dep. Ex. R-1 at 50]. Additionally, one of the identified "Scientific Aims" under the First NIH Grant was "to develop methods and algorithms and implement them in software, including software for image fusion, which will take advantage of the unique features that arise from the direct acquisition of accurately co-registered CT and PET data sets." [Id.]. The grant funding was identified as being allocable to, *inter alia*, equipment costs and salaries for the researchers, including Townsend. [Id. at 6].

In September, 1995, the University used funds from the First NIH Grant to purchase a PET scanner (also known as a rotating "ART" scanner) at cost from CPS. [Townsend Dep. at 43]. While this ART scanner was apparently purchased for the purpose of being used as a component in the PET/CT prototype, Dr. Nutt suggested that the University begin using the scanner to image patients as well as for research while the prototype was being developed. [Townsend Dep. at 44]. In December, 1997, CPS asked the University to return the ART scanner to CPS so that it could be used in the PET/CT prototype. Because the ART scanner was being utilized for patient scanning and other activities within the PET facility, the University did not wish to return it. CPS acquiesced and purchased, with its own funds, another ART scanner to be used in the construction of the PET/CT prototype. No grant funds were used to purchase this ART scanner, and the ART scanner actually purchased with the First NIH Grant funds was never used in the construction of the PET/CT prototype. [Nutt Dep. at 59-60; Townsend Dep. at 44-45]. The University did not provide any money to CPS for the components of the prototype scanner; rather, CTI/CPS either supplied or purchased all of the components themselves. [Nutt Dep. at 89-90].

Dr. Townsend testified in his deposition that the work performed under the First NIH Grant contributed to the development of the prototype PET/CT scanner because the grant "allowed the first prototype to be constructed and placed in the Medical Center and [enabled us to] begin to take images of cancer patients." [Townsend Dep. at 41].

The prototype PET/CT scanner was completed and fully functional in early February, 1998 in Knoxville. [Deposition of Charles Watson ("Watson Dep.") at 41]. CPS tested the prototype scanner by taking "phantom" images of models in Knoxville to insure that the prototype properly functioned prior to shipment to the University. [Id.]. In April, 1998, the prototype PET/CT scanner was installed at the University of Pittsburgh. [Townsend Dep. at 134]. It was installed and maintained by CTI/CPS personnel. [Deposition of Ken Baker at 20; Townsend Dep. Ex. X-1]. At that time, having constructed the prototype, CTI/CPS sought a clinical evaluation, or validation, of the prototype PET/CT scanner. [Nutt Dep. at 98, 133-34].

Dr. Townsend testified that there was no NIH funding for the clinical validation of the PET/CT scanner, and that in fact, NIH had specifically declined to fund the clinical portion of the process. [Townsend Dep. at 114]. The NIH Final Report [Townsend Dep. X-1, Final Report at 2], however, states that the original grant proposal did include funding for a preliminary clinical evaluation of the scanner, and that these clinical studies were performed in collaboration with a number of physicians at UPMC, including Drs. Charron and Meltzer, both of whom were employees of the University. [Malandro Affidavit at ¶6].

2. The Second NIH Grant

At the end of the term of the First NIH Grant, Dr. Townsend prepared and executed a Final Invention Statement and Certification, along with a Final Report for the First NIH Grant for

"A Combined PET/CT Scanner." [Townsend Dep. Ex. X-1]. In the Final Invention Statement and Certification, Dr. Townsend certifies that the invention was "conceived and/or first actually reduced to practice during the course of work under the above-referenced DHHS grant or award for the period" of July 1, 1995 to June 30, 1999. [Id. at 1]. The Final Invention Statement and Certification identifies Dr. Townsend and Dr. Nutt as the inventors of the combined PET/CT scanner. Attached to the Final Invention Statement and Certification is a letter from Reed McManigle of the University's Office of Technology Management ("OTM") to CPS's patent counsel that describes efforts to review the patentability of the PET/CT scanner. [Id. at 3].

The Final Report for the First NIH Grant describes the prototype PET/CT scanner as combining commercially-available PET and CT scanners (a CTI ART scanner and a Siemens AR.SP scanner, respectively) within a single gantry. The Final Report goes on to describe the contributions of various individuals to the development of the PET/CT scanner as follows:

> The design was developed and implemented at CTI PET Systems. Mechanical and electrical design work and assembly was performed by Tony Brun, Raymond Roddy and John Israel at CTI, with important contributions from John Young, Ken Baker and Dr. Charles Watson. Project Director at CTI was Dr. Ronald Nutt, Senior Vice-President for Technology Development. Thomas Beyer (Ph.D. student) was involved in all aspects of the design, performance evaluation, installation and operation within the UPMC PET Facility. Larry Byars, software consultant, was responsible for aspects of the acquisition software and bed control. Drs. Paul Kinahan and Donald Sashin, and Thomas Beyer, developed the CT-based attenuation correction algorithm. Dr. Kinahan developed the software for the FORE+OSEM PET reconstruction using CT images to provide anatomical priors. Maintenance of the CT scanner, both in Knoxville and Pittsburgh, was provided by Siemens CT divisions in the US, and maintenance of the ART scanner was provided by CTI PET Systems. Jeff Jerin, a CTI engineer based full-time at UPMC, is responsible for PET/CT scanner maintenance. The clinical studies funded in the original proposal were performed in collaboration with a number of physicians at the University of Pittsburgh Medical Center, including

> Drs. Martin Charron, Carolyn Meltzer, James Oliver, Adam Slivka, James Luketich, and Theodore Logan.

[Townsend Dep. Ex. X-1, Final Report at 2].

On June 29, 1999, Dr. Townsend sought to continue the First NIH Grant through an application by the University for a competing continuation grant entitled "Methodology for Oncology Imaging with a PET/CT Scanner." [Townsend Dep. Ex. S-1]. This grant application was approved as Grant No. CA74135 (the "Second NIH Grant"). In the Second NIH Grant application, Dr. Townsend was again listed as principal investigator/program director and he again listed his position as Associate Professor with the University's Department of Radiology. Dr. Kinahan was listed as a co-investigator, along with Dr. Martin Charron, Assistant Professor of Radiology at the University. The Second NIH Grant had a term from April 1, 2000 through March 31, 2003. [Townsend Dep. Ex. S-1].[3]

In the Second NIH Grant application, Dr. Townsend states: "We have recently developed a combined PET and CT scanner which allows, for the first time, registered CT and PET images to be acquired sequentially in a single device, overcoming alignment problems due to internal organ movement, variations in scanner bed profile, and positioning of the patient for the scan." [Id. at 2]. The application further states that "[t]he proposed developments in methodology [described in this grant application] will further improve the image quality of PET/CT studies." [Id.]. Letters of support from CTI were again included in the Second NIH Grant application. [Id. at 56-57].

[3]Upon Dr. Townsend's resignation from the University in 2003, the University consented to a transfer of the remainder of the Second NIH Grant to the University of Tennessee. [Townsend Dep. at 180-82; Malandro Aff. at ¶7].

On October 15, 1998, an article was published in Medical Physics by Dr. Townsend, Dr. Paul Kinahan, Assistant Professor of Radiology, and Dr. Donald Sashin, Associate Professor of Radiology, University physicists working at the PET Facility at the University, along with Thomas Beyer, a Ph.D. student at the University, entitled "Attenuation correction for a combined 3D PET/CT scanner" (the "Attenuation Correction Article").[4] The article notes that the work described in the article was supported, in part, by the First NIH Grant. [Id. at 8]. The Attenuation Correction Article discusses the results of three attenuation correction methods using CT information and concludes that using CT information is a feasible way to obtain attenuation correction factors for PET scanning. The Attenuation Correction Article further notes that "a single tomograph with the unique capability of acquiring both functional (PET) and anatomical (CT) images is being built as a collaboration between the University of Pittsburgh and Siemens/CTI, and funded in part by the National Cancer Institute." [Id. at 1].

Also on October 15, 1998, a separate article by Dr. Townsend and Dr. Kinahan, among others, entitled "The SMART scanner: a combined PET/CT Tomograph For Clinical Oncology" was published in connection with the November 1998 IEEE Nuclear Science Symposium and Medical Imaging Conference in Toronto, Canada (the "Scanner Article"). The Scanner Article states that "a combined PET/CT tomograph [medical scanning device] with the unique capability to acquire accurately aligned functional and anatomical images for any part of the human body had been designed and built." [Id. at 1]. The Scanner Article reports on the design concept of the scanner and performance parameters. [Id. at 2-3]. Further, the Scanner Article states in a footnote

[4]"Attenuation correction" is essentially a correction of data distortion during the scanning process. [Watson Dep. at 80-81].

that the described work was supported by NIH Grants CA65856 (the First NIH Grant) and CA74135 (the Second NIH Grant). [Id. at 1].

C. Invention Disclosure and Patent Protection for the Combined PET/CT Scanner

In early 1999, after the prototype had been constructed in Knoxville and shipped to the University, Dr. Townsend, who was still on the faculty at Pittsburgh, sought leave to work for at least a portion of the year at CTI/CPS in Knoxville. Dr. Townsend discussed his proposal with the head of his department, Dr. David Gur. [Townsend Dep. at 77]. Dr. Gur, along with representatives of the University's OTM,. was apparently concerned about intellectual property rights that might arise in the future from Dr. Townsend's work at CTI/CPS. [Deposition of Reed McManigle ("McManigle Dep.") at 45, 97; Deposition of Chris Capelli ("Capelli Dep.") at 124; Townsend Dep. at 120-21]. Dr. Gur, along with Mr. McManigle of the University's OTM, obtained an agreement that a portion of Dr. Townsend's salary would be reimbursed by CPS to the University. [Townsend Dep. at 77].

On July 26, 1999, at the suggestion of Reed McManigle, Dr. Townsend submitted an "Invention Disclosure Statement" for an invention entitled "A Combined PET and X-ray CT Tomograph for Clinical Use." [Townsend Dep. at 27-29, Ex. Q-1]. The Invention Disclosure Statement lists Dr. Townsend and Dr. Nutt as co-inventors and CTI as a potential licensee. The Invention Disclosure Statement further states that the PET/CT scanner was conceived in Geneva in 1991 and first operational in Knoxville in 1998. The First NIH Grant is listed as having provided support for the invention, and the Attenuation Correction and Scanner Articles are listed as prior publications of the invention. [Id.].

Dr. Townsend submitted the Invention Disclosure Statement using a form furnished through the University's website. The Invention Disclosure Statement was not signed. Additionally, the form included a formal assignment document, by which faculty were asked to assign whatever invention was being disclosed. [Id.; McManigle Dep. at 70, Ex. 41]. Dr. Townsend did not complete the assignment form when he submitted the Invention Disclosure Statement. He was never asked to assign any interest in the PET/CT scanner to the University, and he never executed the assignment form. [Townsend Dec. ¶7; McManigle Dep. at 70]. Mr. McManigle testified that while assignments are "normally" done by faculty members at the time of the invention disclosure, sometimes the assignment "slips through the cracks and is caught in the patenting process." [McManigle Dep. at 71]. Mr. McManigle states in a subsequent declaration that he was "comfortable" with the fact that Dr. Townsend had not executed an assignment at the time of the Invention Disclosure because he believed that "the University's rights in the invention had been established by the agreement I negotiated with Townsend and Nutt on behalf of CPS and summarized in the June [sic], 1999 letter to Dr. Gur." [McManigle Dec. at ¶10].[5] He further states that in his experience, "it is not uncommon for a written assignment from an inventor to be provided after the invention disclosure and closer to the licensing stages." [Id. at ¶11].

The University's technology transfer practice expert, Robert Wooldridge, who heads the technology transfer department at Carnegie Mellon University, has also opined that it is "not uncommon in technology transfer offices to obtain written signatures from faculty members/inventors on assignments later than the time of the electronic submission of the invention

[5]This "Gur Letter" is discussed in greater detail below.

disclosure but, as part of the regular processing of an invention disclosure, prior to the time of licensing the technology." [Declaration of Robert Wooldridge ("Wooldridge Dec.") at ¶4].

On July 28, 1999, the University's Technology Transfer Committee approved the filing of a patent application on the invention described by Dr. Townsend's Invention Disclosure Statement. [Townsend Dep. Ex. D-2].

On July 30, 1999, Reed McManigle of the University's OTM sent a letter ("Gur Letter") to David Gur, Professor and Vice Chairman of the University's Department of Radiology, which states, in pertinent part, as follows:

> In followup to your recommendations to Dr. Townsend to coordinate with the Office of Technology Management (OTM) on his collaboration with CTI PET SYSTEMS (CPS), I have had a conference call with CPS and Townsend on July 19, and a subsequent meeting with Dr. Townsend today. Based on these conversations, the OTM is quite comfortable with the evolving relationship with CPS, and has no objections to the commencement of Dr. Townsend's in residence research relationship with CPS.
>
> FYI, we have agreed to the following principles and action items:
>
> 1. All parties understand that Dr. Townsend will remain a University employee during his research collaboration at the CPS facilities, and that any new inventions that result from Dr. Townsend's work in which Dr. Townsend is at least a co-inventor, will be owned at least in part by the University of Pittsburgh.
>
> 2. With regard to the PET/CT prototype imaging system, we have agreed that relevant documentation will be provided to CPS's patent counsel to enable them to provide the parties with advice on the possible scope of patent protection for this prototype system. A list of documentation to be provided to counsel is attached.
>
> 3. Based on the resulting advice from patent counsel, Pitt and CPS will make a decision about filing a patent application to cover the PET/CT prototype design.

> 4. In the event that a patent application is filed, Pitt and CPS will commence discussions regarding a licensing of Pitt's interest in the patent application to CPS.

[Townsend Dep. Ex. I-2]. Dr. Townsend reviewed this letter in draft form and discussed its contents with Dr. Nutt, who suggested minor alterations to the wording of the letter. [Townsend Dep. at 108-09; Nutt Dep. at 125-26]. Dr. Nutt was also copied on the final transmittal of the letter. [Townsend Dep. Ex. I-2].

In connection with the scans to be performed as part of the clinical validation of the scanner, the University and CTI/CPS entered into a "Research Agreement" in August, 1999. [Townsend Dep. Ex. K-2]. Under the terms of the Research Agreement, CPS paid the University $350,000 in exchange for the University agreeing to perform 200 patient scans to allow CPS to evaluate different PET/CT applications. As additional consideration for these scans, the University was provided with a workstation and full maintenance coverage of the prototype PET/CT scanner at no cost to the University. It is noted in the Research Agreement that an invention disclosure statement had been filed and was under review. The Research Agreement further states that "[t]his agreement is contingent upon intellectual property issues being satisfactorily resolved by the University of Pittsburgh Office of Technology Transfer, Siemens, and CPS (attached)." [Id.]. Attached to the Research Agreement is the July 30, 1999 Gur Letter.[6] While the University was paid for the patient scans it performed pursuant to this Agreement, the parties never reached any

[6]The Court notes that the copy of the Research Agreement submitted in support of CTI/CPS's motion for summary judgment does not contain the Gur Letter as an attachment. [Doc. 55 Ex. 3 Part 12], whereas the copy of the Research Agreement submitted by the University [Plaintiff's Appendix Tab 65] does contain the Gur Letter as an attachment.

agreement about the "intellectual property issues" referenced therein. [Deposition of Reed McManigle at 118].

On August 25, 1999, Mr. McManigle sent a letter to CPS's patent counsel, Robert Pitts of Pitts & Brittain, enclosing background documents relating to the invention described in Dr. Townsend's Invention Disclosure Statement. [DEF 00552]. The letter states in pertinent part, as follows:

> As you may know, your client, CTI PET Systems (CPS), has been collaborating with the University of Pittsburgh in the development of a CT/PET imaging system. We have encouraged the investigators at Pitt and CPS to file an invention disclosure on the system, to enable a determination to be made as to whether the system is patentable. Per an agreement with Ron Nutt of CPS, we are providing the background information to you to aid us in making a determination of what is patentable with regard to the system. Based on your input, we will make a collaborative determination as to whether to file a patent.

[Id.]. Although Mr. McManigle provided this documentation to Pitts & Brittain, he conceded that the University was never a client of that firm. [McManigle Dep. at 89-90].

In October 1999, Pitts & Brittain filed a provisional patent application (60/159,395) for the combined PET/CT scanner. [Townsend Dep. Ex. Z-1]. The October 1999 filing date was based on the publication of the Attenuation Correction and Scanner Articles in October 1998. The provisional patent application listed Dr. Townsend and Dr. Nutt as inventors. Attached to the application is a copy of the Attenuation Correction and Scanner Articles and the initial application for the Second NIH Grant. The third page of the application is a form entitled "Statement Claiming Small Entity Status (37 CFR 1.9(f) & 1.27(b)) – Independent Inventor," which contains the following language in the middle of the page:

> Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:
>
> ___ No such person, concern, or organization exists.
>
> _X_ Each such person, concern, or organization is listed below.
>
> **CTI Pet Systems, Inc. 810 Innovation Drive, Knoxville TN 37932**

[Townsend Dep. Ex. X-1 (emphasis added)]. Mr. McManigle received a copy of the provisional application, after its filing, on November 2, 1999. [McManigle Dep. at 107-08]. While he conceded in his deposition that the Small Entity Form made reference to ownership of the patent by CPS, Mr. McManigle did not recall reviewing it. [Id. at 109]. He further testified that if he had reviewed it, the assignment to CPS "wouldn't necessarily have raised an issue because this is a provisional application, and it's not even required that you say who the assignees are in the provisional application." [Id.].[7]

Pitts & Brittain later filed three non-provisional patent applications that claim the 1999 provisional patent application as a base application and priority date for filing purposes. A first non-provisional application entitled "Combined PET and X-Ray CT Tomograph and Method for Using Same" was filed on October 10, 2000, and resulted in the '476 patent, which issued on December 2002. A second application entitled "Combined PET and X-Ray CT Tomograph" was filed on June 12, 2002 and resulted in the '284 patent. A third application (10,623,437) entitled

[7]Citing page 109 of McManigle's deposition, the University erroneously argues in its brief that "McManigle testified that this type of form would not be subject to any review as its purpose it to identify applicable filing fees." [Doc. 71 at 36]. However, this is clearly not the explanation actually given by McManigle in his deposition, and the University conceded as much at oral argument.

"Combined PET and X-Ray CT Tomograph" was filed on July 18, 2003 and remains pending. As with the provisional application, Dr. Townsend and Dr. Nutt were listed as inventors on these non-provisional applications, and CPS was listed as the assignee of the technology.

In November, 1999, the University elected title to the PET/CT scanner invention, pursuant to the provisions of the Bayh-Dole Act relating to the receipt of federal funds, 35 U.S.C. § 202(c)(2). This election of title is reflected on the NIH's website. The NIH has never challenged the University's title to the PET/CT Scanner invention, nor has NIH authorized an assignment of the University's title in the PET/CT scanner invention. [Malandro Aff. ¶¶ 11, 14].

CPS and CTI began the commercial development of the PET/CT scanner in March 2000, led by CTI's project leader, Charles Watson. [Watson Dep. at 16]. The first CPS commercial PET/CT scanner was installed at the University of Pittsburgh Medical Center in August 2001. [Townsend Dep. at 100]. The first PET/CT scanners were sold in the range of $1.1-2.3 million. [Deposition of Steve Hile ("Hile Dep.") at 9 Ex. I-1].

In 2001 and 2002, representatives of the OTM made inquiry of both Dr. Townsend and Dr. Nutt regarding the status of the patent and licensing negotiations. [Capelli Dep. Exs. 29, 30, 32, 33]. In response, Dr. Nutt indicated that he would prefer to wait until the patent issued before discussing any license. [Capelli Dep. at 113; Ex. 32].

In November 2001, University officials asked Dr. Townsend to sever his relationship with CTI and join with its competitor, General Electric. Dr. Townsend refused and in response, resigned as director of the PET facility. [Townsend Dep. at 16-17]. Dr. Townsend began looking for employment elsewhere and left the University faculty effective January 31, 2003. [Id. at 15]. Two months prior to leaving the University, Dr. Townsend entered into a Royalty Agreement with

CPS [Nutt Dep. Ex. K-4], which provides that in consideration of his assignments of his patent rights in the Combined PET and X-ray CT Tomograph, he would receive a royalty rate of $1,500.00 per unit sold. Through the end of 2005, Dr. Townsend received royalty payments under this agreement totaling $742,000.00. [Oberdick Aff. ¶6].

III. The Summary Judgment Standard

Summary judgment is proper "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c). The burden of establishing that there is no genuine issue of material fact lies upon the moving party. Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986).

In considering a motion for summary judgment, the Court must take all of the evidence submitted by the non-moving party as true, and must draw all reasonable inference in the non-moving party's favor. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986). To establish a genuine issue as to the existence of a particular element, the non-moving party must point to evidence in the record upon which a reasonable jury could find in its favor. Id. at 248. The genuine issue must also be material; that is, it must involve facts that might affect the outcome of the suit under the governing law. Id.

Once the moving party presents evidence sufficient to carry its burden under Rule 56, the non-moving party may not rest upon its pleadings, but must affirmatively set forth, by affidavits or otherwise, "specific facts showing that there is a genuine issue for trial." Fed. R. Civ. P. 56(e). An entry of summary judgment is mandated if, "after adequate time for discovery and

upon motion, [the non-moving party] fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex, 477 U.S. at 322. In reviewing the evidence, the Court must determine "whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law." Anderson, 477 U.S. at 251-52; see also Gaines v. Runyon, 107 F.3d 1171, 1174-75 (6th Cir. 1997) (requiring non-moving party "to present some significant probative evidence that makes it necessary to resolve the parties' differing versions of the dispute at trial" in order to defeat summary judgment).

IV. Choice of Law

The parties are in agreement that Pennsylvania law governs the contract and contract-related claims in this action. With respect to those claims of the University sounding in tort, the defendants appear to rely primarily upon Tennessee law, whereas the University contends that Pennsylvania law applies to these claims.

When a case is transferred pursuant to 28 U.S.C. § 1404(a), the court receiving the case must apply the choice of law of the transferring court. Phelps v. McClellan, 30 F.3d 658, 663 (6th Cir. 1994). Accordingly, the Court must apply the choice of law rules applicable in the District Court for the Western District of Pennsylvania from where this case was transferred.[8] Because a

[8]In arguing that Pennsylvania law is applicable to its tort claims, the University cites the Order of District Judge McVerry transferring this case to the Eastern District of Tennessee. The University argues that in this Order, Judge McVerry "analyzed governing law as one of the factors in a Section 1404(a) analysis and held that Pennsylvania [law] would govern the claims." [Doc. 71 at 21-22]. A careful reading of Judge McVerry's Order, however, reveals that Judge McVerry did not engage in any choice of law analysis, nor does it appear that this issue was even raised by either party in that proceeding.

federal court sitting in diversity applies the choice of law rules of the forum state, Ramey v. Wal-Mart, Inc., 967 F. Supp. 843, 844 (E.D. Pa. 1997), the Court will determine the appropriate choice of law using Pennsylvania conflict rules.

Under Pennsylvania law, "the 'choice of law' analysis applies only to conflicts of substantive law." Wilson v. Transport Ins. Co., 889 A.2d 563, 571 (Pa. Super. Ct. 2005). The statute of limitations is considered a matter of procedural law. Id. It is "[t]he long-standing rule of Pennsylvania . . . that the law of the forum determines the time within which a cause of action shall be commenced." Unisys Finance Corp. v. U.S. Vision, Inc., 630 A.2d 55. 58 (Pa. Super. Ct. 1993); accord Ferens v. John Deere Co., 494 U.S. 516, 523 (1990) (superseded by statute on other grounds) (requiring transferee forum to apply the law of the transferor court). Accordingly, the Court concludes that the statutes of limitations applicable in this litigation's original forum, that is, a Pennsylvania district court sitting in diversity, should apply in this case. Accordingly, pursuant to Pennsylvania law, the University's tort claims are subject to a two-year statute of limitations, while its contract claims are subject to a four-year statute of limitations. 42 Pa. Cons. Stat. § 5524; 42 Pa. Cons. Stat. § 5525.

With respect to the University's substantive claims, Pennsylvania choice of law rules state that the Court should avoid the choice of law question if the laws of the competing states would produce the same result. Berg Chilling Systems, Inc. v. Hull Corp., 435 F.3d 455, 462 (3d Cir. 2006); see also Air Products and Chemicals, Inc. v. Eaton Metal Products, Co., 272 F. Supp. 2d 482, 490 n.9 (E.D. Pa. 2003) (noting that if no conflict exists, the law of the forum is to be applied). If the laws of the relevant states would produce different results, then the Court must determine whether a "false conflict" or a "true conflict" exists. A false conflict exists where "only one

jurisdiction's governmental interests would be impaired by the application of the other jurisdiction's law." Lacey v. Cessna Aircraft Co., 932 F.2d 170, 187 (3d Cir. 1991). In that situation, the Court should "apply the law of the state whose interests are truly implicated by the particular cause of action." Coram Healthcare Corp. v. Aetna U.S. Healthcare Inc., 94 F. Supp. 2d 589, 594 (E.D. Pa. 1999). A true conflict exists where "the interests of each state would be impaired if the law of the other is given effect." Id. In that case, the Court must decide "which state has the greater interest in the application of its law." Cipolla v. Shaposka, 267 A.2d 854, 856 (Pa. 1970).

In the event of an actual conflict, Pennsylvania choice of law analysis follows a "flexible rule" that "permits analysis of the policies and interests underlying the particular issue before the court." Berg Chilling Systems, 435 F.3d at 465 (quoting Griffith v. United Air Lines, 203 A.2d 796 (Pa. Super. Ct. 1964)). The Third Circuit has interpreted this to mean that a court applying Pennsylvania choice of law rules "should use the Second Restatement of Conflict of Laws as a starting point, and then flesh out the issue using an interest analysis." Id. The Restatement (Second) of Conflict of Laws provides the choice of law with respect to a tort claim should be determined by the law of the state which "has the most significant relationship to the occurrence and the parties." Restatement (Second) Conflict of Laws § 145(1). In determining which state has the most significant relationship, the Court should consider the following contacts, including: "(a) the place where the injury occurred, (b) the place where the conduct causing the injury occurred, (c) the domicil, residence, nationality, place of incorporation and place of business of the parties, and (d) the place where the relationship, if any, between the parties is centered." Restatement (Second) Conflict of Laws § 145(2). These contacts should be measured qualitatively, not quantitatively. Coram, 94 F. Supp. 2d at 594. In the case of fraud or misrepresentation claims, "the Restatement

places particular importance on the 'state where the false representations were made and received' if the 'plaintiff's action in reliance took place' in the same state." Id. (quoting Restatement (Second) of Conflict of Laws § 148(1)).

The parties have not identified any significant difference between the laws of Tennessee and Pennsylvania. Nor have the parties shown that application of one state's laws over another would produce any appreciable difference in the result. Accordingly, it would appear that Pennsylvania substantive law, that being the law of the original forum, should apply. Even assuming that an actual conflict existed between Tennessee and Pennsylvania law, however, the Court would still conclude that Pennsylvania law should apply because Pennsylvania has the most significant contacts with the University's claims. The University is a state-related, non-profit research university located within the Commonwealth of Pennsylvania. [Malandro Aff. at ¶2]. The University employed Dr. Townsend at its Pittsburgh campus from 1993-2003, and thus, most if not all of his alleged tortious conduct would have occurred in Pennsylvania. Furthermore, any actions taken by the University in reliance upon the defendants' alleged fraudulent statements and/or misrepresentations would have occurred there. While Dr. Townsend did work part of the time at the CTI/CPS facility in Tennessee (where, in addition, both CTI and CPS have their principal place of business), Dr. Townsend remained an employee of the University during that time. Finally, the Court notes that the parties' relationship centered around the prototype PET/CT scanner that, while built in Tennessee, was installed, maintained, and operated in Pennsylvania at the University's PET facility. For all of these reasons, the Court concludes that Pennsylvania has the most significant contacts with the University's claims, and therefore, Pennsylvania law should apply to all of the University's tort claims and any defenses thereto.

V. Statute of Limitations

Having resolved the choice of law issue, the Court now turns to another potentially dispositive issue: the applicability of the statutes of limitations. The defendants argue that all of the University's claims are barred by the applicable statutes of limitations, which, as the Court previously noted, provides a two-year limitations period for tort actions and a four-year limitations period for contract actions under Pennsylvania law. The defendants argue that both statutes of limitations began to run in this case in July 1999, when Dr. Townsend executed the Invention Disclosure Statement without an assignment of his rights in the invention to the University. The defendants argue that this action was sufficient to put the University on notice of its potential causes of action. At the very latest, the defendants contend that the statutes of limitations began to run in November, 1999, when the University received a copy of the provisional patent application, which put the University of notice that CPS was pursuing an application in its own name and that the University was not an owner of the invention, by assignment or otherwise.

The University argues that the defendants' reliance on the respective statutes of limitations ignores the impact made by Dr. Townsend and the other defendants making "continuing affirmations, in and after 1999, of the University's ownership interests in the PET/CT scanner." Additionally, the University argues that the defendants' argument ignores their misconduct in failing to disclose Dr. Townsend's conflict of interest arising from the assignment of his intellectual property rights in the invention to CPS. The University argues that this constitutes a continuing breach of Dr. Townsend's employment obligations (and thus a separate basis for liability), to which the statute of limitations should not apply. Finally, the University argues that the defendants' argument ignores their failure after 1999 to recognize and assign to the University its intellectual

property rights. The University contends that it was not until December 2002, when the first patent issued, that the University had any notice of the defendants' failure to acknowledge and protect the University's interest in the ownership of the invention and related know-how.

"In Pennsylvania, a cause of action accrues when the plaintiff could have first maintained the action to a successful conclusion." Fine v. Checcio, 870 A.2d 850, 857 (Pa. 2005); Drelles v. Manufacturers Life Ins. Co., 881 A.2d 822, 831 (Pa. Super. Ct. 2005) (noting that under Pennsylvania law, the statute of limitations is computed from the time when the cause of action accrued, that is, "as soon as the right to institute and maintain a suit arises, which generally is when the injury was inflicted").

"Once a cause of action has accrued and the prescribed statutory period has run, an injured party is barred from bringing his cause of action." Fine, 870 A.2d at 857. "It is the duty of the party asserting a cause of action to use all reasonable diligence to properly inform himself of the facts and circumstances upon which the right of recovery is based and to institute suit within the prescribed period." Cappelli v. York Operating, Inc., 711 A.2d 481, 485 (Pa. Super. Ct. 1998). "Mistake, misunderstanding, or lack of knowledge in themselves do not toll the running of the statute." Fine, 870 A.2d at 857.

However, there are exceptions that act to toll the running of the statute of limitations, such as the discovery rule and the doctrine of fraudulent concealment. Id. "The 'discovery rule' arises from the inability of the injured party, despite the exercise of reasonable diligence, to know of the injury or its cause. Its purpose is to exclude the period of time during which the injured party is reasonably unaware that an injury has been sustained so that people in that class have essentially the same rights as those who suffer an immediately ascertainable injury." Colonna v. Rice, 664 A.2d

979, 980 (Pa. Super. Ct. 1995). While reasonable diligence is an objective standard, Kingston Coal Co. v. Felton Mining Co., 690 A.2d 284, 289 (Pa. Super. Ct. 1997), "[i]t is sufficiently flexible . . . to take into account the difference[s] between persons and their capacity to meet certain situations and the circumstances confronting them at the time in question." Crouse v. Cyclops Industries, 745 A.2d 606, 611 (Pa. Super. Ct. 2000). Reasonable diligence "is what is expected from a party who has been given reason to inform himself of the facts upon which his right to recovery is premised." Fine, 870 A.2d at 858.

Determining whether the statute of limitations has expired is generally a question of law for the Court. Fine, 870 A.2d at 859. Where the facts are not in dispute, the question of whether a plaintiff exercised reasonable diligence in discovering an injury is also a question of law. "When information is available, the failure of a plaintiff to make the proper inquiries is failure to exercise reasonable diligence as a matter of law." Kingston Coal, 690 A.2d at 289; see also Fine, 870 A.2d at 858-59 ("Where . . . reasonable minds would not differ in finding that a party knew or should have known on the exercise of reasonable diligence of his injury and its cause, the court determines that the discovery rule does not apply as a matter of law."). The burden is on the plaintiff to prove that it acted with reasonable diligence in determining the existence and cause of its injury but was unable to ascertain it. Cappelli v. York Operating, Inc., 711 A.2d 481, 485 (Pa. Super. Ct. 1998).

In the present case, the facts regarding the defendants' allegedly fraudulent statements are not in dispute. Further, the fact that Dr. Townsend did not assign his interest in the PET/CT scanner invention and the fact that the University was provided with a copy of the provisional patent application are also facts that are not in dispute. The only question that remains is whether the University acted with reasonable diligence upon learning these facts. Because the

underlying facts are not in dispute, the issue of the reasonableness of the University's actions is a question of law for the Court.

In the Court's view, the traditional discovery rule is not applicable to these facts. The discovery rule is applicable in situations where the plaintiff is "reasonably unaware" of the injury or its cause. See Colonna, 664 A.2d at 980. In the present case, the University concedes that it was aware of the lack of assignment of Dr. Townsend's intellectual property rights, but contends that the lack of assignment did not raise any "red flags" due to the "continuing affirmations" by the defendants recognizing the University's ownership interest. The University's claim appears to the Court to be more in the nature of a claim of fraudulent concealment. The doctrine of fraudulent concealment is similar to the discovery rule but is based on an estoppel theory. It provides that a defendant may not invoke the statute of limitations as a defense if, through fraud or concealment, the defendant "cause[d] the plaintiff to relax his vigilance or deviate from his right of inquiry into the facts." Fine, 870 A.2d at 860. The defendant's actions "need not rise to fraud or concealment in the strictest sense, that is, with an intent to deceive; unintentional fraud or concealment is sufficient." Molineux v. Reed, 532 A.2d 792, 794 (Pa. 1987). Like the discovery rule, a "[m]ere mistake, misunderstanding or lack of knowledge" is not sufficient to invoke the doctrine of fraudulent concealment. Id. The burden is on the plaintiff to show by clear and convincing evidence that such fraud or concealment occurred. Id.

The University argues that the statute of limitations was not triggered because (1) there was an absence of any clear signal of breach or tort by the defendants and (2) the defendants remained silent in response to the University's repeatedly stated view that it had an ownership interest in the PET/CT scanner and associated intellectual property. Specifically, the University

relies upon the testimony of both Mr. McManigle and the University's technology transfer, Robert Wooldridge, who both testified that it was "not uncommon" for assignments to be obtained some time after the submittal of invention disclosures; the agreement between the parties reflected in the July 30, 1999 Gur Letter (which was subsequently incorporated into the Research Agreement); and the University's communications with the defendants and defendants' patent counsel with respect to the patent application and subsequent licensing negotiations. At no time during these discussions, the University argues, did any of the defendants deny that the University had an interest in the patent, nor did any of the defendants indicate that Townsend would not be executing an assignment in favor of the University. In 2001 and 2002, while the patent application was pending, the University contends, representatives of the OTM continued to make inquiry regarding the status of the patent, and in response, Dr. Nutt indicated that he preferred to wait until the patent issued before discussing any license. It was not until after the first patent issued and Dr. Townsend left the University, the plaintiff argues, that the defendants disclaimed the University's ownership interests.

The Court finds that the University cannot carry its burden of demonstrating that the defendants engaged in acts of fraudulent concealment so as to toll the applicable statutes of limitations. "[I]n order for fraudulent concealment to toll the statute of limitations, the defendant[s] must have committed some affirmative independent act of concealment upon which the plaintiff[] justifiably relied." Kingston Coal, 690 A.2d at 291. While the University points to instances where the defendants remained silent in response to the University's stated view of its ownership interest, the University cannot show any affirmative act or statement prior to the filing of the first patent application in 1999 where the defendants made any affirmative statement or engaged in any affirmative conduct re-affirming the University's position on ownership of the PET/CT scanner or

otherwise assuring the University that Dr. Townsend would assign his rights to the University. Furthermore, while the University argues that Dr. Townsend was under a continuing duty to disclose the conflict of interest created as a result of his relationship with CTI/CPS, the annual conflict of interest disclosure forms for the years 1993-2000, in which Dr. Townsend would have presumably been required to disclose such information, are not contained in the record. Without such evidence, the Court cannot say whether Dr. Townsend made any affirmative misrepresentations or committed any affirmative acts of concealment to the University in these documents. Having failed to identify any affirmative, independent acts of concealment, the University's argument that the doctrine of fraudulent concealment tolls the statutes of limitations must fail.

Even assuming, however, for the purpose of summary judgment, that the defendants' alleged conduct constituted fraud or concealment which caused the University to "relax [its] vigilance or deviate from [its] right of inquiry into the facts," Fine, 870 A.2d at 860, the University was still obligated to exercise reasonable diligence to discover the cause of its injury. The standard of reasonable diligence also applies to the doctrine of fraudulent concealment. Thus, regardless of the fraudulent acts of concealment by a defendant, "a statute of limitations that is tolled by virtue of fraudulent concealment begins to run when the injured party knows or reasonably should know of his injury and its cause." Fine, 870 A.2d at 861. Accordingly, the Court must determine whether the undisputed facts show that at some point, prior to the first patent being issued in 2002, the University knew or reasonably should have known about its injury and its cause despite the defendants' affirmations to the contrary. See Drelles, 881 A.2d at 832 n.6 (stating that determination of whether estoppel results from established facts is question of law for the Court).

Upon careful consideration of the entire record, and viewing all facts in the light most favorable to the plaintiff, the Court concludes that the University reasonably should have known about the defendants' failure to acknowledge any ownership interest on behalf of the University as of November, 1999. First and foremost, the University was aware that there was some sort of "relationship" between Dr. Townsend and CTI/CPS, but the University never requested a copy of Dr. Townsend's consulting agreement, nor did it inquire about its terms. Second, while the University received monthly payments from CTI/CPS (at Dr. Townsend's request) for Dr. Townsend's work performed under the consulting agreement, the University never asked why CTI/CPS was paying the University these funds.

Third, when Dr. Townsend submitted the Invention Disclosure Statement in July 1999, it was unsigned and did not include a completed assignment form. While the University argues that the lack of assignment at the time of an invention disclosure was "not uncommon," the failure to assign these rights at least put the University on notice that such intellectual property rights existed and needed to be assigned to the University.

Fourth, when the patent application process began a few weeks later, the University still took no steps to secure an assignment of Dr. Townsend's invention, even though the University Patent Policy specifically requires that such an assignment be completed before a patent application is pursued:

> **II. Action by the Committee**
> **Patentability Evaluation**
>
> * * *
>
> B. An assignment of all worldwide rights, title and interest by the inventor(s) to the University in the development and improvements therein *will be obtained prior to initiating any*

> *patentability evaluation, search, patent application, or other legal costs.*

[Townsend Dep. Ex. O at 49 (emphasis added)].

Fifth, on November 2, 1999, the University's OTM received a copy of the provisional patent application, which contains the "Statement Claiming Small Entity Status (37 CFR 1.9(f) & 1.27(b)) -- Independent Inventor," listing CPS as the assignee of the technology covered by the application. [Id.]. While acknowledging that he had received a copy of the provisional patent application, including the Small Entity Status Form, Mr. McManigle does not recall reviewing it. Nevertheless, he dismissed the significance of the Small Entity Status form, stating that even if he had reviewed it, it would not have raised an issue for him "because this is a provisional application, and it's not even required that you say who the assignees are in a provisional application." [McManigle Dep. at 109]. Whether one is required to list assignees in a provisional application, however, is beside the point; what matters in this case is that, required or not, the defendants did list the assignee of the invention, and the University was not included on that list. And whether the University chose to review this document is also beside the point; what matters is that by providing this document to the University, the defendants made information available to the plaintiff that should have given it reason to make inquiries regarding the true ownership of the PET/CT scanner.

Had the University reviewed the provisional patent application, as the University's expert Robert Wooldridge conceded it would have been "a good practice" to do [Wooldridge Dec. at ¶6], it would have seen that Dr. Townsend had assigned his rights in the invention to CPS and not to the University, as the University claims that he was required. The University's "mistake, misunderstanding or lack of knowledge" in this regard is simply not sufficient to toll the statute of limitations pursuant to the doctrine of fraudulent concealment. See Molineux, 532 A.2d at 794. The

provisional patent application provided the University actual notice of the defendants' intent not to assign the University any interest in the subject invention. It further provided actual notice of Dr. Townsend's conflict of interest arising from his assignment of the invention to CPS. Thus, because this information was available, the University could have discovered, through the exercise of reasonable diligence, the precise nature of its injury and its cause. "When information is available, the failure of a plaintiff to make the proper inquiries is failure to exercise reasonable diligence as a matter of law." Kingston Coal, 690 A.2d at 289.

Based upon the record before it, the Court concludes that the University failed to exercise reasonable diligence as a matter of law, and that reasonable minds could not differ as to whether the University should have known on the exercise of reasonable diligence of its injury and its cause upon receipt of this provisional patent application. See Fine, 870 A.2d at 858-59. For these reasons, the Court finds that the doctrine of fraudulent concealment does not toll the statutes of limitations in this case, and that the applicable statutes of limitations began to run as of the date of the receipt by the University of the provisional patent application on November 2, 1999. Accordingly, this action, which was filed on July 7, 2004, is barred as untimely.

The University further argues that its claims which are based upon the defendants' failure to disclose Dr. Townsend's conflict of interest (by virtue of his consulting agreement and assignment of rights to CTI/CPS) are not impacted by the events in 1999. In so arguing, the University argues that the defendants' failure to disclose this conflict of interest was in the nature of a continuing breach and tort such that no statute of limitations began to run until after Dr. Townsend left the University in 2003, citing Wm. B. Tenny, Builder & Developer v. Dauphin Deposit Bank & Trust Co., 448 A.2d 1073, 1075 (Pa. Super. Ct. 1982). Even if the duty to disclose

this conflict of interest continued to exist after the events in 1999, the fact remains that the University should have known of the assignment between Dr. Townsend and CPS – and thus, should have known of Dr. Townsend's conflict of interest – as of November, 1999, and thus could have instituted its action against the defendants at that time. The University should have known through the exercise of reasonable diligence in 1999 that Dr. Townsend had a conflict of interest that he failed to disclose; thus, at that point, the University had a right to institute and maintain a cause of action against Dr. Townsend, see Drelles, 881 A.2d at 831, and the statute of limitations began to run.

In arguing that the statutes of limitations should be tolled, the University relies heavily upon Fenn v. Yale University, 283 F. Supp. 2d 615 (D. Conn. 2003). In Fenn, the professor made representations to the university that his invention did not have much commercial potential. Relying upon these representations, the university did not pursue a patent. The professor, without the university's knowledge, filed a patent application in his own name and subsequently licensed the technology to a private corporation. Id. at 625-27. Once the university became aware of the patent, it asked him to assign the patent to the university pursuant to its patent policy, and the professor refused. Id. at 627-28. The district court rejected the professor's argument that the statute of limitations barred the university's fraud claim, finding that the limitations period was tolled by the professor's fraudulent concealment of the facts necessary to establish the university's cause of action. Id. at 637.

The Court finds Fenn to be distinguishable from the present case. In Fenn, the professor misrepresented the commercial potential of the invention and surreptitiously obtained a patent and license for the technology without the university's knowledge. In the present case, Dr.

Townsend filed a patent application and disclosed the contents of that application to the University in 1999. Thus, unlike the university in Fenn, which was unable to discover that it suffered actionable harm until after the patent issued, the University in the present case had been given notice of the commercial viability of Dr. Townsend's invention, his failure to assign rights to the University, and the defendants' pursuit of a patent related to the invention. Furthermore, the University was provided documents which, had they been adequately reviewed, would have revealed that Dr. Townsend had already assigned his rights in the invention to CPS.

In a letter to the Court submitted after the summary judgment hearing, the plaintiff submitted additional authority regarding the application of the Bayh-Dole Act to the issues in this case. Specifically, the plaintiff relies upon a recent decision of the Northern District of California, Board of Trustees of Leland Standford Junior University v. Roche Molecular Systems, Inc., 487 F. Supp. 2d 1099 (N.D. Cal. 2007). In that case, Stanford University brought a patent infringement action against Roche, alleging that Roche was infringing patents that were developed by Stanford faculty, including Dr. Mark Holodniy. Roche, in turn, claimed that an intellectual property assignment agreement signed by Dr. Holodniy effectively transferred any rights in the subject patents to Cetus, a company that was later acquired by Roche. The district court held that Roche's claims of ownership of the patents was barred by the statute of limitations. Nevertheless, because the effect of Dr. Holodniy's assignment was "raised and extensively argued by the parties," the court went on to address the issue. The court ultimately found that Holodniy's assignment of rights was barred by the Bayh-Dole Act, noting that Stanford had already "exercised its right and obtained title" before Holodniy's assignment to Cetus, thus effectively leaving Holodniy with nothing to assign. Id. at 1115, 1119.

While the Roche case appears to be factually similar in some respects to the present case, the Court does not find its reasoning to be particularly beneficial to the plaintiff. First, the court's discussion of the effect of the Bayh-Dole Act was dicta, as the court had already determined that Roche's ownership claims were barred by the applicable statute of limitations. Additionally, in this case, the University's ostensible exercise of its right to title (in November, 1999) occurred after Dr. Townsend's assignment to CTI in 1992. Finally, the statute of limitations holding in Roche, which was based on when and how Roche knew or should have known of facts that would have placed a reasonable person on notice of an injury and its cause, supports the defendants' position in the present litigation more than the plaintiff's. Accordingly, the Court cannot say that the Roche decision would change the result in this case.

For all of these reasons, the Court finds that the University's claims against the defendants are barred by the statutes of limitations, and that this case should be dismissed.

VI. Other Motions

The defendants have filed a motion [Doc. 114], seeking clarification of the Court's Order entered March 30, 2007 with respect to the testimony of the plaintiff's proposed expert, Robert Wooldridge. In light of the Court's ruling today, Defendants' Motion for Clarification [Doc. 114] is rendered moot and is therefore **DENIED AS MOOT**.

The plaintiff moves to file a reply brief to the defendants' response to the plaintiff's supplemental brief. [Doc. 137]. The Court has reviewed and considered the arguments and legal authority cited in the plaintiff's proposed reply. However, in light of the Court's ruling today, the Plaintiff's Motion for Leave to File Reply to Defendants' Response to Plaintiff's Supplemental Brief

in Opposition to Summary Judgment [Doc. 137] is now rendered moot and is therefore **DENIED AS MOOT**.

VII. Conclusion

For the foregoing reasons, it is hereby **ORDERED** as follows:

(1) Defendants CTI Molecular Imaging, Inc. and CTI PET Systems, Inc.'s Motion for Summary Judgment [Doc. 50] is **GRANTED**;

(2) Defendant Ronald Nutt's Motion for Summary Judgment [Doc. 51] is **GRANTED**;

(3) Defendant David Townsend's Motion for Summary Judgment [Doc. 53] is **GRANTED**;

(4) Plaintiff's Motion for Partial Summary Judgment [Doc. 56] is **DENIED**;

(5) Defendants' Motion for Clarification [Doc. 114] is **DENIED AS MOOT**;

(6) Plaintiff's Motion for Leave to File Supplemental Brief in Opposition to Defendants' Motions for Summary Judgment [Doc. 130] is **GRANTED**; and

(7) Plaintiff's Motion for Leave to File Reply to Defendants' Response to Plaintiff's Supplemental Brief in Opposition to Summary Judgment [Doc. 137] is **DENIED AS MOOT**.

JUDGMENT TO FOLLOW.

ENTER:

s/ C. Clifford Shirley, Jr.
United States Magistrate Judge