

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TENNESSEE**

| | | |
|----------------------------------|---|--------------------------------|
| UNIVERSITY OF PITTSBURGH, |) | |
| |) | |
| Plaintiff, |) | |
| |) | Civil Action No. 3:04-CV-00291 |
| v. |) | |
| |) | |
| DAVID W. TOWNSEND; RONALD NUTT; |) | JURY TRIAL DEMANDED |
| CTI MOLECULAR IMAGING, INC.; and |) | |
| CTI PET SYSTEMS, INC., |) | |
| |) | |
| Defendants. |) | |

AMENDED COMPLAINT

Plaintiff, University of Pittsburgh, by its legal counsel, Meyer, Unkovic & Scott LLP, sets forth this Amended Complaint against Defendants, David W. Townsend, Ronald Nutt, CTI Molecular Imaging, Inc. and CTI PET Systems, Inc., averring as follows:

Introduction

1. This case arises from the Defendants’ intentional and egregious efforts to subvert and misappropriate the rights and interests of the University of Pittsburgh (the “University”) in valuable medical scanning technology (a combined PET/CT scanner) that was developed collaboratively with the University at its Pittsburgh campus over the course of several years. The Defendants’ wrongful actions have included breaches of and interference with the University’s contractual rights to joint ownership in the technology as well as tortious misrepresentations and misappropriation. The motive for these wrongful acts is clear – as the revenue potential for the PET/CT scanner became known, the Defendants essentially sought to

unjustly reap the rewards of their collaboration with the University to the exclusion of the University. As a result, the University has suffered and will continue to lose millions of dollars of revenue that could be allocated to, *inter alia*, further research and development efforts, unless the Defendants are held accountable for their wrongful actions.

The Parties

2. Plaintiff, the University, is a state-related, non-profit research university located within the Commonwealth of Pennsylvania. The University's main campus is located in the Oakland section of Pittsburgh, Pennsylvania, where the University has established itself as a comprehensive educational center and has gained international respect as a center for learning and research.

3. Defendant, David W. Townsend ("Townsend") is an adult individual, and, upon information and belief, is currently a resident of the State of Tennessee. Townsend is presently Professor of Medicine and Radiology and Director of the Cancer Imaging and Tracer Development Program at the University of Tennessee Graduate School of Medicine. The University employed Townsend from September 1, 1993 through January 1, 2003.

4. Defendant Ronald Nutt ("Nutt") is an adult individual, and, upon information and belief, is currently a resident of the State of Tennessee. Nutt is presently President and Chief Executive Officer of CTI and CPS.

5. Defendant CTI Molecular Imaging, Inc. ("CTI") is a Delaware Corporation with its principal place of business located in Knoxville, Tennessee. CTI is a leading provider of positron emission tomography (PET) imaging equipment and services, which enable healthcare providers, physicians, and their patients to improve the

diagnosis and treatment of cancer, cardiac disease, and neurological disorders. Among the imaging equipment sold by CTI is the combined PET/CT scanner.

6. Defendant CTI PET Systems, Inc. ("CPS") is a subsidiary of CTI and has its principal place of business with CTI in Knoxville, Tennessee. CPS is a Tennessee Corporation. CTI markets and sells its PET/CT scanners through CPS.

Jurisdiction and Venue

7. The United States District Court has jurisdiction over this action pursuant to 28 U.S.C. § 1332 because it is a civil action between citizens of different states and the amount in controversy exceeds the sum or value of \$75,000, exclusive of interest and costs.

8. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because a substantial part of the events giving rise to the claims asserted occurred in this judicial district, and the Defendants are subject to personal jurisdiction in this judicial district.

The Scanning Technology

9. CTI publicly represents that it is "a leading manufacturer of positron emission tomography imaging equipment and related products used in the detection and treatment of cancer, cardiac disease and neurological disorders." CTI touts a unique and patented scanning product – its combined PET/CT scanner – as the "Invention of the Year" in 2000 and describes the technology as a scanner that "combines PET and CT technologies into one device that reveals both metabolic processes and anatomical details within the body to improve image quality and localization of abnormalities as well as to guide biopsies, radiation therapy and surgical treatments."

10. The PET/CT scanner presents improved scanning technology that provides sharper and clearer scanned images, thereby improving the ability of physicians to both diagnose and monitor tumors and other biologic abnormalities.

11. Since the PET/CT scanner was introduced commercially in November 2001, CTI, through its public filings, has estimated sales of the scanner of approximately \$6.7 Million in 2001, \$56.7 Million in 2002, and \$123.9 Million in 2003.

The Development of the PET/CT Scanner

12. Townsend began to work with the University in 1993 as an Associate Professor in the Department of Radiology in the University's School of Medicine. Townsend, who had extensive experience in physics and, more specifically, PET scanning technology, had previously worked with the University of Geneva as a physicist and computer analyst.

13. Townsend was hired by the University to conduct research work at the University PET facility in the School of Medicine – a non-profit facility within the University's School of Medicine dedicated to research and development of PET scanning technology for purposes of medical diagnosis and treatment. In addition to his research responsibilities, Townsend also served as a postdoctoral teacher and consultant to the School of Medicine's Department of Radiology in the physics of radiology and nuclear medicine.

14. Based largely on his research and development efforts in connection with the combined PET/CT scanner, as described more fully below, Townsend was appointed to "full" Professor of Radiology in the University's School of Medicine in February 2000.

15. At all relevant times from 1993 through January 1, 2003, when Townsend left the University, Townsend was an employee of the University and subject to the policies applicable to all faculty at the University.

16. From July 1995 through June 1997, the University received initial grant funding from the National Institutes of Health ("NIH") and, more specifically, the National Cancer Institute, for development of "A Combined PET and X-Ray CT Tomograph for Clinical Use" under NIH Grant No. CA65856 (the "First NIH Grant"). In the application for the First NIH Grant, Townsend was listed as the principal investigator/program director for this grant and recited his position as Associate Professor with the Department of Radiology at the University.

17. Co-investigators on the First NIH Grant included six other professors associated with the University's Department of Radiology and PET Facility. Dr. Ronald Nutt, then Vice President and Director of Technology for Siemens/CTI, was identified as one of several consultants on the project.

18. Siemens Medical Solutions USA, Inc., a wholly owned subsidiary of Siemens AG (collectively referred to hereafter as "Siemens"), acquired a 49.9% stock interest in CPS in 1987 through a joint venture agreement. Through this agreement, CTI and CPS acquired access to the Siemens global distribution network, and Siemens included the CTI/CPS scanners, including scanners developed prior to the combined PET/CT scanner, in the Siemens product line.

19. Nutt, in his letter of support for the development work on the PET/CT scanner, dated October 13, 1994 and addressed to Townsend at the University's PET Facility, confirmed the willingness of CPS to enter into a joint agreement with Townsend and the PET Facility at the University to jointly develop a PET/CT tomograph. A copy of this October 13, 1994 letter is attached hereto at Exhibit A.

Nutt commented favorably on the University's commitment to the project and its collaboration with the University of Pittsburgh Cancer Institute. Nutt also described several benefits that would be provided by development of a PET/CT scanner or tomograph.

20. Consistent with this letter, the University at all times understood, based upon the representations of the Defendants, that the University and CPS/CTI were working together in the development of the PET/CT scanner for both research and commercial purposes.

21. Notably, Nutt conditioned the participation of CPS in the joint development project on obtaining grant funding. Nutt explained that the research and development division of CPS did not have the funding in place to cover all component costs.

22. The First NIH Grant proposal, which was in or about October 1994, nowhere stated or implied that the University would not hold ownership rights in the technology developed by Townsend and others employed or retained by the University under the First NIH Grant. Indeed, the section in the grant proposal form for "Consortium/Contractual Agreements" was marked as "Not applicable."

23. The primary goal of the First NIH Grant proposal was identified as the development of the PET/CT scanner and, more specifically, (i) the physical mounting of both existing scanners on a single gantry so that full co-registered projection data could be acquired for both images, and (ii) use of CT scanning technology and resulting data to correct attenuation and improve the imaging produced by a PET scan.

24. In connection with the identified need for attenuation correction of the scanning images, one of the additional University faculty employees involved in the

project was Dr. Paul E. Kinahan. Dr. Kinahan worked with Townsend in the design and scientific aspects of the PET/CT scanner and was responsible for defining the algorithms for the attenuation and correction procedure and otherwise assisting in the work on scatter correction.

25. Similarly, the First NIH Grant also involved the University's retention of Larry Byars as a software consultant. Mr. Byars was responsible for overall design of the acquisition software for the scanner. In particular, he developed software to acquire and reconstruct PET data and combine the PET and CT images. The University and Mr. Byars confirmed their contractual relationship in a Professional Services Agreement for Software Programming and Support dated August 1, 1997, a copy of which is attached hereto at Exhibit B (the "Byars Agreement"). Pursuant to Section 9 of the Byars Agreement, Mr. Byars agreed that "any computer programs, software, documentation, reports, copyrightable works, discoveries, inventions or improvements . . . developed by Contractor solely, or with others, resulting from any performance of Services pursuant to this Agreement are the property of the University and Contractor agrees to assign all rights and interest therein to the University."

26. Dr. Kinahan's attenuation correction algorithms and Mr. Byars' software development work for the University had a positive impact on the development of the PET/CT scanner. In a December 4, 2000 *TIME* magazine article, Townsend is quoted on the importance of this software: "We needed and finally created software to control two different imaging systems from one computer console, something that had never been done before."

27. In total, the development work on the PET/CT scanner under the First NIH Grant involved the incorporation of existing scanning devices into a single unit and the development of new methods, software and related technology to permit the

PET and CT scanning technologies to work together and complement each other in the desired manner. This work necessarily involved the creation and development of new methods, techniques, discoveries, inventions and work product that would be and is subject to intellectual property protection through, among other things, patents, copyrights and trade secrets. In addition, the development work under the First NIH Grant also contemplated the development of "know-how" that might not be subject to patent or copyright protection.

28. More specifically, and as defined in the "Specific Aims" of the First NIH Grant proposal, the development project for the PET/CT scanner had an engineering phase that was coordinated primarily by Nutt, as a consultant acting in collaboration with Townsend. This engineering phase 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. The component scanning technology was purchased from the grant proceeds at a cost of almost \$500,000 and obtained from commercially available scanning devices manufactured by Siemens/CPS.

29. The "Scientific" aim 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." This work was carried out through the primary efforts of Dr. Kinahan at the University's PET Facility and also involved My. Byars' software development efforts.

30. Through the University, Dr. Kinahan also served as principal investigator on a separate NIH grant to the University, funded by the National Cancer Institute for

“Methodology for Oncology Imaging with a PET/CT Scanner” at NIH Grant No. CA74135 (the “Second NIH Grant”).

31. The Second NIH Grant had a stated goal to “develop, implement, and evaluate algorithms that will significantly improve image quality for clinical PET oncology imaging, and in particular for a dual PET/CT scanner under development at [the University].” Thus, like the First NIH Grant, the development efforts under the Second NIH Grant necessarily involved the creation and development of new methods, techniques, discoveries, inventions and work product that would be and is subject to intellectual property protection as and through, among other things, patents, copyrights, trade secrets and know-how. The Second NIH Grant was applied for by the University in May 1996 and had a proposed support term from April 1997 through March 2002.

32. In addition to Dr. Kinahan and Townsend, the Second NIH Grant listed five other individuals from the University’s School of Medicine as co-investigators, one Assistant Professor at the University as a consultant, and one graduate student at the University.

33. Like the First NIH Grant, the Second NIH Grant contains no statement or information in the “Consortium/Contractual Agreements” section or elsewhere that negates the University’s ownership interests and rights in intellectual property, including patents and copyrights, developed by its employees, including Townsend, and contractors under the Second NIH Grant.

34. Notably, others in the general field of scanning research and development had previously attempted, with little success, to match PET and CT images by using computer algorithms to unify data from the scans.

35. The development work under the First and Second NIH grants yielded successful results, and a prototype scanner was installed at the University's PET Facility in 1998. The U.S. Food and Drug Administration approved the PET/CT scanner for commercial use in October 2000, and the PET/CT scanner has since provided CTI and CPS with millions of dollars in revenue.

36. In explaining the development history of the PET/CT scanner, CTI has admitted in numerous filings with the U.S. Securities and Exchange Commission ("SEC") that the combined PET/CT scanner was invented in 1998.

37. Consistent with CTI's public acknowledgement of a 1998 invention date for the CTI/PT scanner, on October 15, 1998, Drs. Kinahan, Townsend and Donald Sashin, Assistant Professor of Radiology and physicists in the PET Facility at the University, along with graduate student research assistant Thomas Beyer, published an article in Medical Physics entitled "Attenuation correction for a combined 3D PET/CT scanner" (the "Attenuation Correction Article"). The article noted that the work described in the article was supported, in part, by the NIH grant funding described above and that Beyer was supported by a grant from Siemens/CTI.

38. 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 "a single tomograph with 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." Again, the NIH Grants were funded through the National Cancer Institute.

39. Also on October 15, 1998, a separate article by Drs. Townsend and 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 Symposium and Medical Imaging Conference in Toronto, Canada (the "Scanner Article").

40. The Scanner Article reported that a combined PET/CT tomograph with unique capability to acquire accurately aligned functional and anatomical images for any part of the human body had been designed and built. The Scanner Article further reported on the design concept of the scanner and the first performance measurements.

41. The Scanner Article also noted that the First and Second NIH Grants supported the described work.

42. In June 1999, the University applied for a continuation of the First NIH Grant. The third grant application was titled "Methodology for Oncology Imaging with a PET/CT Scanner" (the "Third NIH Grant"). In the Third NIH Grant application, 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 co-investigator, along with Dr. Martin Charron, Assistant Professor of Radiology at the University.

43. This Third NIH Grant application notes that: "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." (Emphasis added). The application further states that all specific aims from the previous proposal have been achieved,

including, *inter alia*, (i) the design and construction of a combined PET and CT scanner, (ii) development of an algorithm to use CT images for attenuation correction of PET data, and (iii) installation and operation of the PET/CT scanner at the PET Facility of the University.

44. The specific aims of the Third NIH Grant application were stated as (i) extending the development of the CT-based attenuation correction algorithm, and (ii) developing and evaluating improvements in image signal-to-noise from PET data collection with continuous motion of the patient bed. Thus, again, the creation of discoveries, inventions, copyrightable subject matter, trade secrets and know-how was contemplated by the Third NIH Grant.

45. In both the Second and Third NIH Grants, Dr. Danny Newport, Associate Professor of Electrical and Computer Engineering at the University of Tennessee, was retained by the University as an independent contractor to assist in the algorithm development work and associated software programming associated with pursuit of the goals and aims of the Second and Third NIH Grants. Dr. Newport's work was subject to contractual agreement between the University and the University of Tennessee, a copy of which is attached hereto at Exhibit C (without Exhibits). Notably, Section 6.2 of this Agreement mandated that Patent and Invention Reports be submitted to the University if required under the Prime Agreement, i.e., the NIH Grant. Among the attachments included as part of this Prime Agreement is a Notice of Grant Award from the NIH providing that receipt of the subject grant funds is subject to the certain terms and conditions, including: "Rights to inventions vest with the grantee organization [the University] provided certain requirements are met and there is acknowledgement of NIH support." This Notice of Grant Award is attached hereto at Exhibit D.

46. On July 27, 1999, Townsend filed an Invention Disclosure Statement with the University's Office of Technology Management, pursuant to the University's Patent Rights and Technology Transfer Policy (the "Patent Policy"). A copy of this Invention Disclosure Statement is attached hereto at Exhibit E. In the Invention Disclosure Statement, Townsend described the invention as a combined PET and X-Ray CT tomograph for clinical use. Townsend further stated that while conception occurred in 1991, the first written description of the invention was in the NIH Study Section of the First NIH Grant (1994) and, further, that the first model and first successful operational test occurred in 1998 – the same year that CTI identifies in its SEC filings as the year of invention of the PET/CT scanner.

47. Also in the Invention Disclosure Statement, Townsend listed himself as the inventor of the disclosed invention along with Nutt, and, in the section captioned "Commercial Potential," listed CPS and Nutt as potential licensees of the invention.

48. The Invention Disclosure Statement has been submitted by the University to the NIH.

University Rights in the PET/CT Scanner

49. Under the University Patent Rights and Technology Transfer Policy, the University owns and controls the proprietary rights that result from activities of faculty and students. A copy of the Patent Policy relevant to the time period associated with the development of the PET/CT scanner at the University is attached hereto at Exhibit F. Under the Patent Policy, the University holds ownership rights in any invention conceived or reduced to practice by a faculty or staff member or student of the University.

50. In addition, while the Patent Policy primarily references “patents,” the Patent Policy states that it applies to other proprietary and intellectual rights, including trade secrets and know-how associated with developments by faculty, staff and students.

51. On revenues resulting from the development efforts of University , the Patent Policy provides that while an inventor or developer of intellectual property is entitled to 30% of any revenue resulting from any royalty or sale of technology, intellectual property or patents covered by the Patent Policy, the remainder belongs to the University for allocation to (i) a Patent Rights Fund, (ii) a “Patent Research Development Fund” and (iii) the Department with which the inventor was associated.

52. In addition, the University also has a Copyright Policy whereby the University holds title to certain copyright interests in materials and work product developed with University facilities. A copy of the Copyright Policy applicable to the relevant development period of the PET/CT scanner at the University is attached hereto at Exhibit G.

53. The University also has the right, pursuant to the Bayh-Dole Act, 35 U.S.C. §§ 200-212, to claim ownership in inventions created with federal funding provided to non-profit organizations for research and development efforts. The provisions of the Bayh-Dole Act apply to inventions that are either conceived or first reduced to practice in the performance of the work under a subject grant.

54. As employees of the University, all faculty and staff of the University identified as investigators and supported under the NIH Grants, including Townsend, were subject to the terms of the University’s Patent Policy and Copyright Policy, as part of their respective employment obligations to the University. Townsend, in particular, at all times during his employment with the University acknowledged that

he was subject to the Patent Policy and, indeed, made his Invention Disclosure Statement to the University in accordance with the terms of the Patent Policy.

55. The PET/CT scanner was developed and reduced to practice through the efforts of several faculty and staff members of the University, including Drs. Townsend and Kinahan and as a result of the funding provided by the NIH Grants.

56. In the case of the PET/CT scanner, therefore, the University has ownership rights in the PET/CT scanner and the related research, know-how and intellectual property that derived from the work and contributions of all University faculty and students involved in the NIH Grants, including, but not limited to Drs. Townsend and Kinahan. In addition, the University's ownership rights separately arise from the University's copyright interests in the software developed in connection with the PET/CT scanner. The University's ownership rights in the PET/CT scanner and associated intellectual property are further reinforced by the provisions of the Bayh-Dole Act that grant title to the inventions deriving from the NIH Grant funding to the University.

57. More specifically, the research and development efforts of University employees and students and the funding provided by the NIH Grants helped contribute to the making of a working and commercially viable PET/CT scanner

58. For example, Townsend, while working under the NIH Grants as an employee of the University, collaborated on the first objective of the NIH Grants - the design and engineering of the single gantry mounting system for the scanner. Thus, through the University's Patent Policy and the Bayh-Dole Act, the University has ownership rights in the intellectual property associated with the design and engineering of the PET/CT scanner.

59. Equally significant, Dr. Kinahan and others associated with the University were separately and primarily involved in developing the key algorithms needed for the attenuation correction of the scanning images – the second broad objective under the NIH Grants. Similarly, Byars developed key software for the scanner that constitutes a “work made for hire” so that the University owns the copyright in the attenuation correction software. Thus, the University, under its Patent and Copyright Policies and through the Bayh-Dole Act, has exclusive ownership rights in the attenuation correction methodology, algorithms and software.

60. Finally, the development efforts under the NIH Grants resulted in the creation of general know-how concerning the PET/CT scanner and its related functionality and technology, and this know-how was also important to the commercial success of the scanner. All know-how resulting from the activities of University faculty, staff and students, including Townsend and others identified in connection with the NIH grants, was and is owned by the University. Such know-how includes, but is not limited to, (i) knowledge of the design and construction of a functional and operational PET/CT scanner, (ii) knowledge of the attenuation correction methodologies and associated algorithms, and (iii) knowledge of the installation and operation of a PET/CT scanner. This knowledge includes an understanding of not only what is necessary to make the PET/CT scanner operational and functional , but also what does not work.

61. Under the University’s Patent Policy, Townsend was obligated to disclose not only all patentable inventions resulting from his activities on the PET/CT scanner, but also all other discoveries, trade secrets and know-how. Upon information and belief, Townsend has not made a full disclosure of all discoveries, trade secrets and know-how resulting from his activities concerning the PET/CT scanner.

62. At all times during his employment with the University, Townsend, in discussions with representatives of the University and its Office of Technology Management, acknowledged that the University had at least joint ownership rights in the design and engineering of the PET/CT scanner and associated technology and know-how and, possibly, sole ownership rights in the algorithms developed at the University for attenuation correction.

63. Subsequent to the submission of Townsend's Invention Disclosure Statement, the representatives of the University and its Office of Technology Management also sought confirmation of the University's joint ownership rights in the PET/CT scanner from CPS and Nutt, both historically and prospectively, as Townsend was proposing to conduct research while resident at CPS. The University also sought to explore and confirm the interest of CPS/CTI in licensing the University's rights in the PET/CT scanner technology and know-how.

64. These discussions among the parties occurred in June and July of 1999 and resulted in a letter dated July 30, 1999, that confirmed the parties' discussions and agreements as to the parties' joint interests concerning development and commercialization of the PET/CT scanner. A copy of this letter is attached hereto as Exhibit H.

65. Like Townsend, CPS and Nutt acknowledged and agreed during these discussions that the University had joint ownership in the intellectual property and know-how embodied in the PET/CT scanner through Townsend's status as an employee of the University and otherwise through the NIH Grants. At **no** time during Townsend's employment with the University did Townsend, Nutt or CPS deny that the University had an ownership interest in the PET/CT scanner and its associated technology and know-how.

66. Indeed, in the July 30, 1999 letter confirming the parties' joint interests and related discussions and agreements (a copy of which was sent to Nutt at CPS), the following agreed principles and action items were set forth:

a. "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."

b. "With regard to the combined 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."

c. "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."

d. "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."

67. CPS had and has fiduciary responsibilities to the University to protect the University's interests in the PET/CT scanner and to account to the University for profits realized from commercialization of the scanner.

68. Based upon the acknowledgement and representations by Townsend, Nutt and CPS that the University had joint ownership rights in the PET/CT scanner, the University entrusted Townsend, CPS and its patent counsel with the task of reviewing possible patent protection for the combined scanner and protecting the

rights and interests of the University in the PET/CT scanner, including, but not limited to the design of the scanner, the associated attenuation correction algorithms and methodology and other inventions and discoveries developed under the NIH grants and through the efforts of University employees, faculty, contractors and students.

69. As such, in addition to their contractual and other fiduciary obligations, Townsend and CPS voluntarily assumed a fiduciary responsibility to the University in connection with pursuit of patent rights in connection with the PET/CT scanner. Importantly, Townsend and CPS, at that time, represented and led the University to believe that patent protection would be pursued jointly on behalf of the University and CPS, and that appropriate patent assignments recognizing the ownership interest of the University in the PET/CT scanner would eventually be executed and filed with the US Patent Office.

70. Later, in August 1999, the University, Townsend, CTI/CPS and Siemens Medical Systems, Inc. entered into a Research Agreement, whereby the University performed 200 PET/CT scans to evaluate different applications for PET/CT scanning. Notably, the Agreement was expressly "contingent upon intellectual property issues being satisfactorily resolved by the University of Pittsburgh Office of Technology Management, Siemens, and CPS," with the July 30, 1999 letter agreement attached. A copy of the Research Agreement is attached hereto at Exhibit I.

71. The test data resulting from the evaluative PET/CT scans at the University constituted valuable and proprietary data belonging to the University. The test data was entrusted to the Defendants for use in obtaining FDA approval of the PET/CT scanner based upon the Defendants' representations that (i) the University had proprietary rights in the PET/CT scanner and related intellectual property and

test data, and (ii) the University would be compensated by the Defendants for their commercial use of the PET/CT scanner and test data.

72. Again, Townsend and CTI/CPS provided no notice, nor did they suggest, that they disputed, in any way, the University's joint ownership in the PET/CT scanner or proprietary rights in the related test data. To the contrary, in the attached letter proposal from Siemens, Siemens acknowledges that "much of the [PET/CT scanner] project has been supported by NIH grants and the University itself."

73. Later, the University, Townsend and CTI/CPS entered into a letter agreement dated January 5, 2001, that permitted Townsend to work, while an employee of the University, at CTI/CPS on continuing development of the PET/CT scanner. This approval also was expressly contingent upon "all intellectual property issues related to this effort being resolved to the satisfaction of the University through its Office of Technology Management." A copy of this letter agreement is attached hereto at Exhibit J.

The Defendants' Wrongful Efforts to Misappropriate and Subvert the University's Ownership Interests

74. Following the parties' discussions and agreements on joint ownership and the joint pursuit of patent protection on the PET/CT scanner in July 1999, the University's Office of Technology Management advised Townsend of the need to file for patent protection on the PET/CT scanner on or before October 15, 1999. This date had significance because, under the US Patents Laws, the prior publication of the Attenuation Correction and Scanner Articles, one year earlier, would bar patent protection for the disclosures made in these articles, after the passage of one year from the date of publication.

75. Townsend and Nutt, through CPS's patent counsel, filed a provisional patent application on October 14, 1999 for a "Combined PET and X-Ray CT

Tomograph and Method for Using Same.” The timing of this filing is notable, as the Attenuation Correction and Scanning Articles are cited as references in this patent application. More specifically, the timing of the filing of the provisional patent application was responsive to the University’s notice of the October 15, 1999 bar date and demonstrates that the substance and claims of the application were based, at least in part, on the disclosures in the Attenuation Correction and Scanner Articles and the underlying work provided under the First and Second NIH Grants.

76. The specification and disclosure within this provisional patent application is comprised entirely of copies of the Attenuation Correction and Scanner Articles and the First and Second NIH Grants.

77. This provisional patent application matured into US Patent No. 6,490,476 for a Combined PET and X-Ray CT Tomograph and Method for Using Same (the “ ‘476 Patent”), a copy of which is attached hereto as Exhibit K. The ‘476 Patent was prepared by CPS’s patent counsel and designates Drs. Townsend and Nutt as co-inventors.

78. The specification and claims in the ‘476 Patent confirm that it derives from the joint collaboration with the University and the work under the First and Second NIH Grants. In particular, the Brief of the Summary of the Invention in the ‘476 Patent is copied, in part, from the identified objectives within the First NIH Grant. Similarly, the Description of the Prior Art in the ‘476 Patent parallels the background description in the First NIH Grant. Finally, and most significantly, the ‘476 Patent specifically discusses and claims the attenuation correction developments by Dr. Kinahan and others at the University, as well as the mounting and scanning system for the combined scanners jointly developed by Townsend under the grants and in collaboration with the University.

79. The '476 Patent similarly derives portions of its specification and claims from the disclosures in the Attenuation Correction and Scanner Articles, both of which, again, expressly reference the work and developments as occurring under the First and Second NIH Grants.

80. More broadly, the PET/CT scanner that the defendants began to commercialize was derived from the work efforts of University faculty members under the NIH Grants, and the PET/CT scanner incorporated technology and know-how that was developed under the NIH Grants and owned, at least in part, by the University.

81. In addition, the Defendants were able to obtain FDA approval for commercial use of the PET/CT scanner through the proprietary test data generated at and owned by the University

82. On June 12, 2002, Townsend and Nutt, again through CPS's patent counsel, filed a second patent based upon the initial provisional patent filing made on October 14, 1999. This filing has matured into US Patent No. 6,631,284 for a Combined PET and X-Ray CT Tomograph (the " '284 Patent"). A copy of the '284 Patent is attached hereto at Exhibit L. The '284 Patent also notes Drs. Townsend and Nutt as co-inventors.

83. In contravention of their contractual agreements with, and fiduciary duties to, the University, Townsend and CPS did not co-assign the '476 Patent or the '284 Patent to the University.

84. The Defendants' efforts to mislead the University and attempt to wrongfully misappropriate the University's ownership rights in the PET/CT scanner continued as the University made subsequent efforts to make inquiry of Townsend and Nutt concerning the status of the patent efforts being coordinated by CPS's patent counsel.

85. In September 2000, Dr. Christopher C. Capelli, Director of the University's Office of Technology Management, contacted Nutt at CPS to inquire about a licensing arrangement with the University. Nutt responded by questioning whether or not a patent would be obtained and therefore indicated that there was no reason to proceed with negotiation and execution of a license at that point in time. Nutt at no time in these communications stated or implied that the University was not a joint owner of the intellectual property rights in the PET/CT scanner and related technology and know-how.

86. Later, in September 2001, Dr. Capelli engaged Townsend in a series of emails to inquire about the status of any patent application that was filed as based upon Townsend's Invention Disclosure Statement. A copy of these emails is attached hereto at Exhibit M. Townsend explained that he understood that an application for the "PET/CT invention" was filed in September 2000. Townsend at no time stated or implied that the University did not have ownership interests in the "PET/CT invention."

87. The '476 Patent issued in December 2002, and the University officials familiar with the PET/CT project learned of this issuance later in 2003 only through press and media reports highlighting the patent issuance.

88. Townsend left the University just after the issuance of the '476 Patent in January 2003, and joined the University of Tennessee (near CPS/CTI).

89. The University, for the first time, thereafter became aware of potential wrongdoing by the Defendants when both Townsend and Nutt subsequently avoided and refused to respond to further inquiries from the University concerning the assignment of the '476 Patent to the University and the licensing of the University's related rights in the PET/CT scanner to CPS/CIT.

90. By letter to Townsend and CPS dated June 6, 2003, legal counsel for the University formally asserted the University's rights to the PET/CT scanner and the related patents, technology and know-how. An accounting of revenues from the scanner was also requested.

91. CPS, through a August 15, 2003 letter from its legal counsel, denied that the University has any rights to the PET/CT scanner or the '476 Patent because Townsend, before he joined the University, purportedly had executed a pre-existing agreement to assign ownership rights in any of his work product to CPS.

92. As discussed above, while the University was aware of a consulting relationship between Townsend and CPS, neither of these Defendants provided any notice of any assignment of rights in favor of CPS that would negate the University's interest in the PET/CT scanner and related technology and know-how, or somehow override the provisions of the Bayh-Dole Act. Instead, as noted above, the Defendants at all times led the University to believe, through representations and agreements, that the University had at least joint rights in the PET/CT scanner and the associated inventions, know-how, test data and other intellectual property rights.

93. Accordingly, even if some valid assignment agreement existed between Townsend and CPS, the Defendants are estopped from asserting that any such assignment subsumes or obviates Townsend's employment and assignment obligations to the University under the Patent Policy and Copyright Policy because of the Defendants' purposeful silence and associated efforts to mislead the University. Moreover, it would have been impossible for Townsend to have made the invention reflected in the '476 Patent within the limited scope of this consulting for CPS/CTI.

94. CPS also asserts that the research associated with the NIH Grants have nothing to do with the '476 Patent and related invention. This position is contrary to

oral and written representations made by the Defendants and ignores the language of the '476 Patent and its clear incorporation of the aims and objectives of the NIH grants and the associated results reported in the Attenuation Correction and Scanner Articles.

95. Alternatively, Townsend and CPS have breached their legal, contractual and fiduciary duties to the University to the extent the '476 and '284 Patents have somehow been drafted to exclude the inventions and discoveries resulting from the NIH Grants.

96. Defendants' efforts to mislead and subvert the University's ownership interests in the PET/CT scanner have further extended to public filings with the SEC. On April 4, 2002, while Townsend was still with the University, CTI filed an S-1 registration statement with the SEC to offer its stock publicly. In this statement, CTI represented to prospective shareholders that CPS worked with Townsend "at the University of Pittsburgh to develop the PET/CT."

97. More recently, however, after Townsend left the University and the University has given notice of its rights through its legal counsel, CTI, in its recent 10-K SEC filing in December 2003, altered the same discussion concerning the history of the scanner to remove the reference to the University of Pittsburgh and, instead, has inserted reference to the University of Geneva (Switzerland), where Townsend worked prior to joining the University in 1993.

98. In sum, Townsend and the corporate Defendants, CPS and CTI, have breached their contracts and agreements with, and duties and obligations to, the University to recognize the University's ownership rights in the PET/CT scanner and its associated intellectual property and know-how, and the corporate Defendants have

otherwise sought to interfere with these contractual relationships and related duties and obligations.

99. All of the Defendants have benefited unjustly from the work and efforts of the University, through their receipt of unallocated profits from the sale of the PET/CT scanner.

100. In this context, Townsend and Nutt, in connection with their respective dealings with and representations to the University, have acted on the basis of selfish personal interests and greed. In the case of Nutt, in particular, this Defendant has significant stock interests in CTI and CPS, and he has benefited financially from the success of the PET/CT scanner. Upon information and belief, Nutt, in dealings with the University, has participated in and directed the conduct of CPS and CTI and also has acted, at times, on the basis of his personal financial interests and outside the scope of his employment for CTI and CPS in seeking to misappropriate and subvert the University's interests and rights in the PET/CT scanner and its associated intellectual property.

101. Likewise, CPS and CTI, along with the individual Defendants, have actively engaged in wrongful conduct to protect their improper and unjust interests in the revenue stream associated with the sale of the PET/CT scanner, including, but not limited to falsely manipulating SEC filings and controlling the patent prosecution associated with PET/CT scanner and related technology and know-how to exclude the University's ownership interests and to otherwise interfere with the University's contractual, legal and equitable rights.

102. In their dealings directly with the University and elsewhere, including public SEC filings, the Defendants have acted intentionally and egregiously to

misappropriate and subvert the rights of the University in the PET/CT scanner, the related patents and the related technology and know-how.

Damages and Irreparable Harm

103. As a result of the Defendants' wrongful and egregious conduct, the University improperly has been denied an ownership interest in and opportunity to license and commercialize the PET/CT scanner and its associated intellectual property. The University also has lost related royalty income from the past and future sales of the PET/CT scanner made by the Defendants, which amounts can be quantified but do not fully address the potential harm caused by Defendants' wrongful conduct.

104. More specifically, separate and in addition to the those damages that can be quantified, the University, as a further result of Defendants' wrongful conduct as aforesaid, also has suffered irreparable harm and is without an adequate remedy at law insofar as it have been wrongfully denied ownership of the PET/CT scanner patents and access to and use of the intellectual property, software and know-how associated with the PET/CT scanner. The University's proprietary rights in the PET/CT and its associated intellectual property and know-how therefore are at risk and money damages cannot adequately compensate the University.

105. Further, the cloud and uncertainty associated with the ownership of the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner has and will preclude the University from exploiting its own rights in the PET/CT scanner technology, and the University's lost future revenues and future business opportunities cannot be presently calculated and are not fully compensable by money damages.

COUNT I**Breach of Contract**
University v. Townsend

106. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

107. Townsend's wrongful conduct as aforesaid constitutes a breach of Townsend's employment obligations to the University, including the rights and obligations under the University Patent Policy and Copyright Policy. More specifically, Townsend has breached his employment obligations to the University by failing to recognize and protect, and by otherwise acting to subvert, the University's ownership rights and interests in the PET/CT scanner and its associated intellectual property. Townsend has further breached his employment obligations to the University by failing to fully disclose all discoveries, trade secrets and know-how resulting from his activities, while an employee of the University, concerning the PET/CT scanner.

108. Townsend's wrongful conduct as aforesaid, including his failure to recognize, fully disclose and protect, and his actions to otherwise subvert, the University's ownership interests and rights in the PET/CT scanner and its associated intellectual property, further constitutes a breach of Townsend's promises to and agreements with the University that the University has joint ownership in the PET/CT scanner, the related patents and the related technology and know-how. These agreements are reflected by and embodied in the letter agreements dated July 31, 1999 and January 5, 2001, the Research Agreement of August 1999, Townsend's submission of the Invention Disclosure and the parties' related oral agreements. These agreements also are implied by the NIH Grants and the related provisions of the Bayh-Dole Act.

109. The University has detrimentally relied upon the contractual promises, representations and agreements of Townsend.

110. As a direct and proximate result of the unlawful and unjustified conduct of Townsend, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

111. As a further direct and proximate result of the unlawful and unjustified conduct of Townsend, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

COUNT II

Breach of Contract University v. CPS and CTI

112. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

113. The wrongful conduct of CPS and CTI as aforesaid, including their failure to recognize, protect and license, and their actions to otherwise subvert, the University's ownership interests and rights in the PET/CT scanner and its associated intellectual property, constitutes a breach of their promises to and agreements with the University that the University has joint ownership in the PET/CT scanner, the related patents and the related technology and know-how. These agreements are reflected by and embodied in the letter agreements dated July 31, 1999 and January 5, 2001, the Research Agreement of August 1999 and the parties' related oral

agreements. These agreements also are implied by the NIH Grants and the related provisions of the Bayh-Dole Act.

114. The University has detrimentally relied upon the contractual promises, representations and agreements of CPS and CTI.

115. As a direct and proximate result of the unlawful and unjustified conduct of CPS and CTI, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

116. As a further direct and proximate result of the unlawful and unjustified conduct of CPS and CTI, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

COUNT III

Tortious Interference with Contractual Relations University v. CPS

117. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

118. The wrongful conduct of CPS amounts to intentional and unjustified interference with the University's contractual relations with Townsend as described more fully in Count I of this Complaint.

119. As a direct and proximate result of the unlawful and unjustified conduct of CPS, the University has sustained, and will continue to sustain, losses of

proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

120. As a further direct and proximate result of the unlawful and unjustified conduct of CPS, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

121. The wrongful conduct of CPS is outrageous and demonstrates a reckless indifference to the interests of the University. The conduct of CPS was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT IV

Tortious Interference with Contractual Relations **University v. Nutt and CTI**

122. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

123. The wrongful conduct of Nutt and CTI as aforesaid amounts to intentional and unjustified interference with the University's contractual relations with both Townsend and CPS as set forth more fully in Counts I and II of this Complaint.

124. As a direct and proximate result of the unlawful and unjustified conduct of Nutt and CTI, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

125. As a further direct and proximate result of the unlawful and unjustified conduct of Nutt and CTI, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

126. The wrongful conduct of Nutt and CTI is outrageous and demonstrates a reckless indifference to the interests of the University. The conduct of Nutt and CTI was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT V

Breach of Fiduciary Duty **University v. Townsend and CPS**

127. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

128. The wrongful conduct of Townsend and CPS amounts to a breach of their fiduciary duties and related contractual obligations to the University and, more specifically:

a. The duties and responsibilities that CPS owes to the University as a joint owner and developer of the PET/CT scanner and the provider of proprietary know-how and test data concerning the operations of the PET/CT scanner; and

b. The duties and responsibilities that the University entrusted to Townsend and CPS to pursue appropriate patent protection for the PET/CT scanner and its associated intellectual property, and to recognize, fully disclose and protect the

University's ownership rights in the PET/CT scanner and its related technology and know-how.

129. In particular, Townsend and CPS, in breach of their fiduciaries duties to the University:

a. Failed to protect and recognize the ownership interests of the University in the PET/CT scanner and the intellectual property, software and know-how associated with the PET/CT scanner;

b. Failed to share with and account to the University the revenues deriving from commercialization of the PET/CT scanner and associated products and services;

c. Failed to co-assign the '476 and '284, and related applications and patents, to the University;

d. Failed to recognize the University's exclusive ownership rights in the attenuation correction methods and related algorithms and software; and

e. Failed to pursue a scope of patent protection that properly recognized the inventions and discoveries developed under the NIH Grants and through the contributions and discoveries of University employees other than Townsend.

130. As a direct and proximate result of the unlawful and unjustified conduct of Townsend and CPS, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

131. As a further direct and proximate result of the unlawful and unjustified conduct of Townsend and CPS, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership

rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

132. The wrongful conduct of Townsend and CPS is outrageous and demonstrates a reckless indifference to the interests of the University. The conduct of Townsend and CPS was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT VI

Misappropriation and Conversion of Proprietary Interests and Rights University v. All Defendants

133. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

134. The Defendants' wrongful conduct as aforesaid amounts to misappropriation and conversion of the University's rights and proprietary interests in the PET/CT scanner and its related intellectual property, technology and know-how.

135. More specifically, Defendants have failed to recognize, and have otherwise wrongfully misappropriated and converted the University's ownership rights and interests to the PET/CT scanner and the associated intellectual property, technology and know-how that derived from (i) the development work of the University's employees, and (ii) the NIH Grant funding and the related provisions of the Bayh-Dole Act.

136. The University's ownership rights and interests include, but are not limited to, the inventions described by the '476 and '284 Patents, as well as the broader intellectual property, technology and development and operational know-how associated with the PET/CT scanner. In the case of the attenuation correction

methodology and related algorithms and software programs/code, the University's rights are exclusive. The University also owns and has proprietary rights in the PET/CT scanner test data generated at the University.

137. The Defendants have misappropriated and converted the University's ownership rights and proprietary interests in the PET/CT scanner, without compensation to the University, as follows:

a. The Defendants have failed to co-assign the '476 and '284 Patents to the University;

b. The Defendants have taken for their own use the University's rights and interests in the non-copyrightable attenuation correction methodology, algorithms and development and operational know-how relating to the PET/CT scanner;

c. The Defendants have taken for their own use the University's rights and interests in the proprietary PET/CT scanner test data generated at the University; and

d. The Defendants wrongfully have retained physical possession of the attenuation correction software code developed by University employees and contractors.

138. As a direct and proximate result of the unlawful and unjustified conduct of the Defendants, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

139. As a further direct and proximate result of the unlawful and unjustified conduct of Defendants, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the

PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

140. The wrongful conduct of the Defendants is outrageous and demonstrates a reckless indifference to the interests of the University. The conduct of the Defendants was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT VII
Conspiracy
University v. All Defendants

141. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

142. Defendants' wrongful actions as aforesaid constitute an illegal civil conspiracy. In particular, and as alleged in the preceding paragraphs, Defendants have conspired together to wrongfully interfere with the University's contract relations, and misappropriate and convert proprietary rights and interests belonging to the University. In addition, the Defendants have conspired to cover-up their wrongful conduct by falsely manipulating public SEC filings.

143. As a direct and proximate result of the wrongful conduct of Defendants, the University has sustained, and will continue to sustain, loss of the value of their business, losses of revenue and other monetary damages in an amount in excess of \$75,000.

144. As a further direct and proximate result of the unlawful and unjustified conduct of Defendants, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the

PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

145. Defendants' wrongful conduct is outrageous and demonstrates a reckless indifference to the interests of the University. Defendants' conduct was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT VIII

Fraud and Misrepresentation **University v. Townsend and CPS**

146. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

147. Defendants' wrongful actions as aforesaid constitute fraud and misrepresentation. In particular, and as alleged in the preceding paragraphs, Defendants have intentionally and fraudulently misrepresented or concealed the several material items, including their failure, during Townsend's employment with the University, to disclose:

a. The Defendants' current position that Townsend's purported assignment of rights to CPS, prior to Townsend's association with the University, negates the University's ownership rights in intellectual property developed by Townsend while he was employed by the University and, more specifically, the developments, inventions and discoveries made by Townsend concerning the PET/CT scanner during his employment;

b. The Defendants' current position that the University has no joint ownership rights in the PET/CT scanner and the related intellectual property, technology and know-how;

c. The Defendants' current position that the research and developments under the First, Second and Third NIH Grants are unrelated to the PET/CT scanner and the related intellectual property, technology and know-how.

148. Similarly, based on the Defendants' current position, the Defendants fraudulently misled the University into reasonably believing that (i) Townsend and CPS would protect the ownership and patent rights of the University in the PET/CT scanner, and (ii) CPS/CTI would license the University's ownership interests in the PET/CT scanner and its associated intellectual property.

149. The University reasonably relied to its detriment on the representations of Townsend and CPS that the University had joint ownership rights in the PET/CT scanner and the related intellectual property, technology and know-how. In particular, based on the representations of Townsend and CPS, the University entrusted CPS with review and preparation of the patents concerning the PET/CT scanner and commercialization of the PET/CT scanner.

150. As a direct and proximate result of the wrongful conduct of Defendants, the University has sustained, and will continue to sustain, loss of the value of their business, losses of revenue and other monetary damages in an amount in excess of \$75,000.

151. As a further direct and proximate result of the unlawful and unjustified conduct of Townsend and CPS, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and

know-how associated with the PET/CT scanner, as well as related business opportunities, which injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

152. Defendants' wrongful conduct is outrageous and demonstrates a reckless indifference to the interests of the University. Defendants' conduct was and is so egregious that exemplary damages must be assessed against them as a penalty and as a deterrent against such conduct in the future.

COUNT IX

Unjust Enrichment **University v. All Defendants**

153. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

154. As a result of the Defendants' wrongful conduct as aforesaid, the Defendants have been and will continue to be unjustly enriched by receipt, without recognition of the University's ownership interests, of (i) revenues and profits from the sale of the PET/CT scanner, and (ii) the value of the related patents, technology and know-how.

155. As a direct and proximate result of the unlawful and unjustified conduct of the Defendants, the University has sustained, and will continue to sustain, losses of proprietary interests, losses of revenue, and other monetary damages in an amount in excess of \$75,000.

156. As a further direct and proximate result of the unlawful and unjustified conduct of CPS, for which the University has no adequate remedy at law, the University has suffered and will continue to suffer, injury to its ownership rights in the PET/CT scanner patents and the intellectual property, software and know-how associated with the PET/CT scanner, as well as related business opportunities, which

injury is permanent, substantial and irreparable and cannot be adequately ascertained or compensated by damages.

COUNT X

Declaratory Judgment University v. All Defendants

157. The allegations set forth in the preceding paragraphs are incorporated herein by reference.

158. This is an action for declaratory judgment of the University's ownership interests in the PET/CT scanner, including all related technology, know-how and intellectual property, including patents and copyrights, as well as the '476 and '284 Patents. More specifically, the University requests a declaratory judgment that:

a. The University has ownership interests in the PET/CT scanner and its related technology, know-how and intellectual property;

b. The University is the sole owner of the attenuation correction methods and algorithms and associated and derivative software, intellectual property and know-how relating to the PET/CT scanner;

c. The University is a joint owner of the design of the PET/CT scanner and the related inventions set forth in the '476 and '284 Patents and in all related patents, including but not limited to any continuation, CIP, divisional or reissue patents; and

d. The University is entitled to a reasonable royalty from past and future sales of the PET/CT scanner by the Defendants.

159. The Defendants dispute and deny these ownership interests by the University.

160. As a consequence of the foregoing position and assertions by the Defendants, and the allegations in this Complaint, there is an actual and justiciable

controversy between the University and the Defendants with respect to the validity, enforceability and infringement of the University's ownership interests in the PET/CT scanner, including all related technology, know-how and intellectual property, including patents and copyrights, as well as the '476 and '284 Patents, and in all related patents, including but not limited to any continuation, CIP, divisional or reissue patents.

WHEREFORE, the University respectfully requests that this Honorable Court grant the following relief:

A. A declaratory judgment that the University has ownership rights in the intellectual property associated with the PET/CT scanner, the related patents, including the '476 and '284 Patents and in all related patents, including but not limited to any continuation, CIP, divisional or reissue patents, and any and all associated and derivative technology, know-how, software and copyrights as set forth more fully in this Complaint;

B. A preliminary and final injunction against Defendants (i) prohibiting Defendants from disclosing, selling or otherwise transferring in any way the PET/CT scanner and associated intellectual property, software and know-how, and any related information, documents, or code, to any third parties, and (ii) requiring Defendants to deliver to Plaintiffs all information and/or documentation, including algorithms, computer and program information and source and object codes, with respect to the PET/CT scanner and associated intellectual property, software and know-how.

C. An accounting of Defendants' business activities and sales concerning the PET/CT scanner since at least 2001;

D. An award of actual damages, the amount of which is not yet determined;

E. An award of punitive damages;

F. An assessment of reasonable attorneys fees and costs against Defendants; and

G. Such other and further relief as this Court deems just and necessary.

JURY DEMAND

The University of Pittsburgh demands trial by jury on all issues to which it is entitled.

Respectfully submitted,

s/Dwight E. Tarwater, Esq.

TN BPR# 007244

s/Andrew R. Tillman, Esq.

TN BPR# 13979

s/Travis J. Graham, Esq.

TN BPR #019402

PAINE, TARWATER, BICKERS
AND TILLMAN, LLP

1100 First Tennessee Plaza

800 South Gay Street

Knoxville, TN 37929

Phone: (865) 525-0880

Counsel for Plaintiff

s/David G. Oberdick, Esq.

PA. I.D. #47648

s/Michael Yablonski, Esq.

PA. I.D. #49610

s/Chiara F. Orsini, Esq.

PA. I.D. #87026

MEYER, UNKOVIC & SCOTT, LLP

1300 Oliver Building

Pittsburgh, PA 15222

Phone: (412) 456-2800

Counsel for Plaintiff

University of Pittsburgh

Dated: April 19, 2005

CERTIFICATE OF SERVICE

I hereby certify that on April 19, 2005, a copy of the foregoing Amended Complaint was filed electronically. Notice of this filing will be sent by operation of the Court's electronic filing system to all parties indicated on the electronic filing receipt. All other parties will be served by regular U.S. mail. Parties may access this filing through the Court's electronic filing system.

VIA ELECTRONIC MAIL
 J. Chadwick Hatmaker, Esq.
 Woolf, McClane, Bright, Allen
 & Carpenter PLLC
 Riverview Tower
 900 S. Gay Street
 Knoxville, TN 37902
chatmaker@woolmcclane.com
 Counsel for Defendants

VIA U.S. MAIL
 Patrick R. Riley, Esq.
 Riley, Hewitt & Sweitzer
 650 Washington Road, Suite 300
 Pittsburgh, PA 15228
 Counsel for Defendants

VIA ELECTRONIC MAIL
 Daniel F. Diffley, Esq.
 VIA U.S. MAIL
 Randall L. Allen, Esq.
 J. Patrick Elsevier, Esq.
 Alston & Bird
 One Atlanta Center, 40th Floor
 1201 Peachtree Street, NE
 Atlanta, GA 30309-3424
ddiffley@alston.com
 Counsel for Defendants
 VIA ELECTRONIC MAIL
 David G. Oberdick, Esq.
 Michael Yablonski, Esq.
 Chiara F. Orsini, Esq.
 Meyer, Unkovic & Scott, LLP
 1300 Oliver Building
 Pittsburgh, PA 15222
 Counsel for Plaintiff

s/Travis J. Graham, Esq.
 TN BPR #019402

PAINE, TARWATER, BICKERS
 AND TILLMAN, LLP
 1100 First Tennessee Plaza
 800 South Gay Street
 Knoxville, TN 37929
 Phone: (865) 525-0880
 Counsel for Plaintiff