

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

Patient Transfer Systems, Inc.,	:	
Plaintiff,	:	
	:	
v.	:	CIVIL ACTION
	:	NO. 97-1568
Patient Handling Solutions, Inc., D.T. Davis Enterprises,	:	
Ltd., David T. Davis, and Joanne S. Davis,	:	
Defendants.	:	

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

YOHN, J. August , 2001

Patent Transfer Systems, Inc. [“PTS”] sued David T. Davis, Patient Handling Solutions, Inc. [“PHSI”], and D. T. Davis Enterprises, Ltd. [collectively, “defendants”] for infringing on patent number 5,561,873 [“873 patent”], false advertising, breach of fiduciary duty, conversion of corporate assets, and misappropriation of trade secrets.¹ PTS manufactures and sells air inflatable mattress pads that are used to support and move patients in hospitals and other health care facilities.² PTS employed Davis until November 1994. Sometime after Davis left PTS, he incorporated PHSI, a business that competed with PTS as a manufacturer and seller of air inflatable mattress pads. This lawsuit resulted.

¹ PTS has stipulated to the dismissal of claims against Joanne S. Davis. *See* Pl.’s Pre-Trial Mem. 1 (Doc. No. 138). Furthermore, the parties stipulated to the dismissal of PTS’s claim for copyright infringement and Davis’s counterclaim for tortious interference with prospective contractual relations. *See* Pl.’s Trial Mem. on the Legal Issues Involved in the Case (Doc. No. 145/146).

² In this opinion, I will generally refer to this type of product as an “air transfer mattress.”

The trial on damages has been bifurcated from the trial of liability. *See* Order of May 19, 1998 (Doc. No. 80). Having considered both parties’ pre- and post-trial filings as well as all of the testimony and exhibits offered at trial on the issue of liability, I now, pursuant to Fed. R. Civ. P. 52(a), make the following findings of fact and conclusions of law:

I. Findings of Fact

A. Background

1. History of the Air Transfer Mattress

a. General Description of an Air Transfer Mattress

- (1) An air transfer mattress is an inflatable pad composed of a series of interconnected inflatable chambers that is primarily used to move patients in hospitals and in emergency rescue situations from one horizontal surface to another. The surface of the bottom of the mattress has a pattern of small, closely spaced pinholes that allow air to escape from the mattress. This air forms an air bearing “lift” under the weight of the patient that reduces the exertion necessary to move a patient and, as a result, the risk of injury to the individual(s) moving the patient. *See* Joint Findings of Fact and Conclusions of Law [“JFF”] ¶ 5 (Doc. No. 140).

b. Early Air Transfer Technology

- (1) Raynor Johnson and another individual patented an air-bearing pallet for moving heavy cartons (U.S. 3,948,344). *See* JFF ¶ 7.
- (2) Johnson incorporated American Industrial Research, Inc. [“A.I.R.”]. *See* JFF ¶ 7.

- (3) Jack Wegener became associated with A.I.R., and Johnson and Wegener decided to develop and market an air transfer pad. *See* JFF ¶ 7.
- (4) Using a concept similar to the air-bearing pallet Johnson invented, Wegener patented an air pallet for use in a hospital setting, patent number 4,272,856. *See* JFF ¶ 7.

c. The A.I.R. PAL “Hard Pad”

- (1) The air-bearing pallet Wegener patented utilized a rigid insert to keep the pad level during inflation and to provide stable support for the load. As a result, the air-bearing pallet was referred to as a “hard pad.” *See* JFF ¶ 9.
- (2) A.I.R. decided to develop the air-bearing pallet technology to make air transfer devices for moving human beings. *See* JFF ¶ 7.
- (3) Johnson and Wegener presented their business plan to Robert E. Weedling and asked him to join their venture. *See* JFF ¶ 7.
- (4) Weedling incorporated LCI Medical, Inc. to develop and market air transfer devices that would be used to move patients. *See* JFF ¶ 8.
- (5) IN 1984, LCI Medical began manufacturing the pallet as a transfer pad mover for patients and began shipping these “hard pad” patient movers under the A.I.R. PAL trademark it licensed from A.I.R. *See* JFF ¶ 9.

d. Development of “Soft Pads”

- (1) The size and bulk of these “hard pad” patient movers made them difficult to store. *See* JFF ¶¶ 9-10. As a result, from 1986 to 1990, LCI Medical, Wegener, and

Johnson attempted to develop a patient transfer pad that did not require a rigid insert. *See* JFF ¶ 10.

- (2) These development efforts resulted in two designs of a flexible “soft pad.” *See* JFF ¶ 10.

e. The “Old Blue” Soft Pad

- (1) The first “soft pad” was called “Old Blue” and it had a single layer of longitudinal (head-to-toe) air chambers. LCI Medical sold “Old Blue” soft pads in 1988 and 1989. *See* JFF ¶ 10.

f. The ‘189 Patent

- (1) In 1988 or 1989, PTS retained patent attorney Donald E. Zinn to prepare a patent application for a second “soft pad.” Zinn met with Wegener, Johnson, Weedling, and William Swallen at Johnson’s A.I.R. facility in Newark, Delaware to discuss this purported invention. *See* Weedling Direct Testimony (Jan. 22, 2001); Cross Examination of Swallen (Jan. 24, 2001); DX-84 (Zinn Deposition) at 6.

Ultimately, the second “soft pad” became the subject matter of the 1990 patent application that became patent number 5,067,189 [“‘189 patent”]. *See* JFF ¶ 11.

- (2) The ‘189 Patent named Weedling, Swallen, Johnson, Wegener, and Davis as co-inventors. However, Davis and Swallen assigned their interests in the patent to Weedling. *See* JFF ¶ 11.
- (3) The pads described in the ‘189 patent were first shipped in late 1989 and they replaced the “Old Blue” as LCI Medical’s “soft pad.” *See* JFF ¶ 11.

- (4) In 1993, Weedling retained Sanford J. Piltch, Esq. as a patent attorney to review the '189 patent with the inventors. As a result of that review, in November 1993, Piltch filed an application for a broadening re-issue of the '189 patent (Patent No. RE 235,299). In July 1996, the Patent Office examined the patent and re-issued it with broader claims covering lateral chambers. *See* JFF ¶ 13.

g. The '873 Patent

- (1) Between approximately May 1993 to October 1994, the current air transfer mattress was designed at PTS. *See* JFF ¶ 14.
- (2) The current air transfer mattress was designed to eliminate the instability of the older air pads. *See* JFF ¶ 15.
- (3) The current design also features offset partitions so that, when the mattress is deflated, the partitions lie down flat. This feature eliminated the folds of the older air pads that caused patient discomfort. *See* JFF ¶ 16.
- (4) During the design process, PTS received a request from the Mayo Clinic for an oversized pad to transfer an obese patient. As a result of this request, an oversized pad was constructed with a longitudinal (head-to-toe) partition along each side to add stability. Holes were placed in the longitudinal stringers to facilitate air flow into the lateral air chambers. On January 6, 1994, the oversized pad was sent to the Mayo Clinic. *See* JFF ¶ 17.
- (5) After discussions with Piltch, the application for the current design of the air mattress, which became the '873 patent, was filed on July 15, 1994. The patent application listed Weedling and Davis as co-inventors. *See* JFF ¶ 18-19.

2. Weedling's Employment History

- a. Weedling founded Lehigh Valley Packing in 1975. In 1980, Weedling changed the name of Lehigh Valley Packing to Lehigh Consolidated Industries (LCI). *See* JFF ¶ 6.
- b. In 1984, Weedling incorporated LCI Medical. *See* JFF ¶ 8.
- c. In 1992, Weedling filed for bankruptcy and LCI Medical went out of business. *See* JFF ¶ 12.
- d. In August 1992, Weedling incorporated PTS, and he has been the president and majority shareholder of PTS since that time. *See* JFF ¶ 1.
- e. PTS is a Pennsylvania corporation that manufactures and sells air transfer mattresses. *See* JFF ¶ 1.

3. Davis's Employment History

- a. Davis was employed by LCI from 1982 to 1984. *See* JFF ¶ 20.
- b. In 1984, Davis became an employee of LCI Medical.
- c. At LCI Medical, Davis supervised the manufacture of the air transfer pads. Davis also made regular sales calls to customers and potential customers, provided demonstrations of the A.I.R. PAL, and trained customers to use the A.I.R. PAL. Davis also maintained LCI Medical's parts inventory. As a result, Davis had access to LCI Medical's manufacturing records, research files, vendor lists, and user lists. *See* JFF ¶ 21.
- d. In 1992, Davis was appointed a Vice President of Sales at LCI Medical. *See* JFF ¶ 20.

- e. In August 1992, Davis became the Vice President of Sales of PTS. At the time, Davis was the only full-time employee of PTS. *See* JFF ¶ 20.
- f. While he was employed by PTS, Davis was an “at will” employee. Davis did not have a written employment agreement or any confidentiality or secrecy agreement or covenant not to compete with PTS. Davis was also not a shareholder of PTS. *See* JFF ¶ 20.
- g. In 1993, PTS moved into an industrial warehouse in Allentown, Pennsylvania with another company incorporated by Weedling, Gateway Industrial Services, Inc.
- h. As noted above, the patent application for the current design of the air transfer mattress, which became the ‘873 patent, listed Weedling and Davis as co-inventors. *See* JFF ¶ 18-19.
- i. At some point thereafter, Weedling asked Davis to assign his interest in the patent to PTS. Davis considered Weedling’s request but, ultimately, in November 1994, he refused to transfer his interest in the patent. *See* JFF ¶.
- j. In September 1994, Davis met with the owner of Ryan Medical, Inc., Roger Parking. On October 19, 1994, Davis agreed not to disclose to any other party a proposed business transaction between Ryan Medical and Davis. *See* JFF ¶ 28.
- k. On November 14, 1994. Davis resigned from his job at PTS. *See* JFF ¶ 22.
- l. In December 1994, Davis became an employee of Ryan Medical. Davis was hired by Ryan Medical to sell patient lift devices and to begin to market an air transfer mattress. *See* JFF ¶ 30.

- m. On December 22, 1994, Davis entered a written agreement with Ryan Medical to assign any rights he had in the patent application that later became the '873 patent to Roger Parkin. *See* JFF ¶ 31.
- n. On January 27, 1995, Davis and Ryan Medical terminated his employment and their agreement by mutual consent. Davis paid Roger Parkin \$9,486.50 for legal expenses and the nylon fabric purchased in November 1994 from Brookwood. *See* JFF ¶ 32.
- o. In January 1995, Davis asked PTS's vendor for fabric perforation services, Perforating Industries, Inc., to fax him copies of the perforation drawing sheets that PTS had supplied to Perforating Industries. Perforating Industries faxed the drawings to Davis. *See* JFF ¶ 34.
- p. In March 1995, Davis sent 300 yards of the nylon fabric that Ryan Medical purchased from Brookwood to Perforating Industries with instructions for the fabric to be perforated as described in one of the drawing sheets PTS had supplied to Perforating Industries. *See* JFF ¶ 35.
- q. On June 27, 1995, Davis acquired a license to the '189 patent from Wegener. *See* JFF ¶ 36.
- r. Davis purchased almost all of the materials, parts, and services for his air transfer mattresses from the same vendors used by PTS. *See* JFF ¶ 40.
- s. In August 1995, Davis ordered air supply hoses from R/W Connection, PTS's former vendor for this component. R/W Connection addressed its invoice to PTS but sent the hoses to Davis's address. *See* JFF ¶ 41.

- t. In 1995, Davis contacted PTS customers Carney Hospital, Crozer-Chester Hospital, Concord Hospital, Frankford Hospital, Sacred Heart Hospital, and the Medical Center of Delaware. *See* JFF ¶ 42.
- u. In mid-1995, Davis made several air transfer mattresses and provided them to the Medical Center of Delaware for an evaluation. *See* JFF ¶ 39.
- v. Davis initially marketed his air transfer mattresses under the name “AIR PAD.” In 1996, Davis changed the name to “TransPad.” In 1997, Davis changed the name to the present name, “HoverMatt.” *See* JFF ¶ 43.
- w. Davis incorporated PHSI in August 1995. PHSI manufactured and sold inflatable air transfer mattresses until April 1997. *See* JFF ¶ 2.
- x. Davis incorporated D.T. Davis Enterprises (DTD), Ltd. on May 8, 1997. DTD trades under the name Patient Handling Technologies, and it has manufactured and sold air transfer mattresses since May 1997. *See* JFF ¶ 4.

B. Patent Infringement³

1. Weedling’s Knowledge of the Standard for Inventorship

- a. During a 1988 or 1989 meeting regarding the preparation of the ‘189 patent, Attorney Zinn told Weedling that the standard for inventorship is that the individual must contribute to the novel aspect of at least one claim of the patent. *See* DX-84 (Zinn Deposition) at 5-8, 10, 12; Wegener Direct Testimony (Jan. 25, 2001).

³ During closing arguments, PTS dropped its infringement claim as to the Air Pad, and defendants dropped their request to invalidate the ‘873 patent.

- b. After being informed of this standard, Weedling told Attorney Zinn that Davis had made a contribution and should be named as an inventor in the '189 patent application. *See* Weedling Direct Testimony (Jan. 22, 2001); Wegener Direct Testimony (Jan. 25, 2001).
- c. As noted above, Davis was also named as an inventor on the later '873 patent application.

2. Responsibility for Preparing Drawings

- a. Weedling has limited drawing experience. *See* Weedling Direct Testimony (Jan. 22, 2001).
- b. Davis has an associate degree in Civil Engineering and has taken drafting courses. *See* Cross Examination of Davis as a Hostile Witness (Jan. 24, 2001).
- c. After Swallen retired, Davis was responsible for preparing drawings. *See* Weedling Direct Testimony (Jan. 22, 2001); Cross Examination of Weedling (Jan. 23, 2001); PX-11.
- d. The drawings in PX-11 are not memorializations of tests. Instead, given Davis's level of knowledge about the drawings and the reasons for the adjustments that the drawings show, it is clear that Davis made these drawings to propose ideas to Weedling. *See* Davis Direct Testimony (Jan. 26, 2001).

3. Conception of the Claims in the '873 Patent

- a. Swallen stated that development was a group effort. Cross Examination of Swallen (Jan. 24, 2001).

- b. When he visited PTS, Wegener observed Davis contributing to discussions and presenting his own ideas. *See* Wegener Direct Testimony (Jan. 25, 2001).
- c. Davis claims that he conceived of the following elements of claims in the ‘873 patent:
- (1) “lateral partition members making a lateral chamber with an arcuate lower longitudinal partition member and also the varying height partition members in a lateral direction”;⁴
 - (2) lateral array of chambers; and
 - (3) lateral chambers surrounded by a perimeter chamber.
- See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).
- d. Davis claims that he and Weedling jointly conceived of the offset between the top and bottom sheets. *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).
- e. Davis explained his contributions to each of the various ideas incorporated in the ‘873 patent and seemed very knowledgeable about what he contributed to its design. *See generally* Davis Direct Testimony as a Hostile Witness (Jan. 23-24, 2001); Davis Direct Testimony (Jan. 26, 2001).
- f. Davis reviewed the drawings which he prepared contemporaneously with the events and explained the purpose of each of the various changes as the air transfer mattress was developed which resulted in the ‘873 patent. Davis displayed superior

⁴ Davis later restated this conception as follows: “lateral partition members with varying heights along with the longitudinal partition members going from a smaller height at the foot end to a larger height under the middle section and the upper torso with apertures [in the longitudinal partition members to allow air to go] into the lateral chambers.” *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).

knowledge of the '873 patent and air transfer mattress technology in general. His contemporaneous drawings corroborated his testimony. It is undisputed that Davis did most of the work on the Mayo mattress which was the predecessor of the '873 patent. *See generally* Davis Direct Testimony as a Hostile Witness (Jan. 23-24, 2001); Davis Direct Testimony (Jan. 26, 2001).

- g. Weedling's testimony on the conceptions of the '873 patent and air transfer mattress technology in general was markedly less confident than Davis's testimony. For example, Weedling used less detail in explaining the claims of the '873 patent and his explanations often appeared to mimic the idiosyncratic terminology Davis used to describe his conceptions. Furthermore, Weedling made a number of errors while he was discussing his supposed conceptions. Finally, Weedling used the term "we" throughout his explanation of the invention development process. *See, e.g.,* Weedling Rebuttal Testimony (Feb. 1, 2001).

h. Lateral Chambers

- (1) Swallen and Weedling worked with lateral tubes on a wheelchair pad during the late 1980s. *See* Weedling Direct Testimony (Jan. 22, 2001); Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).
- (2) Although, prior to the '873 patent, PTS had used lateral air chambers in a pad, that pad was not an air transfer mattress because it does not have air holes in the bottom sheet. Cross Examination of Davis (Feb. 1, 2001).
- (3) Davis claims that he conceived of the use of lateral chambers in an air transfer mattress while trying to solve a stability problem. *See* Davis Direct Testimony as

a Hostile Witness (Jan. 23, 2001). *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).

- (4) Drawing No. 4 in PX-11 provides evidence that Davis conceived of an air transfer mattress with an array of lateral chambers. *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).

4. Deletion of Davis as a Named Inventor on the '873 Patent

- a. Attorney Piltch did not undertake a substantial investigation into the inventorship claims of Davis and Weedling when the '873 patent application was prepared. *See* Cross Examination of Piltch (Jan. 25, 2001); DX-79.
- b. In June 1995, at Weedling's request, Attorney Piltch prepared a request to delete Davis as an inventor of the '873 patent before Piltch withdrew as an attorney for Davis. *See* Cross Examination of Piltch (Jan. 25, 2001); DX-79.
- c. Piltch sent the letter to Davis by which he withdrew from representing Davis on June 21, 1995. Piltch sent the application to the Patent Office requesting deletion of Davis as a named inventor on June 22, 1995. Piltch did not notify Davis that he was doing so, and he did not notify the Patent Office that he no longer represented Davis. Moreover, even after Davis later retained an attorney, Piltch did not advise that attorney of the deletion. The method used to delete Davis as a co-inventor, although apparently legal, suggests that PTS felt Davis had a strong claim as a co-inventor. *See* Cross Examination of Piltch (Jan. 24, 2001); DX-20; DX-21.
- d. Counsel stipulated that there was no deceptive intent on the part of Davis with regard to his removal as a named inventor.

5. Longitudinally Extending Portions⁵

- a. Upon visual inspection of deflated and inflated TransPad and HoverMatt air transfer mattresses, it is clear that no portion of any of the partition members in these air transfer mattresses is both: 1) attached to the top and bottom sheets of the air transfer mattress, and 2) extends more in the direction of the longitudinal axis than in the direction of the lateral or transverse axis. *See*; DX-66 (Air Pad Serial No. 3125); DX-66A (HoverMatt Serial No. 5024); DX-66C (See-through mattress that approximates DX-66A & DX-85); DX-68A (Air Pad Serial No. 3005 that approximates early TransPad); DX-85 (Equivalent to HoverMatt Serial No. 5024); DX-86 (Early TransPad); PX-121 (Lateral partition member); Piltch Direct Testimony (Jan. 24, 2001); Cross Examination of Piltch (Jan. 24, 2001); Davis Direct Testimony (Jan. 26, 2001); Cross Examination of Davis (Feb. 1, 2001).
- b. My finding is confirmed by the expert testimony of patent attorney Lewis F. Gould, Jr. In particular, Gould found that neither the TransPad nor the HoverMatt contains partition members that have longitudinally extending portions, and that, even if the partition members do have longitudinally extending portions, those portions are not attached to the top and bottom sheets of the air transfer mattress. *See* Gould Direct

⁵ Plaintiff is relying solely on the visual inspection of the air transfer mattresses to determine the issue of whether a portion of the partition member extends more in the direction of the longitudinal axis than in the direction of the lateral or transverse axis. Although the plaintiff offered considerable testimony regarding the distance the partition members extend in the longitudinal direction, *see* Piltch Direct Testimony (Jan. 24, 2001); Cross Examination of Piltch (Jan. 24, 2001), both parties later agreed that this testimony was irrelevant. Neither party measured the relevant angles, even after suggestion by the court. *See* Piltch Direct Testimony (Jan. 24, 2001); Cross Examination of Piltch (Jan. 24, 2001); Davis Direct Testimony (Jan. 26, 2001); Cross Examination of Davis (Feb. 1, 2001).

Testimony (Jan. 25, 2001); Cross Examination of Gould (Jan. 25, 2001); DX-70
(Gould's Expert Report).

C. False Advertising

1. Among the PTS correspondence found in Davis's possession in March 1997 were the following testimonial letters and evaluation reports concerning the A.I.R. PAL:
 - a. An April 19, 1993 letter written by Colin J. Brigham, the Loss Control Manager of EBI Industries, that reported cost savings at an unnamed 230-bed hospital due to the use of the A.I.R. PAL.
 - b. A letter written by Brian Sanders of Crozier Keystone that reports cost reductions at that hospital.
 - c. An April 23, 1990 report written by Christine Collins of the Medical Center of Delaware that describes the results of a study of the A.I.R. PAL.
 - d. A June 22, 1989 letter written by Catherine Hujdich of St. Francis Hospital.
 - e. An April 28, 1993 letter written by Harold Hardinger of the University of Maryland.
 - f. An August 14, 1989 letter written by Hardinger.
 - g. A letter from Mt. Diablo Hospital.
 - h. A report on a 1989 study of the effect A.I.R. PAL material had on x-rays.
 - i. The "infection resistance report" of Lehigh Valley Hospital.

See JFF 25.

2. PTS used reproductions of these letters and materials in its sales and marketing efforts.

See JFF ¶ 26.

3. PTS owns federal trademark registration 2,369,632 for AIR PAL and design for use on inflatable patient transfer and therapy pads. *See* JFF ¶ 47.

4. During 1995 and 1996, Davis sent letters on PHSI stationery to prospective customers in which he enclosed copies of the above-mentioned testimonial letters and evaluation reports. Although Davis removed any references to PTS in the testimonial letters and evaluation reports, his use of the letters and reports was misleading. *See* JFF ¶ 44.

5. Hardinger's Testimonial Letter

a. While he was employed by PTS, Davis asked Hardinger, a Registered Nurse at the University of Maryland Shock Trauma Center, to write a letter about his experience with air transfer mattresses. *See* Hardinger Direct Testimony (Jan. 24, 2001).

b. After Davis left PTS, he notified Hardinger that he no longer worked for PTS. *See* Hardinger Direct Testimony (Jan. 24, 2001). *See also* DX-37.

c. Davis asked Hardinger to "update" the testimonial letters he had written to LCI Medical or PTS. Hardinger updated his letter on March 30, 1996. In the updated letter, Hardinger removed references to the "AIR PAL" and the letter noted that the air transfer system had been used for seven years. *See* JFF ¶ 45.

d. Hardinger was aware that the Air Pad, TransPad, and HoverMatt were not manufactured and sold by the same entity that manufactured and sold the Air Pal. *See* Hardinger Direct Testimony (Jan. 24, 2001).

e. After Davis left PTS, Hardinger preferred to continue dealing with Davis because he was not impressed by a demonstration conducted by Weedling. *See* Hardinger Direct Testimony (Jan. 24, 2001).

6. Brigham's Testimonial Letter

- a. Davis asked Amos Brigham, a Safety and Health Consultant, if PHSI could use the results of the Sacred Heart Hospital study. Brigham gave his approval and updated his letter with one dated February 19, 1996. At Davis's request, Brigham addressed the updated letter to PHSI and replaced references to the "AIR PAL" with the phrase "patient/air transfer technology product." *See* JFF ¶ 45; Brigham Direct Testimony (Jan 25, 2001).
- b. When Brigham approved these changes, he was aware that Davis no longer was working for PTS and that PHSI was a different entity. Brigham was also aware that the Air Pad, TransPad, and HoverMatt were not manufactured and sold by the same entity that manufactured and sold the Air Pal. *See* Brigham Direct Testimony (Jan 25, 2001).
- c. Davis sent the updated Brigham letter to prospective customers. *See* JFF ¶ 45.

7. Sanders's Testimonial Letter

- a. Davis asked Sanders to "update" the testimonial letters he had written to LCI Medical or PTS. Sanders updated his letter on January 16, 1997 and addressed it to Davis at PHSI, and again on June 24, 1997, this time addressing it to Davis at PHT. In both letters, Sanders replaced references to the "AIR PAL" with the phrase "Air/Transfer Technologic system." *See* JFF ¶ 45.
- b. Davis sent the updated Sanders letter to prospective customers. *See* JFF ¶ 45.

8. Koury and the Acquisition of "Air Pals" from PHSI

- a. After Davis left PTS, Steve Koury, the Clinical manager at Carney Hospital in Boston, was not impressed by a product demonstration conducted by Weedling. As a result, Koury preferred to continue dealing with Davis. *See Koury Direct Testimony (Jan. 24, 2001).*
- b. In three price quote letters to Koury, Davis referred to his product as the “AIR PAL.” On April 12, 1996, Carney Hospital ordered 17 “AIR PAL” mattresses and 5 “AIR PAL” blowers. On May 13, 1996, Carney Hospital ordered an additional 7 “AIR PAL transfer mattresses.” On June 12, 1996, Carney Hospital ordered 17 additional “AIR PAL Transfer Mattresses.” *See JFF ¶ 46.*
- c. Koury called the air transfer mattresses he order from Davis after he left PTS, “Air Pals” because he wanted to get the order through the Carney Hospital acquisition process quickly. *See Koury Direct Testimony (Jan. 24, 2001).*
- d. When Koury placed these orders, he was aware that Davis no longer was working for PTS and that PHSI was a different entity. Brigham was also aware that the Air Pad, TransPad, and HoverMatt were not manufactured and sold by the same entity that manufactured and sold the Air Pal. *See Koury Direct Testimony (Jan 24, 2001).*

8. Burton’s Purchases

- a. Suzanne Burton of Concord Hospital was not impressed by a product demonstration Weedling conducted after Davis left PTS. *See Burton Direct Testimony (Jan. 25, 2001).*
- b. Burton learned that Davis started his own company and, as a result, she decided to cancel her order with Weedling. *See Burton Direct Testimony (Jan. 25, 2001).*

- c. Burton was aware that PHSI and PTS were separate companies and that the Air Pal and Air Pad were different products. *See* Burton Direct Testimony (Jan. 25, 2001).
9. At PTS, Weedling received purchase order from individuals who were not currently PTS customers, invoices from part-suppliers for parts that PTS did not order, and a product return of a HoverMatt. *See* Weedling Direct Testimony (Jan. 23, 2001).
10. Davis sent the following seven letters containing literally false statements to prospective customers.
- a. A June 29, 1995 letter from Davis to Linda Young of St. Luke's Hospital uses the following phrase: "The AIR PAL, now called the AIR PAD, . . ." *See* PX-76.
 - b. A August 14, 1995 letter from Davis to Collins of Medical Center of Delaware uses the following phrase: ". . . the AIR MOVER transfer system (the new name for the improved AIR PAL)." *See* PX-76.
 - c. A January 30, 1996 letter from Davis to Patty Smith of Valley View Nursing Center states that ". . . [PHSI] made special units for the MAYO Clinic to handle 800 lb. patients." *See* PX-77.
 - d. A February 16, 1996 letter from Davis to Robert Conrad of Inservco states: "I have been in the patient handling arena for twelve years, initially developing a product to facilitate lateral patient transfers. This is the AIR PAD." *See* PX-77.
 - e. A February 27, 1996 letter from Davis to Deb Fontaine of Workers' Compensation Services states: "Part of the literature describes a product called the AIR PAD. This product has been used in the Shock Trauma unit at the University for several years. . . . The AIR PAD is a new and improved version of the AIR PAL." *See* PX-77.

- f. An April 1, 1996 letter from Davis to Chuck Singleton states: “[Two years ago], the MAYO Clinic asked us to manufacture a transfer pad to move an 800 pound patient off the OR table.” *See* PX-77.
- g. A November 8, 1996 letter from Davis to Linda Young of St. Luke’s Hospital states: “[Annette Friday and Chris Collins of the Medical Center of Delaware] may both identify the Trans Pad by its earlier name- Air Pal.” *See* PX-77.

D. Breach of Fiduciary Duty⁶

- 1. In 1990, the Medical Center of Delaware did a pilot evaluation of the A.I.R. PAL. Davis was PTS’s contact with the Medical Center for this evaluation. The evaluation provided a cost justification for using the AIR PAL and, as a result, the Center purchased several air transfer mattresses. *See* JFF ¶ 27.
- 2. In 1994, the Medical Center of Delaware decided to conduct a larger evaluation with vertical lift, patient positioning devices, and patient transfer devices. While Davis was still a PTS employee, Collins told Davis that the Medical Center was planning to conduct this evaluation. *See* JFF ¶ 27; Collins Direct Testimony (Jan. 26, 2001).
- 3. It is undisputed that, before Davis left PTS in November 1994, Davis told Weedling that the Medical Center of Delaware was “about to pop.” Weedling understood this to mean that the Medical Center of Delaware wanted to purchase additional Air Pals. *See* DX-83 (Weedling Deposition), at 243.

⁶ At mid-trial, I granted defendants’ motion for judgment on partial findings with regard to the breach of fiduciary duty claim as to sales made to Frankford Hospital. Therefore, the breach of fiduciary duty claim applies only to sales made to the Medical Center of Delaware.

4. Weedling never followed up on this information until he made a sales presentation to the Medical Center of Delaware in late 1995 or early 1996. Hospital officials informed Weedling that they were aware of the difference between PTS and PHSI. *See* Cross Examination of Weedling (Jan. 23, 2001); Weedling Rebuttal Testimony (Feb. 1, 2001).
5. Davis did not contact anyone about starting his own company before he left PTS.
6. After Davis left, Weedling sold three air transfer mattresses to the Medical Center of Delaware. However, the mattresses were not purchased by Collins's department at the Medical Center of Delaware. *See* Cross Examination of Weedling during Rebuttal (Feb. 1, 2001).
7. Collins preferred to purchase products from Davis because Davis was willing to adapt air transfer mattresses based on her feedback about their performance. Collins Re-Direct Testimony (Jan. 26, 2001).
8. The Medical Center of Delaware purchased approximately \$70,000 worth of air transfer mattresses from Davis between September 1995 and September 1996. *See* Cross Examination of Davis (Feb. 1, 2001).

E. Conversion of Corporate Assets⁷

1. Davis did not tell Weedling that he had a demonstration scheduled at Frankford Hospital the day his employment was terminated. *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).

⁷ During closing arguments, plaintiffs dropped all of their conversion of corporate assets claims other than their claim involving the demonstration kit.

2. Davis kept the demonstration kit that he had in his car when his employment was terminated on November 15, 1994. *See Davis Direct Testimony as a Hostile Witness* (Jan. 23, 2001).
3. Despite Weedling's claim to the contrary, on November 15, 1994, Weedling did not ask Davis if he had any PTS property in his possession. *See Davis Direct Testimony as a Hostile Witness* (Jan. 23, 2001).
4. Davis is no longer in possession of the demonstration kit. *See Davis Direct Testimony as a Hostile Witness* (Jan. 23, 2001).

F. Misappropriation of Trade Secrets⁸

1. In March 1997, the following items were in Davis's possession:
 - a. A folder labeled "Purchase Orders" that contained, among other documents, copies of purchase orders from PTS to vendors for the parts and services used to make the A.I.R. PAL. The purchase orders show the vendor name, contact information, numbers, and prices for parts and services.
 - b. A folder labeled "Drawings" that contained, among other documents, copies of LCI Medical and PTS development drawings, production drawings, and cutting and sewing instructions for transfer pads from 1990 through 1994.

⁸ At mid-trial, I granted defendants' motion for judgment on partial findings with regard to: 1) customer lists that were published by PTS, 2) sales records from 1993-94 that were Davis's personal records of his progress. Therefore, the misappropriation of trade secrets claim applies only to the vendor list, the part numbers and prices list found in PX-26, the contact list found in PX-60, and the drawings that were in Davis's possession in March 1997.

- c. A folder labeled “Drawings - Production” that contained, among other documents, copies of PTS drawings for production of the 1994 design.
- d. A folder that contained, among other documents, a copy of PTS’s “Cost Justification Report” and copies of testimonial letters and reports that had been sent to PTS.
- e. A folder labeled “Originals” containing, among other documents, copies of various PTS correspondence, instructions, price lists, user lists, packing lists, evaluation forms, warranty forms and definitions, and test reports.
- f. A folder labeled “PTS/Weedling Documents” containing copies of various LCI Medical, PTS, and Weedling documents.
- g. Records of the sales demonstrations Davis made while he was employed by PTS.
- h. PTS’s files regarding dealings with a company named ARJO. *See* JFF ¶ 24.

2. Vendor Lists

- a. The identity of the vendors was not confidential and neither LCI Medical nor PTS had any exclusivity agreements with their vendors. *See* Cross Examination of Weedling (Jan. 23, 2001); Wegener Direct Testimony (Jan. 25, 2001).
- b. The identity of the vendor from whom a given material is purchased is often marked on the material. *See* Cross Examination of Weedling (Jan. 23, 2001); Wegener Direct Testimony (Jan. 25, 2001).
- c. Davis could easily remember the name and locations of each of the limited number of vendors involved without the benefit of any documents.

3. Part Numbers and Prices

- a. Davis used almost all of the same vendors as PTS did. *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001).
- b. Davis claims that, after he left PTS, he did not have to refer to the part numbers and prices listed in PX-26 because he had already memorized the information. *See* Davis Direct Testimony as a Hostile Witness (Jan. 23, 2001). I find this statement not to be credible.

4. Unpublished Customer Contact List

- a. Davis took a partial list of PTS customers with him when he left. This list included the contact person for each customer. *See* PX-60.
- b. Given his experience, Davis would remember the contact information for some customers. However, there is no proof of how much information he would remember. Still, Davis could easily reestablish contact with customers who would direct him to the correct contact person.

5. Drawings

- a. Production staff at PTS did not sign confidentiality agreements. *See* Cross Examination of Weedling (Jan. 23, 2001).
- b. While he worked at PTS, Davis kept some files in a work area of the plant that was accessible to employees of Gateway Industrial Services, Inc. *See* James Weedling Direct Testimony (Jan. 24, 2001).
- c. Approximately a month after Davis left PTS, Davis asked John Davis (no relation) of PTS to get his design and assembly drawings from PTS. John Davis did, in fact,

deliver the documents to Davis. *See Davis Direct Testimony as a Hostile Witness* (Jan. 23, 2001).

- d. Davis saved some time because he did not have to take apart an Air Pal, but he could easily do so and reverse engineer the product he desired to sell. *See Davis Direct Testimony as a Hostile Witness* (Jan. 23, 2001).

II. Conclusions of Law

A. Jurisdiction

1. This court has jurisdiction in this matter pursuant to 28 U.S.C. § 1331, 1338(a), 1338(b), and 1367(a).

B. Applicable Law

1. Patent Infringement

- a. The analysis of patent infringement requires two steps. First, the court must determine the meaning and scope of the patent claims that the plaintiff asserts are being infringed. Second, the court compares the properly construed claims to the accused infringing device. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996).

b. In a prior opinion, this court construed the meaning and scope of the disputed limitations in claim sixteen of the '873 patent as follows:

(1) The phrase “partition members having laterally extending portions and longitudinally extending portions” in the third subset of limitations in claim sixteen “describes partition members that each have at least one laterally extending portion and at least one longitudinally extending portion.” *See Patient Transfer Systems, Inc. v. Patient Handling Solutions, Inc.*, No. CIV. A. 97-1568, 2000 WL 726792, *2-5 (E.D. Pa. 2000).

(2) The third subset of limitations in claim sixteen places restrictions on the partition members that form the “side-by-side, laterally extending elongated chambers,” but on no other partition members in the invention. *See id.* at *5-6.

(3) The longitudinally extending portions of the “partition members having laterally extending portions and longitudinally extending portions” described in the third subset of limitations in claim sixteen do not need to be perpendicular to the laterally extending portions of those partition members. Instead, “the longitudinally extending portions must extend more in the direction of the longitudinal axis . . . than in the direction of the lateral or transverse axis” *See id.* at *6-7.

c. A patent may be infringed by literal infringement, or, alternatively, under what is known as the “doctrine of equivalents.” *See Becton Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 796-97 (Fed. Cir. 1990).

- d. In order to establish literal infringement of the patent, the patent owner must demonstrate, by a preponderance of evidence, that the accused device contains every limitation in the asserted claims. “If even one limitation is missing or not met as claimed, there is no literal infringement.” *Elkay Mfg. Co. v. EBCO Mfg. Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999), *cert. denied*, 529 U.S. 1066 (2000). *See WMS Gaming, Inc. v. International Game Tech.*, 184 F.3d 1339, 1350 (Fed. Cir. 1999).
- e. If a claim is not literally infringed upon by the accused device, it may still be infringed under the doctrine of equivalents if the differences between the claim and the accused device are insubstantial. *See WMS Gaming, Inc.*, 184 F.3d at 1352-53.
- f. Davis as a Co-Inventor
- (1) “The inventors as named in an issued patent are presumed to be correct.” *See Hess v. Advanced Cardiovascular Sys., Inc.*, 106 F.3d 976, 980 (Fed. Cir. 1997), *cert. denied*, 520 U.S. 1277 (quotation omitted). As a result, the burden of showing nonjoinder of an inventor is on the party claiming nonjoinder, and the party claiming nonjoinder must prove its claim of co-inventorship by clear and convincing evidence. *See id.* at 979-80.
 - (2) A patented invention may be the work of two or more joint inventors. *See* 35 U.S.C. § 116.
 - (3) “Conception is the touchstone of inventorship [Conception] is the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice. . . . Because [conception] is a mental act, courts require corroborating evidence of a

contemporaneous disclosure that would enable one skilled in the art to make the invention.” *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1227-28 (Fed. Cir. 1994), *cert. denied*, 516 U.S. 1070 (1996)(quotation and citations omitted).

- (4) “[T]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention; the inventor must prove his conception by corroborating evidence, preferably by showing a contemporaneous disclosure. An idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.” *Id.* at 1228.
- (5) It is not necessary for each joint inventor to make the same type or amount of contribution to the invention. “Rather, each needs to perform only a part of the task which produces the invention. On the other hand, one does not qualify as a joint inventor by merely assisting the actual inventor after conception of the claimed invention.” *See Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 923. “Thus, the critical question for joint conception is who conceived, as that term is used in the patent law, the subject matter of the claims at issue.” *Id.*
- (6) As a result, “a co-inventor need not make a contribution to every claim of a patent. A contribution to one claim is enough.” *Id.* (citations omitted).
- (7) However, “[a]n inventor may use the services, ideas, and aid of others in the process of perfecting his invention without losing his right to a patent.” *Shatterproof Glass*

Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 624 (Fed. Cir. 1985), *cert. dismissed*, 474 U.S. 976 (quotation omitted).

- (8) An alleged co-inventor's testimony with respect to the facts underlying his claim of co-inventorship cannot, standing alone, rise to the level of clear and convincing proof. The testimony must be corroborated by independent evidence. *See Price v. Symsek*, 988 F.2d 1187, 1194-96 (Fed. Cir. 1993).
- (9) Corroborative evidence can take a variety of forms, including contemporaneous documents, circumstantial evidence about the inventive process, and the testimony of witnesses other than that the alleged inventor. *See Ethicon, Inc.*, 135 F.3d at 1461.
- (10) All of the relevant evidence put forth by the alleged inventor, including any of his corroborating testimony, must be considered as a whole to determine whether he conceived the invention. "In other words, an inventor can conceivably prove prior conception by clear and convincing evidence although no one piece of evidence in and of itself establishes the prior conception." *Price*, 988 F.2d at 1196.
- (11) 35 U.S.C. § 256 "provides that if 'through [inadvertent] error an inventor is not named in an issued patent . . . the Commissioner [of Patents] may . . . issue a certificate correcting such error,' and that '[t]he court . . . may order correction of the patent . . . and the Commissioner shall issue a certificate accordingly.'" *Hess*, 106 F.3d at 979 (alteration in the original). *See Ethicon, Inc.*, 135 F.3d at 1461 ("35 U.S.C. § 256 provides that a co-inventor omitted from an issued patent may be added to the patent by a court 'before which such matter is called in question.'").

2. False Advertising

- a. Section 43(a) of the Lanham Act creates a federal cause of action for a wide variety of acts of unfair competition, including false or misleading advertising. *See Rose Art Indus., Inc. v. Swanson*, 235 F.3d 165, 170 (3d Cir. 2000).
- b. To prevail on a Lanham Act false advertising claim, a plaintiff must prove that the advertisement is either literally false, or, if it is not literally false, that it is still likely to mislead or deceive consumers. *See Johnson & Johnson-Merck Consumer Pharm. Co. v. Rhone-Poulenc Rorer Pharm., Inc.*, 19 F.3d 125, 129-30 (3d Cir. 1994).
- c. If a court finds that a statement made in advertising is literally false, it may grant relief without considering whether consumers were actually misled. *See id.* at 129.
- e. To prove a claim for false advertising under 15 U.S.C. § 1125(a), plaintiff must prove by a preponderance of evidence:
 - (1) that the defendant has made false or misleading statements as to his own product or another's product;
 - (2) that there is actual deception or at least a tendency to deceive a substantial portion of the intended audience;
 - (3) that the deception is material in that it is likely to influence purchasing decision;
 - (4) that the advertised goods traveled in interstate commerce; and
 - (5) that there is a likelihood of injury to the plaintiff in terms of declining sales, loss of good will, etc.

See U.S. Healthcare, Inc. v. Blue Cross of Greater Philadelphia, 898 F.2d 914, 922-23 (3d Cir. 1990), *cert. denied*, 498 U.S. 816 (quoting *Max Daetwyler Corp. v. Input Graphics, Inc.*, 545 F. Supp. 165, 171 (E.D. Pa. 1982)(citation omitted).

3. Breach of Fiduciary Duty

- a. In Pennsylvania, an officer of a corporation “shall perform his duties as an officer in good faith, in a manner he reasonably believes to be in the best interests of the corporation and with such care, including reasonable inquiry, skill and diligence, as a person of ordinary prudence would use under similar circumstances.” 15 Pa. C.S.A. § 512(c); *see Confer v. Custom Eng’g Co.*, 952 F.2d 34, 38 (3d Cir. 1991).
- b. Because directors and officers of a corporation occupy a fiduciary relation toward the corporation for which they work, “they cannot directly or indirectly make any profit at the expense of the corporation.” *See Weissman v. Weissman, Inc.*, 114 A.2d 797, 799 (Pa. 1955).
- c. In other words, in order to prove a claim of breach of fiduciary duty, the plaintiff must prove by a preponderance of the evidence:
 - (1) “that the defendant negligently or intentionally failed to act in good faith and solely for the benefit of plaintiff in all matters for which he or she was employed;”
 - (2) that the plaintiff suffered injury; and
 - (3) “that the agent’s failure to act solely for the plaintiff’s benefit . . . was a real factor in bring [sic] about plaintiff’s injuries.”

See McDermott v. Party City Corp., 11 F. Supp. 2d 612, 626 n.18 (E.D. Pa.

1998)(quotation omitted).

- d. Fiduciary duty may be breached by failing to disclose a material fact. *See In re Allegheny Int'l, Inc.*, 954 F.2d 167, 180 (3d Cir. 1992).
- e. “[U]nder the law of Pennsylvania[,] employees at will do not breach a fiduciary duty to the employer by making preparations to compete upon termination of employment provided the employee does not use the confidential information of his employer, solicit the customers of his employer, or otherwise engage in conduct directly damaging his employer during the period of employment.” *Oestreich v. Environmental Inks and Coatings Corp.*, Civ. A. No. 89-8907, 1990 WL 210599, at *6 (E.D. Pa. 1990)(citing *Spring Steels, Inc. v. Molloy*, 162 A.2d 370 (1960)).
- b. Because breach of fiduciary duty is tortious conduct, *see* Restatement (Second) of Torts, § 874 (1979), under Pennsylvania law, it is subject to a two-year statute of limitations period. *See* 42 Pa. C.S.A. § 5524(7).

4. Conversion of Corporate Assets

- a. In order to prove a claim of conversion of corporate assets, the plaintiff must prove by a preponderance of the evidence:
 - (1) “the deprivation of another’s right of property in, or use or possession of, a chattel;”
 - (2) “without owner’s consent;” and
 - (3) “without lawful justification.”

Bernhardt v. Needleman, 705 A.2d 875, 878 (Pa. Super. 1997).

- b. “Where one lawfully comes into possession of the chattel, a conversion occurs if a demand for the chattel is made by the rightful owner and the other party refuses to deliver.” *The Prudential Insurance Co. v. Stella*, 994 F. Supp. 318, 323 (E.D. Pa. 1998)(citing *Norriton East Realty Corp. v. Central-Penn Nat. Bank*, 254 A.2d 637, 638 (Pa. 1969)).
- c. Under Pennsylvania law, there is a two year statute of limitations for conversion. *See* 42 Pa. C.S.A. § 5524; *Shonberg v. Oswell*, 530 A.2d 112, 114 (Pa. Super. 1987).
- d. “It is well settled that the commencement of an action in state court has no effect on the running of the statute with respect to an action filed later in federal court.” *Price v. United States*, 466 F. Supp. 315, 318 (E.D. Pa. 1979)(citing *Falsetti v. Local Union No. 2026, United Mine Workers*, 355 F.2d 658, 662 (3d Cir. 1966)).
- e. “It is well-established that Pennsylvania law recognizes an exception to the statute of limitations which delays the running of the statute until the plaintiff knew, or through the exercise of reasonable diligence should have known, of the injury and its cause. Courts employ the same ‘knew or should have known’ standard whether the statute is tolled because of the discovery rule or because of fraudulent concealment.” *Beauty Time, Inc. v. VU Skin Sys., Inc.*, 118 F.3d 140, 144 (3d Cir. 1997)(quotations omitted).
- f. “Reasonable diligence has been defined as follows: ‘A fair, proper and due degree of care and acting, measured with reference to the particular circumstances; such

diligence, care, or attention as might be expected from a man of ordinary prudence and activity.” *Id.* (quoting *Black’s Law Dictionary* 457 (6th ed. 1991)).

- g. “[T]here are few facts which diligence cannot discover, but there must be some reason to awaken inquiry and suggest investigation.” *Id.* (citation omitted).
- h. Because the statute of limitations is an affirmative defense, the initial burden of establishing its applicability to a particular claim rests with the defendant. *See Van Buskirk v. Carey Canadian Mines, Ltd.*, 760 F.2d 481, 487 (3d Cir. 1985). However, under Pennsylvania law, the burden shifts to the plaintiff if he or she asserts that the statute of limitations should be tolled by the discovery rule. *See id.* If the plaintiff satisfies this burden, the discovery rule delays the accrual of a cause of action until the plaintiff was aware or should have been aware that an injury occurred. *See Oshiver v. Levin, Fishbein, Sedran & Berman*, 38 F.3d 1380, 1386 (3d Cir. 1994).

5. Misappropriation of Trade Secrets

- a. To establish a claim of misappropriation of trade secrets, the plaintiff must prove the following:
 - (1) the existence of trade secrets.
 - (2) that the secrets were valuable to the plaintiff and important in the conduct of plaintiff’s business.
 - (3) that the plaintiff had the right to the use and enjoyment of the secrets; and

- (4) that the secrets were communicated to the defendant while he was employed in a position of trust and confidence under such circumstances as to make it inequitable and unjust for him to disclose the secrets to others, or to make use of them himself.

See SI Handling Sys., Inc. v. Heisley, 753 F.2d 1244, 1255 (3d Cir. 1985).

- b. Pennsylvania courts have adopted the definition of a trade secret given in the Restatement of Torts, § 757, comment b (1939):

A trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or other device, or a list of customers.

Id.

- c. "Matters which are fully disclosed by a marketed product and are susceptible to 'reverse engineering' – i.e., starting with the known product and working backward to divine the process which aided in its manufacture, cannot be protected as trade secrets." *Id.* (quotation omitted).
- d. In determining whether information constitutes a trade secret, a court should consider the extent to which the information is known outside the plaintiff's business; the extent to which it is known by employees and others; the measures taken to guard the secrecy of the information; the value of the information; the money and effort expended by the owner to develop the information; and the ease with which the

information could be properly acquired or duplicated by others. *See id.* at 1256 (citing Restatement of Torts § 757 comment b (1939)).

- e. Confidential customer lists can be protected as trade secrets under Pennsylvania law. *See id.* at 1258. However, “[c]ustomer lists . . . cannot be trade secrets if they are easily or readily obtained, without great difficulty, through some independent source other than the trade secret holder. Accordingly, courts have denied protection to customer lists which are easily generated from trade journals, ordinary telephone listings, or an employee’s general knowledge of who, in an established industry, is a potential customer for a given product.” *BIEC Int’l, Inc. v. Global Steel Servs., Ltd.*, 791 F. Supp. 489, 545 (E.D. Pa. 1992)(citations omitted).
- f. “The secrecy in which a purported trade secret is kept need not be absolute but reasonable precautions under the circumstances must be taken to prevent disclosures to unauthorized third parties. The degree of secrecy must be such that it would be difficult for others to obtain the information without using improper means.” *National Risk Mgmt., Inc. v. Bramwell*, 819 F. Supp. 417, 431 (E.D. Pa. 1993).
- g. Under Pennsylvania law, a claim of misappropriation of trade secrets is subject to a two year statute of limitations. *See* 42 Pa. C.S.A. § 5524; *Advanced Power Sys., Inc. v. Hi-Tech Sys., Inc.*, 801 F. Supp. 1450, 1455 (E.D. Pa. 1992).

C. Liability

1. PTS’s Patent Infringement Claim

- a. PTS claims that the defendants' TransPad and HoverMatt air transfer mattresses violate the '873 patent, which is held by PTS.
- b. PTS has failed to demonstrate, by a preponderance of the evidence, that the TransPad and the HoverMatt contain every limitation in the claims asserted by the '873 patent. In particular, PTS has failed to establish that any portion of the partition members in these air transfer mattresses is both: 1) attached to the top and bottom sheets of the air transfer mattress, and 2) extends more in the direction of the longitudinal axis than in the direction of the lateral or transverse axis. PTS concedes that if this is true, which I have found it is, there is no literal infringement.
- c. PTS has also failed to demonstrate, by a preponderance of the evidence, that the differences between claim sixteen and the TransPad or HoverMatt are insubstantial.
- d. Therefore, PTS's patent infringement claim fails under both a literal infringement and a "doctrine of equivalents" theory of infringement.
- e. Furthermore, PTS's patent infringement claim fails because the defendants have proven, by clear and convincing evidence, that Davis is a joint inventor of the subject matter of the '873 patent. In particular, the drawings in PX-11 and the testimony of Swallen, Wegener, and Attorney Zinn corroborate Davis's claim that he conceived at least one claim of the '873 patent. Moreover, Weedling knew of the standard of inventorship and he added Davis a co-inventor on the '189 and '873 patent applications.

2. PTS's False Advertising Claim

- a. PTS claims that the defendants violated the Lanham Act by utilizing false advertising to promote their air transfer mattress.
- b. PTS has proven, by a preponderance of evidence, that the defendants have engaged in false advertising in violation of the Lanham Act by sending to prospective customers seven letters, noted above in Section I.C.10, that contain statements that are literally false as a factual matter.
- c. Moreover, PTS has also proven, by a preponderance of evidence, that the defendants' use of testimonial letters and evaluation reports, noted above in Section I.C.1, constitutes false advertising in violation of the Lanham Act. Although the statements in these testimonial letters and evaluation reports are literally true, PTS has demonstrated that such statements have misled or confused consumers. The fact that PTS received purchase orders from individuals who were not currently PTS customers, invoices from part-suppliers for parts that PTS did not order, and a product return of a HoverMatt, demonstrate actual confusion on part of consumers and the likelihood of injury to PTS in terms of declining sales, loss of good will, etc.

3. PTS's Breach of Fiduciary Duty Claim

- a. PTS claims that Davis breached the fiduciary duty he owed to PTS by not disclosing that the Medical Center of Delaware was conducting an evaluation of air transfer mattresses. However, PTS concedes that Davis disclosed that the Medical Center of Delaware was "about to pop" which is functionally equivalent and put PTS on notice that it should have pursued the corporate opportunity immediately after Davis left.

- b. PTS has failed to prove, by a preponderance of evidence, two of the three elements of a breach of fiduciary duty.
- c. First, because Davis, before he left PTS, told Wheeling that the Medical Center of Delaware was “about to pop,” PTS has failed to prove that Davis failed to act in good faith and solely for the benefit of PTS while he was employed by PTS.
- d. Second, because Wheeling was in contact with the Medical Center of Delaware after Davis left PTS, PTS sold three mattresses to the Medical Center of Delaware during the relevant time period, and Collins expressed a preference for dealing with Davis after she became aware of the difference between the two corporations, PTS has not established that any conduct by Davis was a real factor in bringing about any injury claimed by PTS.

4. PTS’s Conversion of Corporate Assets Claim

- a. PTS claims that Davis unlawfully converted a corporate asset when he kept PTS’s demonstration kit after he ceased to work there.
- b. PTS’s conversion of corporate assets claim fails because it is barred by the statute of limitations.
- c. PTS knew or, through the exercise of reasonable diligence, should have known that Davis had the demonstration kit on November 14, 1994. Although PTS filed a state lawsuit on November 1, 1995, because this lawsuit was not filed until February 27, 1997, PTS’s conversion of corporate assets claim is barred by the statute of limitations. *See Price v. U.S.*, 466 F. Supp. 315, 318 (E.D. Pa. 1979)(“It is well

settled that the commencement of an action in state court has no effect on the running of the statute with respect to an action filed later in federal court.”)(citing *Falsetti v. Local Union No. 2026, United Mine Workers*, 355 F.2d 658, 662 (3d Cir. 1966)).

- d. PTS has not established a factual basis to toll the statute of limitations by the discovery rule.

5. PTS’s Misappropriation of Trade Secrets Claim

- a. PTS claims that Davis misappropriated PTS’s trade secrets in the form of a vendor list, a part numbers and prices list, the unpublished contact list found in PX-60, and drawings.
- b. With regard to the vendor list, PTS’s misappropriation of trade secrets claim fails because the vendor list does not constitute a trade secret. First, PTS took few if any measures to guard the secrecy of the information contained in the vendor list. For example, the identity of the vendors was not confidential and neither LCI Medical nor PTS had any exclusivity agreements with their vendors. Second, Davis would have been easily capable of replicating the vendor list from memory because: the identity of the vendor from whom PTS purchased a given material was often marked on the material; there are only a limited number of vendors that provide products used in the construction of the Air Pal; and Davis had extensive knowledge about the construction of the Air Pal.
- c. With regard to the part numbers and prices list, PTS has proven that the defendants have misappropriated PTS’s trade secret. First, the part numbers and prices list

constitutes a trade secret because the level of detail contained in the information compiled in this list would have been very difficult for Davis to replicate from memory. Furthermore, the defendants have not contested PTS's claims that: the list is valuable because it simplifies the ordering process and constitutes the basis for production cost approximations; PTS had the right to its use and enjoyment; and Davis became aware of this list while he was an officer of PTS.

- d. With regard to the contact list, PTS's misappropriation of trade secrets claim fails because the contact list does not constitute a trade secret. The contact list does not constitute a trade secret because, given his years of experience selling the Air Pal, Davis could have easily remembered the contact information for some customers. For those customers whose contact person he could not remember, Davis would have been easily able to reestablish contact with the customer who could then direct him to the correct contact person.
- e. With regard to the drawings, PTS's misappropriation of trade secrets claim fails because the drawings do not constitute trade secrets. First, the drawings are not trade secrets because "matters which are fully disclosed by a marketed product and are susceptible to 'reverse engineering' – i.e., starting with the known product and working backward to divine the process which aided in its manufacture, cannot be protected as trade secrets." *See SI Handling Systems, Inc.*, 753 F.2d at 1255. Second, there is considerable evidence that PTS did not take appreciable measures to guard the secrecy of the information contained in the drawings. Third, given that Davis drafted most of the drawings, he would have been capable of replicating them.

D. Remedy

1. Because Davis is a joint inventor of the subject matter of the '873 patent, I will order the correction of the '873 patent.
2. Because the defendants have engaged in false advertising in violation of the Lanham Act by sending: 1) seven letters containing literally false statements to prospective customers, *see* Section I.C.10, and 2) misleading testimonial letters and evaluation reports to prospective customers, *see* Section I.C.1; and have misappropriated PTS's trade secret, as embodied in the part numbers and prices list, *see* PX-26, I will order a trial on damages arising out of these claims.

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

Patient Transfer Systems, Inc.,	:	
Plaintiffs,	:	
	:	
v.	:	CIVIL ACTION
	:	NO. 97-1568
Patient Handling Solutions, Inc., D.T. Davis Enterprises,	:	
Ltd., David T. Davis, and Joanne S. Davis,	:	
Defendants.	:	

Order

YOHN, J.

August, 2001

AND NOW, this day of August, 2001, having considered both parties' pre- and post-trial filings as well as all of the testimony and exhibits offered at trial on the issue of liability, in accordance with the aforesaid findings of fact and conclusions of law, IT IS HEREBY ORDERED THAT judgment is entered as follows:

1. Because David T. Davis is a joint inventor of the subject matter of the '873 patent, the court orders the correction of the '873 patent by the Commissioner of Patents pursuant to 35 U.S.C. § 256 so that David T. Davis is reinstated as a joint inventor of the '873 patent;
2. Defendants have engaged in false advertising in violation of the Lanham Act by sending:
1) seven letters containing literally false statements to prospective customers, and 2)
misleading testimonial letters and evaluation reports to prospective customers; and have misappropriated PTS's trade secret, as embodied in the part numbers and prices list; and
3. The parties shall notify the court within ten days as to: a) how soon they will be ready for a trial on damages based on the judgments against the defendants on the false advertising

and misappropriation of trade secret claims; and b) their estimate as to how long a trial on damages will last.

William H. Yohn, Jr.