IN THE UNITED STATES DISTRICT COURT WESTERN DISTRICT OF MISSOURI JEFFERSON CITY, CENTRAL DIVISION

| SEMCO, LLC, a Missouri Limited Liability Company, |)) |
|--|--------|
| Plaintiff, |) |
| v. |) |
| TRANE U.S., INC., a Delaware corporation, |))) |
| Defendant. |)) |

JURY TRIAL DEMANDED Case No.: 2:17-cv-04077-BCW

PLAINTIFF'S FIRST AMENDED COMPLAINT

COMES NOW the Plaintiff SEMCO, LLC (hereinafter "SEMCO") by and through its undersigned attorneys, and for its cause of action against Defendant Trane U.S., Inc. (hereinafter "Trane") herein states as follows:

THE PARTIES

1. Plaintiff SEMCO is a Missouri Limited Liability Company having its principal place of business located at 1800 East Pointe Drive, Columbia, Missouri 65201-3508.

2. Trane is, upon information and belief, a corporation organized and existing under the laws of Delaware, with principal places of business located in North Carolina and Wisconsin. Trane has done business under different trade names including "Trane Commercial Systems", "Trane Creative Solutions" and "Trane West Michigan." Trane manufactures, sells and markets heating and air ventilation equipment and has multiple business locations in, and transacts business in, Missouri including within the Western District of Missouri, and has delivered and sold numerous products into Missouri and the Western District of Missouri.

3. On March 13, 2001, United States Letters Patent No. 6,199,388, invented by John C. Fischer, Jr. (the "Fischer '388 Patent"), was duly and legally issued to Plaintiff SEMCO for an invention in "System And Method For Controlling Temperature And Humidity" and, since that date SEMCO has been, and still is, the owner of said Fischer '388 Patent. All maintenance fees for the Fischer '388 Patent have been paid and the Fischer '388 Patent remains in full force and effect. (A true and correct copy of said Fischer '388 Patent is attached hereto as Exhibit 1, and incorporated by reference herein).

JURISDICTION AND VENUE

4. Because this action arises under the Patent Laws of the United States (Title 35 U.S.C.), this Court has jurisdiction under 28 U.S.C. § 1331 and 28 U.S.C. § 1338.

5. Jurisdiction is further proper under Missouri law and under the United States Constitution.

6. Venue in this Court is proper under 28 U.S.C. § 1391 and 28 U.S.C. § 1400 (b). With regard to 28 U.S.C. § 1400 (b), Trane has committed acts of infringement in this District, and Trane has a regular and established place of business in this District. In particular, Trane's counsel Cyrus Morton in an e-mail to counsel for SEMCO dated August 17, 2017, stated that Trane would be dismissing the portion of its Motion To Dismiss that challenged venue (Doc. 14) because of a Trane sale in the Western District of Missouri of the type of system accused of infringement in the Complaint (Doc 1). Thus, Trane does not now challenge that this Court has venue under 28 U.S.C. § 1400 (b).

ALLEGATIONS OF INFRINGEMENT

7. Trane has infringed the Fischer '388 Patent by making, using, selling, offering for sale, and/or, importing into the United States, systems and methods embodying one or more of the claims of the Fischer '388 Patent, and/or by inducing others to so infringe, and/or by contributing to such infringement by others, all in violation of 35 U.S.C. § 271.

8. Filed concurrently herewith underseal as Exhibit 2 are documents which, upon information and belief, were distributed by Trane in 2016, as part of an offer for sale for a project for Sioux Falls City Hall, a system as depicted in the drawings in Exhibit 2 and discussed in specifications and operating parameters of Exhibit 2. Upon information and belief the Exhibit 2 documents were used by Trane, to offer the system shown and described in Exhibit 2 for sale in the United States, and the materials shown in Exhibit 2 were prepared by Trane. The drawings on sheets numbered Pages 7-14 of Exhibit 2 state that the "Sales Office" responsible for making the offer for sale of the system of Exhibit 2 was Trane's sales office located in Sioux Falls, South Dakota and the offer for sale and sale of the system of Exhibit 2 was made in the United States.

9. Attached hereto as <u>Exhibit 3</u> are documents which, upon information and belief, were distributed by Trane in 2016, as part of an offer for sale for a project for the University of Sioux Falls, for a system as depicted in the drawings in <u>Exhibit 3</u> and discussed in specifications and operating parameters of <u>Exhibit 3</u>. Upon information and belief the <u>Exhibit 3</u> documents were used by Trane, to offer the system shown and described in <u>Exhibit 3</u> for sale in the United States, and the materials shown in <u>Exhibit 3</u> were prepared by Trane. Further, upon information and belief, a system such as depicted and discussed in the <u>Exhibit 3</u> documents was sold and used by Trane in the United States and installed for use at the University of Sioux Falls in the United States. The drawing sheets following Page 13 of <u>Exhibit 3</u> state that the responsible

Trane "Sales Office" for making the offer for sale and sale of the system of <u>Exhibit 3</u> was Trane's sales office located in Sioux Falls, South Dakota, and thus the offer for sale and sale of the system of <u>Exhibit 3</u> was made in the United States.

10. Attached as <u>Exhibit 4</u> are documents dated in the year 2013, upon information and belief, showing drawings, specifications and operating parameters for a system offered for sale, and sold and used by Trane for a project installed and used at Hoover Elementary School in Sioux City, Iowa. Upon information and belief the offer for sale, sale, installation, and marketing for the system shown in <u>Exhibit 4</u> and installed at Hoover Elementary School, was supervised by an Ordering Office of Trane located in the United States in Sioux Falls, South Dakota, and Trane's offers for sale and sale of those air handling systems were made in the United States.

11. Attached as <u>Exhibit 5</u> are documents dated in the year 2017, upon information and belief, showing drawings, specifications and operating parameters for a system offered for sale, and sold by Trane for a project to be installed and used at Bryant Elementary School in Sioux City, Iowa. Upon information and belief the offer for sale, sale, and marketing for the system shown in <u>Exhibit 5</u> for Bryant Elementary School, was supervised by an Ordering Office of Trane located in the United States in Sioux Falls, South Dakota, and Trane's offers for sale and sale of those air handling systems were made in the United States.

12. Filed concurrently herewith underseal Attached as <u>Exhibit 6</u> are documents, which upon information and belief, show drawings, specifications and operating parameters for a system offered for sale, sold and used, by Trane for a project installed and used at Adams Elementary School for Zeeland Public Schools in Michigan. Upon information and belief the offer for sale, sale, installation, and marketing for the system shown in <u>Exhibit 6</u> and installed at

Adams Elementary School, was supervised by an Ordering Office of Trane, and Trane's offers for sale and sale of those air handling systems were made by an office of Trane in the United States.

13. Each of <u>Exhibits 2 - 6</u> are examples of Trane's systems and methods that fall within the scope of one or more Claims of the Fischer '388 Patent, including for example, Claim 1, that covers a system for controlling the temperature and humidity level of a controlled space, where the system comprises:

a) an air supplier adapted to supply air to the controlled space, creating a supply air stream;

b) an air exhauster adapted to exhaust air out of the controlled space, creating an exhaust air stream adjacent to the supply air stream;

c) a partition disposed between the supply and exhaust air streams that separates the supply and exhaust air streams;

d) a total energy recovery device in contact with the supply air stream and exhaust air stream that exchanges heat and moisture between the supply and exhaust air streams;

e) a dehumidification wheel positioned to rotate through the supply air stream and the exhaust air stream that exchanges heat and moisture between the supply and exhaust air streams; and

f) a cooler disposed in the supply air stream between the total energy recovery device and the dehumidification wheel, the cooler adapted to cool and dehumidify the supply air stream.

14. With regard to elements (a) and (b) of Claim 1 of the Fischer '388 Patent, <u>Exhibit</u> <u>2 (filed under seal)</u> shows air suppliers that are adapted to supply air to a controlled space so as to create a supply air stream, as well as air exhausters adapted to exhaust air out of the controlled space creating an exhaust air stream adjacent to the supply air stream. These air suppliers and air exhausters are depicted in <u>Exhibit 2</u> as fans. Reference to these fans and their operation are shown in the lower half of Page 2 and the top of Page 3 of <u>Exhibit 2</u>, as well as the bottom of Page 3 and the top of Page 4.

15. With regard to element (c) of Claim 1 of a partition that separates the supply and exhaust air streams, such a partition is depicted on Page 8 and 9 of <u>Exhibit 2</u>. The center of Page 9 contains a list of components beneath what is referred to as an "Overall Elevation View." Item 2 on that list is a "fan section" that is depicted toward the bottom left of the drawing. Item7, also designated as a "fan section", is depicted just above the fan item 2 in that drawing. A partition extends between those two fans, items 2 and 7.

16. Claim 1 element (d) designates a "total energy recovery device" in contact with the supply air stream and exhaust air stream that exchanges heat and moisture between the supply and exhaust air streams. Page 9 of Exhibit 2 depicts a total energy recovery device as item 8 "Wheel" with the indicator "S4" located directly above the illustration of that wheel. The item 8 "Wheel" is shown extending to rotate on both sides of the partition to thus be in the supply air path and the exhaust air path.

17. Page 7 of <u>Exhibit 2</u> also refers to and depicts the total energy recovery device of Claim 1, wherein the ledger to the upper right lists as item 6 "Energy wheel", and wherein the drawing on page 7 shows a top plan view that enumerates the said energy wheel with the number

6 shown towards the center of the drawing. Supply fan 2 is shown to the left of that item 6 "Energy wheel".

18. With regard to Claim 1 element (e), Item 10 in the ledger list on Page 9, which is positioned beneath the upper drawing on Page 9, depicts a dehumidification wheel beneath the designation "S5" in the drawing. (It is noted that the ledger list on page 9 of Exhibit 2 has different numbering for the same system components than the ledger list on page 7 of Exhibit 2.) The operating characteristics and information concerning that dehumidification wheel is shown on Page 4 of Exhibit 2 towards the lower half of the page with a heading "Wheel", and extending to the top block on Page 5 of Exhibit 2.

19. The dehumidification wheel shown on page 7 of Exhibit 2 is shown in the ledger as item 8, designated as a "CDQ Wheel", which is a designation that Trane uses for a type of dehumidification wheel. The discussion of the CDQ wheel operating as a dehumidification wheel is stated on Page 28 of Exhibit 2 under the heading "COOL DRY QUIET (CDQ (TM)) DESICCANT WHEEL SECTION" wherein it is stated that the CDQ desiccant wheel is "to control space humidity" which wheel "is for humidity control," thus establishing that the CDQ wheel is a dehumidification wheel.

20. Information concerning the operating parameters of the dehumidification wheel is shown towards the bottom part of Page 5 of <u>Exhibit 2</u> in the block described "Wheel", and on Page 6, wherein "Wheel type" to the right thereof contains the name "CDQ wheel". Pages 5 and 6 of <u>Exhibit 2</u> show operating characteristics and parameters for that dehumidification wheel.

21. With regard to Claim 1 element (f), item 7 on the Page 8 ledger includes a "Cooling coil", and the Page 9 ledger includes as item 9 a "Coil section" which items correspond to the cooler of element (f) of Claim 1. That cooler is positioned in those drawings between the

total energy recovery device and the dehumidification wheel in the supply air stream. Operating characteristics and parameters for that cooler are depicted on Page 5 of Exhibit 2 in the middle of that page under the heading "Coil section." That cooling coil is also depicted in other drawings of Exhibit 2. Page 7 of Exhibit 2 shows a ledger with item 7 designated as a "cooling coil". The drawing on Page 7 shows that cooling coil item 7 positioned between the "energy wheel" (item 6 in the ledger and drawing), and the "CDQ wheel" (item 8 in the ledger and drawing). The same numerals and illustrations are shown on Page 8 of Exhibit 2 as well, and also on Page 9 according to the ledger numbers illustrated on Page 9.

22. The aforesaid <u>Exhibit 2</u> configuration of the layout of the elements of Claim 1 are thus set up for controlling the temperature and humidity level of a controlled space. Therefore, Claim 1 is literally infringed by the Trane system of <u>Exhibit 2</u>.

Claim 1 Applied to Exhibit 3

23. With regard to elements (a) and (b) of Claim 1 of the Fischer '388 Patent, the third sheet of drawings that follow Page 13 of <u>Exhibit 3</u> show in the upper drawing side elevation view of the housing with "Fan sections", which sections are numbered 3 and 8 in the ledger immediately below that drawing on that sheet. Fans are shown located in each of those Fans sections 3 and 8. The fans in these fan sections are described on Pages 3, 4, 5, 11 and 12 of <u>Exhibit 3</u>, and are referred to therein and in other drawings of Exhibit 3 as "plenum fans." On that said third sheet of drawings the fan in Fan section 8 is adapted to supply air stream to a controlled space, while the fan in Fan Section 3, is adapted to exhaust air out of a controlled space. The bottom drawing of the third sheet of drawings that follow Page 13 of <u>Exhibit 3</u> show a top plan view of the upper drawing, viewing the supply fan to the left in Section 8.With regard

to Claim 1 element (c), two sheets of drawings that follow Page 13 of <u>Exhibit 3</u> depict a partition disposed between "Fan section" 3 and "Fan section" 8, and thus between the fans 9 and 11.

24. With regard to Claim 1 element (c), of a partition disposed between the supply and exhaust air streams that separate the supply and exhaust air streams, with reference to the aforesaid top drawing of the third sheet of drawings that follow Page 13 of <u>Exhibit 3</u>, such a partition extends between those two Fan sections 3 and 8, and extends therefrom to the right to the housing end.

25. Regarding Claim 1, element (d) designates a "total energy recovery device" in contact with the supply air stream and exhaust air stream. The third sheet of drawings that immediately follows Page 13 of <u>Exhibit 3</u> shows in the upper drawing a side elevation view of the housing, an item 9 described in the ledger thereunder as "Wheel". The indicator "S4" is located directly above the illustration of that wheel, which is such a "total energy recovery device." This energy wheel extends to be adapted to rotate on both sides of the partition to thus be in the supply air path and the exhaust air path. This total energy recovery wheel is described toward the middle of Page 4 of <u>Exhibit 3</u> under the subheading "Wheel", wherein it is referred to as an "Energy wheel," and is also described on page 13 of <u>Exhibit 3</u> under the heading "ENERGY WHEEL SECTION."

26. With regard to Claim 1 element (e), the the third sheet of drawings that follows Page 13 of Exhibit 3 shows an upper drawing side elevation view. The ledger beneath designates as 11 a "Wheel," which is wheel is depicted in the drawing beneath the designation "S5". The second sheet of drawings after page 13 refers to this same wheel in the ledger on that page with item number 15 designated "CDQ wheel". Page 13 of Exhibit 3 under the heading "COOL DRY QUIET (CDQ (TM)) desiccant wheel section", describes the "CDQ wheel"

operating as a dehumidification wheel, wherein it is stated that the CDQ desiccant wheel is "to control space humidity" which wheel "is for humidity control," thus establishing that the CDQ wheel is a dehumidification wheel. That dehumidification wheel is rotatable and positioned as shown in the drawings on said third sheet to rotate through the supply air stream and the exhaust air stream as called for in Claim 1.

27. With regard to Claim 1, element (f), the third sheet of drawings that follow Page 13 of Exhibit 3 shows a ledger beneath the upper drawing side elevation view of the housing. That ledger designates a "coil section" 10 shown in the both the upper and lower drawings. The first sheet of the drawings that follow Page 13 of Exhibit 3 displays the top plan view of the supply air flow path and has a ledger. That ledger lists a "Cooling coil" as 14, which corresponds to the coil section 10 on the said third sheet. Those first and third sheets, from left to right show a fan, then the total energy recovery wheel, then the cooling coil 14 followed by the CDQ dehumidification wheel. Operating characteristics and parameters for that cooler are depicted on Pages 4 – 6, and on page 11 under the heading "COIL SECTION WITH FACTORY INSTALLED COIL." 8 point 4 of condition 5 of Exhibit 3. The "coil section" and "cooling coil" are shown in the aforesaid drawings to be positioned between the total energy recovery device and the dehumidification wheel in the supply air stream.

28. The aforesaid <u>Exhibit 3</u> configuration of the layout of the elements of Claim 1 are thus set up for controlling the temperature and humidity level of a controlled space. Therefore, Claim 1 is literally infringed by the Trane system of <u>Exhibit 3</u>.

29. The system of Exhibit 4 for the project at Hoover Elementary School at Sioux City, Iowa, also illustrates the elements of Claim 1 as previously described and discussed concerning Exhibits 2 and 3. The air suppliers of Claim 1 are shown in the drawing designated M9.3 of Exhibit 4 with regard to the Air Handling Unit 1 toward the top of sheet M9.3, and Air Handling Units 3 and 4 shown toward the bottom of sheet M9.3. The air supplier of Claim 1 is labeled "SUPPLY FAN", and the air exhauster of Claim 1 is labeled as "EXHAUST FAN" on sheet M9.3. The total energy recovery device of Claim 1 is shown in the section of those Air Handling Units labeled as "ENERGY WHEEL SECTION" on sheet M9.3. The dehumidification wheel in Claim 1 is located in the section of the Air Handling Units labeled "DEHUMIDIFICATION WHEEL SECTION" on sheet M9.3.

30. The cooler disposed in the supply air stream of Claim 1 is labeled "COOLING COIL" in those drawings of sheet M9.3 of <u>Exhibit 4</u> and is shown positioned between the energy recovery wheel and the dehumidification wheel in the supply air stream. The supply air stream is thus shown aligned with the "SUPPLY FAN" of those drawings on sheet M9.3. A partition as set forth in Claim 1, separates the supply and exhaust air stream flow paths on sheet M9.3.

31. The operating characteristics concerning the said <u>Exhibit 4</u> air handling units are described and discussed on the sheet designated M10.2 of <u>Exhibit 4</u>.

32. The aforesaid <u>Exhibit 4</u> configuration of the layout of the elements of Claim 1 are thus set up for controlling the temperature and humidity level of a controlled space. Therefore, Claim 1 is literally infringed by the Trane system of <u>Exhibit 4</u>.

33. The system of <u>Exhibit 5</u> for the project at Bryant Elementary School at Sioux City, Iowa, also illustrates the elements of Claim 1 as previously described and discussed concerning <u>Exhibits 2 and 3</u>. The air supplier systems of Claim 1 are shown in the drawing designated M7.4 of <u>Exhibit 5</u> with regard to the Air Handling Unit 3 toward the left of sheet M7.4. The air supplier of Claim 1 and the air exhauster of Claim 1 are located in the sections labeled "SUPPLY FAN SECTION" and "EXHAUST FAN SECTION, respectively. The total energy recovery device of Claim 1 is shown in the section labeled as "ENERGY WHEEL SECTION" on sheet 7.4. The dehumidification wheel in Claim 1 is located in the section labeled "DEHUMIDIFICATION WHEEL SECTION" on sheet M7.4.

34. The cooler disposed in the supply air stream of Claim 1 is labeled "COOLING COIL" in those drawings of sheet M7.4 of <u>Exhibit 5</u> and is shown positioned between the energy recovery wheel and the dehumidification wheel in the supply air stream. The supply air stream is thus shown aligned with the supply fan in the "SUPPLY FAN SECTION" of those drawings on sheet M7.4. A partition as set forth in Claim 1, separates the supply and exhaust air stream flow paths on sheet M7.4.

35. The operating characteristics concerning the said <u>Exhibit 5</u> air handling units are described and discussed on the sheet designated M9.1 of <u>Exhibit 5</u>.

36. The aforesaid <u>Exhibit 5</u> configuration of the layout of the elements of Claim 1 are thus set up for controlling the temperature and humidity level of a controlled space. Therefore, Claim 1 is literally infringed by the Trane system of <u>Exhibit 5</u>.

37. With regard to Claim 1, <u>Exhibit 6</u> (filed under seal) on the 11^{th} and 12^{th} and 18^{th} through 22^{nd} sheets thereof, show drawings and illustrations of a system that show air suppliers and exhausters, as well as diagrams showing air flow through the supply airflow path and exhaust airflow path, adapted to supply air to a controlled space to create a supply air stream and an exhaust air stream. The air suppliers are depicted as fans and as being located in fan sections. Those sheets depict a partition disposed between the supply and exhaust air streams to separate the supply and exhaust air stream. <u>Exhibit 6</u> documents depict a "total energy recovery device" in contact with the supply air stream and exhaust air streams to exchange heat and moisture between the supply and exhaust air streams. The "total energy recovery device" is referred to as an "Energy wheel" on the 11^{th} and 12^{th} sheets, and on the 18^{th} and 19^{th} sheet ledgers.

38. With regard to the Claim 1 element of a "dehumidification wheel positioned to rotate through the supply air stream and the exhaust air stream" to exchange heat and moisture between those streams, in <u>Exhibit 6</u> such a wheel is referred to as a "Desiccant Wheel" on the 11^{th} and 12^{th} sheets, and as item 2 "CDQ wheel" on the 18^{th} and 19^{th} sheets thereof.

39. With regard to the Claim 1 element of a "cooler disposed in the supply air stream between the total energy recovery device and the dehumidification wheel, the cooler adapted to cool and dehumidify the supply air" such a cooler is shown on the 11^{th} and 12^{th} sheets of <u>Exhibit</u> <u>6</u> as a "Cooling coil" and depicted on the 18^{th} and 19^{th} sheets of <u>Exhibit 6</u> as ledger item 3 "Cooling coil". Information describing the operating parameters and characteristics of the aforesaid elements of Claim 1 are shown in <u>Exhibit 6</u>.

40. The aforesaid <u>Exhibit 6</u> configuration of the layout of the elements of Claim 1 are thus set up for controlling the temperature and humidity level of a controlled space. Therefore, Claim 1 is literally infringed by the Trane system of <u>Exhibit 6</u>.

Systems Referred to in Declaration of Trane Representative

41. Trane filed on or about July 20, 2017, a Motion to Dismiss for Lack of Venue (Doc. 14) that included the Declaration of Felix Wilson, Vice President, Southwest and West Territory, Commercial HVAC NA & EMEA for Trane, and an associated attachment entitled "Appendix 1" (collectively, the "Wilson Declaration"). A copy of said Wilson Declaration with Appendix 1 is attached hereto as <u>Exhibit 7</u>. <u>Exhibits 2 and 6</u> of this present Amended Complaint are the same as <u>Exhibits 8 and 7</u>, respectively, of the Complaint (Doc. 1) previously filed in this Court.

42. In Paragraph 4 of his Declaration (<u>Exhibit 7</u>), Mr. Wilson identifies a number of air-handling units made and sold by Trane since 2010 that employ similar "configurations containing an energy wheel and CDQ wheel", which he states were "classified as dual path, outside air configuration" and which he lists in Appendix 1. Though Mr. Wilson states in his Declaration that he made no representations that the units identified in Appendix 1 meet the limitations of the "patent-in-suit", he nonetheless stated that the configurations of the Appendix 1 systems were similar to those in the <u>Exhibit 2</u> Sioux Falls City Hall documents and the <u>Exhibit 6</u> Zeeland Public School documents.

43. With regard to Trane's sale in this District alleged in Paragraph 6 above, upon information and belief, such sale comprises at least one air handling system of the same configuration as those shown and discussed for Exhibits 2 - 6 herein. Further, with regard to Trane's sale in this District alleged in Paragraph 6 above, upon information and belief, such sale

comprises at least one air handling system such as those listed in Appendix 1 of the aforesaid <u>Exhibit 7</u> Declaration of Trane's Felix Wilson, which employ similar "configurations containing an energy wheel and CDQ wheel" and which Trane has "classified as dual path, outside air configuration" such as listed in Appendix 1. Thus, there is a reasonable basis for asserting that Trane's systems listed in Appendix 1, as well as the system discussed in Paragraph 6 as being the subject of a sale in the Western District of Missouri, are within the scope of the claims of the Fischer '388 Patent, and thus directly infringe the '388 Fischer Patent, for the same reasons as stated with regard to the systems and methods of <u>Exhibits 2 and 6</u> hereto. Upon information and belief at least some of these listed projects, have multiple infringing systems.

44. The systems depicted in <u>Exhibits 2-6</u> can be seen to be in the same configuration as, and employ the same steps of operation as, the systems and methods of operation in the said Exhibits A, B-1, B-2, B-3, C-1 and C-2, of the <u>Exhibit 12</u> Consent Judgment discussed hereafter.

Trane's Knowledge of the Fischer '388 Patent - Inducement and Willfulness

45. Trane had notice and knowledge of SEMCO's rights in the Fischer '388 Patent as early as the year 2005 when a dispute arose between SEMCO and Trane concerning the Fischer '388 Patent. Exemplary of that dispute and of Trane's knowledge of the Fischer '388 Patent is the email of April 22, 2005, from Art Hallstrom of Trane to Doug Haas and John Fischer, both of SEMCO, attached as <u>Exhibit 8</u>, which concerns a project in Houston, Texas. In the <u>Exhibit 8</u> email Mr. Hallstrom states that Trane's "Management decided today to have Semco build both units to avoid patent infringement." That reference to the phrase "patent infringement" refers to the Fischer '388 Patent. Also illustrative of Trane having knowledge of the Fischer '388 Patent in the year 2005 are the emails attached hereto as <u>Exhibit 9</u>. In the email of 04/25/2005 at 2:21 PM from Art Hallstrom of Trane to Etienne Prehoda of SEMCO, included in <u>Exhibit 9</u> Mr. Hallstrom of Trane states as to the Houston project that "our attorney's said the unit needs to be Semco unit do (*sic*, "due") to the patent." The words "the patent" in that email again refers to the Fischer '388 Patent. The Exhibits 8 and 9 e-mails demonstrate Trane's knowledge and actual notice of the Fischer '388 Patent and that Trane knew that it would have infringed the Fischer '388 Patent had it proceeded to sell the system that it had initially proposed to sell.

46. In addition, attached as <u>Exhibit 10</u> is a letter dated February 18, 2010, from Daniel Crowe, counsel for SEMCO, to Trane and received by Trane in February 2010. A true and accurate copy of the Fischer '388 Patent was enclosed with the <u>Exhibit 10</u> letter.

47. Trane had stated in certain correspondence that the Fischer '388 Patent was invalid in view of United States Patent No. 4,903,503 with named inventor Gershon Meckler (hereafter "Meckler '503 Patent"). An October 25, 2012, letter from SEMCO's attorney, Scott Smith, to Trane's attorney which was received by Trane's attorney (attached hereto as <u>Exhibit 11</u>) explained why the Fischer '388 Patent was not invalidated by the Meckler '503 Patent. <u>Exhibit 11</u> explained that the Meckler '503 Patent was duplicative of United States Patent No. 4,723,417, which patent also had named inventor Gershon Meckler (hereafter "'417 Meckler Patent"), and that the '417 Meckler Patent was cited by the Patent Office during the prosecution of the application that lead to the Patent Office granting the Fischer '388 Patent. <u>Exhibit 11</u> further stated that the Meckler '503 Patent was not materially different from the prior art over which the claims of the Fischer '388 Patent were allowed by the Patent Office.

48. The United States District Court for the Western District of Missouri issued a Consent Judgment on February 21, 2012, by the Honorable Fernando J. Gaitan, Jr., in the case of *SEMCO LLC v. Huntair, Inc. and Temtrol, Inc.*, Case No. 11-cv-4026 FJG, which found that the Fischer '388 Patent was valid and had been infringed by certain systems and methods of the

defendants in that case, with such infringing systems being exemplified by the Exhibits A, B-1,

B-2, B-3, C-1 and C-2, which were attached to the said Consent Judgment. The said Consent

Judgment without the aforementioned Exhibits A, B-1, B-2, B-3, C-1 and C-2 is attached hereto

as Exhibit 12.

49. The Exhibit 11 October 25, 2012, letter to Trane's attorney also enclosed the said

Exhibit 12 Consent Judgment and its attached Exhibits A, B-1, B-2, B-3, C-1, and C-2. The

Exhibit 11 letter stated as follows:

The Consent Judgment issued on February 21, 2012, by the U.S. District Court for the Western District of Missouri in *SEMCO*, *LLC v. Huntair*, *Inc. and Temtrol, Inc.* (copy enclosed) held that Huntair and Temtrol had infringed the Fischer Patent. Additionally, through the Consent Judgment the Court issued an injunction enjoining Huntair and Temtrol from future infringement of the Fischer Patent As a side note, during the above-mentioned Huntair litigation, Huntair filed the Meckler '503 Patent as an exhibit and contended that it showed and described the components depicted in Figure 3A of the Fischer Patent, and that it invalidated the Fischer Patent Despite such contentions, and with knowledge of such contentions, the U.S. District Court issued its Consent Judgment enforcing the Fischer Patent, with the consent of Huntair and Temtrol.

50. The representations in that <u>Exhibit 11</u> letter to Trane's attorney were accurate in that the Defendant Huntair had alleged (*see* e.g., Docket Entry 44 from Case No. 11-cv-4026 FJG), that the '388 Fischer was invalid in view of the Meckler '503 Patent.

51. A January 30, 2014, letter from SEMCO's attorney, Scott Smith, delivered to Trane's attorney (a copy of which is attached hereto as <u>Exhibit 13</u>). The <u>Exhibit 13</u> letter referred to the said <u>Exhibit 11</u> Mr. Smith's October 25, 2012 letter, and noted that Trane's attorney's had never responded to <u>Exhibit 11</u>.

52. Despite having all of the above actual notice of the Fischer '388 Patent, Trane nonetheless thereafter infringed the Fischer '388 Patent.

Trane's Inducement of Infringement and Contributory Infringement

53. In his Declaration (Exhibit 7, \P 7), Mr. Wilson states that the marketing and sales support for Trane's HVAC systems "is located in the Trane office that supports the geographical location of the installation" and in Appendix 1 to his Declaration, Mr. Wilson identifies the locations of that Trane's marketing and sales offices in the United States, which conducted the marketing and sales activities on behalf of Trane that resulted in the sale and installation of each of the accused systems in Appendix 1 of Exhibit 7.

54. Upon information and belief, for each of the accused systems listed in Appendix 1 1 of Exhibit 7, Trane personnel at the Ordering Offices listed in Appendix 1, interacted with the customer's engineers so that Trane could provide to each such engineer access to Trane marketing software to design, select, provide performance/design data based upon Trane equipment to enable the engineer to provide final submittals to the contractor/end customer. That is, in order to incorporate Trane systems into the their final accused systems, Trane's customers used performance data, equipment drawings and other data only available from Trane's software, which upon information and belief, Trane sales offices knew would infringe the Fischer '388 Patent.

55. Upon information and belief, for each of the accused systems, Trane personnel at the Trane marketing and sales offices, interacted with the customer's engineers to provide specific system configuration information in addition to the information available on Trane's marketing software to enable the engineers to specify Trane equipment to construct the accused systems, with Trane having full knowledge that such systems would infringe the Fischer '388 Patent. 56. Further, in light of the complexity of such air handling systems and the desire to maintain good post-sale customer relations, it is quite reasonable to infer that Trane's marketing and sales offices continued and still continue to communicate with one or more of the customers who purchased the accused systems of Exhibits 2 - 7 to enhance, modify or simply encourage their customers' continued use of the accused systems, with Trane having full knowledge that such systems infringe the Fischer '388 Patent.

57. These facts and reasonable inferences also establish that Trane has actively induced, and is affirmatively continuing to induce, the ongoing infringement of the Fischer '388 Patent by continued marketing of the accused systems, and by providing and continuing to allow the design and selection of systems which infringe the Fischer '388 Patent through the use of Trane's marketing software, and providing services to enable the continued use of one or more of the accused systems by one or more of Trane's customers, where such actions by Trane show a deliberate indifference or willful blindness to known risk that the induced acts constituted patent infringement under 35 USC § 271(b) all without SEMCO's authorization or consent and in violation of SEMCO's patent rights.

SEMCO's Knowledge of Trane's Infringement and SEMCO's Injuries

58. SEMCO did not become aware of the infringing nature of Trane's system and method depicted in Exhibits 2 and 6 until after the Exhibit 13 letter was sent.

59. SEMCO has been, and will continue to be, irreparably harmed by the acts of Trane as complained of herein; wherefore SEMCO is without adequate remedy at law.

60. Unless enjoined by this Court, Trane will continue with the aforesaid infringement of the Fischer '388 Patent.

61. Trane's infringement of the Fischer '388 Patent has been committed knowingly and willfully.

WHEREFORE, Plaintiff SEMCO prays:

- A. That Trane, its agents, servants and all those acting in concert and/or privity with Trane, be preliminarily and permanently enjoined from infringing (i.e. importing, making, using, selling, and/or offering to sell) any products or services covered by any or all of claims of the said Fischer '388 Patent, in accordance with 35 U.S.C. § 283;
- B. That Trane be held liable for all awards granted by this Court in favor of SEMCO;
- C. That SEMCO be awarded damages for Trane's infringement of the Fischer '388 Patent, together with all interest thereon including prejudgment interest, and that said damages be trebled in accordance with 35 U.S.C. § 284;
- D. Further, that this case be declared an exceptional case under 35 U.S.C. § 285, and that SEMCO be awarded its reasonable attorney's fees.
- E. That the costs of this action be assessed against Trane; and
- F. That SEMCO be awarded all such other and further relief as the Court may deem appropriate under the circumstances.

SEMCO hereby demands trial by jury on all issues triable by jury.

POLSTER, LIEDER, WOODRUFF & LUCCHESI, LC

/s/McPherson D. Moore

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ATTORNEYS FOR PLAINTIFF

CERTIFICATE OF SERVICE

I hereby certify that on November 16, 2017, the foregoing SEMCO, LLC'S FIRST AMENDED COMPLAINT was filed electronically with the Clerk of Court to be served by operation of the Court's electronic filing system upon all attorneys of record and the following:

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