IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

Armin Ruda, individually and)
d/b/a ABT Systems, LLC,)
and The University of Central)
Florida Board of Trustees on behalf)
of the University of Central Florida,)
•)
PLAINTIFFS,) COMPLAINT FOR
) PATENT INFRINGEMENT
VS.)
) CIVIL ACTION NO. 09-cv-6957
Lux Products Corporation,)
Emerson Electric Co., and)
Braeburn Systems, LLC,)
•) JURY DEMANDED
DEFENDANTS.)

SECOND AMENDED VERIFIED COMPLAINT

Plaintiffs Armin Rudd, individually and d/b/a ABT Systems, LLC (jointly "Rudd"), and the University of Central Florida Board of Trustees on behalf of the University of Central Florida ("UCF") complain of defendants Lux Products Corporation ("Lux"), Emerson Electric Co., which has an operating division known as White Rodgers which is part of Emerson Climate Technologies ("Emerson"), and Braeburn Systems, LLC ("Braeburn"), and as claim for relief shows as follows:

1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. § 1338(a).

PARTIES

- 2. Plaintiff Armin Rudd, individually and d/b/a ABT Systems, LLC (jointly "Rudd") is an individual with his principal place of business at 726 East Maple Street, Annville, Pennsylvania 17003.
- 3. Plaintiff UCF is a university established by the State of Florida having an address at 4000 Central Florida Boulevard, Orlando, FL 32816-2450.
- 4. Defendant Lux Products Corporation is a New Jersey Corporation having a principal place of business at 6000 I Commerce Parkway, Mt. Laurel, NJ 08054.
- 5. Defendant Emerson is a Missouri corporation having a principal place of business at 8000 W. Florissant Avenue, St. Louis, MO 63136. White-Rodgers is a division of Defendant, Emerson, and part of an Emerson corporate brand platform called Emerson Climate Technologies.
- 6. Defendant Braeburn is an Illinois limited liability corporation having a principal place of business at 2215 Cornell Ave., Montgomery, IL 60538.

THE RUDD PATENTS

- 7. Rudd is the sole inventor of United States Patent No. 5,547,017, entitled "Air Distribution Fan Recycling Control," assigned to the University of Central Florida ("the '017 Patent") (Exhibit A).
- 8. Rudd is the exclusive licensee of the '017 Patent with the sole right to sublicense, to file suit in his own name for patent infringement, and to recover damages for past infringement of the '017 Patent.
 - 9. Rudd has standing to sue for infringement of the '017 Patent.

- 10. Rudd is the sole inventor of United States Patent No. 6,431,268 B1 entitled "Air Distribution Fan And Outside Air Damper Recycling Control," assigned to the University of Central Florida ("the '268 Patent") (Exhibit B).
- 11. Rudd is the exclusive licensee of the '268 Patent with the sole right to sublicense, to file suit in his own name for patent infringement, and to recover damages for past infringement of the '268 Patent.
 - 12. Rudd has standing to sue for infringement of the '268 Patent.
- 13. Rudd became the exclusive licensee of the '017 Patent and the '268 Patent under an exclusive license agreement between Rudd and the University of Central Florida entered on November 21, 2000, amended on June 5, 2009, and amended on September 2, 2009.
- 14. The '017 Patent and the '268 Patent (collectively, "the Rudd Patents") concern thermostats that utilize a fan recycling control.
- 15. Thermostats that utilize a fan recycling control are non-staple articles of commerce which are a material component of the infringement.

THE INFRINGEMENT

Lux's Infringement of the '017 Patent

16. Defendant Lux sells thermostats including, but not limited to the LUXPRO PSP711CC series, CAG1500 series, PSP722E, PSD122E, PSPA711a, PSPA722, PSPHA732, PSPU721T and PSPU732T (collectively "the Lux thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors purchasing on behalf of building owners, homeowners, or end users who directly

infringe. (Ex. C ¶7, Decl. of A. Rudd; Ex. D, Amended First Supplemental Infringement Contentions directed to Lux)

- 17. Purchasers of the Lux thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the Lux thermostat to control a circulating fan. (Ex. C ¶11)
- 18. Purchasers of the Lux thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the Lux thermostat to operate a central air conditioning system with ducts to distribute cooled and heated conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C ¶12; Ex. E, 10 C.F.R. Part 430, Vol. 75, No. 105 at 31232 (June 2, 2002))
- 19. When installed, the Lux thermostats are designed to, and do in fact, activate and deactivate both the central air conditioning system and the circulating fan. (Ex. C ¶13)
- 20. The Lux thermostats' activating of the air conditioning system causes a continuous fan operation, and deactivating of the air conditioning system causes no fan operation. (Ex. C $\P14$)
 - 21. The Lux thermostats have a selectable constant fan mode. (Ex. D, pg. 3)
- 22. The Lux thermostats have a recycling control for periodically activating and deactivating only the circulating fan after a preselected period, since the central air conditioning system has been deactivated, or the circulating fan has been deactivated from the selectable constant fan mode. (Ex. C ¶15, Ex. D; pgs. 3-4)

- 23. Lux may provide the following additional products with the Lux thermostats: a circulating fan; and a central air conditioning system with ducts. In any event, these items are necessarily present when the Lux Thermostats are operating in normal applications. (Ex. C \P 17).
 - 24. Lux had knowledge of the '017 Patent. (Ex. C ¶8 and Ex. D, pg. 1)
- 25. Lux had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C ¶8)
- 26. The Lux Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Lux Thermostats to operate a central air conditioning system, as detailed in the Infringement Contentions directed to Lux. (Ex. D)
- 27. Accordingly, Lux commits direct and/or contributory infringement, and/or induces infringement, of the '017 Patent pursuant to 35 U.S.C. §§ 271(a)-(c). (Ex. D, pgs. 1-7)

Lux's Infringement of the '268 Patent

28. Defendant Lux sells thermostats including, but not limited to the LUXPRO PSP711CC series, CAG1500 series, PSP722E, PSD122E, PSPA711a, PSPA722, PSPHA732, PSPU721T and PSPU732T (collectively "the Lux thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors, purchasing on behalf of building owners, homeowners, or end users who directly infringe. (Ex. C ¶7)

¹ The above paragraphs 16-27 demonstrate Lux's infringement of independent Claim 1 of the '017 patent. Claim 1 is representative of the Lux's infringement of Claims 2-6, which is further detailed in the Infringement Contentions directed to Lux. (Ex. D, pgs. 1-7)

- 29. Purchasers of the Lux thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the thermostat to operate an air conditioning system, including but not limited to an air conditioning system with a circulating fan, and at least one of a heating apparatus, a cooling apparatus, or an air cleaning apparatus to distribute conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C ¶12)
- 30. Purchasers of the Lux thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the thermostat to control a circulating fan to distribute conditioned air to an interior space, including circulating air for thermal or air quality purposes. (Ex. C ¶12)
- 31. The Lux thermostats activate and deactivate the air conditioning apparatus and the fan. (Ex. C \P 13)
- 32. The Lux thermostats' activating of the air conditioning apparatus causes a continuous fan operation, and deactivating of the air conditioning apparatus causes no fan operation. (Ex. C $\P14$)
 - 33. The Lux thermostats have a selectable constant fan mode. (Ex. D, pg. 10)
- 34. The Lux thermostats have a fan recycling control for periodically activating and deactivating only the fan of said air conditioning system in order to operate the fan for a first time period after a second time period dependent from the end of a last operation of the fan, wherein the last operation of the fan includes at least one of: a last operation of said air conditioning system, and a last fan operation initiated by the fan recycling control. (Ex C, $\P17$; Ex. D, pg. 10)

- 35. Lux may provide the following additional products with the Lux thermostats: (1) a heating apparatus, a cooling apparatus, or an air cleaning apparatus; and (2) a fan to distribute conditioned air to an interior space. In any event, these items are necessarily present when the Lux Thermostats are operating in normal applications. (Ex. C \P 17)
 - 36. Lux had knowledge of the '268 Patent. (Ex. C ¶8; Ex. D, pg. 8)
- 37. Lux had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C $\P 8$)
- 38. The Lux Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Lux Thermostats, as detailed in the Infringement Contentions directed to Lux. (Ex. D)
- 39. Accordingly, Lux commits direct and/or contributory infringement, and/or induces infringement, of the '268 Patent pursuant to 35 U.S.C. §§ 271(a)-(c). ² (Ex. D, pgs. 8-22)

Emerson' Infringement of the '017 Patent

40. Defendant Emerson, through its' White Rodgers' Division, sells thermostats, White RodgersTM Thermostat Model Nos. 1F95-1277, 1F95-1280, 1F95-1291 and 1F97-1277 (collectively "the Emerson Thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors, purchasing on behalf of a building owners, homeowners, end users who directly infringe. (Ex. C ¶7)

² The above paragraphs 29-39 demonstrate Lux's infringement of independent Claim 1 of the '268 patent. Claim 1 is representative of the Lux's infringement of Claims 2, 4-7, and 9, which is further detailed in the Infringement Contentions directed to Lux. (Ex. D, pgs. 8-22)

- 41. Purchasers of the Emerson Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the Emerson Thermostat to control a circulating fan. (Ex. C ¶11)
- 42. Purchasers of the Emerson Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the Emerson Thermostat to operate a central air conditioning system with ducts to distribute cooled and heated conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C \P 12; Ex. E)
- 43. When installed, the Emerson Thermostats are designed to, and do in fact, activate and deactivate both the central air conditioning system and the circulating fan. (Ex. C $\P14$)
- 44. The Emerson Thermostats' activating of the air conditioning system causes a continuous fan operation, and deactivating of the air conditioning system causes no fan operation. (Ex. C $\P14$)
- 45. The Emerson Thermostats have a selectable constant fan mode. (Ex. F, Infringement Contentions directed to Emerson, pgs. 2-3)
- 46. The Emerson Thermostats have a recycling control for periodically activating and deactivating only the circulating fan after a preselected period, since the central air conditioning system has been deactivated, or the circulating fan has been deactivated from the selectable constant fan mode. (Ex. C ¶15, Ex. F, pgs. 3-4)
- 47. Emerson may provide the following additional products with the Lux thermostats: a circulating fan; and a central air conditioning system with ducts. In any

event, these items are necessarily present when the Emerson Thermostats are operating in normal applications. (Ex. C ¶17)

- 48. Emerson had knowledge of the '017 Patent. (Ex. C ¶9 and Ex. F, pg. 1)
- 49. Emerson had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C ¶9)
- 50. The Emerson Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Emerson Thermostats to operate a central air conditioning system, as detailed in the Infringement Contentions directed to Emerson. (Ex. F)
- 51. Accordingly, Emerson commits direct and/or contributory infringement, and/or induces infringement, of the '017 Patent pursuant to 35 U.S.C. §§ 271(a)-(c).³ (Ex. F, pgs. 1-6)

Emerson Infringement of the '268 Patent

- 52. Defendant Emerson sells thermostats, White RodgersTM Thermostat Model Nos. 1F95-1277, 1F95-1280, 1F95-1291 and 1F97-1277 (collectively "the Emerson Thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors, purchasing on behalf of a building owners, homeowners, or end users who directly infringe. (Ex. C ¶7)
- 53. Purchasers of the Emerson Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end users, install the thermostat to operate an air conditioning system, including but not limited to an air conditioning system with a

³ The above paragraphs 40-51 demonstrate Emerson infringement of independent Claim 1 of the '017 patent. Claim 1 is representative of the Emerson infringement of Claims 2-6, which is further detailed in the Infringement Contentions directed to Emerson . (Ex. F, pgs. 1-6)

circulating fan, and at least one of a heating apparatus, a cooling apparatus, or an air cleaning apparatus to distribute conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C ¶12)

- 54. Purchasers of the Emerson Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end-users, install the thermostat to control a fan to distribute conditioned air to an interior space, including circulating air for thermal or air quality purposes. (Ex. C ¶12)
- 55. The Emerson Thermostats activate and deactivate the air conditioning apparatus and the fan. (Ex. C $\P14$)
- 56. The Emerson Thermostats' activating of the air conditioning apparatus causes a continuous fan operation, and deactivating of the air conditioning apparatus causes no fan operation. (Ex. C \$ 14)
- 57. The Emerson Thermostats have a selectable constant fan mode. (Ex. F, pg. 9)
- 58. The Emerson Thermostats have a fan recycling control for periodically activating and deactivating only the fan of said air conditioning system in order to operate the fan for a first time period after a second time period dependent from the end of a last operation of the fan, wherein the last operation of the fan includes at least one of: a last operation of said air conditioning system, and a last fan operation initiated by the fan recycling control. (Ex. C ¶16; Ex. F, pg. 9)
- 59. Emerson may provide the following additional products with the Emerson Thermostats: (1) a heating apparatus, a cooling apparatus, or an air cleaning apparatus; and (2) a fan to distribute conditioned air to an interior space. In any event, these items

are necessarily present when the Emerson Thermostats are operating in normal applications. (Ex. C $\P17$)

- 60. Emerson had knowledge of the '268 Patent. (Ex. C ¶9; Ex. F, pg. 7)
- 61. Emerson had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C ¶9; Ex. F, pg. 7)
- 62. The Emerson Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Emerson Thermostats to operate a central air conditioning system, as detailed in the Infringement Contentions directed to Lux. (Ex. F)
- 63. Accordingly, Emerson commits direct and/or contributory infringement, and/or induces infringement, of the '268 Patent pursuant to 35 U.S.C. §§ 271(a)-(c). ⁴ (Ex. F, pgs. 7-20)

Braeburn's Infringement of the '017 Patent

64. Defendant Braeburn sells thermostats, the Premier Series Non-Programmable Thermostat Model Nos. 3000, 3200 and 3300 and the Premier Series Programmable Thermostat Model No. 5000, 5200, 5300 and 5400 (collectively "the Braeburn Thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors, purchasing on behalf of a building owners, homeowners, or end-users who directly infringe. (Ex. C ¶7)

⁴ The above paragraphs 52-63 demonstrate Emerson infringement of independent Claim 1 of the '268 patent. Claim 1 is representative of the Emerson infringement of Claims 2, 4-7, and 9, which is further detailed in the Infringement Contentions directed to Emerson . (Ex. F, pgs. 7-20)

- 65. Purchasers of the Braeburn Thermostats, such as contractor purchasing on behalf of building owners, homeowners, or end-users, install the Braeburn Thermostat to control a circulating fan. (Ex. C ¶11)
- 66. Purchasers of the Braeburn Thermostats, such as a contractor purchasing on behalf of building owners, homeowners, or end-users, install the Braeburn Thermostats to operate a central air conditioning system with ducts to distribute cooled and heated conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C ¶12; Ex. E)
- 67. When installed, the Braeburn Thermostats are designed to, and do in fact, activate and deactivate both the central air conditioning system and the circulating fan. (Ex. C \$ 13)
- 68. The Braeburn Thermostats activating of the air conditioning system causes a continuous fan operation, and deactivating of the air conditioning system causes no fan operation. (Ex. C $\P14$)
- 69. The Braeburn Thermostats have a selectable constant fan mode. (Ex. G, Infringement Contentions directed to Braeburn, pg. 3)
- 70. The Braeburn Thermostats have a recycling control for periodically activating and deactivating only the circulating fan after a preselected period, since the central air conditioning system has been deactivated, or the circulating fan has been deactivated from the selectable constant fan mode. (Ex. C ¶15, Ex. G, pgs. 3-5)
- 71. Braeburn may provide the following additional products with the Lux thermostats: a circulating fan; and a central air conditioning system with ducts. In any

event, these items are necessarily present when the Braeburn Thermostats are operating in normal applications. (Ex. C $\P17$)

- 72. Braeburn had knowledge of the '017 Patent. (Ex. C ¶10 and Ex. G, pg. 1)
- 73. Braeburn had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C ¶10)
- 74. The Braeburn Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Braeburn Thermostats to operate a central air conditioning system, as detailed in the Infringement Contentions directed to Braeburn. (Ex. G)
- 75. Accordingly, Braeburn commit direct and/or contributory infringement, and/or induces infringement, of the '017 Patent pursuant to 35 U.S.C. §§ 271(a)-(c).⁵ (Ex. G, pgs. 1-7)

Braeburn's Infringement of the '268 Patent

- 76. Defendant Braeburn sells thermostats, the Premier Series Non-Programmable Thermostat Model Nos. 3000, 3200 and 3300 and the Premier Series Programmable Thermostat Model No. 5000, 5200, 5300 and 5400 (collectively "the Braeburn Thermostats"), utilizing a fan recycling control, to purchasers in the United States such as contractors, purchasing on behalf of a building owners, homeowners, or end-users who directly infringe. (Ex. C ¶7)
- 77. Purchasers of the Braeburn Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end-users, install the thermostat to operate

⁵ The above paragraphs 64-75 demonstrate Braeburn's infringement of independent Claim 1 of the '017 patent. Claim 1 is representative of the Braeburn's infringement of Claims 2-6, which is further detailed in the Infringement Contentions directed to Braeburn. (Ex. G, pgs. 1-7)

an air conditioning system, including but not limited to an air conditioning system with a circulating fan, and at least one of a heating apparatus, a cooling apparatus, or an air cleaning apparatus to distribute conditioned air throughout a building or home, including circulating air for thermal or air quality purposes. (Ex. C ¶12)

- 78. Purchasers of the Braeburn Thermostats, such as contractors purchasing on behalf of building owners, homeowners, or end-users, install the thermostat to control a fan to distribute conditioned air to an interior space, including circulating air for thermal or air quality purposes. (Ex. C ¶12)
- 79. The Braeburn Thermostats activate and deactivate the air conditioning apparatus and the fan. (Ex. C $\P13$)
- 80. The Braeburn Thermostats' activating of the air conditioning apparatus causes a continuous fan operation, and deactivating of the air conditioning apparatus causes no fan operation. (Ex. C ¶14)
- 81. The Braeburn Thermostats have a selectable constant fan mode. (Ex. G, pg. 10)
- 82. The Braeburn Thermostats have a fan recycling control for periodically activating and deactivating only the fan of said air conditioning system in order to operate the fan for a first time period after a second time period dependent from the end of a last operation of the fan, wherein the last operation of the fan includes at least one of: a last operation of said air conditioning system, and a last fan operation initiated by the fan recycling control. (Ex. C ¶16; Ex. G, pg. 10-12)
- 83. Braeburn may provide the following additional products with the Braeburn Thermostats: (1) a heating apparatus, a cooling apparatus, or an air cleaning

apparatus; and (2) a fan to distribute conditioned air to an interior space. In any event, these items are necessarily present when the Braeburn Thermostats are operating in normal applications. (Ex. C ¶17)

- 84. Braeburn had knowledge of the '268 Patent. (Ex. C ¶10 and Ex. G, pg. 8)
- 85. Braeburn had knowledge that the use of a thermostat that utilizes a fan recycling control would be infringing. (Ex. C ¶10)
- 86. The Braeburn Thermostats' manuals encourage and direct a contractor, installer, or end-user how to install and use the Braeburn Thermostats to operate a central air conditioning system, as detailed in the Infringement Contentions directed to Lux. (Ex. G)
- 87. Accordingly, Braeburn commit direct and/or contributory infringement, and/or induces infringement, of the '268 Patent pursuant to 35 U.S.C. §§ 271(a)-(c). ⁶ (Ex. G, pgs. 8-26)

Venue

88. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b)-(d) and 1400(b).

Relief Requested

89. Infringement by each of the defendants has injured Plaintiff Rudd and Rudd is entitled to recover damages adequate to compensate it for infringement of the Rudd Patents, pursuant to 35 U.S.C. §§ 284, 285. If the infringement is found to be intentional and willful, then Rudd will seek treble damages pursuant to 35 U.S.C. § 284.

⁶ The above paragraphs 76-87 demonstrate Braeburn's infringement of independent Claim 1 of the '268 patent. Claim 1 is representative of the Braeburn's infringement of Claims 2, 4-7, and 9, which is further detailed in the Infringement Contentions directed to Braeburn. (Ex. G, pgs. 8-26)

90. Infringement by each of the defendants will continue to injure Rudd until this Court enters an injunction prohibiting further infringement, and specifically enjoins further manufacture, sale, use and/or offer for sale of the infringing equipment recited in Paragraphs 17-90, above, pursuant to 35 U.S.C. §§ 283.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Rudd asks this Court to enter judgment against each of the defendants, and their subsidiaries, agents, servants, employees, attorneys and all persons in active concert or participation with the defendants, granting Rudd the following relief:

- A. a judgment that each defendant has directly and/or contributorily infringed and/or induced the infringement of the Rudd Patents;
- B. an award to Rudd of such damages pursuant to 35 U.S.C. § 284 that are adequate to compensate it for the defendants' infringement, the damages to be no less than a reasonable royalty;
- C. a permanent injunction pursuant to 35 U.S.C. § 283 prohibiting further infringement of the Rudd Patents; an award of treble damages pursuant to 35 U.S.C. § 284 to the extent that the defendants' infringement, or any thereof, is ultimately found to be willful;
- D. an award to Rudd of its reasonable attorney fees pursuant to 35 U.S.C. § 285 upon a determination that this is an exceptional case justifying such fees;
- E. that the Court award prejudgment and postjudgment interest on all damages;
 - F. that Rudd recover all its costs of action; and
- G. for such other and further relief as this Court and/or a jury may deem proper and just.

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DEMAND FOR JURY TRIAL

Plaintiff hereby demands that all issues be determined by jury.

DATED: August 23, 2010 Respectfully submitted,

s/Michael P. Mazza/ Michael P. Mazza

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