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

UNICORN GLOBAL, INC., AND HANGZHOU CHIC INTELLIGENT TECHNOLOGY CO., LTD.

Plaintiffs,

v.

E-LINK TECHNOLOGY CO., LTD., STKE, E_POWER, US WEIXUN, NANCYS SHOP, SMALIFE, WORMWHOLE USA, VENUSBOARD, HYPER GOGO BOARD, GRAVITYEX, EBUYSTORMSHOP, ICHEERS_HOT, STKE_668, STK_068, SINCEVERS, PICTURSTORE, LEVESLAND, HAPPYDSTORE9, KOOZONEMALL, FINDMEY, ASIWO2018, FRAYSEEASHOP, ASIWOE2, URICHDEALSTORE, FUNGISTORE, STKE_211, AND ONENICEMALLSTORE, BETERYOURLIFE, AND TWO DOTS

Civil Action No. 1:20-cv-4127

JURY TRIAL DEMANDED

Defendants.

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement in which Unicorn Global, Inc. ("Unicorn") and Hangzhou Chic Intelligent Technology Co., Ltd. ("Chic") (collectively, "Plaintiffs") accuse E-Link Technology Co., Ltd. ("E-Link"), STKE, e_Power, US Weixun, Nancys Shop, Smalife, Wormwhole USA, Venusboard, and Hyper Gogo Board (collectively, the "Amazon Stores") Gravityex, Ebuystormshop, Icheers_Hot, Stke_668, Stk_068, Sincevers, picturstore, Levesland, Happydstore9, Koozonemall, Findmey, Asiwo2018, Frayseeashop, Asiwoe2, Urichdealstore, Fungistore, Stke_211, and Onenicemallstore (the "eBay Stores"), Betteryourlife (the "Walmart

Stores") (the Amazon, eBay and Walmart stores are collectively referred to as the "Online Stores"), and Two Dots (E-Link, Two Dots, the eBay Stores, and the Amazon Stores are collectively referred to as "Defendants") of infringing U.S. Patent Nos. 9,376,155, 9,452,802, 10,696,348, 10,696,347, 10,486,764, and 10,597,107 (collectively, the "Patents-in-Suit"), alleging as follows:

PARTIES

- Unicorn is a California corporation with its place of business located at 18333 Gale
 Ave., City of Industry, California 91748.
- 2. Chic is a company organized and existing under the laws of the People's Republic of China with a principal place of business located at 2/F, No. 2 Building, Liangzhu University, Science and Technology Park, No. 1 Jingyi Road, Liangzhu, Hangzhou, 311112, People's Republic of China.
- 3. Chic is a high-tech company that is supported by Zhejiang University Ministry of Education Computer Aided Product Innovation Design Engineering Center; Zhejiang University International Design; and Zhejiang Key Laboratory of Service Robot. Chic manufactures and licenses hoverboard products for sale in the United States. Chic has been assigned 70 granted patents for its hoverboard technology and design in different regions such as China, the United States, the European Union, and Canada.
- 4. Defendant E-Link, and its Amazon stores and eBay Stores, is a company organized and existing under the laws of China, with its principal place of business at A1 Block, Shi'ao 2nd Industrial Park, Langjing Road, Dalang, Longhua, Shenzhen, China, 518109. E-Link is the owner of record for U.S. Trademark Reg. No. 5,936,929 for TWO DOTS. *See* Ex. 1.
- 5. On information and belief E-Link, directly or through its affiliates and subsidiaries, imports and/or sells the infringing products within the United States.

- 6. Upon information and belief, defendant STKE is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 7. Upon information and belief defendant e_Power is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 8. Upon information and belief defendant US Weixun is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 9. Upon information and belief defendant Nancys Shop is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 10. Upon information and belief defendant Smalife is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 11. Upon information and belief defendant Wormwhole USA is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 12. Upon information and belief defendant Venusboard is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.

- 13. Upon information and belief defendant Hyper Gogo Board is a foreign person or entity of who sells E-Link products within the United Sates on its Amazon.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 14. Upon information and belief defendant Gravityex is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 15. Upon information and belief defendant Ebuystormshop is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 16. Upon information and belief defendant iCheers_hot is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 17. Upon information and belief defendant Stke_668 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 18. Upon information and belief defendant Stk_068 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 19. Upon information and belief defendant Sincevers is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.

- 20. Upon information and belief defendant picturstore is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 21. Upon information and belief defendant Levesland is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 22. Upon information and belief defendant Happydstore9 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 23. Upon information and belief defendant Koozonemall is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 24. Upon information and belief defendant Findmey is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 25. Upon information and belief defendant Asiwo2018 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 26. Upon information and belief defendant Frayseeashop is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.

- 27. Upon information and belief defendant Asiwoe2 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 28. Upon information and belief defendant Urichdealstore is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 29. Upon information and belief defendant Fungistore is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 30. Upon information and belief defendant Stke_211 is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 31. Upon information and belief defendant Onenicemallstore is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 32. Upon information and belief defendant <u>Betteryourlife</u> is a foreign person or entity of who sells E-Link products within the United Sates on its Walmart.com storefront. Furthermore, it has sold and/or offered for sale products with the forum state.
- 33. Upon information and belief defendant Two Dots is a foreign person or entity of who sells E-Link products within the United Sates on its eBay.com and Amazon.com stores and the www.lamboscooter.com website. Furthermore, it has sold and/or offered for sale products with the forum state.

JURISDICTION AND VENUE

- 34. This is an action for infringement of the Patents-in-Suit arising under 35 U.S.C. §§ 271(a), 281, and 284 85. This Court has subject matter jurisdiction over this action under 28 U.S.C. §1331 and §1338(a).
- 35. Venue is proper in this district under 28 U.S.C. §§ 1391(c) and 1400. Defendant E-Link, is a foreign company residing in China and has committed acts of infringement within this judicial district and the Two Dots website, eBay, Walmart, and Amazon Stores are, on information and belief, foreign persons or entities that have committed acts of infringement in the United States. Furthermore, Defendants have committed acts of infringement within the forum state by selling and/or offering to sell infringing products within the forum state. Furthermore, E-Link has consented to venue in this jurisdiction by filing at least two other lawsuits in this judicial district. See E-Link Technology Co., Ltd. v. Shenzhen Uni-Sun Electronics Co., Ltd. et al., Case No. 1:20-cv-00247 (N.D. Ill. 2020); E-Link Technology Co. Ltd. v. Shenzhen Chitado Technology Co. Ltd. et al., Case No. 1:19-cv-08468 (N.D. Ill. 2019).
- 36. Defendants are subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Illinois Long Arm Statute, because, inter alia: (i) Defendants have done and continue to do business in Illinois; (ii) Defendants have committed and continue to commit acts of patent infringement in the State of Illinois, including making, using, selling, offering for sale, and/or importing at least the EL-ES03, EL-ES03R, EL-ES06 TDLB0001, EL-ES05, and EL-ES11 (the "Type 1 Hoverboards") and the EL-ES09D, EL-ES09F (the "Type 2 Hoverboards") (collectively, the "Accused Instrumentalities") into Illinois, including by Internet sales at the www.lamboscooter.com website, over Amazon.com through stores such as STKE, e_Power, US Weixun, Nancys Shop, Smalife, Wormwhole USA, Venusboards, and Hyper Gogo

Board, over eBay through such stores as Gravityex, Ebuystormshop, Icheers_Hot, Stke_668, Stk_068, Sincevers, picturstore, Levesland, Happydstore9, Koozonemall, Findmey, Asiwo2018, Frayseeashop, Asiwoe2, Urichdealstore, Fungistore, Stke_211, and Onenicemallstore; and over Walmart through stores such as Betteryourlife; and (iii) by the filing of two other lawsuits in this judicial district. *See E-Link Technology Co., Ltd. v. Shenzhen Uni-Sun Electronics Co., Ltd. et al.*, Case No. 1:20-cv-00247 (N.D. Ill. 2020); *E-Link Technology Co. Ltd. v. Shenzhen Chitado Technology Co. Ltd. et al.*, Case No. 1:19-cv-08468 (N.D. Ill. 2019). Attached hereto as Schedule 1 is a listing of the eBay listings, www.lamboscooter.com listings which are sold under the TWO DOTS trademark owned by E-Link, Walmart listings, and Amazon.com ASIN numbers for the Accused Instrumentalities.

U.S. PATENT NO. 9,376,155

- 37. On June 28, 2016, United States Patent No. 9,376,155 (the "'155 patent") was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Balance Vehicle." A true and correct copy of the '155 patent is attached hereto as Exhibit A.
 - 38. Jiawei Ying and Shaojun Cao are the inventors of the '155 Patent.
- 39. Chic is the owner by assignment of the '155 Patent with all rights in and to that patent.
- 40. Unicorn is a licensee of the '155 Patent with the exclusive right to enforce the '155 Patent in the United States.
- 41. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

<u>U.S. PATENT NO. 9,452,802</u>

- 42. On September 27, 2016, United States Patent No. 9,452,802 (the "'802 patent") was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Balance Vehicle." A true and correct copy of the '802 Patent is attached hereto as Exhibit B.
 - 43. Jiawei Ying and Shaojun Cao are the inventors of the '802 Patent.
- 44. Chic is the owner by assignment of the '802 Patent with all rights in and to that patent.
- 45. Unicorn is a licensee of the '802 Patent with the exclusive right to enforce the '802 Patent in the United States.
- 46. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

U.S. PATENT NO. 10,696,347

- 47. On June 30, 2020, United States Patent No. 10,696,347 (the "'347 patent') was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Vehicle." A true and correct copy of the '347 Patent is attached hereto as Exhibit C.
 - 48. Jiawei Ying and Shaojun Cao are the inventors of the '347 Patent.
- 49. Chic is the owner by assignment of the '347 Patent with all rights in and to that patent.
- 50. Unicorn is a licensee of the '347 Patent with the exclusive right to enforce the '347 Patent in the United States.
- 51. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

U.S. PATENT NO. 10,696,348

- 52. On June 30, 2020, United States Patent No. 10,696,348 (the "'348 patent") was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Vehicle." A true and correct copy of the '348 Patent is attached hereto as Exhibit D.
 - 53. Jiawei Ying and Shaojun Cao are the inventors of the '348 Patent.
- 54. Chic is the owner by assignment of the '348 Patent with all rights in and to that patent.
- 55. Unicorn is a licensee of the '348 Patent with the exclusive right to enforce the '348 Patent in the United States.
- 56. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

U.S. PATENT NO. 10,486,764

- 57. On November 26, 2019, United States Patent No. 10,486,764 (the "'764 patent") was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Vehicle." A true and correct copy of the '764 Patent is attached hereto as Exhibit E.
 - 58. Jiawei Ying and Shaojun Cao are the inventors of the '764 Patent.
- 59. Chic is the owner by assignment of the '764 Patent with all rights in and to that patent.
- 60. Unicorn is a licensee of the '347 Patent with the exclusive right to enforce the '764 Patent in the United States.
- 61. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

<u>U.S. PATENT NO. 10,597,107</u>

- 62. On March 24, 2020, United States Patent No. 10,597,107 (the "'107 patent') was duly and legally issued by the United States Patent and Trademark Office for an invention entitled "Electric Vehicle." A true and correct copy of the '107 Patent is attached hereto as Exhibit F.
 - 63. Jiawei Ying and Shaojun Cao are the inventors of the '107 Patent.
- 64. Chic is the owner by assignment of the '107 Patent with all rights in and to that patent.
- 65. Unicorn is a licensee of the '107 Patent with the exclusive right to enforce the '107 Patent in the United States.
- 66. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

KNOWLEDGE AND WILLFULNESS

- 67. E-Link has had actual knowledge of Plaintiffs' patent portfolios in hoverboard technologies since at least 2016. It was a licensee of certain Chinese patents owned by Chic between November 23, 2016 to November 23, 2017.
- 68. E-Link did not renew its license with Chic and yet continued to sell and export the unauthorized hoverboard products after November 23, 2017. A settlement was reached on February 23, 2018. E-Link agreed to cease manufacturing and selling hoverboard products that infringe Chic's patent rights.
- 69. E-Link breached the 2018 settlement agreement, and the intermediate court in Shenzhen, China issued money damages and an injunction against E-Link on March 25, 2019.
- 70. Upon information and belief, E-Link had actual knowledge of at least the '155 and '802 Patents because it was aware of the two patent infringement lawsuits filed by Plaintiffs in March 2019. In fact, the owner of E-Link and owner of Unicorn have been friends on the social

media app WeChat since at least as early as March 2019. They were in communication with each other regarding U.S. patent matters several times in 2019. E-Link knew their products infringe the Patents-in-suit and discussed paying royalties to Plaintiff Unicorn for the U.S. patents exclusively licensed from Chic.

- 71. E-Link also has actual knowledge of the Patents-in-suit and that the Accused Products infringe the Asserted Patents due to service of this action. *In re Bill of Lading Transmission & Processing Sys. Patent Litig.*, 681 F.3d 1323, 1345 (Fed. Cir. 2012) (allowing notice of indirect infringement upon service).
- 72. Furthermore, defendants have constructive knowledge of the Asserted Patents because Plaintiffs have complied with the marking statute, 35 U.S.C. § 287.

COUNT I INFRINGEMENT OF U.S. PATENT NO. 9,376,155

- 73. Defendants directly or through intermediaries, make, use, offer to sell, and/or sell electric balance vehicles which infringe the '155 Patent, shown in Exhibits A-1 and A-2.
- 74. Upon information and belief, Defendants have been and are now infringing claims 1, 2, 4, 5, 6, 7, 11, and 16 of the '155 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, *i.e.* the Type 1 Hoverboards, covered by one or more claims of the '155 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '155 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '155 Patent pursuant to 35 U.S.C. § 271(a).
- 75. The Type 1 Hoverboards directly infringe claim 1 of the '155 Patent. For example, they are electric balance vehicles, comprising: a top cover comprising a first top cover and a second

top cover disposed symmetrically and rotatable relative to each other; a bottom cover fixed to the top cover, the bottom cover comprising a first bottom cover and a second bottom cover disposed symmetrically and rotatable relative to each other; an inner cover fixed between the top cover and the bottom cover, the inner cover comprising a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other; a rotating mechanism fixed between the first inner cover and the second inner cover; two wheels rotatably fixed at two sides of the inner cover, respectively; two hub motors fixed in the two wheels, respectively; a plurality of sensors disposed between the bottom cover and the inner cover; a power supply fixed between the first bottom cover and the first inner cover; and a controller fixed between the second bottom cover and the second inner cover, wherein the controller is electrically connected with the plurality of sensors, the power supply, and the hub motors, and the controller controls the hub motors to drive the corresponding wheels to rotate according to sensing signals transmitted by the sensors. *See* Exs. A-1 and A-2.

- 76. The Type 1 Hoverboards directly infringe claim 2 of the '155 Patent. They include two pedals, wherein the pedals are fixed to the top cover and the inner cover. *See* Exs. A-1 and A-2.
- 77. The Type 1 Hoverboards directly infringe claim 4 of the '155 Patent. They include hollow spaces on the first and second top covers and the first and second inner covers have recesses corresponding to the hollow spaces which form a cavity for the pedals. *See* Exs. A-1 and A-2.
- 78. The Type 1 Hoverboards directly infringe claim 5 of the '155 Patent. They include a rotatable mechanism with two bearings, a shaft sleeve, and two snap springs, with the two bearings being fixed to the first inner cover and second inner cover and the shaft sleeve fixed inside the two bearings and the inner cover via the snaps springs. *See* Exs. A-1 and A-2.

- 79. The Type 1 Hoverboards directly infringe claim 6 of the '155 Patent. They include an inner cover with a cylindrical barrel, and the bearings and the shaft sleeve are installed in the barrel via snap springs. *See* Exs. A-1 and A-2.
- 80. The Type 1 Hoverboards directly infringe claim 7 of the '155 Patent. They include a decorative lamp on the bottom cover. *See* Exs. A-1 and A-2.
- 81. The Type 1 Hoverboards directly infringe claim 11 of the '155 Patent. They include a charging interface on the bottom cover. *See* Exs. A-1 and A-2.
- 82. The Type 1 Hoverboards directly infringe claim 16 of the '155 Patent. They include a top and bottom cover made of plastic and an aluminum alloy inner cover. *See* Exs. A-1 and A-2.
- As a result of Defendants' infringement of the '155 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.
- 84. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '155 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT II INFRINGEMENT OF U.S. PATENT NO. 9,452,802

85. Defendants directly or through intermediaries, make, use, import, offer to sell, and/or sell electric balance vehicles which infringe the '802 Patent, shown in Exhibits B-1 and B-2.

- 86. Upon information and belief, Defendants have been and are now infringing claims 1, 3, 4, 5, 9, and 14 of the '802 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, *i.e.*, the Type 1 Hoverboards, covered by one or more claims of the '802 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '802 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '802 Patent pursuant to 35 U.S.C. § 271(a).
- The Type 1 Hoverboards directly infringe claim 1 of the '802 Patent. For example 87. they are electric balance vehicles, comprising: a top cover comprising a first top cover and a second top cover disposed symmetrically and rotatable relative to each other; a bottom cover fixed to the top cover, the bottom cover comprising a first bottom cover and a second bottom cover disposed symmetrically and rotatable relative to each other; an inner cover fixed between the top cover and the bottom cover, the inner cover comprising a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other; a rotating mechanism fixed between the first inner cover and the second inner cover, the rotating mechanism having two bearings, a shaft sleeve, and two snap springs, the two bearings fixed to the first inner cover and the second inner cover, respectively, and the shaft sleeve fixed inside the two bearings and fixed to the inner cover via the two snap springs; two wheels rotatably fixed at two sides of the inner cover, respectively; two hub motors fixed in the two wheels, respectively; a plurality of sensors disposed between the bottom cover and the inner cover; a power supply fixed between the first bottom cover and the first inner cover; a controller fixed between the second bottom cover and the second inner cover, wherein the controller is electrically connected with the plurality of sensors, the power supply, and the hub motors, and the controller controls the hub motors to drive the corresponding wheels to rotate

according to sensing signals transmitted by the sensors; and two pedals, wherein the pedals are fixed to the top cover and the inner cover. *See* Exs. B-1 and B-2.

- 88. The Type 1 Hoverboards directly infringe claim 3 of the '802 Patent. They include hollow spaces on the first and second top covers and the first and second inner covers have recesses corresponding to the hollow spaces which form a cavity for the pedals. *See* Exs. B-1 and B-2.
- 89. The Type 1 Hoverboards directly infringe claim 4 of the '802 Patent. They include an inner cover with a cylindrical barrel, and the bearings and the shaft sleeve are installed in the barrel via the snap springs. *See* Exs. B-1 and B-2.
- 90. The Type 1 Hoverboards directly infringe claim 5 of the '802 Patent. They include a decorative lamp on the bottom cover. *See* Exs. B-1 and B-2.
- 91. The Type 1 Hoverboards directly infringe claim 9 of the '802 Patent. They include a charging interface on the bottom cover. *See* Exs. B-1 and B-2.
- 92. The Type 1 Hoverboards directly infringe claim 14 of the '802 Patent. They include a top and bottom cover made of plastic and an aluminum alloy inner cover. *See* Exs. B-1 and B-2.
- 93. As a result of Defendants' infringement of the '802 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.
- 94. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '802 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT IIIINFRINGEMENT OF U.S. PATENT NO. 10,696,347

- 95. Defendants directly or through intermediaries, make, use, import, offer to sell, and/or sell electric balance vehicles which infringe the '347 Patent, shown in Exhibits C-1 and C-2.
- 96. Upon information and belief, Defendants have been and are now infringing claims 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, and 17 of the '347 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, *i.e.*, the Type 1 Hoverboards, covered by one or more claims of the '347 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '347 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '347 Patent pursuant to 35 U.S.C. § 271(a).
- 97. The Type 1 Hoverboards directly infringe claim 1 of the '347 Patent. For example they are electric balance vehicles comprising: a housing having a first side rotatable relative to a second side; a support structure mounted within the housing, the support structure comprising a plurality of structural components, wherein at least a first one of the plurality of structural components is coupled to the first side and at least a second one of the plurality of structural components is coupled to the second side; a first pedal disposed on the first side of the housing and a second pedal disposed on the second side of the housing; a rotating mechanism coupled with the support structure and configured to allow the first one of the plurality of structural components to rotate relative to the second one of the plurality of structural components; a limiting shaft disposed within the housing to limit rotation of the first side relative to the second side; a first wheel attached to a first end of the support structure and a second wheel attached to a second end

of the support structure; a first motor mounted in the first wheel and a second motor mounted in the second wheel; a plurality of sensors; a power supply mounted within the housing; and at least one controller mounted within the housing and electrically connected with the plurality of sensors, the power supply, the first motor and the second motor, and wherein the at least one controller is configured to control the first motor and the second motor, respectively, to drive the first wheel and the second wheel, respectively, to rotate according to one or more signals from the plurality of sensors. *See* Exs. C-1 and C-2.

- 98. The Type 1 Hoverboards directly infringe claim 5 of the '347 Patent. They meet the limitations of claim 1 and further, wherein the power supply is disposed in the first side of the housing and the at least one controller is disposed in the second side of the housing. *See* Exs. C-1 and C-2.
- 99. The Type 1 Hoverboards directly infringe claim 6 of the '347 Patent. They meet the limitations of claim 1, and further, wherein the plurality of sensors, the power supply, and the at least one controller are disposed between a bottom cover and the first and second pedals. *See* Exs. C-1 and C-2.
- 100. The Type 1 Hoverboards directly infringe claim 7 of the '347 Patent. They meet the limitations of claim 1, and further, wherein the first one of the plurality of structural components coupled to the first side comprises a cylindrical barrel. *See* Exs. C-1 and C-2.
- 101. The Type 1 Hoverboards directly infringe claim 8 of the '347 Patent. They meet the limitations of claim 7, and further, wherein the rotating mechanism further comprises a bearing disposed inside the cylindrical barrel. *See* Exs. C-1 and C-2.

- 102. The Type 1 Hoverboards directly infringe claim 9 of the '347 Patent. They meet the limitations of claim 8, and further, wherein the rotating mechanism further comprises a shaft sleeve disposed inside the cylindrical barrel and the bearing. *See* Exs. C-1 and C-2.
- The Type 1 Hoverboards directly infringe claim 10 of the '347 Patent. They are an 103. electric balance vehicle, comprising: a housing having a first side rotatable relative to a second side; a support structure mounted within the housing, the support structure comprising a plurality of structural components, wherein at least a first one of the plurality of structural components is coupled to the first side and has a first cylindrical barrel portion, and at least a second one of the plurality of structural components is coupled to the second side; a first pedal disposed on the first side of the housing and a second pedal disposed on the second side of the housing; a rotating mechanism disposed within the first cylindrical barrel portion and configured to allow the first one of the plurality of structural components to rotate relative to the second one of the plurality of structural components; a limiting shaft disposed within the housing to limit rotation of the first side relative to the second side; a first wheel attached to a first end of the support structure and a second wheel attached to a second end of the support structure; a first motor mounted in the first wheel and a second motor mounted in the second wheel; a plurality of sensors; a power supply mounted within the housing; and at least one controller mounted within the housing and electrically connected with the plurality of sensors, the power supply and the first motor, and wherein the at least one controller is configured to control the first motor to drive the first wheel to rotate according to one or more signals from the plurality of sensors. See Exs. C-1 and C-2.
- 104. The Type 1 Hoverboards directly infringe claim 11 of the '347 Patent. They meet the limitations of claim 10 and further includes a power supply disposed in the first side of the

housing and the at least one controller is disposed in the second side of the housing. *See* Exs. C-1 and C-2.

- 105. The Type 1 Hoverboards directly infringe claim 12 of the '347 Patent. They meet the limitations of claim 10 and further, wherein the plurality of sensors, the power supply, and the at least one controller are disposed between a bottom cover and the first and second pedals. *See* Exs. C-1 and C-2.
- 106. The Type 1 Hoverboards directly infringe claim 13 of the '347 Patent. They meet the limitations of claim 10, and meets the limitations of claim 10, and further, includes a rotatable mechanism with a shaft sleeve and a bearing. *See* Exs. C-1 and C-2.
- 107. The Type 1 Hoverboards directly infringe claim 15 of the '347 Patent. They are an electric balance vehicle, comprising: a housing having a first side rotatable relative to a second side; a support structure mounted within the housing, the support structure comprising a plurality of structural components, wherein at least a first one of the plurality of structural components is coupled to the first side and has a first cylindrical barrel portion, and at least a second one of the plurality of structural components is coupled to the second side and has a second cylindrical barrel portion; a first pedal disposed on the first side of the housing and a second pedal disposed on the second side of the housing; a rotating mechanism disposed within the first cylindrical barrel portion and configured to allow the first one of the plurality of structural components to rotate relative to the second one of the plurality of structural components, the rotating mechanism comprising a bearing and a shaft sleeve; a limiting shaft disposed within the housing to limit rotation of the first side relative to the second side; a first wheel attached to a first end of the support structure; a first motor

mounted in the first wheel and a second motor mounted in the second wheel; a plurality of sensors; and a power supply mounted within the housing. *See* Exs. C-1 and C-2.

108. The Type 1 Hoverboards directly infringe claim 16 of the '347 Patent. They meet the limitations of claim 15 and further includes a controller mounted within the housing and electrically connected with the plurality of sensors, the power supply, and the first motor, and wherein the controller is configured to control the first motor to drive the first wheel to rotate according to one or more signals from the plurality of sensors.. *See* Exs. C-1 and C-2.

109. The Type 1 Hoverboards directly infringe claim 17 of the '347 Patent. They meet the limitations of claim 16 and further includes a power supply disposed in the first side of the housing and the at least one controller is disposed in the second side of the housing. *See* Exs. C-1 and C-2.

110. As a result of Defendants' infringement of the '347 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.

111. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '347 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT IV INFRINGEMENT OF U.S. PATENT NO. 10,696,348

- 112. Defendants directly or through intermediaries, make, use, import, offer to sell, and/or sell electric balance vehicles which infringe the '348 Patent, shown in Exhibits D-1, D-2, and D-3.
- 113. Upon information and belief, Defendants have been and are now infringing claims 1, 4, 5, 6, 7, 8, 10, 11, 12, 13, 16, 17, 18, 21 of the '348 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, *i.e.*, the Accused Instrumentalities, covered by one or more claims of the '348 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '348 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '348 Patent pursuant to 35 U.S.C. § 271(a).
- are electric balance vehicles comprising: a first platform; a second platform; a bottom cover comprising a first bottom cover removably connected to the first platform and a second bottom cover removably connected to the second platform, wherein the first platform and the second platform are made of a first material, and wherein the first bottom cover and the second bottom cover are made of a second material that differs in strength from the first material; a rotation mechanism disposed between the first platform and the second platform, wherein the rotation mechanism allows the first platform and the first bottom cover to rotate relative to the second platform and the second bottom cover; a first wheel rotatably fixed at a first end of the first platform and a second wheel rotatably fixed at a second end of the second platform, wherein the first end and the second end are at opposites ends of the electric balance vehicle; a first motor mounted within the first wheel and configured to drive the first wheel; a second motor mounted within the

second wheel and configured to drive the second wheel; a plurality of sensors; a power supply disposed between the bottom cover and one of the first platform or the second platform; at least one controller electrically coupled to the first motor, the second motor, the plurality of sensors, and the power supply and configured to control the first motor and the second motor, respectively, to drive the first wheel and the second wheel, respectively, using power from the power supply and based on signals from the plurality of sensors; and a limiting mechanism configured to limit an overlarge relative rotation angle between the first platform and the second platform, wherein the limiting mechanism is disposed between the first platform and the second platform. *See* Exs. D-1, D-2, and D-3.

- 115. The Accused Instrumentalities directly infringe claim 4 of the '348 Patent. They meet the limitations of claim 1, and further, wherein the plurality of sensors, the power supply, and the at least one controller are disposed between the bottom cover and the first and second platforms. *See* Exs. D-1, D-2, and D-3.
- 116. The Accused Instrumentalities directly infringe claim 5 of the '348 Patent. They meet the limitations of claim 1, and further, wherein the rotating mechanism further comprises a bearing and a shaft sleeve. *See* Exs. D-1, D-2, and D-3.
- 117. The Accused Instrumentalities directly infringe claim 6 of the '348 Patent. They meet the limitations of claim 5, and further, wherein the bearing and shaft sleeve are disposed inside a cylindrical barrel. *See* Exs. D-1, D-2, and D-3.
- 118. The Accused Instrumentalities directly infringe claim 7 of the '348 Patent. They meet the limitations of claim 1, and further, wherein the limiting mechanism comprises a shaft. *See* Exs. D-1, D-2, and D-3.

- 119. The Accused Instrumentalities directly infringe claim 8 of the '348 Patent. They are electric balance vehicles comprising: a first part comprising a first platform and a first bottom cover removably coupled to the first platform; a second part comprising a second platform and a second bottom cover removably coupled to the second platform; a rotation mechanism disposed between the first part and the second part and configured to allow the first part and the second part to rotate relative to each other; a first wheel rotatably fixed at a first end of the first part and a second wheel rotatably fixed at a second end of the second part, wherein the first end and the second end are at opposites ends of the electric balance vehicle; a first motor mounted within the first wheel and configured to drive the first wheel; a second motor mounted within the second wheel and configured to drive the second wheel; a plurality of sensors; a power supply disposed therein; at least one controller electrically coupled to the first motor, the plurality of sensors, and the power supply and configured to control the first motor to drive the first wheel using power from the power supply and based on one or more signals from the plurality of sensors; and a limiting mechanism disposed between the first part and the second part and configured to limit an overlarge relative rotation angle between the first part and the second part. See Exs. D-1, D-2, and D-3.
- 120. The Accused Instrumentalities directly infringe claim 10 of the '348 Patent. They meet the limitations of claim 8, and further, wherein the rotating mechanism further comprises a bearing and a shaft sleeve. *See* Exs. D-1, D-2, and D-3.
- 121. The Accused Instrumentalities directly infringe claim 11 of the '348 Patent. They meet the limitations of claim 10, and further, wherein the bearing and shaft sleeve are disposed inside a cylindrical barrel. *See* Exs. D-1, D-2, and D-3.

- 122. The Accused Instrumentalities directly infringe claim 12 of the '348 Patent. They meet the limitations of claim 8, and further, wherein the limiting mechanism comprises a shaft. *See* Exs. D-1, D-2, and D-3.
- 123. The Accused Instrumentalities directly infringe claim 13 of the '348 Patent. They meet the limitations of claim 8, and further, wherein the first platform and the second platform are made of a first material, and wherein the first bottom cover and the second bottom cover are made of a second material that differs in strength from the first material. *See* Exs. D-1, D-2, and D-3.
- are an electric balance vehicle comprising: a first part comprising a first platform and a first bottom cover removably coupled to the first platform; a second part comprising a second platform and a second bottom cover removably coupled to the second platform; a rotation mechanism disposed between the first part and the second part and configured to allow the first part and the second part to rotate relative to each other, the rotation mechanism comprising a bearing and a shaft sleeve; a first wheel rotatably fixed at a first end of the first part and a second wheel rotatably fixed at a second end of the second part, wherein the first end and the second end are at opposites ends of the electric balance vehicle; a first motor mounted within the first wheel and configured to drive the first wheel; a second motor mounted within the second wheel and configured to drive the second wheel; a plurality of sensors; a power supply disposed therein; and a limiting mechanism disposed between the first part and the second part and configured to limit an overlarge relative rotation angle between the first part and the second part. See Exs. D-1, D-2, and D-3.
- 125. The Accused Instrumentalities directly infringe claim 17 of the '348 Patent. They meet the limitations of claim 16, and further comprise: a controller electrically connected with the plurality of sensors, the power supply and the first motor, and wherein the controller is configured

to control the first motor to drive the first wheel to rotate according to one or more signals from the plurality of sensors. *See* Exs. D-1, D-2, and D-3.

- 126. The Accused Instrumentalities directly infringe claim 18 of the '348 Patent. They meet the limitations of claim 16 and further, wherein the controller is further electrically connected with the second motor and configured to control the second motor to drive the second wheel to rotate according to one or more signals from the plurality of sensors. *See* Exs. D-1, D-2, and D-3.
- 127. The Accused Instrumentalities directly infringe claim 21 of the '348 Patent. They meet the limitations of claim 16, and further, wherein the limiting mechanism comprises a limiting shaft. *See* Exs. D-1, D-2, and D-3.
- 128. As a result of Defendants' infringement of the '348 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.
- 129. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '348 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT V INFRINGEMENT OF U.S. PATENT NO. 10,486,764

130. Defendants directly or through intermediaries, make, use, import, offer to sell, and/or sell electric balance vehicles which infringe the '764 Patent, shown in Exhibits E-1, E-2, and E-3.

- 131. Upon information and belief, Defendants have been and are now infringing claims 1, 2, 3, 4, 5, 8, 9, 10, 15, 16, 17, 19, 21 of the '764 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, i.e., the Accused Instrumentalities, covered by one or more claims of the '764 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '764 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '764 Patent pursuant to 35 U.S.C. § 271(a).
- are electric balance vehicles comprising: a first platform; a second platform; a rotation mechanism disposed between the first platform and connecting the second platform, allowing the first platform and the second platform to rotate relative to each other; two wheels rotatably fixed at two opposite sides of the first platform and the second platform, respectively; two motors configured to drive the two wheels, respectively; a plurality of sensors; a power supply; a controller electrically connected with the plurality of sensors, the power supply, and the two motors; wherein the controller is configured to control the two motors to drive the two wheels using power from the power supply and based on signals from the plurality of sensors; and a limiting mechanism configured to limit an overlarge relative rotation angle between the first platform and the second platform; wherein the limiting mechanism is disposed between the first platform and the second platform. *See* Exs. E-1, E-2, and E-3.
- 133. The Type 1 Hoverboards directly infringe claim 2 of the '764 Patent. They meet the limitations of claim 1, and further, wherein the first platform comprises a first inner cover and a first bottom cover; the second platform comprises a second inner cover and a second bottom

cover; wherein the first inner cover and the second inner cover are disposed symmetrically and rotatable relative to each other. *See* Ex. E-1 and E-3.

- 134. The Type 1 Hoverboards directly infringe claim 3 of the '764 Patent. They meet the limitations of claim 2, and further, wherein the power supply is disposed between the first inner cover and the first bottom cover, and the controller is disposed between the second inner cover and the second bottom cover. *See* Ex. E-1 and E-3.
- 135. The Type 1 Hoverboards directly infringe claim 4 of the '764 Patent. They meet the limitations of claim 2, and further, wherein the first inner cover and the second inner cover are made of a first material, the first bottom cover and the second bottom cover are made of a second material, wherein first material has a higher strength than the second material. *See* Ex. E-1 and E-3.
- 136. The Type 1 Hoverboards directly infringe claim 5 of the '764 Patent. They meet the limitations of claim 4, and further, wherein the first material is aluminum alloy, and the second material is plastic. *See* Ex. E-1 and E-3.
- 137. The Type 1 Hoverboards directly infringe claim 8 of the '764 Patent. They meet the limitations of claim 2, and further, wherein the first inner cover and the second inner cover each includes an inner end, and the rotating mechanism comprises a shaft sleeve installed in at least one of the inner ends. *See* Ex. E-1 and E-3.
- 138. The Type 1 Hoverboards directly infringe claim 9 of the '764 Patent. They meet the limitations of claim 8, and further, wherein the at least one of inner ends of the first inner cover and the second inner cover comprises a cylindrical barrel, and the shaft sleeve is installed in the cylindrical barrel, wherein the rotating mechanism comprises a bearing installed in the cylindrical barrel, and the shaft sleeve is installed in the bearing. *See* Ex. E-1 and E-3.

- 139. The Type 1 Hoverboards directly infringe claim 10 of the '764 Patent. They meet the limitations of claim 8, and further, wherein the inner ends of the first inner cover and the second inner cover comprise cylindrical barrels, the rotating mechanism comprises two bearings, and the two bearings and the shaft sleeve are installed in the cylindrical barrels. *See* Ex. E-1 and E-3.
- 140. The Accused Instrumentalities directly infringe claim 15 of the '764 Patent. They meet the limitations of claim 1, and further, wherein the first platform comprises a first top cover and a first bottom cover; the second platform comprises a second top cover and a second bottom cover; wherein the first top cover and the second top cover are disposed symmetrically and rotatable relative to each other. *See* Ex. E-1 and E-3.
- 141. The Accused Instrumentalities directly infringe claim 16 of the '764 Patent. They meet the limitations of claim 15, and further, wherein the first top cover and the first bottom cover are made of a same material, and the second top cover and second bottom cover are made of a same material. *See* Exs. E-1, E-2, and E-3.
- 142. The Accused Instrumentalities directly infringe claim 17 of the '764 Patent. They meet the limitations of claim 15, and further, wherein the rotating mechanism comprises a shaft sleeve and two bearings, and the shaft sleeve is disposed inside the two bearings, which are fixed to the first platform and the second platform, respectively. *See* Exs. E-1, E-2, and E-3.
- 143. The Accused Instrumentalities directly infringe claim 19 of the '764 Patent. They meet the limitations of claim 1, and further comprise two pedals fixed to the first platform and the second platform, respectively. *See* Exs. E-1, E-2, and E-3.
- 144. The Accused Instrumentalities directly infringe claim 21 of the '764 Patent. They meet the limitations of claim 15, and further comprise two pedals fixed to the first top cover and the second top cover correspondingly. *See* Exs. E-1, E-2, and E-3.

- 145. As a result of Defendants' infringement of the '764 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.
- 146. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '764 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT VI INFRINGEMENT OF U.S. PATENT NO. 10,597,107

- 147. Defendants directly or through intermediaries, make, use, import, offer to sell, and/or sell electric balance vehicles which infringe the '107 Patent, shown in Exhibits F-1 and F-2.
- 148. Upon information and belief, Defendants have been and are now infringing claims 1, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 22, 23, 25 of the '107 Patent in the State of Illinois, in this judicial district, and elsewhere in the United States, by, among other things, directly or through intermediaries, making, using, selling, offering to sell, and/or importing electric balance vehicles, i.e., the Type 1 Hoverboards, covered by one or more claims of the '107 Patent to the injury of Plaintiffs. Defendants are directly infringing, literally infringing, and/or infringing the '107 Patent under the doctrine of equivalents. Defendants are thus liable for direct infringement of the '107 Patent pursuant to 35 U.S.C. § 271(a).
- 149. The Type 1 Hoverboards directly infringe claim 1 of the '107 Patent. They are electric balance vehicles comprising: a top cover; a bottom cover; an inner cover fixed between

the top cover and the bottom cover, the inner cover comprising a first inner cover and a second inner cover rotatable relative to each other; a rotating mechanism fixed between the first inner cover and the second inner cover; two wheels rotatably fixed at two sides of the inner cover, each wheel comprising a hub motor fixed in the wheel; a plurality of sensors; a power supply; and a controller electrically connected with the plurality of sensors, the power supply, and the hub motors, wherein the controller is configured to control the hub motors to drive the two wheels to rotate according to signals from the plurality of sensors. *See* Exs. F-1 and F-2.

- 150. The Type 1 Hoverboards directly infringe claim 5 of the '107 Patent. They meet the limitations of claim 1, and further, wherein the bottom cover is coupled to the top cover. *See* Exs. F-1 and F-2.
- 151. The Type 1 Hoverboards directly infringe claim 7 of the '107 Patent. They meet the limitations of claim 1, and further, wherein the plurality of sensors, the power supply, and the controller are disposed between the bottom cover and the inner cover. *See* Exs. F-1 and F-2.
- 152. The Type 1 Hoverboards directly infringe claim 8 of the '107 Patent. They electric balance vehicles comprising: a top cover; a bottom cover; an inner cover positioned between the top cover and the bottom cover, the inner cover comprising a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other, the inner cover comprising a left edge and a right edge; a rotating mechanism disposed between the first inner cover and the second inner cover and comprising a shaft sleeve installed in inner ends of the first inner cover and the second inner cover, the first inner cover and the second inner cover capable of rotating relative to each other through the rotating mechanism; and wheels rotatably fixed to the left edge and the right edge, respectively. *See* Exs. F-1 and F-2.

- 153. The Type 1 Hoverboards directly infringe claim 9 of the '107 Patent. They meet the limitations of claim 8, and further, wherein the rotating mechanism comprises two bearings disposed in the inner ends of the first inner cover and the second inner cover, respectively; and the shaft sleeve is disposed inside the two bearings. *See* Exs. F-1 and F-2.
- 154. The Type 1 Hoverboards directly infringe claim 10 of the '107 Patent. They are electric balance vehicles comprising: an inner cover comprising a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other; wheels rotatably fixed at two opposite sides of the inner cover, respectively; motors configured to drive the wheels, respectively; a plurality of sensors comprising at least one gyroscope; a power supply; and a controller electrically connected with the plurality of sensors, the power supply, and the motors, wherein the controller controls the motors to drive the wheels to rotate in response to signals received from the sensors. *See* Exs. F-1 and F-2.
- 155. The Type 1 Hoverboards directly infringe claim 11 of the '107 Patent. They meet the limitations of claim 10, and further include a top cover and a bottom cover, wherein the inner cover is disposed between the top cover and the bottom cover, the top cover comprises a first top cover and a second top cover disposed symmetrically and rotatable relative to each other, and the bottom cover comprises a first bottom cover and a second bottom cover disposed symmetrically and rotatable relative to each other. *See* Exs. F-1 and F-2.
- 156. The Type 1 Hoverboards directly infringe claim 12 of the '107 Patent. They meet the limitations of claim 10, and further, wherein the motors are hub motors fixed in the wheels.
- 157. The Type 1 Hoverboards directly infringe claim 13 of the '107 Patent. They meet the limitations of claim 12, and further, wherein the vehicle comprises only two wheels and two hub motors. *See* Exs. F-1 and F-2.

- 158. The Type 1 Hoverboards directly infringe claim 14 of the '107 Patent. They meet the limitations of claim 10, and further include a rotating mechanism, wherein the first inner cover and the second inner cover are capable of rotating relative to each other through the rotating mechanism. *See* Exs. F-1 and F-2.
- 159. The Type 1 Hoverboards directly infringe claim 15 of the '107 Patent. They meet the limitations of claim 14, and further, wherein the rotating mechanism comprises a shaft sleeve installed in at least one of inner ends of the first inner cover and the second inner cover. *See* Exs. F-1 and F-2.
- 160. The Type 1 Hoverboards directly infringe claim 16 of the '107 Patent. They meet the limitations of claim 15, and further, wherein the at least one of inner ends of the first inner cover and the second inner cover comprises a cylindrical barrel, and the shaft sleeve is installed in the cylindrical barrel. *See* Exs. F-1 and F-2.
- 161. The Type 1 Hoverboards directly infringe claim 17 of the '107 Patent. They meet the limitations of claim 16, and further, wherein the rotating mechanism comprises a bearing installed in the cylindrical barrel, and the shaft sleeve is installed in the bearing. *See* Exs. F-1 and F-2.
- 162. The Type 1 Hoverboards directly infringe claim 18 of the '107 Patent. They meet the limitations of claim 15, and further, wherein the inner ends of the first inner cover and the second inner cover comprise cylindrical barrels, the rotating mechanism comprises two bearings, and the two bearings and the shaft sleeve are installed in the cylindrical barrels. *See* Exs. F-1 and F-2.
- 163. The Type 1 Hoverboards directly infringe claim 22 of the '107 Patent. They meet the limitations of claim 10, and further include two pedals, wherein the first inner cover and the

second inner cover have recesses, respectively; and the two pedals are disposed in the recesses, respectively. *See* Exs. F-1 and F-2.

- 164. The Type 1 Hoverboards directly infringe claim 23 of the '107 Patent. They meet the limitations of claim 22, and further include a top cover, wherein the top cover comprises a first top cover and a second top cover disposed symmetrically and rotatable relative to each other, the first top cover and the second top cover have hollow spaces, respectively; the recesses are at positions corresponding to the hollow spaces, respectively; and the hollow spaces are combined with the recesses to form pedal cavities for containing the pedals. *See* Exs. F-1 and F-2.
- 165. The Type 1 Hoverboards directly infringe claim 25 of the '107 Patent. They are electric balance vehicles comprising: a top cover; a bottom cover; an inner cover positioned between the top cover and the bottom cover, the inner cover comprising a first inner cover and a second inner cover disposed symmetrically and rotatable relative to each other, the inner cover extending from a first outer edge to a second outer edge; a rotating mechanism disposed between the first inner cover and the second inner cover and comprising a shaft sleeve installed in a first cylindrical barrel at a first inner end of the first inner cover and installed in a second cylindrical barrel at a second inner end of the second inner cover, wherein the first inner cover and the second inner cover capable of rotating relative to each other through the rotating mechanism; a first wheel rotatably fixed at the first outer edge of the inner cover, the first wheel comprising a first hub motor; a second wheel rotatable fixed at the second outer edge of the inner cover, the second wheel comprising a second hub motor; a power supply disposed between the top cover and the bottom cover for providing power to the first hub motor and the second hub motor; a plurality of sensors disposed between the top cover and the bottom cover, the plurality of sensors comprising a gyroscope and an acceleration sensor; and a controller electrically connected with the plurality of

sensors, the power supply, and the first and second hub motors, the controller configured for controlling the first and second hub motors to drive the first and second wheels to rotate in response to signals received from the sensors. *See* Exs. F-1 and F-2.

- 166. As a result of Defendants' infringement of the '107 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the court, and Plaintiffs will continue to suffer damages in the future unless Defendants' infringing activities are enjoined by this Court.
- 167. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting on in active concert therewith from infringing the '107 Patent, Plaintiffs will be greatly and irreparably harmed.

COUNT VII WILLFUL INFRINGEMENT

- 168. Defendants have willfully infringed the Patents-in-Suit in connection with the Accused Instrumentalities.
- 169. Defendants' conduct in making, using, selling, offering to sell and/or importing the Accused Instrumentalities directly infringes multiple claims of the Patents-in-Suit pursuant to 35 U.S.C. § 271(a).
- 170. Defendants had knowledge of the Patents-in-Suit and of the fact that the Accused Instrumentalities were made or adapted for use in infringement of the Patents-in-Suit.
- 171. Defendants had knowledge of the Patents-in-Suit prior to this lawsuit. Defendants failed to provide any material, description, reasoning, or evidence of non-infringement or invalidity of the Patents-in-Suit. Defendants continued making, using, selling, offering to sell

and/or importing the Accused Instrumentalities within the United States regardless of its knowledge of infringement. Accordingly, Defendants' infringement is and has been willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, and fragrant. Thus, Plaintiffs sue for willful infringement of the Patents-in-Suit.

172. As a result of Defendants' willful infringement of the Patents-in-Suit, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount three times the compensatory damages, in accordance with 35 U.S.C. § 284.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully requests that this Court enter:

- 1. a judgment in favor of Plaintiffs that Defendants have infringed the Patents-in-Suit;
- 2. a permanent injunction enjoining Defendants and their officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith from infringement, inducing the infringement of, or contributing to the infringement of the Patents-in-Suit, or such other equitable relief the Court determines is warranted;
- 3. a judgment and order requiring Defendants pay to Plaintiffs their damages, costs, expenses, and prejudgment and post-judgment interest for Defendants' infringement of the Patents-in-Suit as provided under 35 U.S.C. § 284, and an accounting of ongoing post-judgment infringement;
- 4. a judgment that Defendants' infringement was willful and ordering Defendants to pay Plaintiffs increased damages of three times the compensatory damages, in accordance with 35 U.S.C. § 284; and

5. any and all other relief, at law or equity, to which Plaintiffs may show themselves to be entitled.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

DATED October 14, 2020. Respectfully submitted,

/s/ Timothy T. Wang

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