

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NEW YORK**

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

Plaintiffs,

v.

DGL GROUP, LTD.,

Defendants.

Civil Action No. 1:21-cv-1443

JURY TRIAL DEMANDED

PLAINTIFFS' ORIGINAL 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 DGL Group, Ltd. ("Defendant") of infringing U.S. Patent No. 10,597,107 (the "'107 Patent"), alleging as follows:

PARTIES

1. 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.

2. 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 authorized patents for its hoverboard technology and design in different regions such as China, the United States, the European Union, and Canada.

3. Unicorn is a California corporation with its place of business located at 820 S Wanamaker Ave Ontario, CA 91761. Unicorn has enforcement rights for the '107 Patent under a written Patent License Agreement dated October 16, 2018.

4. Defendant DGL Group, Ltd. is a New York company with its principal place of business at 195 Raritan Center Pkwy., Edison, NJ 08837. Upon information and belief, Defendant can be served with process at 195 Raritan Center Pkwy., Edison, NJ 08837.

JURISDICTION AND VENUE

5. This is an action for infringement of the '107 Patent arising under 35 U.S.C. § 271(a), 281, and 284-85. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this District under 28 U.S.C. § 1400(b). Defendant is a resident of the forum state by virtue of its incorporation under the laws of the forum state and has committed acts of infringement within the forum state.

7. Defendant is subject to this Court's specific and general personal jurisdiction under due process and/or the New York Long Arm Statute due at least to Defendant's substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in New York and in this District; (iii) and by virtue of its incorporation under the laws of the forum state.

U.S. PATENT NO. 10,597,107

8. On March 24, 2020, United States Patent No. 10,597,107, 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 A.

9. Jiawei Ying and Shaojun Cao are the inventors of the '107 Patent.

10. Chic is the owner of all right, title, and interest in and to the '107 Patent, and collectively, Plaintiffs have the exclusive rights to enforce the '107 Patent, to file actions based on infringement of the '107 Patent, to recover damages or other monetary amounts for infringement of the '107 Patent, and to obtain injunctive relief pertaining to the '107 Patent.

11. Chic has owned the '107 Patent at all times during Defendant's infringement of the '107 Patent.

12. Upon information and belief, to the extent any marking was required by 35 U.S.C. § 287, Plaintiffs have complied with such requirements.

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

13. Defendant, directly or through intermediaries, makes, uses, imports, offers to sell, and/or sells electric balance vehicles commonly referred to as "hoverboards," which infringe the '107 Patent, shown in Exhibit A-1.

14. Upon information and belief, Defendant has been and is now infringing claims 1, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, and 25 of the '107 Patent in the State of New York, 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, *e.g.*, the Hover-1 Ultra, Hover Hoverboard, Hover-1 Helix, Hover-1 Titan, Hover-1 Chrome, Hover-1 Chrome 2.0, Hover-1 Eclipse, Hover-1 Matrix, Hover-1 Horizon, Hover-1 H1, Hover-1 Ultra, Hover-1 Freedom, Hover-1 Nomad, Hover-1 Beast, and Hover-1 X10 products (collectively, the "Accused Products"), covered by one or more claims of the '107 Patent to the injury of Plaintiffs. Defendant is directly infringing, literally infringing, and/or infringing the '107 Patent under the doctrine of equivalents. Defendant is thus liable for direct infringement of the '107 Patent pursuant to 35 U.S.C. § 271(a).

15. The Accused Products 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* Ex. A-1.

16. The Accused Products directly infringe claim 6 of the '107 Patent. They meet the limitations of claim 1, and further, wherein the power supply and the controller are disposed at a side of the inner cover, and the side is adjacent to the bottom cover. *See* Ex. A-1.

17. The Accused Products 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* Ex. A-1.

18. The Accused Products directly infringe claim 8 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 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* Ex. A-1.

19. The Accused Products 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* Ex. A-1.

20. The Accused Products 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* Ex. A-1.

21. The Accused Products 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. *See* Ex. A-1.

22. The Accused Products 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* Ex. A-1.

23. The Accused Products 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* Ex. A-1.

24. The Accused Products 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* Ex. A-1.

25. The Accused Products 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* Ex. A-1.

26. The Accused Products directly infringe claim 19 of the '107 Patent. They meet the limitations of claim 10, and further, wherein the plurality of sensors comprise an acceleration sensor, and an inductive switch; the inductive switch senses whether a user stands on the electric balance vehicle; and the controller receives signals from the inductive switch, the acceleration sensor, and the gyroscope to control the motors. *See* Ex. A-1.

27. The Accused Products directly infringe claim 20 of the '107 Patent. They meet the limitations of claim 10, and further, wherein the controller generates control signals to drive the hub motors when signal from an inductive switch indicates a user is on the vehicle, and wherein the controller does not generate control signals to drive the hub motors when signal from the inductive switch indicates no user is on the vehicle. *See* Ex. A-1.

28. The Accused Products directly infringe claim 21 of the '107 Patent. They meet the limitations of claim 20, and further, wherein the inductive switch is an infrared photoelectric sensor. *See* Ex. A-1.

29. The Accused Products 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* Ex. A-1.

30. Defendant's infringement of the '107 Patent is exceptional and entitles Plaintiffs' to attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

31. Plaintiffs are in compliance with any applicable marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '107 Patent.

32. As a result of Defendant's infringement of the '107 Patent, Plaintiffs have suffered monetary damages and are entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the court, and Plaintiffs will

continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

33. Unless a permanent injunction is issued enjoining Defendant and its 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.

DEMAND FOR JURY TRIAL

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

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court enter:

A. a judgment in favor of Plaintiffs that Defendant has infringed at least one or more claims of the '107 Patent, directly and/or indirectly, literally and/or under the doctrine of equivalents;

B. a permanent injunction enjoining Defendant and its 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 '107 Patent, or such other equitable relief that the Court determines is warranted;

C. a judgment and order requiring Defendant pay to Plaintiffs their damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the Patents-in-Suit as provided under 35 U.S.C. § 284, including an enhancement of damages on account of Defendant's willful infringement, and an accounting of ongoing post-judgment infringement;

D. that the case be found exceptional under 35 U.S.C. § 285 and that Plaintiffs be awarded their reasonable attorneys' fees;

E. such other and further relief as the Court may deem just and proper.

DATED: March 18, 2021

Respectfully submitted,

/s/ John H. Choi

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**ATTORNEYS FOR PLAINTIFFS
UNICORN GLOBAL, INC. AND
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TECHNOLOGY CO., LTD.**

CERTIFICATE OF SERVICE

I hereby certify that on the 18th day of March, 2021, I electronically filed the foregoing document with the clerk of the court for the U.S. District Court, Eastern District of New York, using the electronic case filing system of the court. The electronic case filing system sent a “Notice of Electronic Filing” to the attorneys of record who have consented in writing to accept this Notice as service of this document by electronic means.

/s/ John H. Choi
John H. Choi