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ANZA TECHNOLOGY, INC.

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA**

Anza Technology, Inc.,

Plaintiff,

v.

TRENDnet, Inc.,

Defendant.

Case No. 3:16-cv-01266-BEN-AGS

**FIRST AMENDED COMPLAINT
FOR PATENT INFRINGEMENT**

DEMAND FOR JURY TRIAL

Plaintiff Anza Technology, Inc. (“Anza” or “Plaintiff”), by and through its undersigned counsel, complains and alleges against Defendant TRENDnet, Inc. (“Trendnet” or “Defendant”) as follows:

NATURE OF THE ACTION

1. This is a civil action for infringement of a patent arising under the laws of the United States relating to patents, 35 U.S.C. § 101, *et seq.*, including, without limitation, 35 U.S.C. §§ 271, 281. Plaintiff Anza seeks a preliminary and permanent injunction and monetary damages for patent infringement.

JURISDICTION AND VENUE

2. This court has subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a) and pursuant to the patent laws of the United States of America, 35 U.S.C. § 101, *et seq.*

3. Venue properly lies within the Southern District of California pursuant to the provisions of 28 U.S.C. §§ 1391(b), (c), and (d) and 1400(b). On information and belief, Defendant conducts substantial business directly and/or through third parties or agents in this judicial district by selling and/or offering to sell the infringing products and/or by conducting other business in this judicial district. Furthermore, Plaintiff is informed and believes that Defendant engages in business in this district, and that Plaintiff has been harmed by Defendant's conduct, business transactions and sales in this district.

4. This Court has personal jurisdiction over Defendant because, on information and belief, Defendant is a California corporation and is headquartered and maintains an office at 20675 Manhattan Place, Torrance, California. Also, Plaintiff is informed and believes that Defendant transacts continuous and systematic retail business within the State of California and the Southern District of California. This Court has personal jurisdiction over the Defendant because Plaintiff is informed and believes that this Defendant's infringing activities, including, without limitation, the making, using, selling and/or offers for sale of infringing products occur in the State of California and the Southern District of California. In particular, Defendant sells its infringing product at local retail stores within the Southern District including but not limited to Frys and other local retail locations. Finally, this Court has personal jurisdiction over Defendant because, on information and belief, Defendant has made, used, sold and/or offered for sale its infringing products and placed such infringing products in the stream of interstate commerce with the expectation that such infringing products would be made, used, sold and/or offered for sale within the State of California and the Southern District

1 of California.

2 5. Upon information and belief, certain of the products manufactured by
3 or for Defendant have been and/or are currently designed and/or offered for sale by
4 Defendant through an in-house sales and marketing team operating in California.

5 PARTIES

6 6. Plaintiff Anza is a corporation organized and existing under the laws
7 of the State of California with an office and principal place of business at 4121
8 Citrus Avenue, Suite 4, Rocklin, California 95677. Anza is a designer,
9 manufacturer and seller of bonding tools; ESD tools and other products directed to
10 the manufacture and assembly of electronics, in particular the bonding of
11 electrostatic-sensitive devices.

12 7. Upon information and belief, Trendnet is a corporation organized and
13 existing under the laws of the State of California, with a principal place of business
14 at 20675 Manhattan Place, Torrance, California.

15 THE ACCUSED PRODUCTS

16 8. Defendant designs, manufactures, assembles and/or imports products
17 that depend on high density integrated circuit ("IC") chips that are manufactured
18 and mounted on printed circuit boards using a "flip chip" bonding process that
19 require special electrostatic discharge ("ESD") handling in the Accused Products'
20 assembly process. Defendants hereby allege that the Accused Products are
21 assembled using the methods of the claims of the asserted patents as set forth in
22 more detail below.

23 9. The Defendant's accused products for purposes of the asserted patents
24 include but are not limited to its router, modem, transmitter, receiver, and
25 transponder products and systems, and products and systems that incorporate same,
26 that utilize integrated circuit chips that were mounted on printed circuit boards
27 using a "flip chip" bonding process and sold under the "Trendnet" and "Cameo"
28 brands or as manufactured and sold under other brands (the "Accused Products").

1 These products include, but are not limited to the following products and/or
 2 product families: TEW-424UB; TEW-644UB; TEW-624UB; TEW-643PI; TEW-
 3 623PI; TEW-716BRG; TEW-429UB; TEW-USB; TEW-224UB; TEW-229UB;
 4 TEW-443UB; TEW-444UB; TEW-641PC; TEW-621PC; TEW-649UB; TEW-
 5 648UB; TEW-645UB; TEW-664UB; Cameo WLB-1500; TEW-421PC; TEW-
 6 423PI; TEW-820AP; TEW-221PC; TEW-648UBM; TEW-601PC; TEW-429UF;
 7 TEW-445UB; Cameo WLG-1100; Cameo WLB-200; Cameo WLG-1204; Cameo
 8 WLN-1205; Cameo WLN-1507; TEW-642EC; TEW-504UB; TEW-204UB;
 9 TEW-652BRP; TEW-687GA; TEW-401PCplus; TEW-501PC; TEW-503PI;
 10 TEW-301PC; TEW-684UB; TEW-509UB; TEW-692GR; WN8020A; WN8020B;
 11 Cameo WLN-1506; Cameo WLN-1503; Cameo WLN-1504; Cameo WLG-1104;
 12 Cameo WLG-1200; Cameo WLB-1403; Cameo WLB-1100; Cameo WLG-1502;
 13 Cameo WLN-1109; Cameo WLG-1101; Cameo WLG-1203; TEW-656BRG;
 14 TEW-452BRP; TEW-680MB; TEW-646UBH; TEW-603PI; TEW-611BRP;
 15 TEW-AP100; TPL-310AP; TEW-432BRP; TEW-639GR; Cameo WLN-1513;
 16 TEW-604UB; Cameo WLN-2219.

17 **THE ASSERTED PATENTS**

18 10. On October 24, 2006, the United States Patent and Trademark Office
 19 (“USPTO”) duly and legally issued United States Patent No. 7,124,927 B2 entitled
 20 “FLIP CHIP BONDING TOOL AND BALL PLACEMENT CAPILLARY” (“the
 21 ’927 patent”). Steven F. Reiber is the patent’s sole named inventor and Plaintiff is
 22 owner, by assignment, of the entire right, title and interest in and to the ’927 patent
 23 and vested with the right to bring this suit for damages and other relief. A true and
 24 correct copy of the ’927 patent is attached hereto as Exhibit “A.”

25 11. On June 24, 2008, the USPTO duly and legally issued United States
 26 Patent No. 7,389,905 B2 entitled “FLIP CHIP BONDING TOOL TIP” (“the ’905
 27 patent”). Steven F. Reiber is the patent’s sole named inventor and Plaintiff is
 28 owner, by assignment, of the entire right, title and interest in and to the ’905 patent

1 and vested with the right to bring this suit for damages and other relief. A true and
 2 correct copy of the '905 patent is attached hereto as Exhibit "B."

3 COUNT ONE

4 **INFRINGEMENT OF THE '927 PATENT BY DEFENDANT**

5 12. Plaintiff re-alleges and incorporates by reference each of the
 6 allegations set forth in paragraphs 1 through 11 above.

7 13. Plaintiff alleges that the Accused Products, alone or in combination
 8 with other products, directly or alternatively, under the doctrine of equivalents,
 9 infringe each of the limitations of independent claim 16 of the '927 patent in
 10 violation of 35 U.S.C. § 271(g) when Defendant imports into the United States or
 11 offers to sell, sells, or uses within the United States a product which is made by the
 12 processes described below.

13 14. Defendant designs, manufactures, assembles or imports products that
 14 depend on high density integrated circuit ("IC") chips that require the use of flip
 15 chip bonding techniques during manufacture and/or assembly. The ICs of the
 16 Accused Products that are bonded according to the claimed methods include one or
 17 more of the following brands: Atheros, Broadcom, Celeno, Conexant, CSR,
 18 Envara, Intersil, Lantiq, Marvell, MediaTek, Ralink, Realtek Texas Instruments,
 19 Quantenna and/or Wilocity. These ICs are highly sensitive to ESD events as
 20 evidenced by the charge load tolerance specifications promulgated by their
 21 manufacturers.

22 15. Generically speaking, flip chip microelectronic assembly is the direct
 23 electronic connection of facedown electronic components onto substrates, circuit
 24 boards, or carriers by means of conductive bumps on an IC's bond pads. ICs are
 25 handled in the course of manufacturing the Accused Products by tools and
 26 machines that pick them up and place them on surfaces where they are bonded so
 27 as to allow for the interconnection of circuits. The risk of an ESD event or
 28 discharge exists when an IC comes in contact with a tool or surface. The event or

1 discharge may damage the IC rendering the Accused Product unusable.

2 16. The susceptibility of an IC to damage from ESD events is well known
3 in the electronics industry, which has lead to the development of certain standards
4 and techniques to reduce the risk of damage from electrostatic discharges.
5 Standards and techniques have been developed by several standards setting
6 organizations to include, ANSI, JEDEC, the IEC and/or the ESDA (cumulatively,
7 “ESD Standards”). ANSI standards, for example, specify that manufacturing
8 techniques, involving ESD-Sensitive devices require tools that utilize dissipative
9 materials. Such materials have a resistance value between 1×10^4 and 1×10^{11}
10 ohms surface or volume resistance. JEDEC, IEC and ESDA require similar
11 resistance ranges. Each of the aforementioned industry standards thus requires the
12 use of manufacturing tools having approximately the same resistance values in
13 connection with handling ICs that are particularly sensitive to ESD events.

14 17. Failing to adhere to such standards could otherwise lead to ESD
15 events during the bonding process that could damage the ICs and render them
16 defective and/or unusable. Accordingly, Plaintiff is informed, believes and thereon
17 alleges that the Defendant designs, specifies and directs that the Accused Products
18 be made using methods that meet or exceeds such ESD Standards

19 18. Claim 16 teaches “providing a bonding machine capable of being
20 equipped with a flip chip bonding tool and ball placement capillary having a tip
21 comprised of a dissipative material, the dissipative material having a resistance low
22 enough to prevent a discharge of a charge to the device being bonded and high
23 enough to stop all current flow to the device being bonded” and “equipping the
24 bonding machine with the flip chip bonding tool.” The resistance values specified
25 by the aforementioned ESD Standards, *e.g.*, ANSI’s required 1×10^4 and 1×10^{11}
26 ohms surface or volume resistance and similar ranges specified by the other
27 standards organizations, are low enough to prevent a discharge of a charge to the
28 device being bonded and high enough to stop all current flow to the device being

1 bonded.” Accordingly, Plaintiff alleges that, in manufacturing the Accused
 2 Products consistent with such standards, the ICs of the Accused Products are
 3 bonded using bonding tools meeting the resistance range specified in claim 16 in
 4 order to reduce the risk of damage to the Accused Products’ ICs and surrounding
 5 circuitry.

6 19. Plaintiff is informed and believes and thereon alleges that the ICs used
 7 in Accused Products utilize a ball grid array(s) (“BGA”) or variations thereof for
 8 mounting the IC’s to a surface. A BGA mounting system provides for the surface
 9 mounting of an IC *via* an array of solder balls, applied using a ball placement
 10 capillary. The solder balls are “thermally and electrically conductive” as taught
 11 by claim 16 of the ’927 patent. Otherwise, the ICs would not affix to the board and
 12 would not pass electricity.

13 20. The solder balls in a BGA mounting system are also substantially
 14 spherical in shape as taught by claim 16 of the ’927 patent.

15 21. The IC is flipped so that the solder balls are face down with a tool that
 16 picks the IC up and places it at a predesigned location, pressing the substantially
 17 spherical-shaped bonding material such that it forms a conductive bump as taught
 18 by claim 16 of the ’927 patent.

19 22. Based on the foregoing, Anza alleges that Defendant directly infringes
 20 claim 16 of the ’927 patent under 35 U.S.C. § 271(g).

21 23. Defendant has, since at least the filing of the original complaint, had
 22 knowledge of infringement of the ’927 patent.

23 **COUNT TWO**

24 **INFRINGEMENT OF THE ’905 PATENT BY DEFENDANT**

25 24. Plaintiff re-alleges and incorporates by reference each of the
 26 allegations set forth in paragraphs 1 through 23 above.

27 25. The Accused Products, alone or in combination with other products,
 28 directly or alternatively under the doctrine of equivalents infringe each of the

1 limitations of independent claims 53 and 55 of the '905 patent in violation of 35
2 U.S.C. § 271(g) when Defendant imports into the United States or offers to sell,
3 sells, or uses within the United States a product which is made by the processes
4 described above.

5 26. Plaintiff is informed and believes and thereon alleges that Defendant
6 manufactures and assembles the Accused Products utilizing the methods described
7 by claim 53 and 55 of the '905 patent.

8 27. Claim 53 of the '905 patent is substantially similar to claim 16 of the
9 '927 patent discussed above except that claim 53 of the '905 patent does not
10 require equipping the bonding machine tool with a "ball placement capillary."
11 Accordingly, Defendant's infringe claim 53 of the '905 patent for the same reasons
12 set forth in Count One, above.

13 28. The Accused Products are also assembled using the method described
14 in claim 55 of the '905 patent. As alleged above, the ICs used in the Accused
15 Products are bonded to a surface using an electrically dissipative flip chip bonding
16 tool tip.

17 29. As set forth in more detail above, Plaintiff alleges that in the process
18 of manufacturing the Accused Products, Defendants use tools for mounting ICs to
19 circuit boards that meet industry standards for electric current resistance. The
20 resistance ranges specified in the most common ESD standards identified above,
21 such as, *e.g.*, the ANSI standard, are within the 1×10^2 to 1×10^{12} range taught by
22 claim 55 of the '905 patent.

23 30. Flip chip bonding requires the step of making contact with a device
24 being bonded during bonding, which results in establishing an electrostatic
25 potential between the tool and the device ("triboelectric charging") such that the
26 tool acts as a dissipative device to dissipate current away from the IC so as to avoid
27 charge build up but resistive enough to allow for a smooth current flow as taught
28 by claim 55.

32. The developed charge during the bonding process and other destructive energy present in the system needs to be dissipated smoothly to avoid damaging the device's electrical characteristics. Hence, flip chip bonding tools require static dissipative materials to effectively dissipate such energy as taught by claim 55 of the '905 patent.

33. Based on the foregoing, Anza alleges that Defendant directly infringes claims 53 and 55 of the '905 patent under 35 U.S.C. § 271(g).

34. Defendant has knowledge of infringement of the '905 patent since at least the filing of the original complaint.

WHEREFORE, Plaintiff prays for relief and judgment as follows:

1. That Defendant has infringed the Patents-in-Suit;
2. Compensation for all damages caused by Defendant's infringement of the Patents-in-Suit to be determined at trial;
3. A finding that this case is exceptional and an award of reasonable attorneys fees pursuant to 35 U.S.C. § 285;
4. Granting Plaintiff pre-and post-judgment interest on its damages, together with all costs and expenses; and,
5. Awarding such other relief as this Court may deem just and proper.

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HANDAL & ASSOCIATES

Dated: November 23, 2016 By: /s/ Gabriel G. Hedrick
Gabriel G. Hedrick
Attorneys for Plaintiff
Anza Technology, Inc.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury on all claims.

HANDAL & ASSOCIATES

Dated: November 23, 2016 By: /s/ Gabriel G. Hedrick
Gabriel G. Hedrick
Attorneys for Plaintiff
Anza Technology, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing document has been served on this date to all current and/or opposing counsel of record, if any to date, who are deemed to have consented to electronic service via the Court's CM/ECF system. Any other counsel of record will be served by electronic mail, facsimile and/or overnight delivery.

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct. Executed this 23rd day of November, 2016 at San Diego, California.

/s/ Gabriel G. Hedrick
Gabriel G. Hedrick