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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

WESTERN DIVISION

SEIKO EPSON CORPORATION, a Japan corporation; **EPSON AMERICA, INC.**, a California corporation; and **EPSON PORTLAND INC.**, an Oregon corporation, Plaintiffs, vs. **DONGGUAN OCBESTJET DIGITAL TECHNOLOGY CO., LTD.**, a China corporation, **OCBESTJET PRINTER CONSUMABLES (HK) CO., LTD.**, a Hong Kong corporation, Defendants.	CASE NO. _____ **COMPLAINT FOR PATENT INFRINGEMENT; FEDERAL TRADEMARK INFRINGEMENT AND UNFAIR COMPETITION** **DEMAND FOR JURY TRIAL** Trial Date: None Set

Plaintiffs Seiko Epson Corporation, Epson America, Inc., and Epson Portland Inc., (collectively, "Epson"), for their Complaint herein, allege as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the patent laws of the United States of America, 35 U.S.C. § 1 *et. seq*., of

A. United States Patent No. 6,955,422 ("the '422 patent"),

B. United States Patent No. 8,454,116 ("the '116 patent"), and

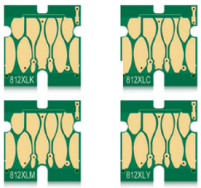
C. United States Patent No. 8,794,749 ("the '749 patent")

(collectively, "the Epson Patents"). The patent infringing products at issue are aftermarket ink cartridges for use with Epson printers (including "empty refillable ink cartridges" and "continuous ink supply systems" (sometimes referred to as "CISS"), as described by Defendants), and aftermarket circuit boards for ink cartridges (sometimes referred to as "chips") for use with Epson printers. Exemplary patent infringing products are shown below:

infringing ink cartridges

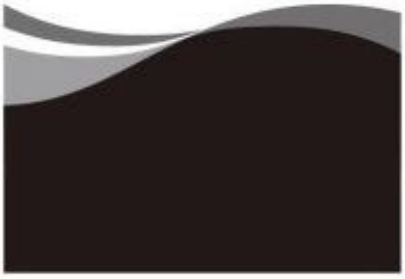
infringing ink cartridges in a CISS

infringing "empty refillable" ink cartridges



infringing circuit boards ("chips")

2. This is also an action for trademark infringement, false designation of origin, and unfair competition under the Lanham Act, 15 U.S.C. § 1051 *et. seq.* due to Defendants' improper use of trademarks owned and used by Epson, including, but not limited to, the below "wave" design trademark for printer ink, cartridges, and bottles, among other specific classes of goods (Reg. No. 5,402,648) ("the WAVE Mark"):



3. The trademark infringing products at issue are bottles of ink for use with Epson printers that improperly use the infringing WAVE Mark. Exemplary trademark infringing products are shown below:

trademark infringing bottles of ink

4. Over the years, Epson has brought numerous actions in various district courts as well as the United States International Trade Commission ("ITC") for infringement of its patents related to ink cartridge technology. The ITC has issued two general exclusion orders that prohibit the importation of products that infringe

certain Epson patents, including the '422, '116, and '749 patents asserted in this case. Epson's patent enforcement efforts have been widely publicized and reported by the aftermarket ink cartridge industry and by Epson itself. As a result, the aftermarket ink cartridge industry is intimately familiar with the two ITC general exclusion orders and Epson's patents. The aftermarket ink cartridge industry knows that importation and sale of ink cartridges for use with Epson printers and circuit boards for ink cartridges may violate the ITC's general exclusion orders and infringe Epson's patents, including the '422, '116, and '749 patents asserted in this case. Epson gives notice of its patents, including the '422, '116, and '749 patents, by virtual marking of its ink cartridges pursuant to 35 U.S.C. § 287(a). Nevertheless, infringers, like Defendants here, continue to import, offer to sell, and sell ink cartridges and circuit boards that infringe Epson's patents, including the '422, '116, and '749 patents, in flagrant violation of the ITC's general exclusion orders and United States patent law.

5. Defendants in this case are willful infringers of the '422, '116, and '749 patents and violators of at least the ITC's general exclusion order that covers the '116, and '749 patents.

6. In addition to the importation, offer for sale, and sale of ink cartridges and circuit boards that infringe Epson's patents, Defendants currently advertise, offer for sale, and sell a separate line of aftermarket bottles of ink that independently infringe upon the WAVE Mark. Defendants' use of the WAVE Mark to sell replacement bottles of ink is intended to deceive consumers and create consumer confusion and results in the dilution of Epson's reputation and trade name.

7. As a result of Defendants' trademark infringement, Epson is suffering a loss of the enormous goodwill that Epson has created in the WAVE Mark and is losing lost profits from lost sales of products.

8. Epson brings this action to recover money damages, for a preliminary and permanent injunction, and for other relief as set forth herein, for both patent and trademark infringement.

RELATED ACTIONS

9. This action is related to the following six actions filed in the Central District of California because the '422 patent, the '116 patent, and/or the '749 patent asserted here were also asserted in those cases and/or the accused products at issue in this case overlap with the same or similar infringing products in those cases:

a. *Seiko Epson Corporation, et al. v. RJ International Group, Inc., et al.*, Civil No. 2:22-cv-01122-AB-JC (C.D. Cal.), filed on February 18, 2022, currently pending;

b. *Seiko Epson Corporation, et al. v. Vision Imaging Supplies, Inc., et al.*, Civil No. 2:21-cv-02756-MCS-MAA (C.D. Cal.), filed on March 30, 2021, concluded by settlement, consent judgment as to certain defendants and dismissal as to certain other defendants;

c. *Seiko Epson Corporation, et al. v. Audoormatics USA, Inc., et al.*, Civil No. 2:20-cv-11148-MCS-MAA (C.D. Cal.), filed on December 9, 2020, concluded by settlement, consent judgment and permanent injunction as to certain defendants, and dismissal as to certain other defendants;

d. *Seiko Epson Corporation, et al. v. Vintrick Inc., et al.*, Civil No. 1:19-cv-10697-CJC-AFM (C.D. Cal.), filed on December 18, 2019, concluded by default judgment and permanent injunction;

e. *Seiko Epson Corporation, et al. v. Soldcrazy USA LLC*, Civil No. 2:17-cv-04502-AB (JCx) (C.D. Cal.), filed on June 16, 2017, concluded by default judgment and permanent injunction; and

f. *Seiko Epson Corporation, et al. v. Prinko Image Co. (USA), Inc*, Civil No. 2:17-cv-04501-AB (JCx) (C.D. Cal.), filed on June 19, 2017, concluded by default judgment and permanent injunction.

10. In addition, this action is related to *In the Matter of CERTAIN INK CARTRIDGES AND COMPONENTS THEREOF*, Investigation No. 337-TA-946, United States International Trade Commission ("ITC"), Washington, D.C., which was adjudicated by the ITC in a final determination (ITC Opinion, May 26, 2016) (the "ITC 946 Investigation") and in which the ITC issued a General Exclusion Order and certain Cease and Desist Orders that include the '116 and '749 patents. In fact, Defendants in this case were respondents in the ITC 946 Investigation and the '116 and '749 patents asserted in this case were asserted against Defendants in the ITC 946 Investigation, including with respect to the same or overlapping groups of aftermarket ink cartridges that are accused of infringement in this action. Both Defendants defaulted in the ITC 946 Investigation.

11. Finally, this action is related to *In the Matter of CERTAIN INK CARTRIDGES AND COMPONENTS THEREOF*, Investigation No. 337-TA-565, United States International Trade Commission, Washington, D.C., which was adjudicated by the ITC in a final determination (Commission Opinion, Oct. 19, 2007) (the "ITC 565 Investigation") and in which the Commission issued a General Exclusion Order and certain Cease and Desist Orders that include the '422 patent. The '422 patent at issue in this case was litigated in the ITC 565 Investigation against the same or overlapping groups of aftermarket ink cartridges that are accused of infringement in this action.

THE PARTIES

12. Plaintiff Seiko Epson Corporation ("Seiko Epson") is a corporation organized and existing under the laws of Japan. Its principal place of business is located at 3-3-5 Owa Suwa-Shi Nagano-Ken, 392-8502, Japan. Seiko Epson is the assignee of the Epson Patents.

13. Plaintiff Epson America, Inc. ("Epson America") is a corporation organized and existing under the laws of the State of California. Its principal place of business is located at 3131 Katella Avenue, Los Alamitos, California 90720. As

the North American sales, marketing, and customer service affiliate of Seiko Epson, Epson America is the exclusive licensee of the Epson Patents for distributing in the United States Epson ink cartridges that embody the inventions contained in the Epson Patents, including cartridges manufactured by Epson Portland Inc.

14. Plaintiff Epson Portland Inc. ("Epson Portland") is a corporation organized and existing under the laws of the State of Oregon. Its principal place of business is located at 3950 NE Aloclek Drive, Hillsboro, Oregon 97124. Epson Portland is the exclusive licensee of the Epson Patents for manufacturing in the United States Epson ink cartridges that embody the inventions contained in the Epson Patents.

15. Plaintiffs Seiko Epson, Epson America, and Epson Portland are sometimes referred to collectively herein as "Epson" or "Plaintiffs."

16. Plaintiffs produce and sell ink cartridges that operate with Epson ink jet printers utilizing Epson's patented technology and designs in the United States and in this judicial district.

17. Plaintiffs advertise and sell various ink bottles and related accessories under the WAVE Mark in the United States and this judicial district.

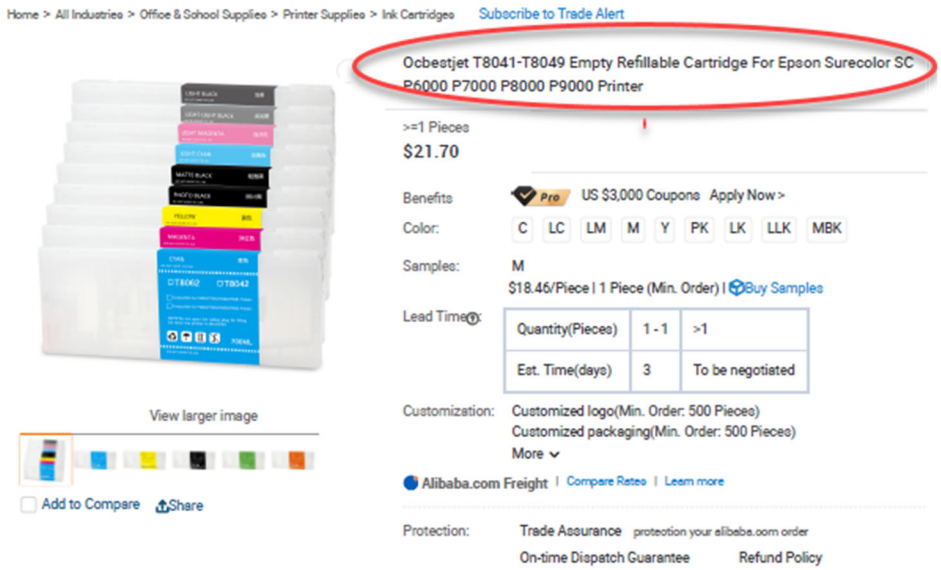
18. On information and belief, and according to defendant's registration with the government of China, Donnguan Ocbestjet Digital Technology Co., Ltd. ("Ocbestjet Digital") is a limited liability company organized and existing under the laws of China (Registry No. 441900000788712) and has a registered office address at B-3-302, Guancheng Electronic Information Industrial Park, No. 689 Jian'an Road, Shatou Community, Chang'an Town, Dongguan City, Guangdong, China.

19. On information and belief, and according to defendant's registration with the government of Hong Kong, defendant Ocbestjet Printer Consumables (HK) Co., Ltd. ("Ocbestjet PC") is a limited liability company organized and existing under the laws of Hong Kong (Registry No. 1487257) and has a registered office address at RM 2301, 23 F/L, Worldwide House, 19 Des, Voeux Road Central Hong Kong.

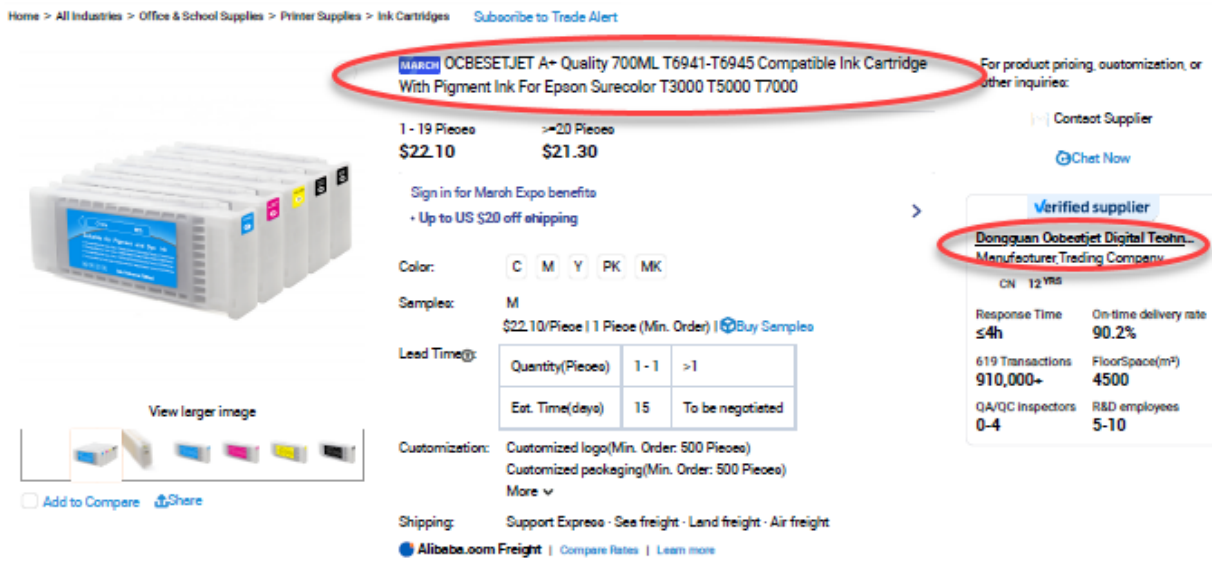
20. Collectively, defendant Ocbestjet Digital and defendant Ocbestjet PC are referred to herein as "Defendants."

21. On information and belief, Defendants have and continue to conduct business on the Internet under various seller names, including but not limited to "Ocbestjet" through their listings and/or storefronts on Alibaba.com and Aliexpress.com. On information and belief, Defendants import, offer for sale, and sell products that infringe the Epson Patents as complained of herein, including by offering for sale and selling ink cartridges and circuit boards, and components thereof, that infringe the Epson Patents directly through Defendants' store fronts and listings on Alibaba.com and Aliexpress.com. On their storefront on Alibaba.com, Defendants state that they are "a high technology company specialized in the R&D, production, sales and service of compatible printing consumables," and their "products include toner cartridges, ink cartridges, CISS, chips and decoders" that are "100% compatible with Epson [] printers, etc."

22. For example, in the annotated screen capture shown below of one of Defendants' listings on their alibaba.com storefront, visited on November 16, 2021, Defendants offer for sale patent infringing ink cartridges for use with Epson printers and describe them as: "Ocbestjet T8041-T8049 Empty Refillable Cartridge for Epson Surecolor SC P6000 P7000 P8000 P9000 Printer.

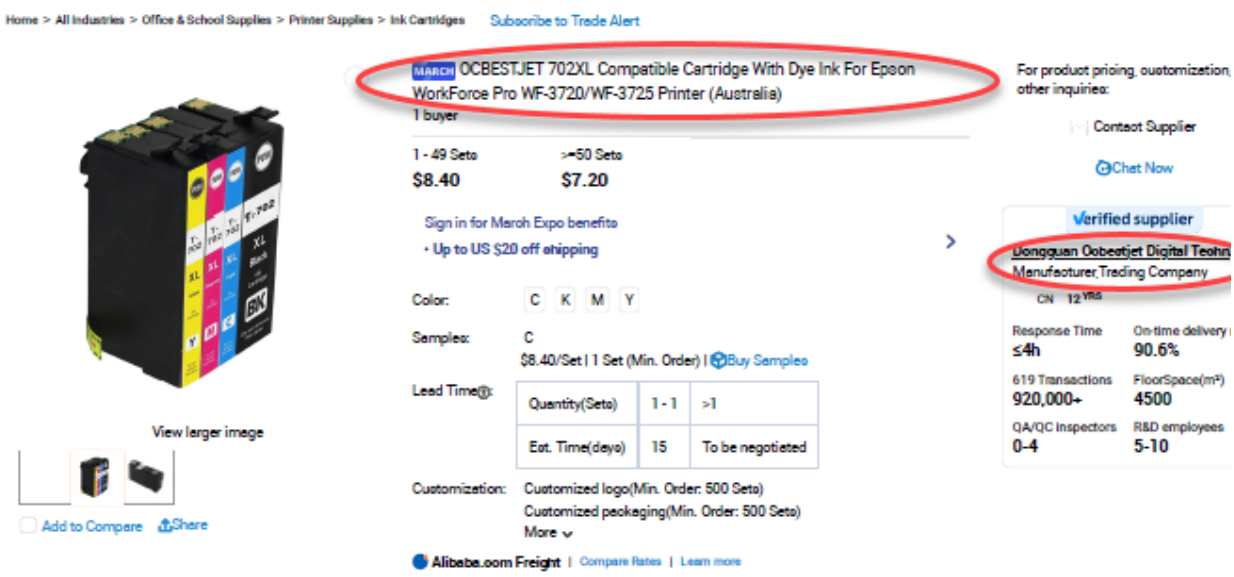


23. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 23, 2022, Defendants offered for sale patent infringing ink cartridges for use with Epson printers and describe them as: "OCBESTJET A+ Quality 700ML T6941-T6945 Compatible Ink Cartridge With Pigment Ink For Epson Surecolor T3000 T5000 T70005."



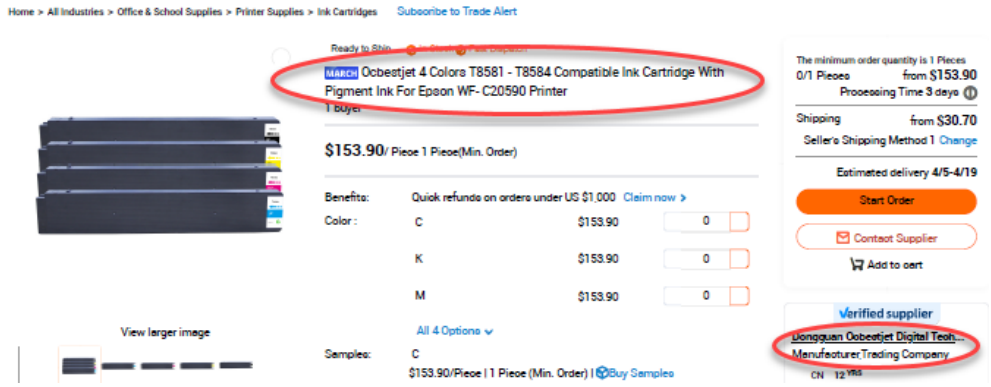
24. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 22, 2022, Defendants offered for sale patent infringing ink cartridges for use with Epson printers and describe them as: "Ocbestjet T252XL, T2521-T2524 252XL 252 Empty Refillable Ink Cartridge for Epson WF 7720 WF 3620 WF-3640 7610 WF-7620."

25. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on May 22, 2022, Defendants offered for sale patent infringing ink cartridges for use with Epson printers and describe them as: "OCBESTJET 702XL Compatible Cartridge With Dye Ink For Epson WorkForce Pro WF-3720/WF-3725 Printer (Australia)."

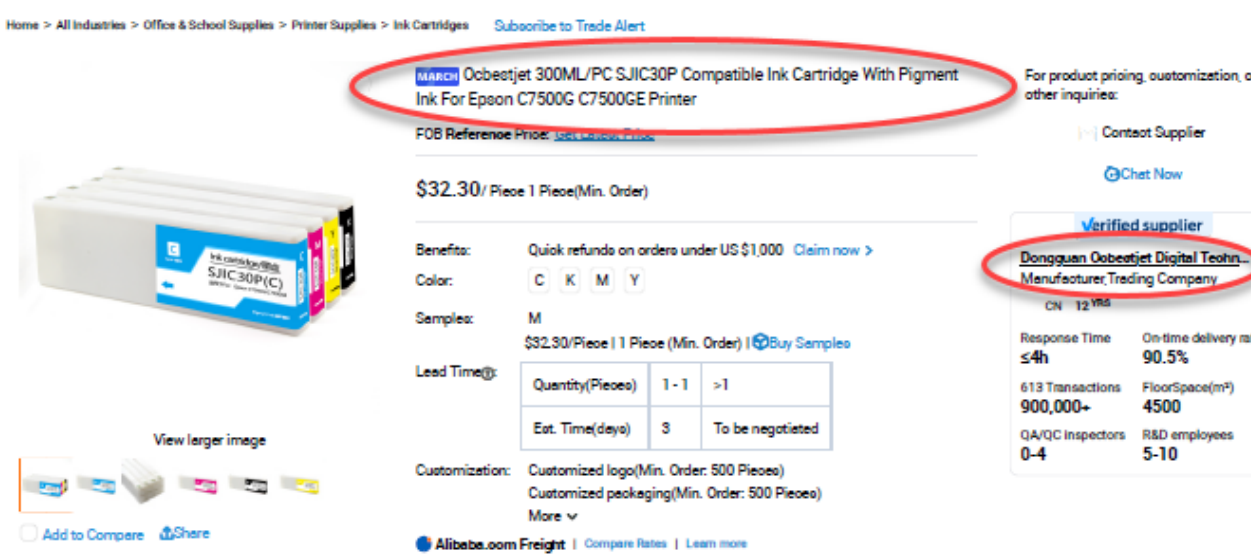


26. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 29, 2022, Defendants offered for sale patent infringing ink cartridges for use with

Epson printers and describe them as: "Ocbestjet 4 Colors T8581-T8584 Compatible Ink Cartridge With Pigment Ink For Epson WF-C20590 Printer."

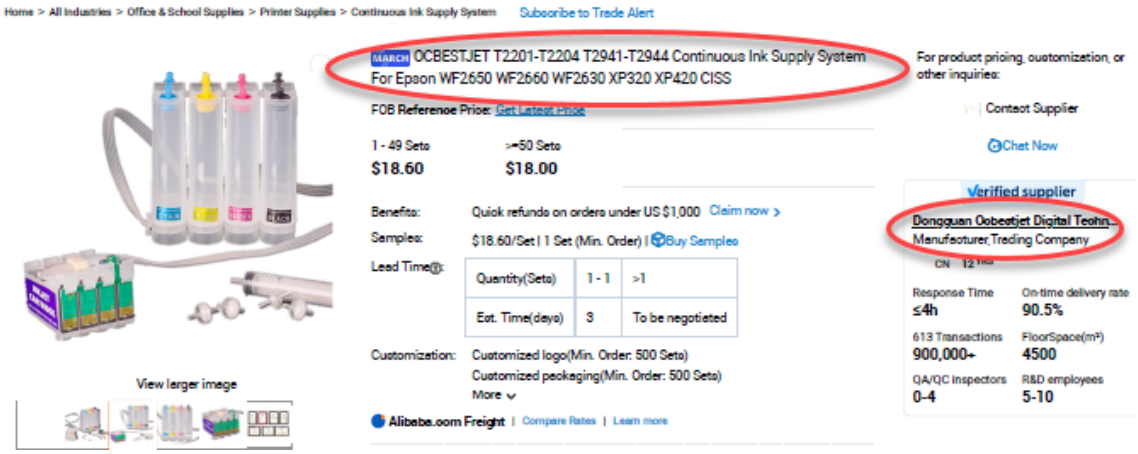


27. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 29, 2022, Defendants offered for sale patent infringing ink cartridges for use with Epson printers and describe them as: "Ocbestjet 300ML/PC SJIC30P Compatible Ink Cartridge With Pigment Ink For Epson C7500G C7500GE Printer."

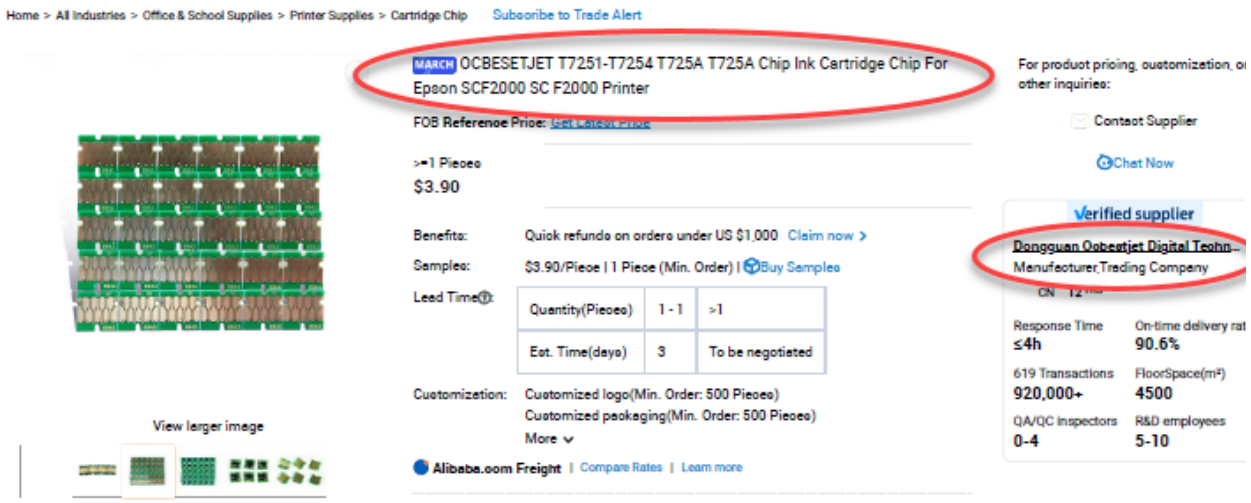


28. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 28, 2022, Defendants offered for sale patent infringing ink cartridges in a Continuous

Ink Supply System ("CISS") for use with Epson printers and describe them as: "OCBESTJET T2201-T2204 T2941-T2944 Continuous Ink Supply System For Epson WF-2650 WF2660 WF2630 XP320 XP420 CISS."

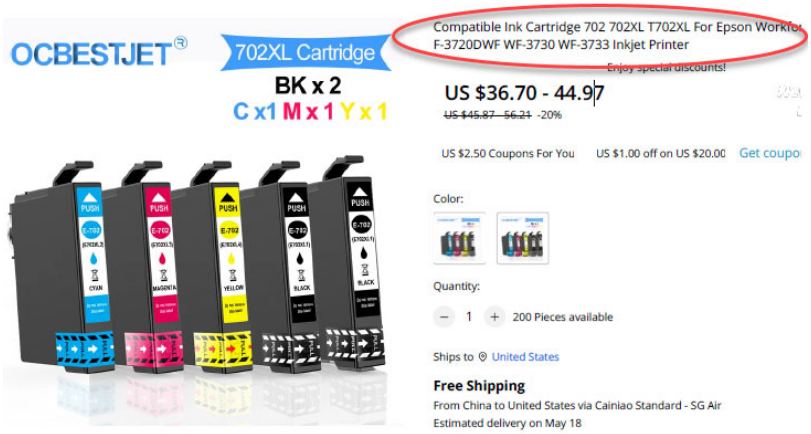


29. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, visited on March 22, 2022, Defendants offered for sale patent infringing circuit boards (sometimes referred to by the aftermarket ink cartridge industry as "chips") for ink cartridges for use with Epson printers and describe them as: "OCBESTJET T7251-T7254 T725A T725A Chip Ink Cartridge Chip for Epson SCF2000 SC F2000 Printer."

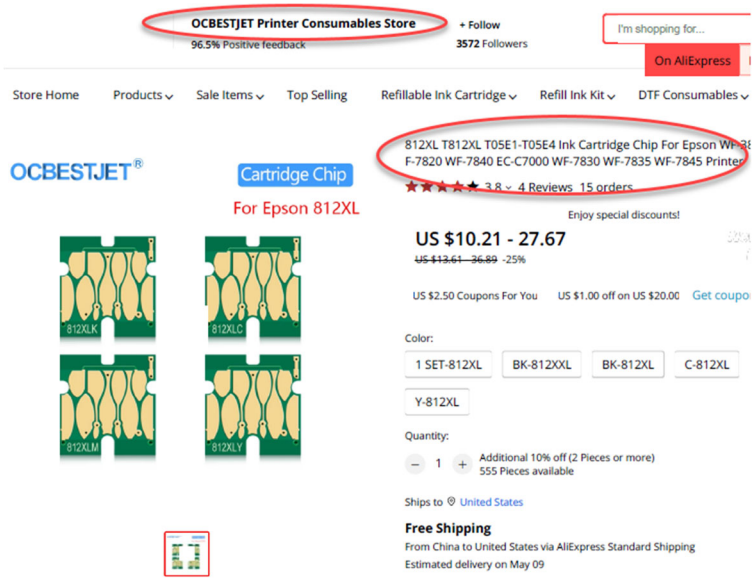


30. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Aliexpress.com, visited on April

20, 2022, Defendants offered for sale patent infringing ink cartridges for use with Epson printers and describe them as: "Compatible Ink Cartridge 702 702XL T702XL For Epson WorkForce F-3720DWF WF-3730 WF-3733 Inkjet Printer."

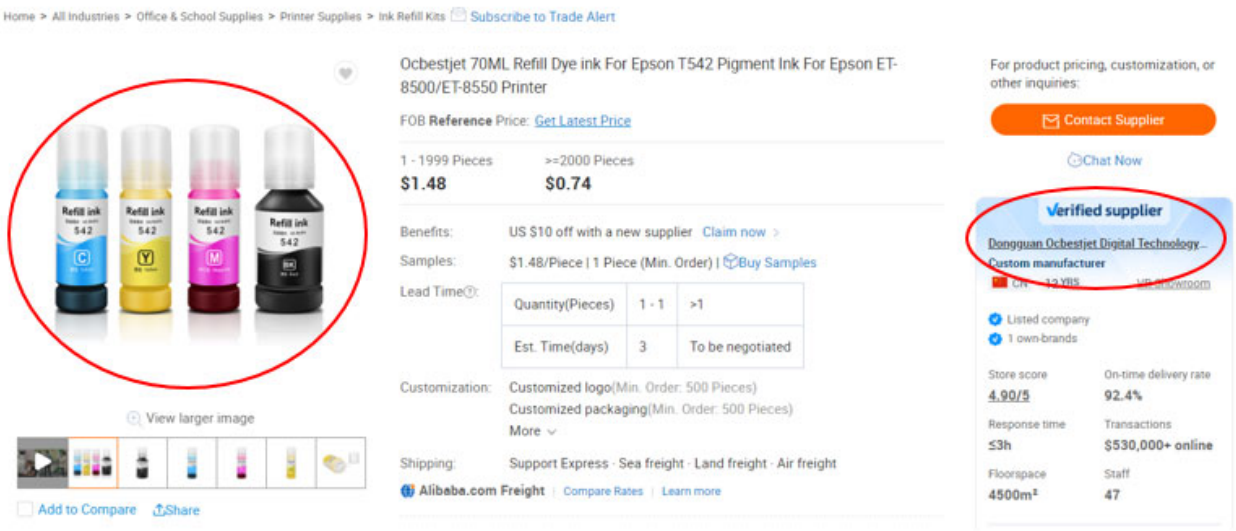


31. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Aliexpress.com, visited on April 20, 2022, Defendants offered for sale patent infringing circuit boards for ink cartridges for use with Epson printers and describe them as: "812XL T812XL T05E1-T05E4 Ink Cartridge Chip for Epson WF-3820 WF-7820, WF-7840 EC-C7000 WF-7830 WF-7835 WF-7845 Printer."

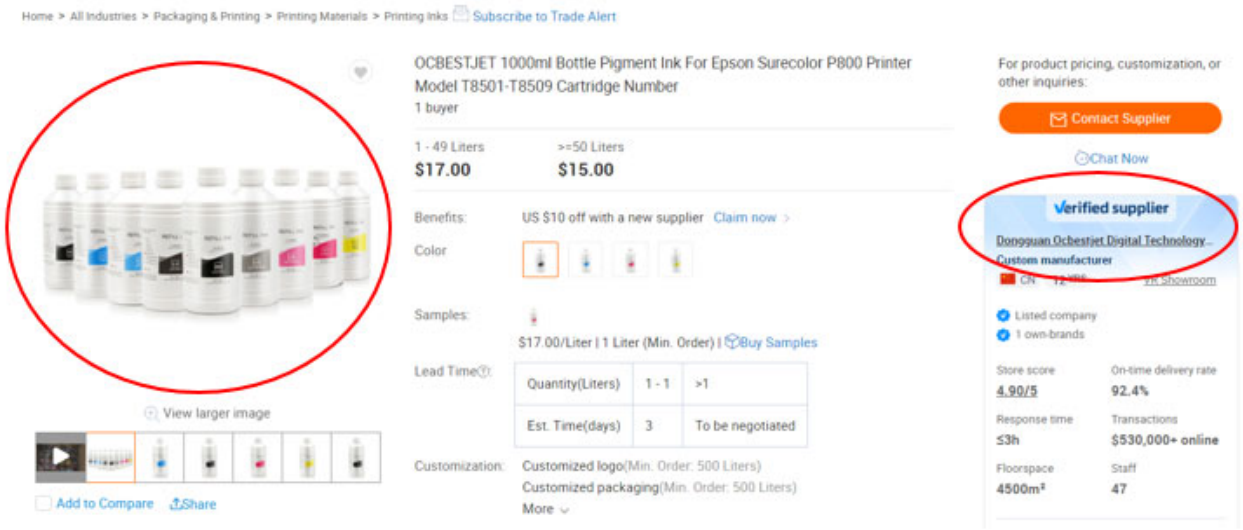


32. Similarly, on information and belief, through Defendants' storefronts and listings on Alibaba.com and Aliexpress.com, Defendants advertise, offer for sale, and sell ink bottles that infringe upon the WAVE Mark. Specifically, Defendants' ink bottles exploit a nearly identical imitation of Epson's WAVE Mark on the product labels.

33. For example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, last accessed May 11, 2022, Defendants offer for sale trademark infringing ink bottles that infringe Epson's WAVE Mark and describe the infringing products as "Objestjet 70ML Refill Dye Ink for Epson T542 Pigment Ink for Epson ET-8500/ET-8550 Printer."



34. As another example, in the annotated screen capture below of Defendants' listing on their "Ocbestjet" storefront on Alibaba.com, last accessed May 11, 2022, Defendants offer for sale trademark infringing ink bottles that infringe upon Epson's WAVE Mark and describe the infringing products as "Ocbestjet 1000ml Bottle Pigment Ink for Epson Surecolor P800 Printer Model T8501-T8509 Cartridge Number."



35. Numerous purchases of patent infringing ink cartridges and trademark infringing ink bottles were made by Epson from Defendants' storefronts and listings on Alibaba.com. The patent infringing ink cartridges and trademark infringing ink bottles were shipped by Defendants to Epson under Defendants' seller name Ocbestjet from their shipping address Guancheng Electronic Information Industrial Park, No. 689, Jiana Road, Shatou Village, Changan Town, 523850 Dongguan, China.

36. On September 9, 2019, the United States International Trade Commission issued a Seizure and Forfeiture Order in the 337-TA-946 ITC Investigation, discussed in paragraph 10 above, against Defendant, ordering that (emphasis added):

> Ink Cartridges and Components Thereof that are imported in violation of the general exclusion order issued in the above-captioned investigation are to be seized and forfeited to the United States, if imported by the following firm: **Ocbestjet Company, Guanchen Electronic Information Park, No. 689 Jianan Road, Shatou Village, Changan Town, Dongguan, China 523850**, or any affiliated companies, parents, subsidiaries, or other related business entities, or any of their successors or assigns.

On information and belief, "Ocbestjet Company" referenced in the Seizure and Forfeiture Order is the same company as defendant Ocbestjet named herein and that

the address identified in the Seizure and Forfeiture Order is the same address for defendant Ocbestjet in its listing on the Chinese Government's official database at gsxt.co.cn. The foregoing Seizure and Forfeiture Order, by its terms, was issued by the ITC after the United States Bureau of Customs and Border Protection ("Customs") had informed the ITC that defendant Ocbestjet had attempted to import patent infringing ink cartridges covered by the 337-TA-946 General Exclusion Order and that Customs had denied such entry of patent infringing ink cartridges and informed defendant Ocbestjet of the 337-TA-946 General Exclusion Order and also informed defendant Ocbestjet that any further attempt to import patent infringing ink cartridges covered by the 337-TA-946 General Exclusion Order would result in seizure and forfeiture. On information and belief, despite Customs' notice and despite the ITC's Seizure and Forfeiture Order, and with full knowledge of the same and of at least the '116 and '749 patents complained of herein (which are two of the patents covered by the 337-TA-946 General Exclusion Order), defendant Ocbestjet imported patent infringing ink cartridges for use with Epson printers and patent infringing circuit boards for ink cartridges for use with Epson printers into the United States for sale on their own websites and online marketplace storefronts identified in paragraphs 21-31 above, and elsewhere. On information and belief, Defendants also had knowledge of the '422 patent complained of herein, when they imported, offered for sale, and sold ink cartridges that infringe the '422 patent. For at least these reasons, and others, Defendants' importation, offers to sell, and sale of patent infringing ink cartridges and patent infringing circuit boards complained of herein is willful. A copy of the ITC's Seizure and Forfeiture Order is attached hereto as Exhibit A.

37. On information and belief, Defendants act in concert with each other and with other entities and under fictitious business names to import, manufacture, distribute, and sell ink cartridges and circuit boards that infringe the Epson Patents and ink bottles that infringe Epson's WAVE Mark. On information and belief, Defendants are jointly and severally responsible for the infringements of the Epson

Patents and the WAVE Mark as they jointly operated and continue to jointly operate and manage the infringing enterprises, including Defendants, and any related d/b/a entities, as a single enterprise by comingling resources, assets, operations, commercial activities, and they incur expenses and achieve profits jointly for the benefit of the combined enterprise, its owners and officers.

JURISDICTION AND VENUE

38. The causes of action herein for patent infringement arise under the patent laws of the United States, 35 U.S.C. § 271. This Court has subject matter jurisdiction over the claims for patent infringement pursuant to 28 U.S.C. §§ 1331, 1332, 1338(a) and 1338(b). The causes of action herein for trademark infringement arise under the Lanham Act, 15 U.S.C. § 1051 *et seq.*; 28 U.S.C. §§ 1331, 1338(a) and 1338(b); and 28 U.S.C. § 1332. This Court has jurisdiction over the claims in this complaint that arise under the laws of the State of California pursuant to 28 U.S.C. § 1367(a) because the state law claims are so related to the federal claims that they form part of the same case or controversy and derive from a common nucleus of operative facts.

39. This Court has personal jurisdiction over the Defendants at least because Defendants reside in this judicial district and have committed acts of direct and indirect patent infringement and trademark infringement in this judicial district, and have conducted systematic and continuous business within California and because they have directed their unlawful business activities towards California and have caused injury to a California resident within California

40. Venue is proper in this district under 28 U.S.C. §§ 1391(b)(2), (b)(3), (c) and/or 1400(b) because Defendants' conduct business within this judicial district and/or a substantial part of the events or omissions giving rise to the alleged claims occurred in this judicial district. Defendants have performed acts in this district that constitute patent and trademark infringement, and unfair competition by offering to sell and selling products in this district that infringe Epson's patents and trademarks.

FIRST CLAIM FOR RELIEF

(Patent Infringement—35 U.S.C. § 271)

INFRINGEMENT OF U.S. PATENT NO. 6,955,422

41. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 40 as though fully set forth at length here.

42. Epson owns all right, title, and interest in, including the right to sue thereon and the right to recover for infringement thereof, United States Patent No. 6,955,422, which was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office on October 18, 2005. Attached as Exhibit B to this Complaint is a true and correct copy of the '422 patent. On September 29, 2009, reexamination certificate 6,955,422 C1 was duly and legally issued to Seiko Epson by the Unites States Patent and Trademark Office. Attached as Exhibit C to this Complaint is a true and correct copy of the reexamination certificate of the '422 patent. The original patent and the reexamination certificate are collectively referred to herein as "the '422 patent." The '422 patent relates generally to ink cartridges for printers.

43. The '422 patent is valid and enforceable for infringements occurring prior to its expiration.

44. On information and belief after conducting a reasonable investigation, Defendants have infringed and are infringing the '422 patent, as defined by at least one claim of the patent in violation of 35 U.S.C. § 271(a) by having made, used, imported, offered for sale, and sold in this judicial district and elsewhere aftermarket ink cartridges that operate with Epson ink jet printers, including but not limited to ink cartridges having model no. T702XL220, as well as others that are no more than colorably different from the foregoing (collectively, the "Accused '422 Ink Cartridges"). The specific, but exemplary, model identified above was obtained by Epson during its investigation leading to this Complaint from Defendants' online listings on their storefronts on Alibaba.com and Aliexpress.com.

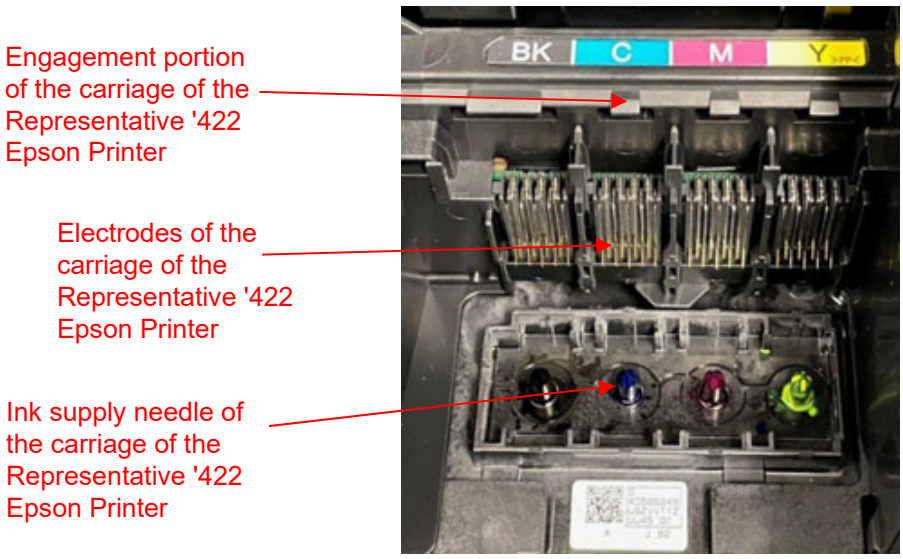
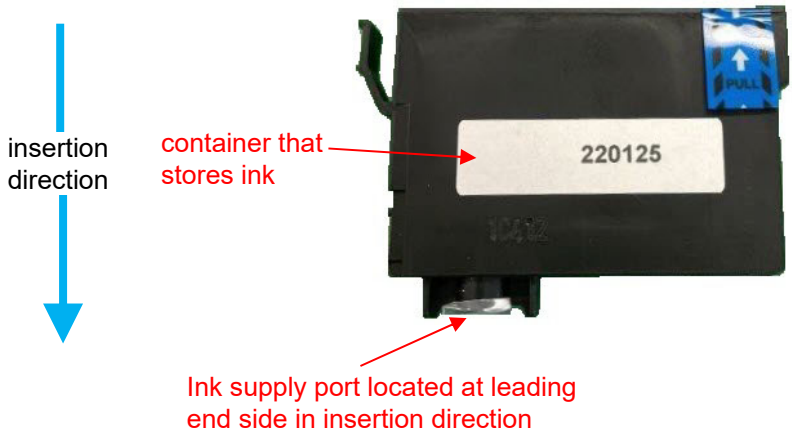
45. As a non-limiting example, set forth below is a claim chart with a description of Defendants' infringement of exemplary claim 1 of the '422 patent by the Accused '422 Ink Cartridges. The infringement is shown using a representative ink cartridge (Model No. T702XL220; Control No.[1] 220125) from among the Accused '422 Ink Cartridges purchased from Defendants that, for infringement analysis purposes, is representative of and represents all of Defendants' ink cartridges within the Accused '422 Ink Cartridges (i.e., the represented ink cartridges), including, but not limited to, the models identified above. The claim chart below refers to this ink cartridge as "the Representative '422 Ink Cartridge." The Representative '422 Ink Cartridge was designed for use in a specific Epson printer, the Epson WF-3720 printer ("the Representative '422 Epson Printer"),[2] and for purposes of the analysis set forth herein, the Representative '422 Ink Cartridge was tested in the Representative '422 Epson Printer, as discussed in further detail in the claim chart below.

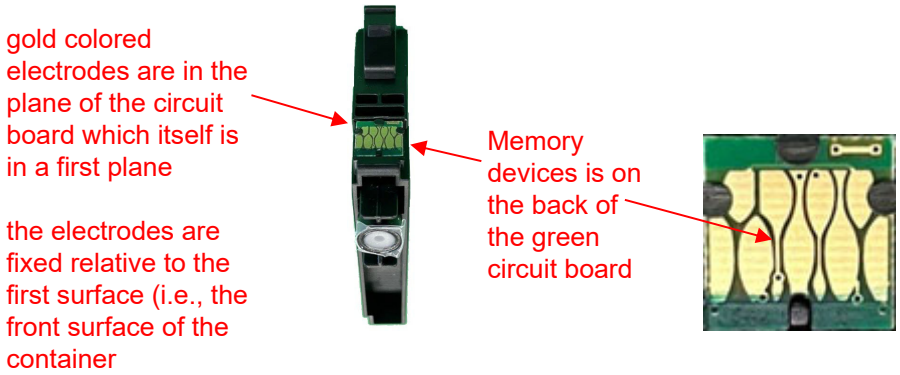
Claim 1 of the '422 Patent	Where found in the Accused '422 Ink Cartridges
[1a] An ink cartridge detachably mountable on a carriage which is reciprocally movable in a recording apparatus and which has a plurality of electrodes, an	Each of the Accused '422 Ink Cartridges is an ink cartridge for detachably mounting on the carriage of an Epson ink jet printer that is reciprocally movable in a recording apparatus (i.e., an ink jet printer). Defendants marketed and sold the Accused '422 Ink Cartridges as being compatible with one or more specific Epson ink jet printers. For example, the Representative '422 Ink Cartridge is compatible with the Representative '422 Epson Printer.

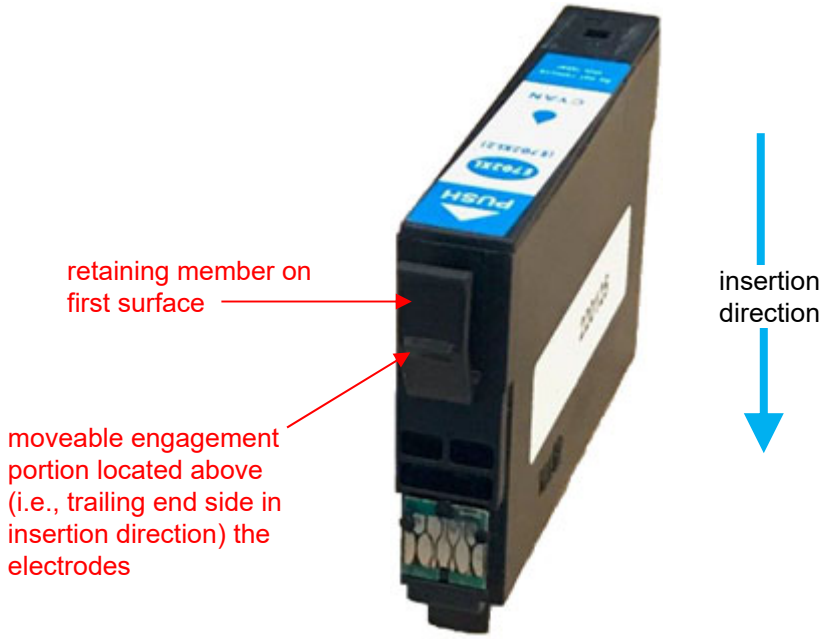
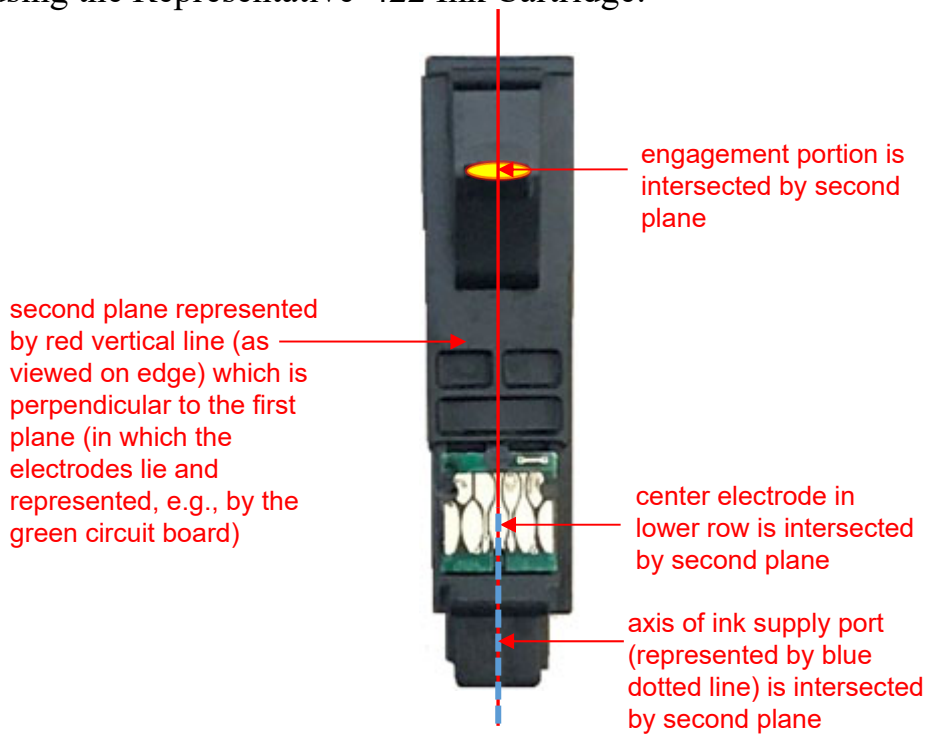
[1] For identification purposes, a unique "control number" ("Control No.") has been assigned by Epson to each ink cartridge purchased by Epson from Defendants as part of Epson's investigation in support of this Complaint.

[2] From a patent infringement analysis perspective, as set forth herein, the Representative '422 Epson Printer is representative of, and represents, all Epson printers that work with the Accused '422 Ink Cartridges.

engagement portion and an ink supply needle, the ink cartridge comprising:	 an ink cartridge detachably mountable on a carriage of a recording apparatus (i.e., an ink jet printer) The following photograph depicts the Representative '422 Ink Cartridge detachably mounted in the carriage of the Representative '422 Epson Printer.  The reciprocally movable carriage in a recording apparatus (i.e., an ink jet printer) has a plurality of electrodes, an engagement portion and an ink supply needle. The following photograph shows the engagement portion, electrodes, and ink supply needle of the carriage of the Representative '422 Epson Printer. When mounted, each of the Accused '422 Ink Cartridges supplies ink to the printhead of the ink jet printer through an ink supply needle of the printer (the needle, which is part of the carriage inside the ink jet printer and not part of the cartridge, has a passage that allows ink to pass from the ink cartridge through the needle).

	 Accordingly, the Accused '422 Ink Cartridges literally meet the preamble of claim 1 of the '422 patent.
[1b] a container that stores ink therein and has an ink supply port connectable to the ink supply needle, the ink supply port being located in a leading end side in an insertion direction of the container into the carriage, the container further having first and second surfaces opposite each other, the first surface being substantially parallel to the insertion direction of the	Each of the Accused '422 Ink Cartridges has a container that stores ink, an ink supply port that is connectable to the ink supply needle of the printer carriage, with the ink supply port located in a leading end side in an insertion direction of the container into the carriage. These features are shown below using the Representative '422 Ink Cartridge:  Each of the Accused '422 Ink Cartridges has a container that has a first and second surfaces opposite each other, the first surface being substantially parallel to the insertion direction of the container into the carriage. These features are shown below using the Representative '422 Ink Cartridge:

container into the carriage;	 Accordingly, the Accused '422 Ink Cartridges literally meet this limitation of claim 1 of the '422 patent.
[1c] a memory device having a plurality of electrodes disposed substantially in a first plane for respective electrical connection to the electrodes of the carriage, the electrodes of the memory device being fixed relative to the first surface of the container; and	Each of the Accused '422 Ink Cartridges has a memory device having a plurality of electrodes that are disposed substantially in a first plane for respective electrical connection to the electrodes of the carriage, the electrodes of the memory device are fixed relative to the first surface of the container. These features are shown below using the Representative '422 Ink Cartridge:  Accordingly, the Accused '422 Ink Cartridges literally meet this limitation of claim 1 of the '422 patent.
[1d] a retaining member disposed on the first surface of the container, and having a movable engagement portion that can shift position relative to the first surface of the container and	Each of the Accused '422 Ink Cartridges has a retaining member disposed on the first surface of the container, and has a movable engagement portion that can shift position relative to the first surface of the container. The movable engagement portion is located at a trailing end side relative to the electrodes of the memory device in the insertion direction of the container into the carriage. The movable engagement portion of the retaining member is engageable with the engagement portion of the carriage. These features are shown below using the Representative '422 Ink Cartridge:

which is located at a trailing end side relative to the electrodes of the memory device in the insertion direction of the container into the carriage, and which is engageable with the engagement portion of the carriage,	 Accordingly, the Accused '422 Ink Cartridges literally meet this limitation of claim 1 of the '422 patent.
[1e] wherein at least one said electrode, the movable engagement portion, and an axis of the ink supply port are intersected by a second plane that is perpendicular to the first plane.	In each of the Accused '422 Ink Cartridges at least one of the electrodes, the movable engagement portion, and the axis of the ink supply port are intersected by a second plane that is perpendicular to the first plane. These features are shown below using the Representative '422 Ink Cartridge: 

	Accordingly, the Accused '422 Ink Cartridges literally meet this limitation of claim 1 of the '422 patent.

46. On information and belief after conducting a reasonable investigation, Defendants have, knowingly and intentionally aided and abetted and induced infringement of the '422 patent in violation of 35 U.S.C. § 271(b) by non-parties, including end-users, despite Defendants' knowledge of the '422 patent.

47. On information and belief, Defendants have had knowledge of the '422 patent prior to April 2, 2022, the expiration date of the 422 patent.

48. On information and belief, Defendants contributed to the infringement of the '422 patent in violation of 35 U.S.C. § 271(c) by non-parties by offering to sell or selling within the United States or importing into the United States components of the patented inventions set forth in the '422 patent before April 2, 2022. The components constitute a material part of the inventions. Defendants know that such components are especially made or especially adapted for use in an infringement of the '422 patent. The components are not a staple article or commodity of commerce suitable for substantial noninfringing use.

49. By reason of Defendants' infringing activities, Epson has suffered substantial damages in an amount to be proven at trial.

50. Defendants were not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge claimed in the '422 patent before April 2, 2022, and Defendants' conduct was, in every instance, without Epson's consent.

51. On information and belief, Defendants' infringement was willful.

SECOND CLAIM FOR RELIEF

(Patent Infringement—35 U.S.C. § 271)

INFRINGEMENT OF U.S. PATENT NO. 8,794,749

52. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 40 as though fully set forth at length here.

53. Epson owns all right, title, and interest in, including the right to sue thereon and the right to recover for infringement thereof, United States Patent No. 8,794,749 ("the '749 patent"), which was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office on August 5, 2014. The '749 patent relates generally to ink cartridges for printers. Attached as Exhibit D to this Complaint is a true and correct copy of the '749 patent.

54. The '749 patent is valid and enforceable.

55. On information and belief after conducting a reasonable investigation, Defendants have infringed and are infringing the '749 patent, as defined by at least one claim of the patent in violation of 35 U.S.C. § 271(a) by making, using, importing, offering to sell, and selling in this judicial district and elsewhere aftermarket ink cartridges that operate with Epson ink jet printers, including but not limited to ink cartridges, including refillable ink cartridges, and continuous ink supply systems having model nos. T804120, T804220, T804320, T804420, T702XL220, T04Q1, SJIC30P (B), SJIC30P (C) , SJIC30P (M), and SJIC30P (Y), as well as others that are no more than colorably different from the foregoing (collectively, the "Accused '749 Ink Cartridges").

56. The specific models of Accused '749 Ink Cartridges identified above were obtained by Epson during its investigation leading to this Complaint from Defendants' online listings on their storefronts on Alibaba.com and Aliexpress.com, as described above.

57. As a non-limiting example, set forth below is a claim chart with a description of Defendants' infringement of claim 1 of the '749 patent by the Accused '749 Ink Cartridges. The infringement is shown using a representative ink cartridge (Model No. T804120; Control No. 210943) selected from among the Accused '749 Ink Cartridges purchased from Defendants that, for infringement analysis purposes, is representative of and represents all of Defendants' ink cartridges within the Accused '749 Ink Cartridges (i.e., the represented ink cartridges), including, but not limited to,

the models identified above. The claim chart below refers to this ink cartridge as "the Representative '749 Ink Cartridge." The Representative '749 Ink Cartridge was designed for use in specific Epson printers, for example, the Epson SureColor P9000 printer ("the Representative '749 Epson Printer"),[3] and for purposes of the analysis set forth herein, the Representative '749 Ink Cartridge was tested in the Representative '749 Epson Printer, as discussed in further detail in the claim chart below.

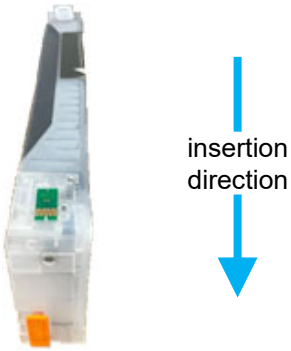
Claim 1 of the '749 patent	Where found in the Accused '749 Ink Cartridges
[1a] A printing material container adapted to be attached to a printing apparatus by being inserted into the printing apparatus in an insertion direction, the printing apparatus having a print head and a plurality of apparatus-side electrical contact members, the printing material container comprising:	Each of the Accused '749 Ink Cartridges is or includes a printing material container adapted to be attached to an Epson ink jet printing apparatus. Each of the Accused '749 Ink Cartridges is inserted, in an insertion direction, into an Epson ink jet printer. All Epson ink jet printers that work with the Accused '749 Ink Cartridges have a print head and a plurality of printer-side (apparatus-side) electrical contact members. These features are shown below using the Representative '749 Ink Cartridge. The Representative '749 Ink Cartridge is adapted to be attached to the Representative '749 Epson Printer by being inserted in an insertion direction, as shown in the following photographs:

[3] From a patent infringement analysis perspective, as set forth herein, the Representative '749 Epson Printer is representative of, and represents, all Epson printers that work with the Accused '749 Ink Cartridges.

The Representative '749 Ink Cartridge

The Representative '749 Epson Printer

The following photograph depicts the insertion direction (blue arrow) in which the Representative '749 Ink Cartridge is inserted into the Representative '749 Epson Printer:



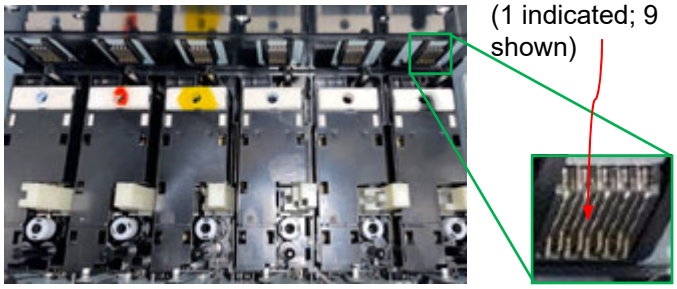
The following photograph shows the Representative '749 Ink Cartridge, a photo black-ink ink cartridge, attached in the Representative '749 Epson Printer after the cartridge has been inserted into the printer in the insertion direction (the cyan, yellow, magenta and photo black ink cartridges, which are

genuine Epson ink cartridges used to fill the remaining slots of the cartridge holder, can also be seen):

Representative '749 Ink Cartridge installed in the Representative '749 Epson Printer

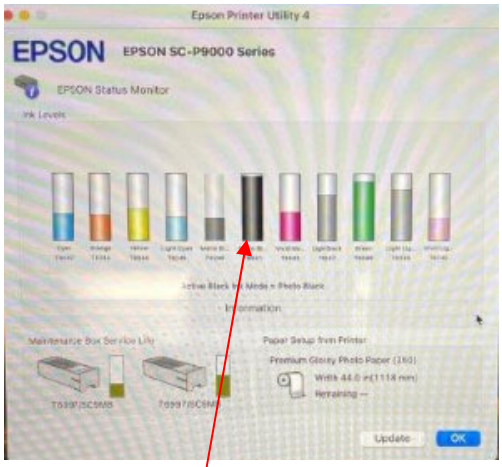
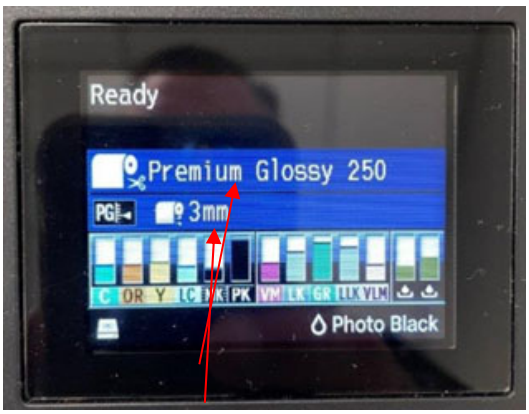
The Epson ink jet printers (which includes the Representative '749 Epson Printer) that accept the Accused '749 Ink Cartridges (which includes the Representative '749 Ink Cartridge) each include a print head for printing and multiple printer-side electrical contact forming members for each ink cartridge accepted by the printer. These features are shown below for the Representative '749 Epson Printer's cartridge holder slot that accepts the Representative '749 Ink Cartridge, a photo black-ink ink cartridge (the printer's electrical contact members for the cyan, yellow, magenta, and photo black cartridges can also be seen in the left photo):

zoomed-in view of printer's electrical contact forming members (1 indicated; 9 shown)

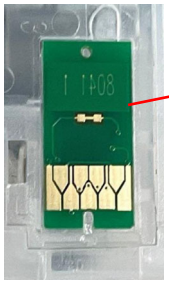


Accordingly, the Accused '749 Ink Cartridges literally meet the preamble of claim 1 of the '749 patent.

[1b] an ink supply opening, having an exit, adapted to supply ink from the ink cartridge to the printing apparatus;	Each of the Accused '749 Ink Cartridges comprises an ink supply opening having an exit. When attached, the ink supply opening of each of the Accused '749 Ink Cartridges is adapted to supply ink from the cartridge to the Epson ink jet printer that accepts the cartridge. The following photograph depicts the exit of the ink supply opening of the Representative '749 Ink Cartridge:  exit of ink supply opening Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1c] a low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device comprising a memory device;	Each of the Accused '749 Ink Cartridges comprises a low voltage electronic device that comprises a memory device adapted to receive and function with a low voltage. The low voltage electronic device is an integrated circuit ("IC") chip located on the back of a printed circuit board that is mounted on a wall of the ink cartridge, as shown below in the Representative '749 Ink Cartridge:  printed circuit board (green) with low voltage electronic device located on back In addition, the presence of a low voltage electronic device (i.e., an IC chip comprising a memory device) is further confirmed through

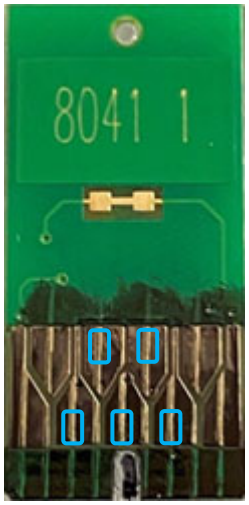
	testing demonstrating that the Epson ink jet printers that accept the Accused '749 Ink Cartridges read the remaining ink level and other descriptive information about the ink cartridge from the ink cartridge's memory device, and display that information on the display screen of a connected computer and on the printer's display screen. The following photographs show the display of such information on the computer display screen and  the printer's display screen for the Representative '749 Ink Cartridge, containing photo black ink, attached to the Representative '749 Epson Printer:  memory device shows, on the printer's display screen, the amount of photo black ink remaining in the Representative '749 Ink Cartridge

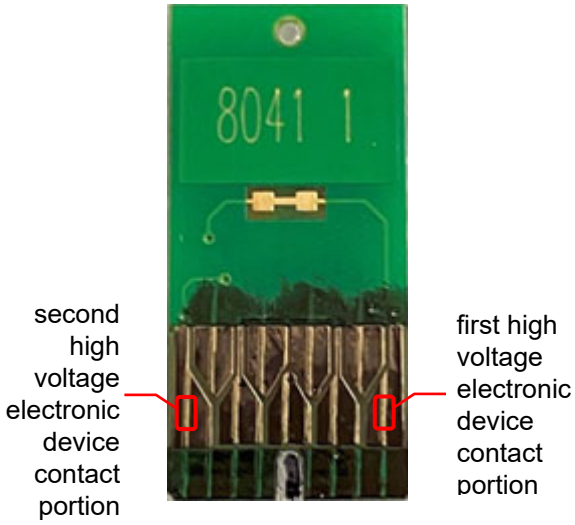
	All Epson ink jet printers that accept the Accused '749 Ink Cartridges have similar circuitry and programming in terms of the voltages and signals they apply to their contact forming members and, consequently, to the corresponding contact portions of the Accused '749 Ink Cartridges (the contact portions are located on the gold-colored metallic terminals of the ink cartridge shown above). In particular, Epson printers apply a maximum voltage of approximately 4 volts (a low voltage as compared to the high voltage discussed in the next limitation) to certain of their contact forming members that in turn correspond to certain of the contact portions of the Accused '749 Ink Cartridges that are connected to the low voltage electronic device comprising a memory device. Consequently, the low voltage electronic device is adapted to receive and function with a low voltage. Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1d] a high voltage electronic device adapted to receive and function with a high voltage, which is a higher voltage than the low voltage of the low voltage electronic device; and	Each of the Accused '749 Ink Cartridges comprises a high voltage electronic device that is adapted to receive and function with a voltage that is a higher voltage than the voltage of the low voltage electronic device. The high voltage electronic device may be, for example, a resistor, or one or more other coupled electronic components, that is/are capable of receiving and functioning with a high voltage. The high voltage electronic device is located on the back of a printed circuit board that is mounted on a wall of the ink cartridge, as shown below in the Representative '749 Ink Cartridge:

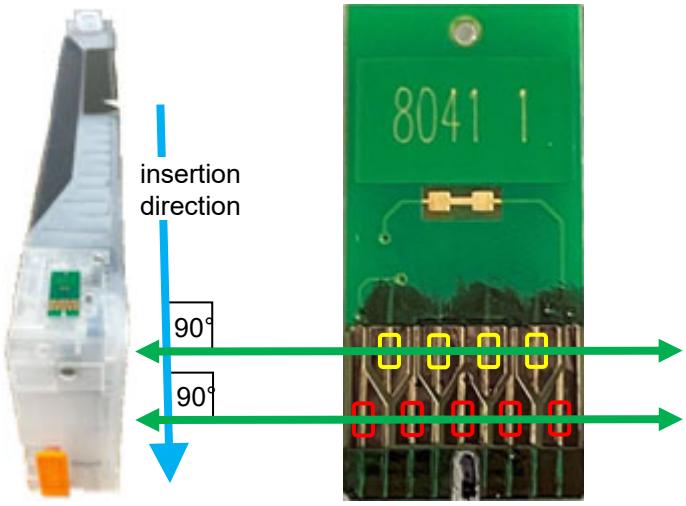
	 All Epson ink jet printers that accept the Accused '749 Ink Cartridges have similar circuitry and programming in terms of the voltages and signals they apply to their contact forming members and, consequently, to the corresponding contact portions of the Accused '749 Ink Cartridges (the contact portions are located on the gold terminals of the ink cartridge shown above). In particular, Epson printers apply a voltage of approximately 42 volts (a high voltage as compared to the low voltage of approximately 4 volts applied to the low voltage electronic device discussed in the preceding limitation) to two of their contact forming members that in turn correspond to two of the contact portions of the Accused '749 Ink Cartridges that are connected to the high voltage electronic device. Consequently, the high voltage electronic device is adapted to receive and function with a high voltage. Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1e] a plurality of container-side terminals having contact portions adapted and positioned to contact corresponding apparatus-side contact forming members so that electrical communication is enabled between the	Each of the Accused '749 Ink Cartridges comprises a plurality of container-side terminals that have contact portions. The contact portions are adapted and positioned on the cartridge so that, when the cartridge is attached to the printer, the contact portions of the cartridge's terminals contact corresponding printer-side contact forming members so that electrical

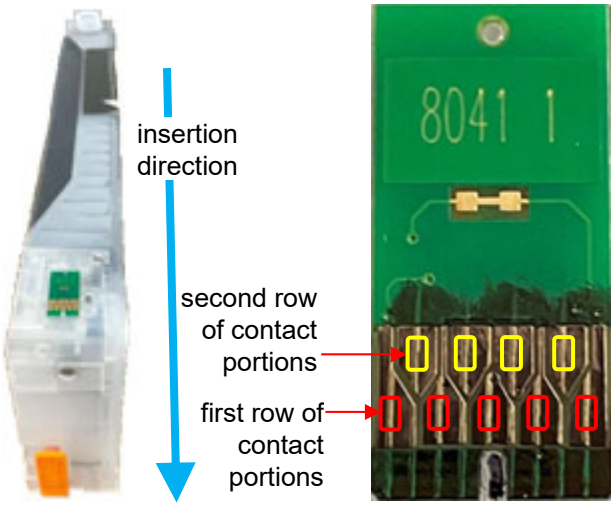
container and the printing apparatus, the contact portions of the terminals including a plurality of low voltage electronic device contact portions electrically coupled to the low voltage electronic device, and a first high voltage electronic device contact portion and a second high voltage electronic device contact portion, each electrically coupled to the high voltage electronic device, wherein:	communication is enabled between the cartridge and the printer. As seen with respect to limitation 1c above, the terminals of the Accused '749 Ink Cartridges are the gold-colored metallic portions on the green printed circuit board. The contact portions are located on these gold-colored metallic portions. To confirm the location and arrangement of the terminals' contact portions, the terminals were marked with black ink, the cartridge was installed in and then removed from the printer (which caused the printers' contact forming members to leave scratch marks on the terminals thereby removing a portion of the black ink that was applied and therefore indicating the location of the contact portions), and the terminals were then photographed. For example, the terminals of the Representative '749 Ink Cartridge before marking with black ink is shown on the left and after marking with black ink is shown on the right:   The resulting marks left by the printer's contact forming members on the terminals show the location and arrangement of the contact portions. These are indicated below with annotated yellow boxes superimposed on the

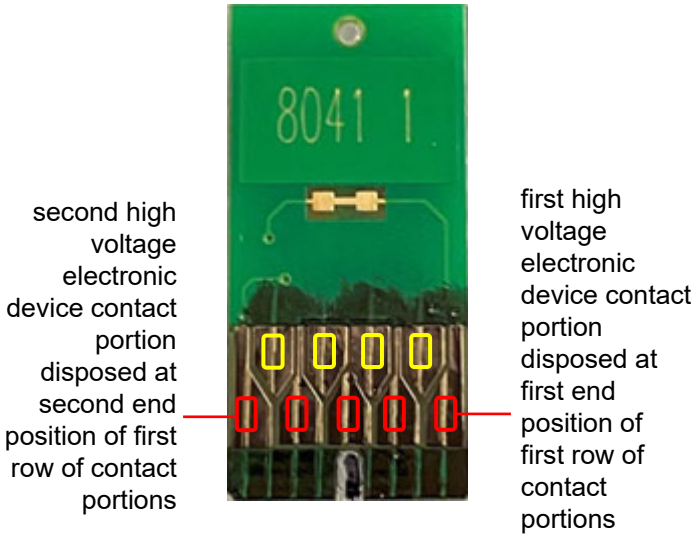
	terminals to indicate the location of the contact portions (there are a total of nine contact portions, with four contact portions in a top row and five contact portions in a bottom row):  The contact portions shown above correspond to their printer-side contact forming members so that electrical communication is enabled between the ink cartridge and the printer, e.g., so the printer can read remaining ink level and other information from the memory device as described above with respect to limitation 1c. The above shown contact portions include a plurality of low voltage electronic device contact portions that are electrically coupled to the low voltage electronic device (specifically, the IC chip comprising a memory device). Each low voltage electronic device contact portion is electrically coupled by the terminal it appears on and by other circuitry to the memory device located on the back of the green printed circuit board. The following photograph of the Representative '749 Ink Cartridge shows the low voltage electronic device contact portions (there are five such low voltage electronic device contact portions, as indicated by superimposed blue boxes):

	 The contact portions of the Accused '749 Ink Cartridges' terminals also include first and second high voltage electronic device contact portions that are each electrically coupled to the high voltage electronic device discussed above with respect to limitation 1d. Each high voltage electronic device contact portion is electrically coupled by the terminal it appears on and by other circuitry to the high voltage electronic device on the back of the printed circuit board. The following photograph of the Representative '749 Ink Cartridge shows the high voltage electronic device contact portions (there are two such high voltage electronic device contact portions, as indicated by superimposed red boxes):

	 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1f] the contact portions are arranged in a first row of contact portions and in a second row of contact portions, the first row of contact portions and the second row of contact portions extending in a row direction which is generally orthogonal to the insertion direction,	The contact portions of each of the Accused '749 Ink Cartridges are arranged in a first row of contact portions and in a second row of contact portions that both extend in a row direction which is generally orthogonal to the insertion direction. The following photographs of the Representative '749 Ink Cartridge show the first row and second row of contact portions extending in a row direction which is generally orthogonal to the insertion direction in which the Accused '749 Ink Cartridges are inserted into Epson ink jet printers that accept the Accused '749 Ink Cartridges. The right photo shows an enlarged and annotated view of the printed circuit board shown in the left photo.

	 first row of contact portions (red squares) and second row of contact portions (yellow squares), each extending in a row direction (green arrows) orthogonal to cartridge insertion direction (blue Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1g] the first row of contact portions is disposed at a location that is further in the insertion direction than the second row of contact portions, and,	In each of the Accused '749 Ink Cartridges, the first row of contact portions is disposed at a location that is further in the insertion direction than the second row of contact portions. The following photographs of the Representative '749 Ink Cartridge show the first row of contact portions (red boxes) disposed at a location that is further in the cartridge insertion direction than the second row of contact portions (yellow boxes) (i.e., the first row is deeper in the printer than the second row).

	 first row of contact portions (red squares) disposed further in insertion direction (blue arrow) than second row of contact portions (yellow squares) Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.
[1h] the first row of contact portions has a first end position and a second end position at opposite ends thereof, the first high voltage electronic device contact portion is disposed at the first end position of the first row of contact portions and the second high voltage electronic device contact portion is disposed at the second end position of the first row of contact portions.	In each of the Accused '749 Ink Cartridges, the first row of contact portions has a first end position and a second end position at opposite ends thereof, the first high voltage electronic device contact portion is disposed at the first end position of the first row of contact portions, and the second high voltage electronic device contact portion is disposed at the second end position of the first row of contact portions. The following photograph of the Representative '749 Ink Cartridge shows the first and second high voltage contact portions disposed, respectively, at the first and second end positions at opposite ends of the first row of contact portions.

	 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.

58. On information and belief after conducting a reasonable investigation, Defendants have and are actively, knowingly, and intentionally aiding and abetting and inducing infringement of the '749 patent in violation of 35 U.S.C. § 271(b) by non-parties, including end-users, despite Defendants' knowledge of the '749 patent.

59. On information and belief, Defendants had knowledge of the '749 patent prior to, or at least since, the filing and service of this complaint on Defendants.

60. On information and belief, Defendants are contributing to the infringement of the '749 patent in violation of 35 U.S.C. § 271(c) by non-parties by offering to sell or selling within the United States or importing into the United States components of the patented inventions set forth in the '749 patent. The components constitute a material part of the inventions. Defendants know that such components are especially made or especially adapted for use in an infringement of the '749 patent. The components are not a staple article or commodity of commerce suitable for substantial noninfringing use.

61. By reason of Defendants' infringing activities, Epson has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.

62. Defendants' acts complained of herein have damaged and will continue to damage Epson irreparably. Epson has no adequate remedy at law for these wrongs and injuries. Epson is therefore entitled to a preliminary and permanent injunction restraining and enjoining Defendants and their agents, servants, and employees, and all persons acting thereunder, in concert with, or on their behalf, from infringing the claims of the '749 patent.

63. Defendants are not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge claimed in the '749 patent, and Defendants' conduct is, in every instance, without Epson's consent.

64. On information and belief, Defendants' infringement has been and continues to be willful.

THIRD CLAIM FOR RELIEF

(Patent Infringement—35 U.S.C. § 271)

INFRINGEMENT OF U.S. PATENT NO. 8,454,116

65. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 40 as though fully set forth at length here.

66. Epson owns all right, title, and interest in, including the right to sue thereon and the right to recover for infringement thereof, United States Patent No. 8,454,116 ("the '116 patent"), which was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office on June 4, 2013. The '116 patent relates generally to ink supply systems for printers, including ink cartridges for printers, and circuit boards for ink cartridges. Attached as Exhibit E to this Complaint is a true and correct copy of the '116 patent. On April 26, 2022, certificate of correction 8,454,116 B2 was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office. Attached as Exhibit F to this Complaint is a true

and correct copy of the certificate of correction of the '116 patent. The original patent and the certificate of correction are collectively referred to herein as "the '116 patent."

67. The '116 patent is valid and enforceable.

68. On information and belief after conducting a reasonable investigation, Defendants have infringed and are infringing the '116 patent, as defined by at least one claim of the patent in violation of 35 U.S.C. § 271(a) by making, using, importing, offering to sell, and selling in this judicial district and elsewhere aftermarket ink cartridges, including empty refillable ink cartridges and continuous ink supply systems, for use with Epson printers and circuit boards for ink cartridges for use with Epson printers. These products include but are not limited to: (a) circuit boards for ink cartridges having model nos. T804120, T804220, T804320, T804420, and those that are no more than colorably different from the foregoing; (b) ink cartridges, including empty refillable ink cartridges and continuous ink supply systems, having model nos. T804120, T804220, T804320, T804420, T702XL220, T04Q1, SJIC30P (B), SJIC30P (C), SJIC30P (M), and SJIC30P (Y), and those that are no more than colorably different from the foregoing; (collectively, the "Accused '116 Products"). The specific models of Accused '116 Products identified above were obtained by Epson during its investigation leading to this Complaint from Defendants' online listings on their storefronts on Alibaba.com and Aliexpress.com.

69. As a non-limiting example, set forth below is a claim chart with a description of Defendants' infringement of claim 18 of the '116 patent by the Accused '116 Products. The infringement is shown using a representative ink cartridge (Model No. T702XL220; Control No. 220125) from among the Accused '116 Products purchased from Defendants that, for infringement analysis purposes, is representative of and represents all of Defendants' products within the Accused '116 Products (i.e., the represented ink cartridges, circuit boards, and continuous ink supply systems), including, but not limited to, the models identified above. The claim chart below refers to this product as "the Representative '116 Product." The Representative '116

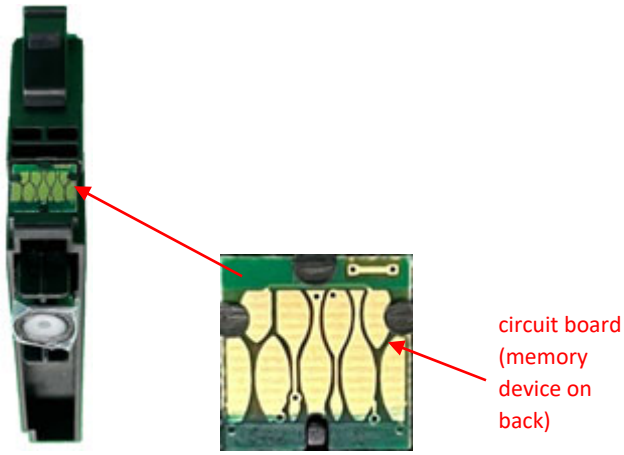
Product was designed for use in a specific Epson printer, the Epson WorkForce WF-3720 printer ("the Representative '116 Epson Printer"),[4] and for purposes of the analysis set forth herein, the Representative '116 Product was tested in the Representative '116 Epson Printer, as discussed in further detail in the claim chart below.

Claim 18 of the '116 patent	Where found in the Accused '116 Products
[18a]. A circuit board mountable on a printing material container that is used in an ink jet printing apparatus, the ink jet printing apparatus having a print head and a plurality of apparatus-side contact forming members, the printing material container having a body and an ink supply opening, the ink supply opening having an exit on an exterior portion of the body and being adapted to supply ink from the printing material container to the printing apparatus, the circuit board comprising:	A circuit board is mounted on the Representative '116 Product (model no. T702XL220; control no. 220125), which itself includes a printing material container and is used in an Epson ink jet printing apparatus (e.g., the Representative '116 Epson Printer) having a print head and a plurality of apparatus-side contact forming members. The Representative '116 Product has a body and an ink supply opening having an exit on an exterior portion of the body and is adapted to supply ink from the Representative '116 Product to the Representative '116 Epson Printer (the ink jet printing apparatus). The Representative '116 Product is a printing material container with a mounted circuit board. The following photos depict the circuit board (green with gold-colored metallic terminals) mounted on the Representative '116 Product containing black ink.

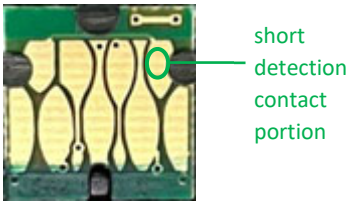
[4] From a patent infringement analysis perspective, as set forth herein, the Representative '116 Epson Printer is representative of, and represents, all Epson printers that work with the Accused '116 Products.

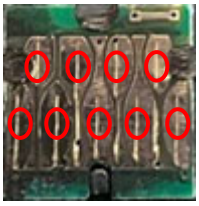
	 The Representative '116 Product is used in any of the following Epson ink jet printer (printing apparatus) models: Epson WorkForce WF-7610, WF-7710, WF-7720, WF-3620, WF-7210, WF-7620, WF-7110, WF-3640, and WF-7720 (the "Epson Ink Jet Printers"). The following photo depicts the Epson WorkForce WF-3720 ink jet printer.  The Epson Ink Jet Printers each include a print head for printing and multiple printer-side contact forming members. The Representative '116 Product has a body, as depicted below.

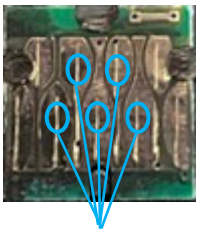
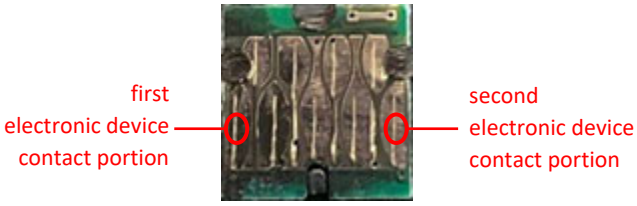
	 The Representative '116 Product has an ink supply opening having an exit on an exterior portion of the body. When mounted, the ink supply opening is adapted to supply ink from the printing material container (i.e., the cartridge) to the Epson Ink Jet Printers. The following photo depicts the exit of the Representative '116 Product's ink supply opening.  Accordingly, the Representative '116 Product literally meets the preamble of claim 18 of the '116 patent.
[18b] a memory device adapted to be driven by a memory driving voltage;	The circuit board mounted on the Representative '116 Product comprises a memory device that is adapted to be driven by a memory driving voltage. The following photo depicts the circuit board (green with gold-colored metallic terminals) mounted on the Representative '116 Product. The memory device is located on the back of the circuit board and is not visible in this view.

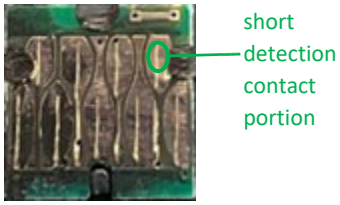
	 All Epson ink jet printers that accept the Representative '116 Product have similar circuitry and programming in terms of the voltages and signals they apply to their contact forming members and, consequently, to the corresponding contact portions of the Representative '116 Product (the contact portions are located on the gold-colored metallic terminals of the ink cartridge shown above). In particular, Epson printers apply a maximum voltage of approximately 4 volts (a low voltage as compared to the high voltage discussed in the next limitation) to certain of their contact forming members that in turn correspond to certain of the contact portions of the Representative '116 Product that are connected to the memory. Consequently, the memory device is adapted to be driven by a memory driving voltage. This was confirmed through testing during the ITC 946 Investigation. Accordingly, the Representative '116 Product literally meets this limitation of claim 18 of the '116 patent.
[18c] an electronic device adapted to receive a voltage higher than the memory	The circuit board mounted on the Representative '116 Product comprises an electronic device that is adapted to receive a

driving voltage; and	voltage that is a higher voltage than the voltage of the memory device. The electronic device that receives a higher voltage may be, for example, a resistor, or one or more other coupled electronic components, that is/are capable of receiving a high voltage. The electronic device is located on the back of a printed circuit board that is mounted on a wall of the Representative '116 Product shown in the above limitation. Moreover, all Epson ink jet printers that accept the Representative '116 Product have similar circuitry and programming in terms of the voltages and signals they apply to their contact forming members and, consequently, to the corresponding contact portions of the circuit board mounted on the Representative '116 Product (the contact portions are located on the gold terminals of circuit board mounted on the ink cartridge shown above). In particular, Epson printers apply a voltage of approximately 42 volts (a high voltage as compared to the low voltage of approximately 4 volts applied to the memory device discussed in the preceding limitation) to two of their contact forming members that in turn correspond to two of the contact portions of the circuit board mounted on the Representative '116 Product that are connected to the electronic device. Consequently, the electronic device is adapted to receive and function with a high voltage. This was confirmed through testing during the ITC 946 Investigation. Accordingly, the Representative '116 Product literally meets this limitation of claim 18 of the '116 patent.
[18d] a plurality of terminals having contact portions	The circuit board mounted on the Representative '116 Product comprises a

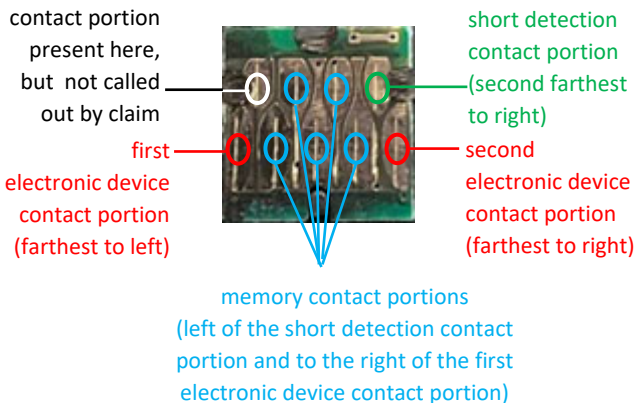
adapted and positioned to contact corresponding apparatus-side contact forming members so that electrical communication is enabled with the ink jet printing apparatus, the contact portions of the terminals including a plurality of memory contact portions electrically coupled to the memory device, a first electronic device contact portion electrically coupled to the electronic device, a second electronic device contact portion electrically coupled to the electronic device, and a short detection contact portion positioned and arranged to electrically contact a contact forming member that itself is electrically coupled to a short detection circuit of the printing apparatus, wherein:	plurality of terminals that have contact portions. The contact portions are adapted and positioned on the cartridge so that, when the cartridge is mounted on the printer, the contact portions of the cartridge's terminals contact corresponding printer-side contact forming members so that electrical communication is enabled with the printer. As discussed at 18(a) and 18(b) *supra*, the terminals of the Representative '116 Product's circuit board are the gold colored metallic portions on the green circuit board, reproduced in enlarged form below.  To determine the precise location of the terminals' contact portions, the following steps were taken: (1) using a marker, black ink was applied to the terminals and the terminal arrangement photographed; (2) the Representative '116 Product was installed in and removed from the printer; and (3) the terminal arrangement was photographed. The following photo shows the terminals after the application of black ink with a marker.  The step of installing and removing the cartridge from the printer, causes the printer's contact forming members (discussed at 18(a), *supra*) to leave scratch marks on the terminals

	thereby removing a portion of the black ink that was applied with the marker. The following photo shows the terminals after the cartridge was installed and removed from the printer. The contact portions of the circuit board's terminals are the most pronounced portions of the scratch marks (all of which contact corresponding printer-side contact forming members so that electrical communication is enabled with the printer, e.g., so that the printer can read remaining ink level and other information from the memory device as described in 18(b), *supra*). The following annotated photo shows the location of the contact portions annotated by red circles.  The contact portions of the circuit board's terminals include a plurality of memory contact portions that are electrically coupled to the memory device. Each memory contact portion is electrically coupled by the terminal it appears on to a "via," which is a through-hole (through the circuit board) that electrically couples the terminal to wiring on the back of the circuit board. The wiring on the back of the circuit board electrically couples the via (and, therefore, the contact portion of the terminal) to an electrical lead of the IC chip containing the memory device mounted on the back of the circuit board. In combination, these components electrically couple the memory contact portion to the memory device.

	The following annotated photo depicts the five memory contact portions (in blue) located on the terminals on the front of the circuit board.  The contact portions of the circuit board's terminals include a first and second electronic device contact portion that are each electrically coupled to the electronic device (specifically, the resistor). Each electronic device contact portion is electrically coupled by the terminal it appears on to a via that electrically couples the terminal to wiring located on the back of the circuit board. The wiring on the back of the circuit board electrically couples the via (and, therefore, the contact portion of the terminal) to an electrical lead of the resistor mounted on the back of the circuit board. In combination, these components electrically couple the first and second electronic device contact portions to the resistor. The following annotated photo depicts the first and second electronic device contact portions (in red) located on the terminals on the front of the circuit board.  The contact portions of the circuit board's terminals include a short detection contact

	portion that is positioned and arranged to electrically contact a contact forming member of the Epson Ink Jet Printers that is itself electrically coupled to a short detection circuit of the printers. The following photo depicts the short detection contact portion (in green).  Moreover, all Epson ink jet printers that accept the Representative '116 Product have similar circuitry and programming in terms of the operation of the short detection contact portion. In particular, when the printers are operated while the short detection contact portion is electrically shorted to the second electronic device contact portion, the printers stop the receipt of the voltage higher than the memory driving voltage by the second electronic device contact portion, and display an error message to the user on the display screen of a connected computer and on the printer display screen (if the printer has a display screen). This was confirmed through testing during the ITC 946 Investigation. Accordingly, the Representative '116 Product literally meets this limitation of claim 18 of the '116 patent.
[18e] the contact portions are arranged so that, when the terminal arrangement is viewed from the vantage of the contact forming members, with the	The contact portions of the Representative '116 Product's circuit board are arranged so that, when the terminal arrangement is viewed from the vantage of the printer's contact forming members, with the terminals oriented as if in

terminals oriented as if in contact with the contact forming members so that electrical communication is enabled with the ink jet printing apparatus, and with the ink cartridge oriented with the exit of the ink supply opening facing downwards, the contact portion farthest to the left is the first electronic device contact portion, the contact portion that is farthest to the right is the second electronic device contact portion, the contact portion that is second farthest to the right is the short detection contact portion, and the memory contact portions are located to the left of the short detection contact portion and to the right of the first electronic device contact portion.	contact with the contact forming members so that electrical communication is enabled with the printer, and with the ink cartridge oriented so that the exit of the ink supply opening faces downwards, then the contact portion farthest to the left is the first electronic device contact portion, the contact portion that is farthest to the right is the second electronic device contact portion, the contact portion that is second farthest to the right is a short detection contact portion, and the memory contact portions are located to the left of the short detection contact portion and to the right of the first electronic device contact portion. The following photo depicts the terminal arrangement when it is viewed from the vantage of the printer's contact forming members, with the terminals oriented as if in contact with the contact forming members so that electrical communication is enabled with the printer, and with the ink cartridge oriented so that the exit of the ink supply opening faces downwards.  terminal arrangement viewed from vantage of printer's contact forming members . . . with the exit of the ink supply opening facing downwards The following photo depicts the arrangement of the contact portions when the terminal arrangement is viewed as described above.

	 Accordingly, the Representative '116 Product literally meets this limitation of claim 18 of the '116 patent.

70. On information and belief after conducting a reasonable investigation, Defendants have and are actively, knowingly and intentionally aiding and abetting and inducing infringement of the '116 patent in violation of 35 U.S.C. § 271(b) by non-parties, including end-users, despite Defendants' knowledge of the '116 patent.

71. On information and belief, Defendants had knowledge of the '116 patent prior to, or at least since the filing and service of this complaint on Defendants.

72. On information and belief, Defendants are contributing to the infringement of the '116 patent in violation of 35 U.S.C. § 271(c) by non-parties by offering to sell or selling within the United States or importing into the United States components of the patented inventions set forth in the '116 patent. The components constitute a material part of the inventions. Defendants know that such components are especially made or especially adapted for use in an infringement of the '116 patent. The components are not a staple article or commodity of commerce suitable for substantial noninfringing use.

73. By reason of Defendants' infringing activities, Epson has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.

74. Defendants' acts complained of herein have damaged and will continue to damage Epson irreparably. Epson has no adequate remedy at law for these wrongs and injuries. Epson is therefore entitled to a preliminary and permanent injunction restraining and enjoining Defendants and their agents, servants, and employees, and all persons acting thereunder, in concert with, or on their behalf, from infringing the claims of the '116 patent.

75. Defendants are not licensed or otherwise authorized to make, use, import, sell, or offer to sell any product claimed in the '116 patent, and Defendants' conduct is, in every instance, without Epson's consent.

76. On information and belief, Defendants' infringement has been and continues to be willful.

FOURTH CLAIM FOR RELIEF

(Trademark Infringement, False Designation of Origin, and Unfair Competition—15 U.S.C. §§ 1114; 1125(a))

77. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 40 as though fully set forth at length here.

78. Epson is the owner of all relevant intellectual property rights in the WAVE Mark. Attached as Exhibit G to this Complaint is a true and correct copy of the U.S. trademark registration for the WAVE Mark.

79. The WAVE Mark has been in continuous use since at least its date of registration.

80. Epson advertises, distributes, and sells its products to consumers under the WAVE Mark.

81. Epson's federal trademark registration for the WAVE Mark is in full force and constitutes *prima facie* evidence of the validity of the WAVE Mark. Epson has also acquired common law rights in the use of the WAVE Mark throughout the United States.

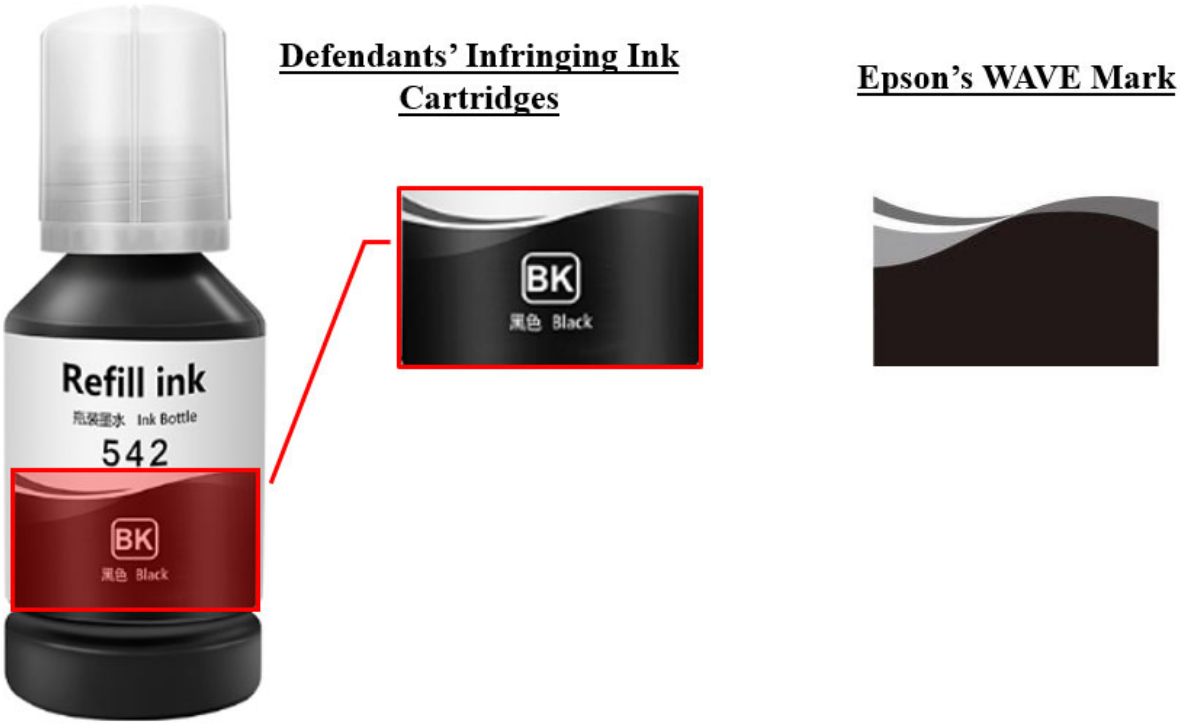
82. Epson has invested significant time, money, and effort in advertising, promoting, and developing the WAVE Mark throughout the United States and the world. As a result of such advertising and promotion, Epson has established substantial goodwill and widespread recognition in the WAVE Mark, and the WAVE Mark has become associated exclusively with Epson and its products both by customers and potential customers, as well as the general public at large. The WAVE Mark has been, and will continue to be, known throughout the United States and the world as identifying and distinguishing Epson's products and services.

83. To create and maintain such goodwill amongst its customers, Epson has taken substantial steps to ensure that products bearing the WAVE Mark are of the highest quality. As a result, the WAVE Mark has become widely known and is recognized throughout the United States and the world as a symbol of high quality products.

84. Epson is not affiliated with Defendants, and Epson has never authorized or otherwise granted Defendants permission to use the WAVE Mark.

85. Despite this, Defendants have used and continue to use the WAVE Mark in the advertisement, offer for sale, and sale of Defendants' aftermarket bottles of ink on the Internet, including, but not limited to, Alibaba.com and Aliexpress.com.

86. The product labels for Defendants' aftermarket bottles of ink exploit a nearly identical copy of Epson's WAVE Mark, as shown below:



87. Defendants' use in commerce of the WAVE Mark in connection with the advertising and sale of its competing aftermarket bottles of ink is likely to cause, and has caused, confusion and deception amongst consumers as to the origin of Defendants' products. Defendants' conduct deceives the ordinary consumer into believing that Defendants' aftermarket bottles of ink originate from, or are affiliated, authorized, sponsored, or approved by Epson, or that Defendants and Epson are otherwise associated, which they are not.

88. Defendants' sale of bottles of ink bearing the WAVE Mark substantially harms consumers who ultimately purchase Defendants' aftermarket bottles of ink believing them to be Epson products, or otherwise sponsored or approved by Epson. Further, Defendants' conduct likely results in consumer confusion as well as the dilution of Epson's goodwill and trade name as consumers are not receiving Epson's high quality products as intended.

89. On information and belief, Defendants advertise and sell their bottles of ink bearing the WAVE Mark with the intent to deceive consumers, create consumer confusion, and divert sales of Epson products and accessories. Defendants' actions demonstrate an intentional, willful, and malicious intent to trade on the goodwill associated with the WAVE Mark, thereby causing immediate, substantial, and irreparable injury to Epson. Defendants' sale of bottles of ink bearing the WAVE Mark results in the lessening of sales of properly advertised Epson products to the detriment of Epson.

90. Defendants acts as alleged herein constitute the use in commerce, without consent of Epson, of a reproduction, counterfeit, copy, or colorable imitation of the WAVE Mark in connection with the sale, offering for sale, distribution, or advertising of goods, which use is likely to cause confusion or mistake, or to deceive consumers, and therefore infringes Epson's rights in the WAVE Mark, in violation of the Lanham Act, 15 U.S.C. § 1114.

91. Further, by selling or distributing products using the WAVE Mark as alleged herein, Defendants are engaging in unfair competition, and/or falsely representing sponsorship by, affiliation with, or connection to Epson and their goods and services in violation of 15 U.S.C. § 1125(a).

92. By advertising or promoting products using the WAVE Mark as alleged herein, Defendants are misrepresenting the nature, characteristics, and qualities of their goods and services in violation of 15 U.S.C. § 1125(a).

93. Epson is entitled to a judgment of three times its damages and Defendants' ill-gotten profits, together with reasonable attorneys' fees, pursuant to 15 U.S.C. § 1117(a).

94. As a direct and proximate result of Defendants' actions, Epson has been, and continues to be, damaged by Defendants' activities and conduct. Defendants have profited thereby, and unless its conduct is enjoined, Epson's reputation and goodwill will continue to suffer irreparable injury that cannot adequately be calculated or

compensated by money damages. Accordingly, Epson is entitled to injunctive relief pursuant to 15 U.S.C. § 1116.

PRAYER FOR RELIEF

WHEREFORE, Epson prays for judgment against Defendants as follows:

A. That the '422, '116, and '749 patents are valid; that the '116 and '749 patents are enforceable and that the '422 patent was enforceable before its expiration on April 2, 2022;

B. That Defendants have infringed and are infringing the '116, and '749 patents and have infringed the '422 patent;

C. That such infringement of the '116 and '749 patents was and is willful and infringement of the '422 patent was willful before April 2, 2022;

D. That Defendants and their subsidiaries, affiliates, parents, successors, assigns, officers, agents, representatives, servants, and employees, and all persons in active concert or participation with them, be preliminarily and permanently enjoined from continued infringement of the '116, and '749 patents;

E. That Defendants be ordered to pay Epson its damages caused by Defendants' infringement of the '422, '116, and '749 patents and that such damages be trebled, together with interest thereon;

F. That this case be declared exceptional pursuant to 35 U.S.C. § 285 and that Epson be awarded its reasonable attorneys' fees, litigation expenses and expert witness fees, and costs;

G. That Defendants have infringed and are infringing upon the WAVE Mark;

H. That Defendants' acts of trademark infringement have been knowing and willful;

I. That Defendants and their subsidiaries, affiliates, parents, successors, assigns, officers, agents, representatives, servants, and employees, and all persons in active concert or participation with them, including, but not limited to, any online

platform, such as Alibaba.com and Aliexpress.com, or any website, website host, website administrator, domain registrar, or internet service provider, be preliminarily and permanently enjoined from continued use, or attempts to use the WAVE Mark.

J. That Defendants be ordered to pay Epson its actual damages caused by Defendants' infringement of the WAVE Mark and treble said damages as provided by law pursuant to 15 U.S.C. § 1117;

K. That Defendants be ordered to recall, impound, and destroy of all goods, advertising, or other items bearing infringing markings, pursuant to 15 U.S.C. § 1118;

L. That Epson be awarded its reasonable attorneys' fees and costs incurred in bringing this action as allowed by law;

M. That Epson be awarded pre-judgment and post-judgment interest in the maximum amount allowed by law; and

N. That Epson have such other and further relief as the Court deems just and proper.

JURY TRIAL DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs request a trial by jury of all issues so triable.

DATED: June 15, 2022

QUINN EMANUEL URQUHART & SULLIVAN, LLP

By *\/s/ Tigran Guledjian*

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