Case No. _____
COMPLAINT FOR: PATENT INFRINGEMENT

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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 of United States Patent No. 6,955,422 ("the '422 patent"), United States Patent No. 8,794,749 ("the '749 patent"), and United States Patent No. 8,454,116 ("the '116 patent") (collectively "Epson Patents") arising under the patent laws of the United States, 35 U.S.C. § 1 *et. seq.*
- The infringing products at issue are aftermarket ink cartridges for use with Epson printers. Over the years Epson has brought numerous actions in various district courts as well as the United States International Trade Commission ("ITC" or "Commission") for infringement of its patents. In fact, the ITC has issued two general exclusion orders that prohibit the importation of ink cartridges that infringe certain Epson patents, including the three 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 ITC's general exclusion orders and Epson's patents. Players in the aftermarket ink cartridge industry know that importation and sale of ink cartridges for use with Epson printers may violate the ITC's general exclusion orders and infringe Epson's patents. Epson also gives notice of its patents, including the '422, '749, and '116 patents, by virtual marking of its cartridges pursuant to 35 U.S.C. § 287(a). Nevertheless, infringers continue to import and sell infringing ink cartridges in flagrant violation of the ITC's general exclusion orders, United States patent law, and Epson's patents.
- 3. Defendants in this case are willful infringers of Epson's patents, including the '422, '749, and '116 patents, and violators of the ITC's general exclusion orders. Epson brings this action to recover money damages, for a preliminary and permanent injunction, and for other relief as set forth herein.

RELATED ACTIONS

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- 4. This action is related to the following twenty-two actions because one or more of the Epson patents asserted here are or were also asserted in those cases against infringing aftermarket ink cartridges that, from a patent analysis perspective, are the same as the accused products in this case:
 - Seiko Epson Corporation, et al. v. BCH Technologies LLC, et al., Civil No. 1:19-cv-01067 (M.D.N.C.), filed on October 17, 2019, currently pending;
 - Seiko Epson Corporation, et al. v. STS Refill Technology, LLC, b. et al., Civil No. 9:18-cv-81723-CV-ALTMAN (S.D.FL.), filed on December 17, 2018, currently pending;
 - Seiko Epson Corporation, et al. v. CIS Systems, Inc., et al., Civil c. No. 1:18-cv-06586-ENV-PK (N.D.IL.), filed on September 27, 2018, currently pending;
 - Seiko Epson Corporation, et al. v. Inkjet2U LLP, et al., Civil No. d. 3:16-cv-2322-YY (D. Or.) filed on December 14, 2016, currently pending;
 - Seiko Epson Corporation, et al. v. FTrade Inc., et al., Civil No. e. 1:18-cv-05036-ENV-PK (E.D.N.Y.), filed on September 5, 2018, concluded by settlement, consent judgment and permanent injunction;
 - f. Seiko Epson Corporation, et al. v. Sinotime Technologies, Inc., et. al., Civil No. 18-cv-22838-Gayles/Otazo-Reyes (S.D. Fla.) filed on July 13, 2018, concluded by settlement, consent judgment and permanent injunction;
 - Seiko Epson Corporation, et al. v. EZ Inks et al., Civil No. 1:18g. cv-01338 (E.D.N.Y.), filed on March 2, 2018, concluded by settlement, consent judgment and permanent injunction;

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- p. Seiko Epson Corporation, et al. v. Shoppers Smart LLC, Houses Investing, LLP and Houses Investing Of Florida, Corp., Civil No. 3:16-cv-2324-YY (D. Or.) filed on December 14, 2016, concluded by settlement, consent judgment and permanent injunction;
- q. Seiko Epson Corporation, et al. v. Nano Business & Technology, Inc., Civil No. 3:16-cv-02211-YY (D. Or.), filed on November 22, 2016, concluded by settlement, consent judgment and permanent injunction;
- r. Seiko Epson Corporation, et al. v. Glory South Software

 Manufacturing Inc., et al., Civil No. 06-236-BR (D. Or.), filed
 on February 17, 2006, concluded by default judgment and
 permanent injunction
- s. Seiko Epson Corporation, et al. v. Glory South Software

 Manufacturing Inc., et al., Civil No. 06-477-BR (D. Or.), filed
 on April 7, 2006, concluded by default judgment and permanent
 injunction;
- t. Seiko Epson Corporation, et al. v. Abacus 24-7 LLC, et al., Civil No. 09-477-BR (D. Or.), filed on April 28, 2009, concluded by settlement, consent judgment and permanent injunction;
- u. Seiko Epson Corporation, et al. v. E-Babylon, Inc., et al., Civil No. 07-896-BR (D. Or.), filed on June 18, 2007, concluded by settlement, consent judgment and permanent injunction; and
- v. Seiko Epson Corporation, et al. v. Inkjetmadness.com, Inc., et al., Civil No. 08-452-BR (D. Or.), filed on April 10, 2008, concluded by settlement, consent judgment and permanent injunction.

6. 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

- 7. 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.
- 8. 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 3840 Kilroy Airport Way, Long Beach, California 90806. 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

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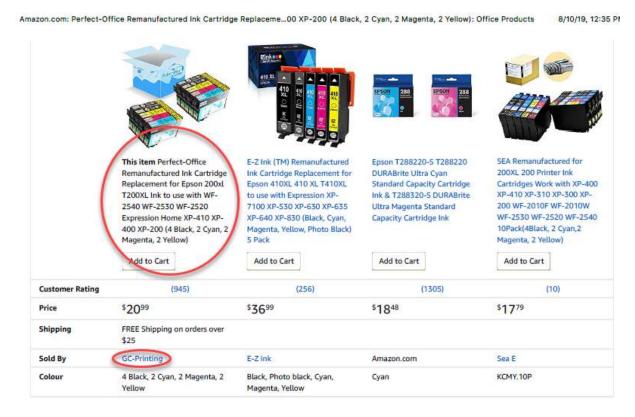
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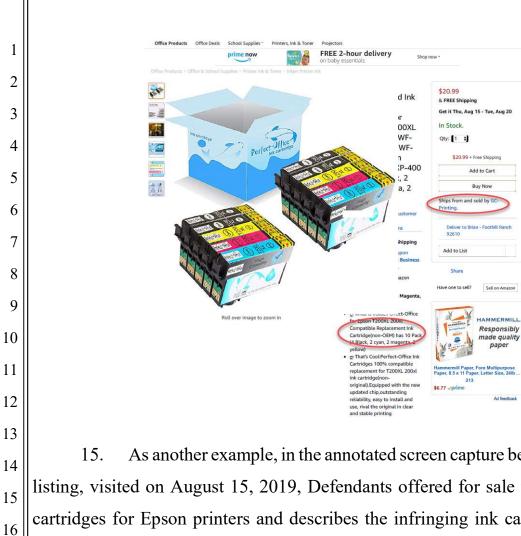
States Epson ink cartridges that embody the inventions contained in the Epson Patents, including cartridges manufactured by Epson Portland Inc.

- 9. 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 Place, 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. Seiko Epson, Epson America and Epson Portland are sometimes referred to collectively herein as "Epson" or "Plaintiffs."
- 10. 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.
- 11. On information and belief, and according to the California Secretary of State, defendant Vintrick Inc. ("Vintrick") is a corporation organized and existing under the laws of the State of California. Based on information and belief, and according to Vintrick's filings with the California Secretary of State, Vintrick's President is Xiaodong Hu, and Vintrick's principal office and mailing address is 341 S. Palm Avenue, Alhambra, California 91803. Based on information and belief, and according to Vintrick's filings with the California Secretary of State, Vintrick's registered agent for service of process is Xiaodong Hu and the service address is the same Alhambra address as Vintrick's principal office at 341 S. Palm Avenue, Alhambra, California 91803.
- 12. On information and belief, defendant, Xiaodong Hu, is an individual who resides in California, and is the President of defendant Vintrick with an address at 341 S. Palm Avenue, Alhambra, California 91803.
- Collectively, defendants Vintrick and Xiaodong Hu are referred to herein 13. as "Defendants."

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14. On information and belief, Defendants have and continue to conduct business on the Internet under various seller names, including but not limited to "GC-Printing," "JieJieGao," "Eurowayoo," "Gucoco," and "Perfect-Office through their listings and/or storefronts on amazon.com; "super_inker," "print-kingdom," "jaylen67," "zilionyen2016," and "kiet_1" through their listings and/or storefronts on ebay.com; and "printchainstore," and "win-tinten" through their listings and/or storefronts on newegg.com. Directly through amazon.com, ebay.com, and newegg.com, Defendants offer for sale and sell ink cartridges that infringe the Epson Patents. For example, in the annotated screen captures below of Defendants' listing on amazon.com visited on August 10, 2019, Defendants offered for sale infringing ink cartridges for Epson printers and describes the infringing ink cartridge as "Perfect-Office Remanufactured Ink Cartridge Replacement for Epson 200XL, T200XL Ink to use with WF-2540, WF-2530, WF-2520 Expression Home XP-410, XP-400, XP-200 (4 Black, 2 Cyn, 2 Magenta, 2 Yellow)," and "Compatible Replacement Ink Cartridge (non-OEM)."





15. As another example, in the annotated screen capture below of an ebay.com listing, visited on August 15, 2019, Defendants offered for sale their infringing ink cartridges for Epson printers and describes the infringing ink cartridges as "5 Pack 200XL Ink for XP200, XP300, XP310, XP400, XP410, WF2520, WF2530, WF2540 Printers," and that these infringing ink cartridges are shipped and sold by Defendants.



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As another example, in the annotated screen capture below of Defendants' 16. "printchainstore" storefront on newegg.com, visited on March 19, 2019, Defendants offered for sale their infringing ink cartridges for Epson printers and describes the infringing ink cartridges as "Win-Tinten Replacement with Epson T252 6 packs Compatible Ink cartridges.

		TRI	ending now: amd graphics card	newegg → FEEDBAC
ALL PRODUCTS ▼	DEALS & SERVICE	ES ▼ FEATURED SELLERS ▼ Ke	ywords, Model # or Item #	Search all ▼ SEARCH
PRINTCHAINST				
artridge Color	•	Search Within:	60	Page 1/2 4 >
3 Colors	(3)			
4 Colors	(16)	Sort by: Featured Items •		View: 36 ▼ III III
5 Colors	(2)			
Black	(4)	.10	<u> </u>	
Black/Color	(1)			
Cyan/Magenta/Y	(1)			
SHOW MORE				
artridge Quantity		Win-Tinten Replacement	Win-TinTen High Yield	Win-Tinten Replacement
2 Pack	(4)	with Epson T252 6 packs Compatible ink cartridges	Black 4 Pack Compatible Ink Cartridges HP 920 XL	with Epson T252 Compatible ink cartridges
3 Pack	(1)			
4 Pack	(8)	****	± 2 30	400.00
	(3)	\$14 .09	\$8.39	\$29 ^{.88}
5 Pack		Free Chiening	Free Shipping	Free Shipping
5 Pack 6 Pack	(3)	Free Shipping ADD TO CART	ADD TO CART	ADD TO CART >

17. Numerous purchases of infringing ink cartridges were made by Epson from Defendants' storefronts and listings on amazon.com, ebay.com, and newegg.com. The infringing ink cartridges were shipped by Defendants to Epson from Defendants' principal office and mailing address at 341 S. Palm Avenue, Alhambra, California 91803 address.

JURISDICTION AND VENUE

18. 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 and 1338(a). This Court has personal jurisdiction of the Defendants at least because Defendants have committed acts of direct and indirect patent infringement in this judicial district and reside in this judicial district. Venue is proper in this district under 28 U.S.C. §§ 1391(b), (c) and 1400(b).

FIRST CLAIM FOR RELIEF

(Patent Infringement—35 U.S.C. § 271)

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

- 19. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 18 as though fully set forth at length here.
- 20. 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 A 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 B 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.
 - 21. The '422 patent is valid and enforceable.
- 22. On information and belief after conducting a reasonable investigation, Defendants have infringed and are infringing the '422 patent, as defined by numerous claims 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 having model nos. 126, 126XL, T127, 127XL, 200XL, T200XL, T200XL120, 220, T220, 220XL, T220XL120, 252, T252, and T252XL, as well as

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[1a] An ink cartridge detachably mountable on a carriage which is reciprocally

Claim 1 of the '422 Patent

others that are no more than colorably different from the foregoing (collectively, the "Accused '422 Ink Cartridges"). The specific models of Accused '422 Ink Cartridges identified above were obtained by Epson during its investigation leading to this Complaint from Defendants' online listings on their storefronts on amazon.com, ebay.com, and newegg.com.

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. T200XL120; Control No. 10291) 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 WorkForce WF-2530 printer ("the Representative '422 Epson Printer"), 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.

Where found in the Accused '422 Ink Cartridges
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 market and sell the Accused '422 Ink Cartridges as being compatible with one or more specific Epson ink jet printers. For example, the Representative '422 Ink

For identification purposes, a unique "control number" ("Control No.") has been assigned by Epson to this ink cartridge and all other ink cartridges, purchased by Epson from Defendants as part of Epson's investigation leading to the filing of this Complaint.

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movable in a recording apparatus and which has a plurality of electrodes, an engagement portion and an ink supply needle, the ink cartridge comprising:

Cartridge is compatible with the Representative '422 Epson Printer.



an ink cartridge detachably mountable on a carriage of a recording apparatus (i.e., an ink jet

The following photograph depicts the Representative '422 Ink Cartridge detachably mounted in the carriage of the Representative '422 Epson Printer.

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.

Engagement portion of the carriage of the Representative '422' Epson Printer

Electrodes of the carriage of the Representative '422 Epson Printer

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 container into the carriage;

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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:



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

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1 [1c] a memory device having a 2 plurality of 3 electrodes disposed 4 substantially in a 5 first plane for respective 6 electrical 7 connection to the 8 electrodes of the carriage, the 9 electrodes of the memory device 10 being fixed 11 relative to the 12 first surface of the container; and 13 14 15 16 17 18

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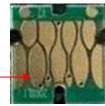
Each of the Accused '422 Ink Cartridges has a memory device having a plurality of electrodes that are disposed substantially in a first plane for respective electrical connection to the electrodes of the carriage, the electrodes of the memory device are fixed relative to the first surface of the container. These features are shown below using the Representative '422 Ink Cartridge:

gold colored electrodes are in the plane of the circuit board which itself is in a first plane

the electrodes are fixed relative to the first surface (i.e., the front surface of the container



Memory devices is on the back of the green circuit board



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

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[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 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,

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:



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

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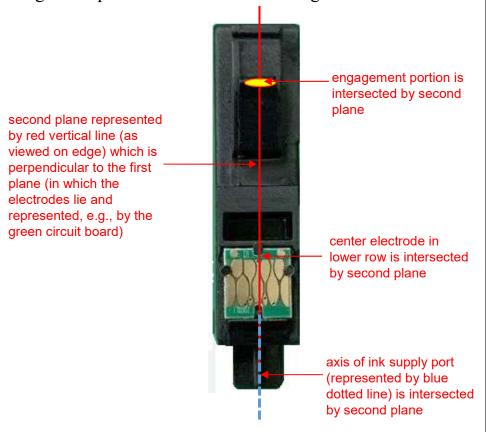
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[1e] wherein at least one said electrode, the movable engagement portion, and an axis of the ink supply port are intersected by a second plane that is perpendicular to the first plane.

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.

- 24. 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 '422 patent in violation of 35 U.S.C. § 271(b) by non-parties, including end-users, despite Defendants' knowledge of the '422 patent.
- 25. On information and belief, defendant Vintrick's president, Xiaodong Hu, directs and controls the infringing activities of defendant Vintrick and has taken and continues to take active steps to encourage and induce defendant Vintrick to infringe by

actively running and directing the businesses, including but not limited to being the principal decision maker regarding the promotion, advertising, and sale of products that infringe the '422 patent on Defendants' storefronts on internet marketplaces, including amazon.com, ebay.com, and newegg.com discussed above in paragraphs 11-17.

- 26. On information and belief, Defendants had knowledge of the '422 patent prior to, or at least since the filing and service of this complaint on Defendants.
- 27. On information and belief, Defendants are contributing 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. 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.
- 28. By reason of Defendants' infringing activities, Epson has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.
- 29. 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 '422 patent.
- 30. Defendants are not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge claimed in the '422 patent, and Defendants' conduct is, in every instance, without Epson's consent.
- 31. On information and belief, Defendants' infringement has been and continues to be willful.

SECOND CLAIM FOR RELIEF

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(Patent Infringement—35 U.S.C. § 271)

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

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32. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 18 as though fully set forth at length here.

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33. 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 C to this Complaint is a true and correct copy of the '749 patent.

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34. The '749 patent is valid and enforceable.

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Defendants have infringed and are infringing the '749 patent, as defined by numerous claims of the patent in violation of 35 U.S.C. § 271(a) by making, using, importing,

On information and belief after conducting a reasonable investigation,

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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

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cartridges having model nos. 126, 126XL, T127, 127XL, 200XL, T200XL,

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T200XL120, 220, T220, 220XL, T220XL120, 252, T252, and T252XL, as well as

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others that are no more than colorably different from the foregoing (collectively, the "Accused '749 Ink Cartridges"). The specific models of Accused '749 Ink Cartridges

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identified above were obtained by Epson during its investigation leading to this

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Complaint from Defendants' online listings on its storefronts on amazon.com, ebay.com, and newegg.com.

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36. As a non-limiting example, set forth below is a claim chart with a description of Defendants' infringement of exemplary claim 1 of the '749 patent by the Accused '749 Ink Cartridges. The infringement is shown using a representative ink cartridge (Model No. T200XL120; Control No. 10467) from among the Accused '749

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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 a specific Epson printer, the Epson WorkForce WF-2530 printer ("the Representative '749 Epson Printer"), 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.

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Claim 1 of the '749 Patent

attached to a printing apparatus

insertion direction, the printing

side electrical contact members,

the printing material container

apparatus having a print head

and a plurality of apparatus-

[1a] A printing material

by being inserted into the

printing apparatus in an

comprising:

container adapted to be

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Where found in the Accused '749 Ink Cartridges

Each of the Accused '749 Ink Cartridges is a printing material container (an ink cartridge) 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 accept 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:

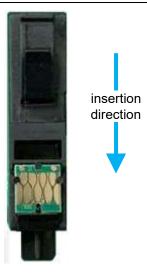


The Representative '749 Ink Cartridge



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 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 yellow, magenta, and cyan 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 that accept the Accused '749 Ink Cartridges each include a print head for printing and multiple printer-side electrical contact

1 forming members for each ink cartridge accepted by the printer. These features are shown below for 2 the printer's cartridge holder slot that accepts the 3 Representative '749 Ink Cartridge, a black-ink ink cartridge (the printer's electrical contact members 4 for the yellow, magenta, and cyan cartridges can 5 also be seen in the right photo): 6 zoomed-in view of printer's 7 electrical contact forming members (1 indicated; 9 8 shown) 9 10 11 12 13 Accordingly, the Accused '749 Ink Cartridges literally meet the preamble of claim 1 of the '749 14 patent. 15 [1b] an ink supply opening, Each of the Accused '749 Ink Cartridges comprises 16 having an exit, adapted to an ink supply opening having an exit. When 17 attached, the ink supply opening of each of the supply ink from the ink cartridge to the printing Accused '749 Ink Cartridges is adapted to supply 18 ink from the cartridge to the Epson ink jet printer apparatus; 19 that accepts the cartridge. photograph depicts the exit of the ink supply 20 opening of the Representative '749 Ink Cartridge: 21 22 23 24 exit of ink supply opening 25 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 26 patent. 27

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The following

[1c] a low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device comprising a memory device;

mathematical device adapted to receive and function with a low voltage, the low voltage electronic device comprising a memory device;

mathematical device adapted to receive and function with a low voltage, the low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and function with a low voltage electronic device adapted to receive and electronic device adapted to rece

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 black ink, attached to the Representative '749 **Epson Printer:**

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memory device shows, on the computer's display screen, the amount of black ink remaining in the Representative '749 Ink Cartridge



memory device shows, on the printer's display screen, the amount of 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

1 voltage as compared to the high voltage discussed in the next limitation) to certain of their contact 2 forming members that in turn correspond to certain 3 of the contact portions of the Accused '749 Ink Cartridges that are connected to the low voltage 4 electronic device comprising a memory device. 5 Consequently, the low voltage electronic device is adapted to receive and function with a low voltage. 6 7 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 8 patent. 9 [1d] a high voltage electronic Each of the Accused '749 Ink Cartridges comprises 10 device adapted to receive and a high voltage electronic device that is adapted to 11 function with a high voltage, receive and function with a voltage that is a higher which is a higher voltage than voltage than the voltage of the low voltage 12 electronic device. The high voltage electronic the low voltage of the low 13 voltage electronic device; and device may be, for example, a resistor, or one or more other coupled electronic components, that 14 is/are capable of receiving and functioning with a 15 high voltage. The high voltage electronic device is located on the back of a printed circuit board that 16 is mounted on a wall of the ink cartridge, as shown 17 below in the Representative '749 Ink Cartridge: 18 19 20 21 22 23 printed circuit board (green) with high voltage 24 electronic device located on back 25 26 27 All Epson ink jet printers that accept the Accused '749 Ink Cartridges have similar circuitry and 28

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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.

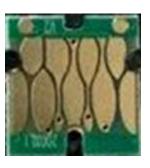
Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.

[1e] a plurality of containerside terminals having contact portions adapted and positioned to contact corresponding apparatus-side contact forming members so that electrical communication is enabled between the 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

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 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

electrically coupled to the high voltage electronic device, wherein: 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):

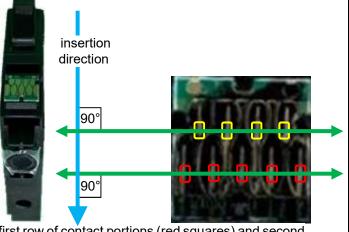


The contact portions of the Accused '749 Ink Cartridges' terminals also include first and second high voltage electronic device contact portions that are each electrically coupled to the high voltage electronic device discussed above with respect to limitation 1d. Each high voltage electronic device 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):

1 2 3 second high first high 4 voltage voltage electronic electronic 5 device device contact contact 6 portion portion 7 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 8 patent. 9 [1f] the contact portions are 10

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 arrow)

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1 Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 2 patent. 3 In each of the Accused '749 Ink Cartridges, the [1g] the first row of contact 4 portions is disposed at a first row of contact portions is disposed at a 5 location that is further in the location that is further in the insertion direction than the second row of contact portions. insertion direction than the 6 second row of contact portions, following photographs of the Representative '749 7 Ink Cartridge show the first row of contact and, portions (red boxes) disposed at a location that is 8 further in the cartridge insertion direction than the 9 second row of contact portions (yellow boxes) (i.e., the first row is deeper in the printer than the 10 second row). 11 12 insertion 13 direction 14 15 second row of contact 16 portions 17 first row of contact 18 portions 19 first row of contact portions (red squares) disposed further in insertion direction (blue arrow) than second 20 row of contact portions (yellow squares) 21 Accordingly, the Accused '749 Ink Cartridges 22 literally meet this limitation of claim 1 of the '749 23 patent. 24 [1h] the first row of contact In each of the Accused '749 Ink Cartridges, the portions has a first end position first row of contact portions has a first end position 25 and a second end position at opposite ends thereof, and a second end position at 26 opposite ends thereof, the first the first high voltage electronic device contact high voltage electronic device portion is disposed at the first end position of the 27 contact portion is disposed at first row of contact portions, and the second high 28

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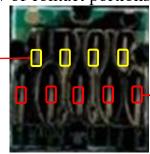
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the first end position of the first row of contact portions and the second high voltage electronic device contact portion is disposed at the second end position of the first row of contact portions. voltage electronic device contact portion is disposed 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.

second high
voltage
electronic
device contact
portion
disposed at
second end
position of first
row of contact
portions



first high voltage electronic device contact portion disposed at first end position of first row of contact portions

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

- 37. 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.
- 38. On information and belief, defendant Vintrick's president, Xiaodong Hu, directs and controls the infringing activities of defendant Vintrick and has taken and continues to take active steps to encourage and induce defendant Vintrick to infringe by actively running and directing the businesses, including but not limited to being the principal decision maker regarding the promotion, advertising, and sale of products that infringe the '749 patent on Defendants' storefronts on internet marketplaces, including amazon.com, ebay.com, and newegg.com discussed above in paragraphs 11-17.

- 39. 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.
- 40. 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.
- 41. By reason of Defendants' infringing activities, Epson has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.
- 42. 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.
- 43. 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.
- 44. 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

45. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 18 as though fully set forth at length here.

- 46. 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 cartridges for printers. Attached as Exhibit D to this Complaint is a true and correct copy of the '116 patent.
 - 47. The '116 patent is valid and enforceable.
- 48. 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 that operate with Epson ink jet printers, including but not limited to replacement cartridge chips and ink cartridges having model nos. T200XL, T200XL120, 220, T220, 220XL, T220XL120, 252, T252, and T252XL, as well as others that are no more than colorably different from the foregoing (collectively, the "Accused '116 Ink Cartridges"). The specific models of Accused '116 Ink Cartridges and replacement cartridge chips identified above were obtained by Epson during its investigation leading to this Complaint from Defendants' online listings on their storefronts on amazon.com, ebay.com, and newegg.com.
- 49. 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 Ink Cartridges. The infringement is shown using a representative ink cartridge (Model No. T200XL120; Control No. 10291) from among the Accused '116 Ink Cartridges purchased from Defendants that, for infringement analysis purposes, is representative of and represents all of Defendants' ink cartridges within the Accused '116 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 '116 Ink Cartridge." The Representative '116 Ink Cartridge was

designed for use in a specific Epson printer, the Epson WorkForce WF-2530 printer ("the Representative '116 Epson Printer"), and for purposes of the analysis set forth herein, the Representative '116 Ink Cartridge was tested in the Representative '116 Epson Printer, as discussed in further detail in the claim chart below.

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Claim 18 of the '116 patent

material container that is used

the ink jet printing apparatus

contact forming members, the

supply opening, the ink supply

opening having an exit on an

exterior portion of the body

and being adapted to supply

container to the printing apparatus, the circuit board

comprising:

ink from the printing material

having a print head and a

plurality of apparatus-side

printing material container

having a body and an ink

in an ink jet printing apparatus,

[18a]. A circuit board mountable on a printing

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Where found in the Accused '116 Ink Cartridges

A circuit board is mounted on the Representative '116 Ink Cartridge (model no. T676XL120; control no. 10482), which itself is a printing material container and that 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 Ink Cartridge has a body and an ink supply opening having an exit on an exterior portion of the body and being adapted to supply ink from the Representative '116 Ink Cartridge to the Epson ink jet printing apparatus.

The Representative '116 Ink Cartridge 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 Ink Cartridge containing black ink.



The Representative '116 Ink Cartridge is used in any of the following Epson ink jet printer (printing apparatus) models: Epson Expression Home XP-200, XP-300, XP-310, XP-400, XP-410, WorkForce WF-2010F, WF-2010W, WF-2510WF, WF-2520, WF-2520NF, WF-2530, WF-2530WF, WF-2540, and WF-2540WF (the "Epson Ink Jet Printers").

The following photo depicts the Epson WorkForce WF-2540 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 Ink Cartridge has a body, as depicted below.



The Representative '116 Ink Cartridge 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

1 from the printing material container (i.e., the cartridge) to the Epson Ink Jet Printers. 2 3 The following photo depicts the exit of the Representative '116 Ink Cartridge's ink supply 4 opening. 5 6 7 8 exit of ink supply opening (shown here with anti-leak 9 film undisturbed and in place) Accordingly, the Representative '116 Ink 10 Cartridge literally meets the preamble of claim 18 of the '116 patent. 11 12 The circuit board mounted on the [18b] a memory device adapted to be driven by a Representative '116 Ink Cartridge comprises a 13 memory driving voltage; memory device that is adapted to be driven by 14 a memory driving voltage. 15 The following photo depicts the circuit board 16 (green with gold-colored metallic terminals) mounted on the Representative '116 Ink 17 Cartridge. The memory device is located on 18 the back of the circuit board and is not visible in this view. 19 20 21 22 circuit board 23 (memory device on back) 24 25 All Epson ink jet printers that accept the Representative '116 Ink Cartridge have similar 26 circuitry and programming in terms of the 27 voltages and signals they apply to their contact 28 forming members and, consequently, to the

1 corresponding contact portions of the Representative '116 Ink Cartridge (the contact 2 portions are located on the gold-colored 3 metallic terminals of the ink cartridge shown above). In particular, Epson printers apply a 4 maximum voltage of approximately 4 volts (a 5 low voltage as compared to the high voltage discussed in the next limitation) to certain of 6 their contact forming members that in turn 7 correspond to certain of the contact portions of the Representative '116 Ink Cartridge that are 8 connected to the memory. Consequently, the 9 memory device is adapted to be driven by a memory driving voltage. This was confirmed 10 through testing during the ITC 946 11 Investigation. 12 Accordingly, the Representative '116 Ink 13 Cartridge literally meets this limitation of claim 18 of the '116 patent. 14 15 [18c] an electronic device The circuit board mounted on the adapted to receive a voltage Representative '116 Ink Cartridge comprises an 16 higher than the memory electronic device that is adapted to receive a 17 driving voltage; and voltage that is a higher voltage than the voltage of the memory device. The electronic device 18 that receives a higher voltage may be, for 19 example, a resistor, or one or more other coupled electronic components, that is/are 20 capable of receiving a high voltage. The 21 electronic device is located on the back of a printed circuit board that is mounted on a wall 22 of the Representative '116 Ink Cartridge shown 23 in the above limitation. 24 Moreover, all Epson ink jet printers that accept 25 the Representative '116 Ink Cartridge have similar circuitry and programming in terms of 26 the voltages and signals they apply to their 27 contact forming members and, consequently, to the corresponding contact portions of the 28

circuit board mounted on the Representative '116 Ink Cartridge (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 Ink Cartridge 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.

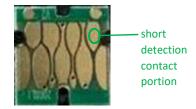
Accordingly, the Representative '116 Ink Cartridge literally meets this limitation of claim 18 of the '116 patent.

[18d] a plurality of terminals having contact portions 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

The circuit board mounted on the Representative '116 Ink Cartridge comprises a 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 Ink Cartridge's circuit board are the gold colored metallic portions on the green circuit board, reproduced in enlarged form below.

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:



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 Ink Cartridge 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

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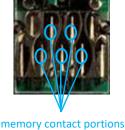
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described in 18(b), supra). The following annotated photo shows the location of the contact portions annotated by red circles.



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.

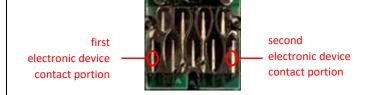
The following annotated photo depicts the five memory contact portions (in blue) located on the terminals on the front of the circuit board.



The contact portions of the circuit board's terminals include a first and second electronic

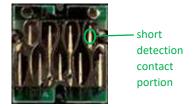
device contact portion that are each electrically coupled to the electronic device (specifically, the resistor). Each electronic device contact portion is electrically coupled by the terminal it appears on to a via that electrically couples the terminal to wiring located on the back of the circuit board. 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).



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Moreover, all Epson ink jet printers that accept the Representative '116 Ink Cartridge 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 Ink Cartridge 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 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

The contact portions of the Representative '116 Ink Cartridge'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 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.

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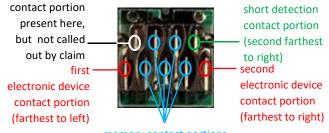
contact portion that is second farthest to the right is the short detection contact portion, and the memory contact portions are located to the left of the short detection contact portion and to the right of the first electronic device contact portion.

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.



memory contact portions (left of the short detection contact portion and to the right of the first electronic device contact portion)

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

- 50. 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.
- 51. On information and belief, defendant Vintrick's president, Xiaodong Hu, directs and controls the infringing activities of defendant Vintrick and has taken and continues to take active steps to encourage and induce defendant Vintrick to infringe by actively running and directing the businesses, including but not limited to being the principal decision maker regarding the promotion, advertising, and sale of products that infringe the '116 patent on Defendants' storefronts on internet marketplaces, including amazon.com, ebay.com, and newegg.com discussed above in paragraphs 11-17.
- 52. 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.
- 53. 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.
- 54. By reason of Defendants' infringing activities, Epson has suffered, and will continue to suffer, substantial damages in an amount to be proven at trial.
- 55. 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.

- 56. Defendants are not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge claimed in the '116 patent, and Defendants' conduct is, in every instance, without Epson's consent.
- 57. On information and belief, Defendants' infringement has been and continues to be willful.

PRAYER FOR RELIEF

WHEREFORE, Epson prays for judgment against Defendants as follows:

- A. That the Epson Patents are valid and enforceable;
- B. That Defendants have infringed and are infringing the Epson Patents;
- C. That such infringement is willful;
- 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 Epson Patents;
- E. That Defendants be ordered to pay Epson its damages caused by Defendants' infringement of the Epson 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; and
- G. 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.

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