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Attorneys for Plaintiffs Seiko Epson Corporation,
Epson America, Inc., and Epson Portland Inc.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON
PORTLAND DIVISION

SEIKO EPSON CORPORATION,
a Japan corporation; **EPSON AMERICA,**
INC., a California corporation; and **EPSON**
PORTLAND INC., an Oregon corporation,

Plaintiffs,

v.

GAEA SUPPLIES CORPORATION, a
California corporation,

Defendant.

Civil No. 3:17-cv-00366

COMPLAINT FOR:
PATENT INFRINGEMENT
DEMAND FOR JURY TRIAL

Plaintiffs Seiko Epson Corporation, Epson America, Inc., and Epson Portland Inc., 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, 35 U.S.C. § 1 *et. seq.*

RELATED ACTIONS

2. This action is related to two actions that are being concurrently filed, captioned as follows:

- a. *Seiko Epson Corporation, et al. v. OW Supplies Corp., et. al.*, Civil No. ____-cv-____ (D. Or.); and
- b. *Seiko Epson Corporation, et al. v. TA Trix USA Inc.*, Civil No. ____-cv-____ (D. Or.).

The same patents that are asserted in the above two cases are asserted in this Complaint against infringing products that, from a patent analysis perspective, are the same in each of the cases.

3. This action is also related to four recently filed actions captioned as follows:

- a. *Seiko Epson Corporation, et al. v. Nano Business & Technology, Inc.*, Civil No. 3:16-cv-02211-YY (D. Or.), filed on November 22, 2016 and currently assigned to Magistrate Judge Youlee Yim You;
- b. *Seiko Epson Corporation, et al. v. HT Tech, Inc. and HT Imaging Inc.*, Civil No. 3:16-cv-2321-YY (D. Or.) filed December 14, 2016 and currently assigned to Magistrate Judge Youlee Yim You;

- c. *Seiko Epson Corporation, et al. v. Inkjet2U LLP*, Civil No. 3:16-cv-2322-YY (D. Or.) filed on December 14, 2016 and currently assigned to Magistrate Judge Youlee Yim You; and
- d. *Seiko Epson Corporation, et al. v. Shoppers Smart LLC, Houses Investing, LLLP and Houses Investing Of Florida, Corp.*, Civil No. 3:16-cv-2324-YY (D. Or.) filed on December 14, 2016 and currently assigned to Magistrate Judge Youlee Yim You.

The same patents that are asserted in the foregoing cases are asserted in this Complaint against infringing products that, from a patent analysis perspective, are the same in each of the cases.

4. This action is also related to five legal proceedings, all of which were pending before this Court and were assigned to the Honorable Anna J. Brown. All five proceedings were concluded by settlement, entry of consent orders and/or by entry of defaults and default judgments, with the last of the proceedings concluding on June 15, 2012 when the cases were closed by the Court. One of the two patents (the '917 patent, discussed below) asserted in this case was litigated in each of the five related proceedings against the same or overlapping groups of products that are accused of infringement in this action. The five related proceedings are as follows:

- a. *Seiko Epson Corporation, et al. v. Glory South Software Manufacturing Inc., et al.*, Civil No. 06-236-BR (D. Or.), closed June 15, 2012;
- b. *Seiko Epson Corporation, et al. v. Glory South Software Manufacturing Inc., et al.*, Civil No. 06-477-BR (D. Or.), closed June 15, 2012;
- c. *Seiko Epson Corporation, et al. v. Abacus 24-7 LLC, et al.*, Civil No. 09-477-BR (D. Or.), closed June 15, 2012;

- d. *Seiko Epson Corporation, et al. v. E-Babylon, Inc., et al.*, Civil No. 07-896-BR (D. Or.), closed February 27, 2012; and
- e. *Seiko Epson Corporation, et al. v. Inkjetmadness.com, Inc., et al.*, Civil No. 08-452-BR (D. Or.), closed February 27, 2012.

5. 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, Washington, D.C. ("ITC"), which has been adjudicated by the ITC in a final determination (Commission Opinion, May 26, 2016) (the "ITC 946 Investigation") and in which the Commission issued a General Exclusion Order and certain Cease and Desist Orders. The other of the two patents (the '749 patent, discussed below) asserted in this case was litigated in the ITC 946 Investigation against the same or overlapping groups of products that are accused of infringement in this action.

6. Lastly, 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 has been adjudicated by the ITC in a final determination (Commission Opinion, October 19, 2007) (the "ITC 565 Investigation") in which the Commission issued a General Exclusion Order, a Limited Exclusion Order and certain Cease and Desist Orders. The ITC's final determination was upheld in its entirety in a *per curiam* judgment by the Federal Circuit and on June 1, 2009 the United States Supreme Court denied a Petition for Writ of *Certiorari* for review of the Federal Circuit decision. The '917 patent asserted in this case was litigated in the ITC 565 Investigation against the same or overlapping groups of products 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.

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 described below 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.

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 NW Aloclek Place, Hillsboro, Oregon 97124. Epson Portland is the exclusive licensee of the Epson Patents described below 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.

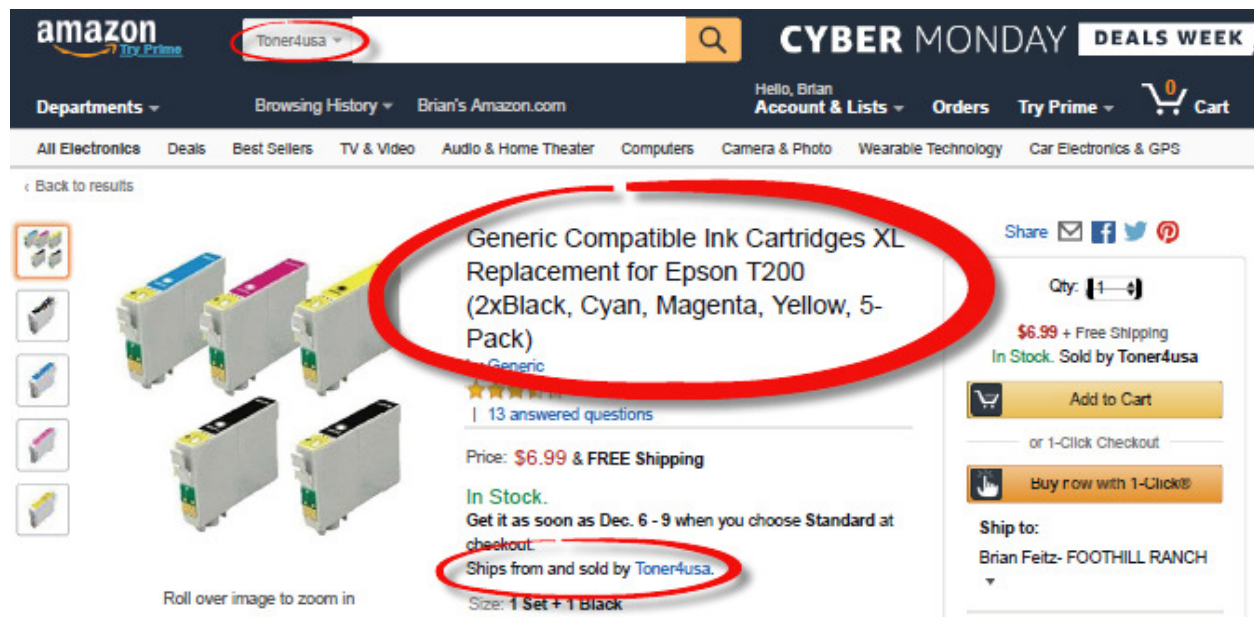
11. On information and belief, defendant Gaea Supplies Corp. ("Gaea") is a corporation organized and existing under the laws of the State of California. Based on information and belief, and according to Gaea's filings with the California Secretary of State, Gaea's primary and principal place of business is located at 226 Clary Avenue, San Gabriel, California, 91776. The agent for service of process for Gaea is Kang Xiang and the address for service of process is 226 Clary

Avenue, San Gabriel, California, 91776, the same address as the primary and principal place of business. Kang Xiang is also identified as the Chief Executive Officer, Chief Financial Officer and the sole Director of Gaea in Gaea's Secretary of State filings filed on March 8, 2016 and July 17, 2013. On information and belief, Gaea will soon operate a website located at www.targetimagingltd.com, which according to the website is under construction.

12. On information and belief, Gaea does business online as "toner4usa" through at least its listings on Amazon and on eBay using at least the online seller name toner4usa, and its logo shown here:



Directly through Amazon and eBay, Gaea offers for sale and sells ink cartridges that infringe the Epson patents as complained of herein. For example, in the annotated screen capture below of an Amazon.com listing, visited on November 20, 2016, Gaea offers for sale infringing ink cartridges for Epson printers and describes the infringing ink cartridges as "Generic Compatible Ink Cartridges XL Replacement for Epson T200 (2xBlack, Cyan, Magenta, Yellow, 5-Pack)" and that these infringing ink cartridges are shipped and sold by Toner4usa.



On information and belief, most sales by Defendant are of generic (unbranded) infringing ink cartridges.

13. Numerous purchases of infringing ink cartridges were made by Epson from Defendant's "toner4usa" online listings discussed above. The infringing ink cartridges were shipped by Defendant to Epson from Defendant's 226 Clary Avenue, San Gabriel, California 91776 address, the same address identified above in paragraph 11.

JURISDICTION AND VENUE

14. 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 Defendant at least because Defendant has 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. 6,502,917

15. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 14 as though fully set forth at length here.

16. 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. 6,502,917, which was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office on January 7, 2003. Attached as Exhibit A to this Complaint is a true and correct copy of the 6,502,917 patent. On February 3, 2009, reexamination certificate 6,502,917 C1 was duly and legally issued to Seiko Epson by the United States Patent and Trademark Office. Attached as Exhibit B to this Complaint is a true and correct copy of the reexamination certificate of the '917 patent. The original patent and the reexamination certificate are collectively referred to herein as "the '917 patent." The '917 patent relates generally to ink cartridges for printers.

17. The '917 patent is valid and enforceable.

18. On information and belief after conducting a reasonable investigation, Defendant has infringed and is infringing the '917 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. 126-1, 126-2, 126-3, 126-4, 200XL-1, 200XL-2, 200XL-3, 200XL-4, 78-1, 78-2, 78-3, 78-4, 78-5, 78-6, 273XL Black, 273XL Photo Black, 273XLCyan, 273XL Magenta, 273XL Yellow, T676XL1, T676XL2, T676XL3, and T676XL4, as well as others that are no more than colorably different from the foregoing (collectively, the

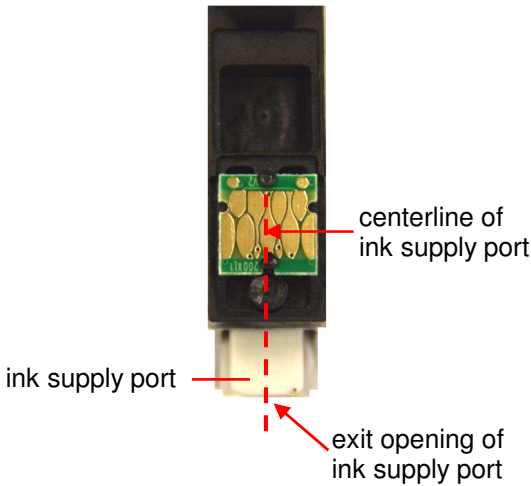
"Accused '917 Ink Cartridges"). The specific models of Accused '917 Ink Cartridges identified above were obtained by Epson during its investigation leading to this Complaint from Defendant's "toner4usa" online listings. The Accused '917 Ink Cartridges were shipped by Defendant from its 226 Clary Ave, San Gabriel, California 91776 address.

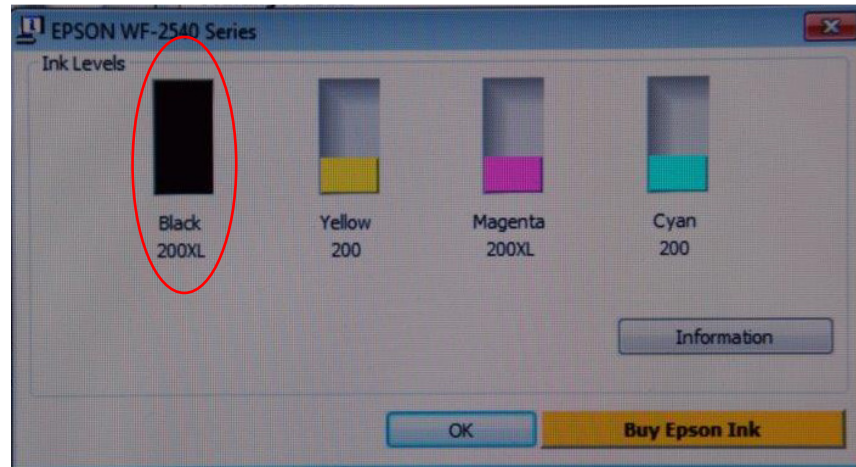
19. As a non-limiting example, set forth below is a claim chart with a description of Defendant's infringement of exemplary claim 9 of the '917 patent by the Accused '917 Ink Cartridges. The infringement is shown using a representative ink cartridge (Model No. 200XL-1; Control No.¹ 8127) from among the Accused '917 Ink Cartridges purchased from Defendant that, for infringement purposes, is representative of and represents all of Defendant's ink cartridges in the Accused '917 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 '917 Ink Cartridge." The Representative '917 Ink Cartridge was designed for use in a specific Epson printer, the Epson WorkForce WF-2540 printer ("the Representative '917 Epson Printer"), and for purposes of the analysis set forth herein, the Representative '917 Ink Cartridge was tested in the Representative '917 Epson Printer, as discussed in further detail in the claim chart below.

Claim 9 of the '917 Patent	Where found in the Accused '917 Ink Cartridges
[9a] An ink cartridge for mounting on a carriage of an ink jet printing apparatus and for supplying ink to a printhead of said ink jet printing apparatus through an ink supply	Each of the Accused '917 Ink Cartridges is an ink cartridge for mounting on the carriage of an Epson ink jet printer (an ink jet printing apparatus). Defendant markets and sells the Accused '917 Ink Cartridges as being compatible with one or more specific Epson ink jet printers. For example, the Representative '917 Ink Cartridge is compatible with the Representative '917 Epson Printer. When mounted, each of the Accused '917 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

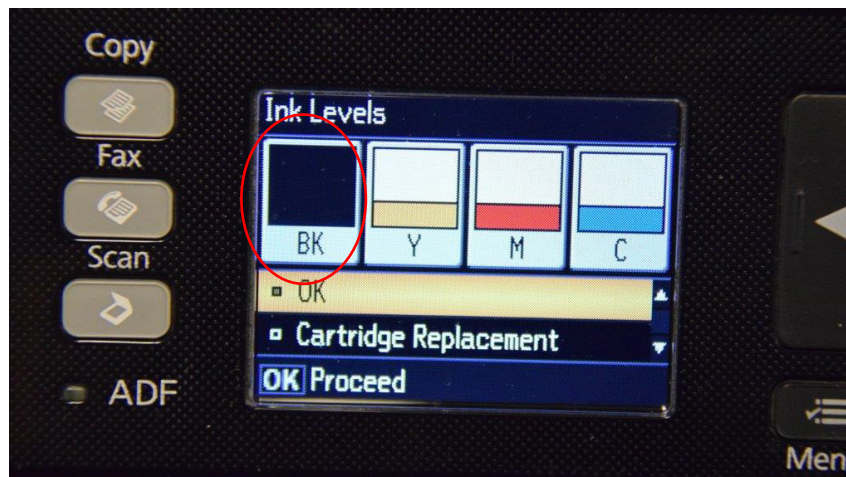
¹ For identification purposes, a unique "control number" ("Control No.") has been assigned by Epson to this ink cartridge, and all other ink cartridges, purchased by Epson from Defendant as part of Epson's investigation leading to the filing of this Complaint.

<p>needle, the ink cartridge comprising:</p>	<p>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).</p> <p>Accordingly, the Accused '917 Ink Cartridges literally meet the preamble of claim 9 of the '917 patent.</p>
<p>[9b] a plurality of external walls defining at least some of a chamber;</p>	<p>Each of the Accused '917 Ink Cartridges includes several external walls that define a chamber, and therefore also at least some of a chamber. These features are shown below using the Representative '917 Ink Cartridge:</p> <div data-bbox="555 661 1201 1117" data-label="Image"> <p>The image shows a grey ink cartridge with a yellow label on top and a white label with the number '8127' on the front. Red arrows point from the text labels 'chamber' and 'external walls' to the corresponding parts of the cartridge. The 'chamber' label points to the top surface, and the 'external walls' label points to the side and bottom surfaces.</p> </div> <p>Accordingly, the Accused '917 Ink Cartridges literally meet this limitation of claim 9 of the '917 patent.</p>
<p>[9c] an ink supply port for receiving said ink supply needle, the ink supply port having an exit opening and a centerline and communicating with the chamber;</p>	<p>Each of the Accused '917 Ink Cartridges includes an ink-supply port (i.e., a structure with an opening for the movement of ink) in the bottom of the cartridge. The ink supply port receives the ink-supply needle of the printer when the cartridge is mounted. The ink supply port is the conduit that allows the ink to leave the cartridge. Consequently, the ink supply port communicates with the chamber. The ink supply port also has a centerline and an exit opening at its end outside the cartridge. These features can be seen as shown below using the Representative '917 Ink Cartridge:</p>

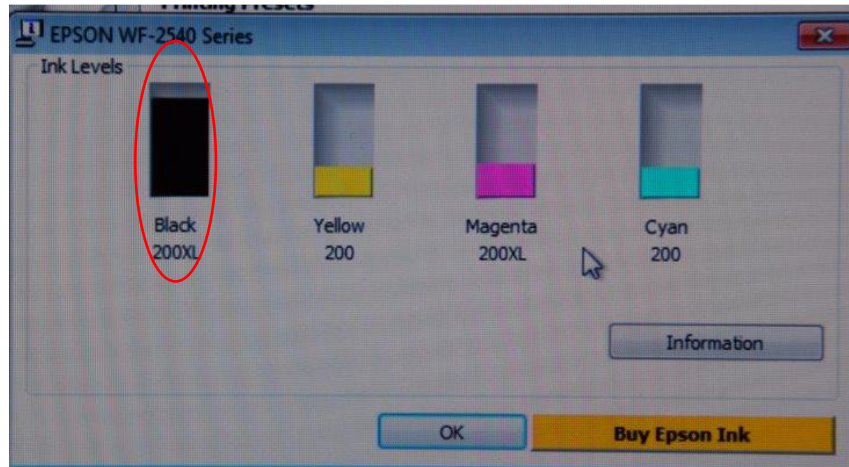
	 <p>centerline of ink supply port</p> <p>ink supply port</p> <p>exit opening of ink supply port</p> <p>Accordingly, the Accused '917 Ink Cartridges literally meet this limitation of claim 9 of the '917 patent.</p>
<p>[9d] a semiconductor storage device storing information about the ink carried by said cartridge; and</p>	<p>Each of the Accused '917 Ink Cartridges includes a chip (a semiconductor storage device) on the back of a printed circuit board (the circuit board is mounted on the front wall of the ink cartridge). The chip stores information about the ink carried by the cartridge. Testing of the Representative '917 Ink Cartridge in the Representative '917 Epson Printer confirms that the chip stores information about the ink, for example, the quantity of ink consumed. The following photographs show that the printer utility window on the computer (i.e., the computer to which the printer is connected) and the printer's on-board monitor displayed that the level of ink in the Representative '917 Ink Cartridge had decremented after printing a number of pages. In addition, after removing and reinstalling the ink cartridge into the printer, the computer's printer utility window and the printer's on-board monitor continued to display the same level of ink in the ink cartridge. This testing confirms that the chip on the Representative '917 Ink Cartridge stores information about the ink carried by the cartridge, namely the amount of ink consumed.</p> <p>The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the computer's printer utility window before any printing has been carried out (showing full):</p>



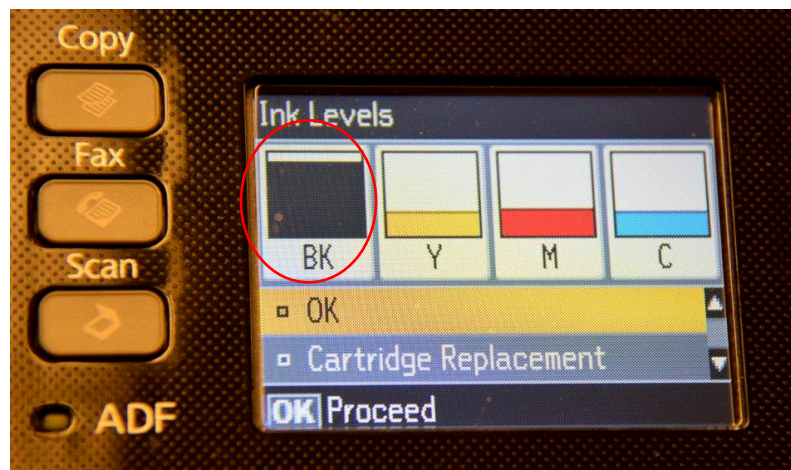
The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the printer's on-board monitor before any printing has been carried out (showing full):



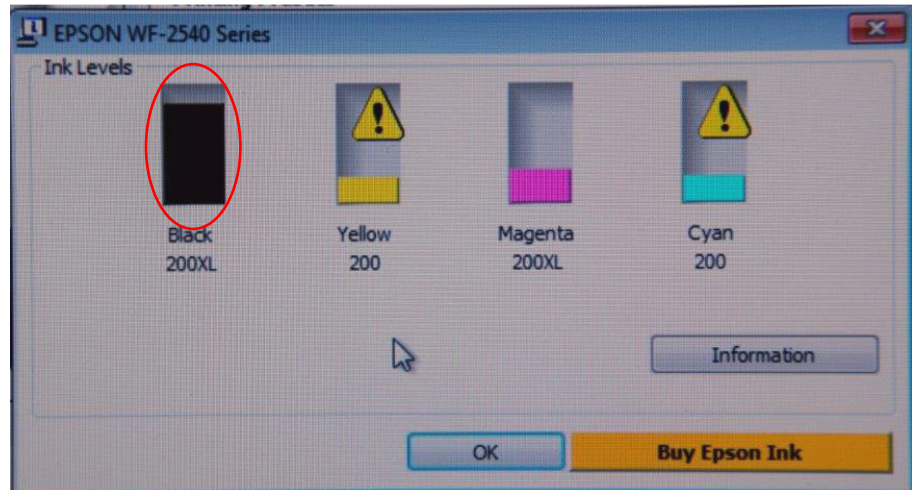
The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the computer's printer utility window after several pages have been printed (showing partial depletion):



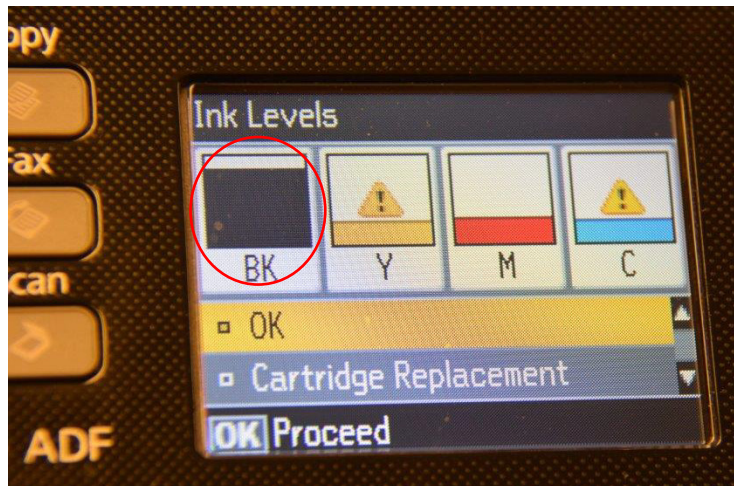
The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the printer's on-board monitor after several pages have been printed (showing partial depletion):



The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the computer's printer utility window after the ink cartridge was removed from and reinstalled in the printer (showing the same level of partial depletion as before the ink cartridge was removed):

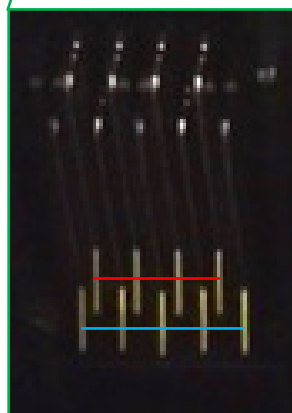
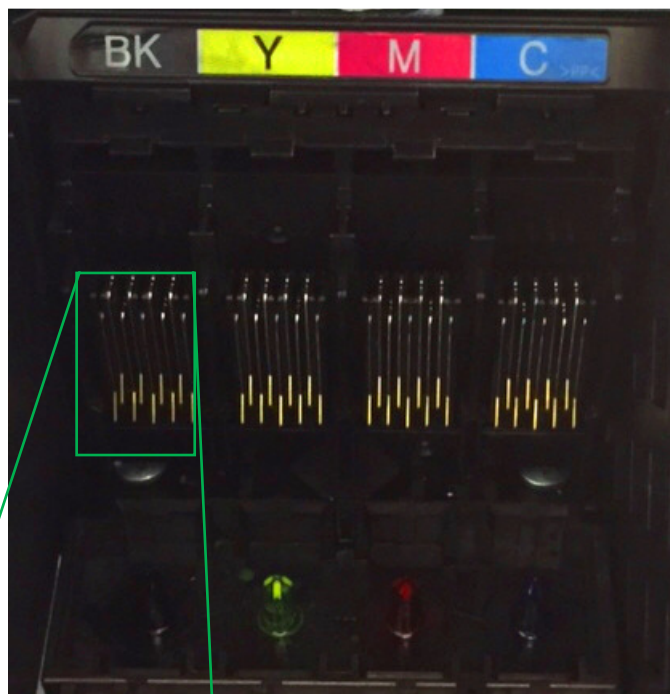


The Ink level of the Representative '917 Ink Cartridge (a black-ink ink cartridge) is shown on the printer's on-board monitor after the ink cartridge was removed from and reinstalled in the printer (showing the same level of partial depletion):



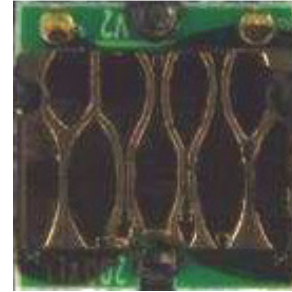
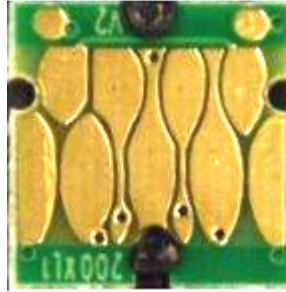
The testing of the Representative '917 Ink Cartridge is applicable to each of the Accused '917 Ink Cartridges. Accordingly, the Accused '917 Ink Cartridges literally meet this limitation of claim 9 of the '917 patent.

<p>[9e] a plurality of contacts for connecting said semiconductor storage device to the ink jet printing apparatus, the contacts being formed in a plurality of rows so that one of said rows is closer to said exit opening of said ink supply port than an other of said rows, the row of said contacts which is closest to said exit opening of said ink supply port being longer than the row of said contacts which is furthest from said exit opening of said ink supply port.</p>	<p>Each of the Accused '917 Ink Cartridges includes a plurality of contacts for connecting the chip (the semiconductor storage device) to the ink jet printer (ink jet printing apparatus). The testing described above with respect to the preceding limitation confirms that there is an electrical connection between the chip and the ink jet printer. The contacts are the discrete portions of conductive material on the cartridge that are present there to make an electrical connection between the cartridge and the printer (i.e., they contact the printer-side contact forming members when the cartridge is installed in the printer). The contacts allow communication between the chip and the printer through corresponding printer-side contact forming members. Every Epson ink jet printer has printer-side contact forming members, as seen, for example, in the Representative '917 Epson Printer discussed with respect to the preceding limitation. The printer-side contact forming members are configured in two rows with one row above the other row. In addition, the lower row is longer than the upper row. When an ink cartridge from the Accused '917 Ink Cartridges is fully inserted into the printer and in an installed position, the printer-side contact forming members come into contact and make an electrical connection with the cartridge contacts (i.e., the discrete portions located on the larger pattern of electrically conductive material on the cartridge). The contacts are formed in two rows, one above the other. Consequently, the lower row is closer to the exit opening of the ink supply port than the upper row, and the lower row is longer than the upper row. The above described features are shown in the photos below.</p> <p>Shown below are the printer-side contact forming members of the Representative '917 Epson Printer, with which, as discussed above, the Representative '917 Ink Cartridge works. The printer's contact forming members are formed in two rows, one above the other, with the lower row of contact forming members longer than the upper row, as can be seen below:</p>
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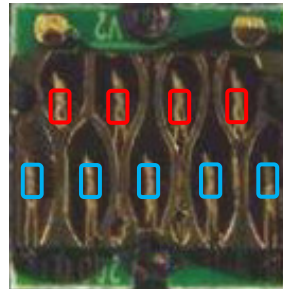


Shown at left is an enlarged view of the printer-side contact forming members of the Representative '917 Epson Printer that accepts the Representative '917 Ink Cartridge. The printer-side contact forming members are arranged in two rows with the lower row (blue line) longer than the upper row (red line).

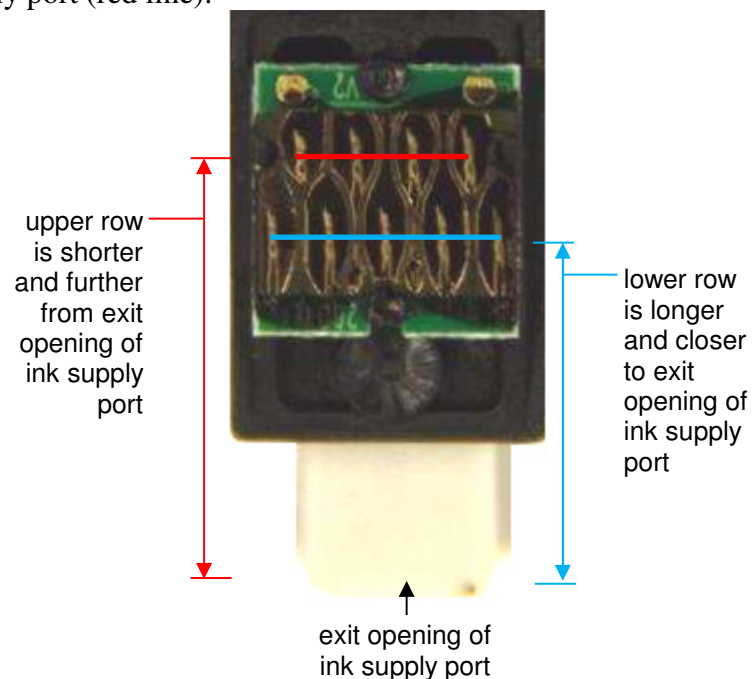
The contacts of the Representative '917 Ink Cartridge are shown below. The contacts are located on the gold colored metallic conductive pattern. To confirm the location and arrangement of the contacts, the conductive pattern was marked with black ink, the cartridge was installed in and then removed from the printer (which caused the printer's contact forming members to leave scratch marks on the conductive pattern thereby removing a portion of the black ink that was applied and therefore indicating the location of the contacts), and the conductive pattern was then photographed. For example, the conductive pattern of the Representative '917 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 conductive material of the ink cartridge show the arrangement of the contacts of the ink cartridge. These are shown below with red boxes (top row of contacts) and blue boxes (bottom of row of contacts).



As shown below, the lower row of contacts is longer and closer to the exit opening of the ink supply port (blue line) than the upper row of contacts, which is shorter and further from the exit opening of the ink supply port (red line):



	Accordingly, the Accused '917 Ink Cartridges literally meet this limitation of claim 9 of the '917 patent.
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20. On information and belief after conducting a reasonable investigation, Defendant has and is actively, knowingly and intentionally aiding and abetting and inducing infringement of the '917 patent in violation of 35 U.S.C. § 271(b) by non-parties, including end-users.

21. On information and belief, Defendant is contributing to the infringement of the '917 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 '917 patent. The components constitute a material part of the inventions. Defendant knows that such components are especially made or especially adapted for use in an infringement of the '917 patent. The components are not a staple article or commodity of commerce suitable for substantial noninfringing use.

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

23. Defendant's 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 Defendant and its agents, servants, and employees, and all persons acting thereunder, in concert with, or on their behalf, from infringing the claims of the '917 patent.

24. Defendant is not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge or process/method claimed in the '917 patent, and Defendant's conduct is, in every instance, without Epson's consent.

25. On information and belief, Defendant's infringement has been and continues to be willful.

SECOND CLAIM FOR RELIEF

(Patent Infringement—35 U.S.C. § 271)

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

26. Epson incorporates by reference each and every allegation contained in Paragraphs 1 through 14 as though fully set forth at length here.

27. 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.

28. The '749 patent is valid and enforceable.

29. On information and belief after conducting a reasonable investigation, Defendant has infringed and is 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, 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. 126-1, 126-2, 126-3, 126-4, 200XL-1, 200XL-2, 200XL-3, 200XL-4, 78-1, 78-2, 78-3, 78-4, 78-5, 78-6, 273XL Black, 273XL Photo Black, 273XLCyan, 273XL Magenta, 273XL Yellow, T676XL1, T676XL2, T676XL3, and T676XL4, as well as 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 identified above were obtained by Epson during its investigation leading to this Complaint from Defendant's

"toner4usa" online listings. The Accused '917 Ink Cartridges were shipped by Defendant from its 226 Clary Ave, San Gabriel, California 91776 address.

30. As a non-limiting example, set forth below is a claim chart with a description of Defendant's 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. 200XL-1; Control No. 8127, the same representative ink cartridge as used in the analysis of the '917 patent above) from among the Accused '749 Ink Cartridges purchased from Defendant that, for infringement purposes, is representative of and represents all of Defendant's ink cartridges in 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-2540 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.

Claim 1 of the '749 Patent	Where found in the Accused '749 Ink Cartridges
<p>[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:</p>	<p>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.</p> <p>These features are shown below using the Representative '749 Ink Cartridge.</p> <p>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</p>

photographs:

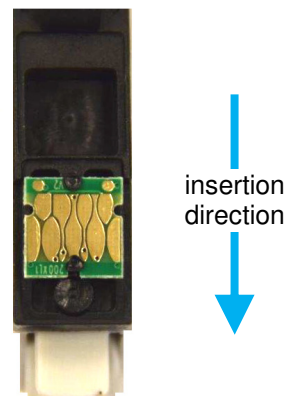


The Representative '749 Ink Cartridge



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:

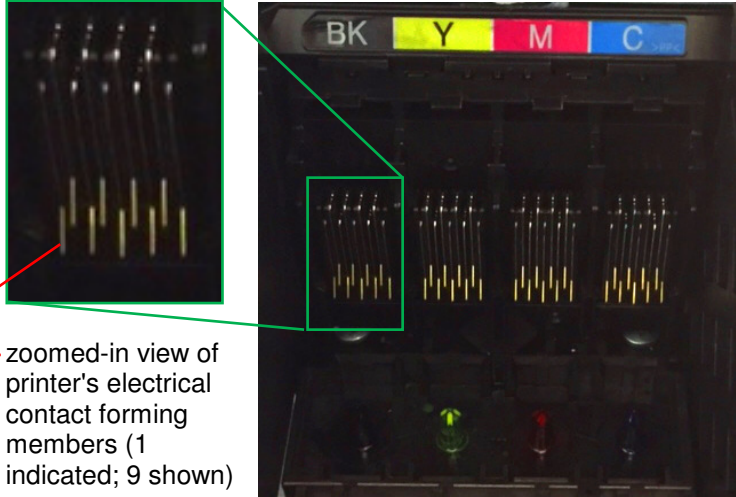



The following photograph shows the Representative '749 Ink Cartridge, a black-ink ink cartridge, attached in the Representative '749 Epson Printer after the cartridge has been inserted into the printer in the insertion direction (the yellow, magenta and cyan ink cartridges, which are genuine Epson ink cartridges used to fill the remaining slots of the cartridge holder, can also be seen):

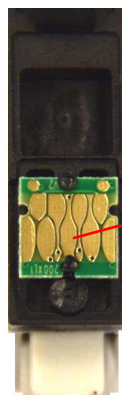
Representative '749 Ink Cartridge installed in the Representative '749 Epson Printer



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 forming members for each ink cartridge accepted by the printer. These features are shown below for the printer's cartridge holder slot that accepts the Representative '749 Ink Cartridge, a black-ink ink cartridge (the printer's electrical contact members for the yellow, magenta, and cyan cartridges can also be seen in the right photo):

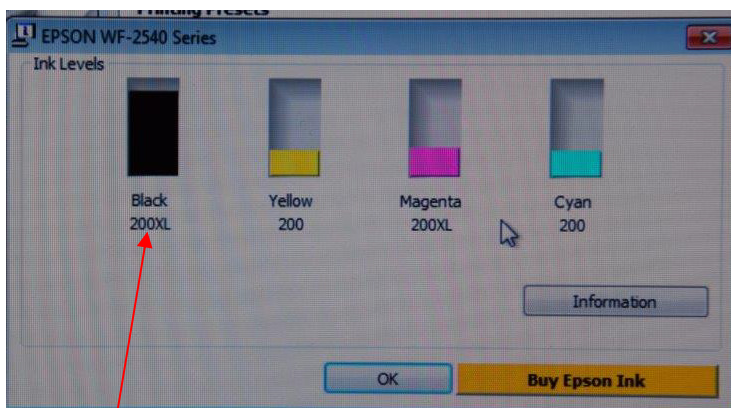
	 <p>zoomed-in view of printer's electrical contact forming members (1 indicated; 9 shown)</p> <p>Accordingly, the Accused '749 Ink Cartridges literally meet the preamble of claim 1 of the '749 patent.</p>
<p>[1b] an ink supply opening, having an exit, adapted to supply ink from the ink cartridge to the printing apparatus;</p>	<p>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:</p>  <p>exit of ink supply opening (shown here with anti-leak film undisturbed and in place)</p> <p>Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.</p>
<p>[1c] a low voltage electronic device adapted to receive and function with a low voltage, the low voltage electronic device comprising a memory device;</p>	<p>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</p>

the Representative '749 Ink Cartridge:

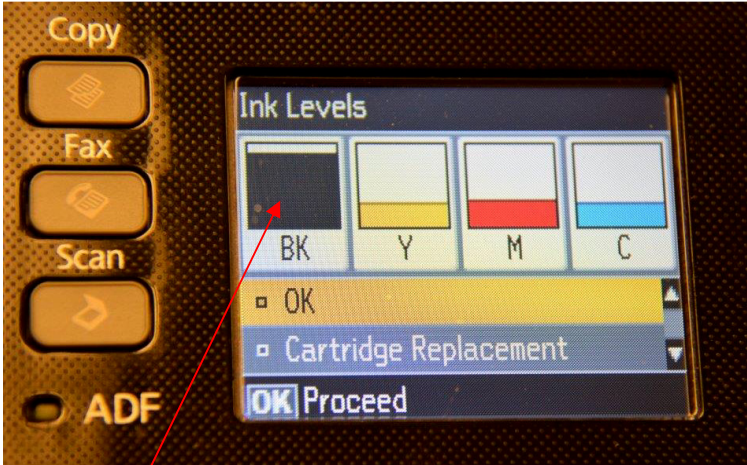


printed circuit board
(green) with low voltage
electronic device located
on back

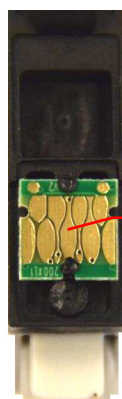
In addition, the presence of a low voltage electronic device (i.e., an IC chip comprising a memory device) is further confirmed through testing demonstrating that the Epson ink jet printers that accept the Accused '749 Ink Cartridges read the remaining ink level and other descriptive information about 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:



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

	 <p>memory device shows, on the printer's display screen, the amount of black ink remaining in the Representative '749 Ink Cartridge</p> <p>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.</p> <p>Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.</p>
<p>[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</p>	<p>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</p>

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 high voltage electronic device located on back

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.

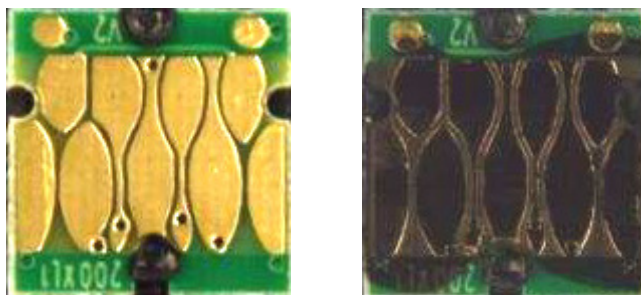
Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.

[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 container and the printing apparatus, the contact portions of the

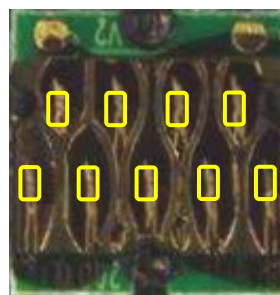
Each of the Accused '749 Ink Cartridges comprises a plurality of container-side terminals that have contact portions. The contact portions are adapted and positioned on the cartridge so that, when the cartridge is attached to the printer, the contact portions of the cartridge's terminals contact corresponding printer-side contact forming members so that electrical communication is enabled between the cartridge and the printer.

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:

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:



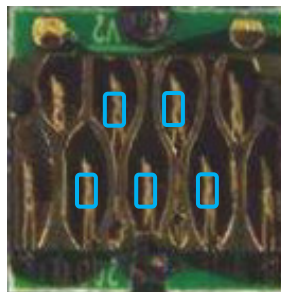
The resulting marks left by the printer's contact forming members on the terminals show the location and arrangement of the contact portions. These are indicated below with annotated yellow boxes superimposed on the terminals to indicate the location of the contact portions (there are a total of nine contact portions, with four contact portions in a top row and five contact portions in a bottom row):



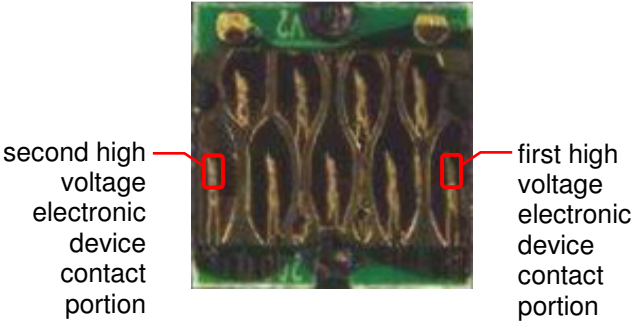
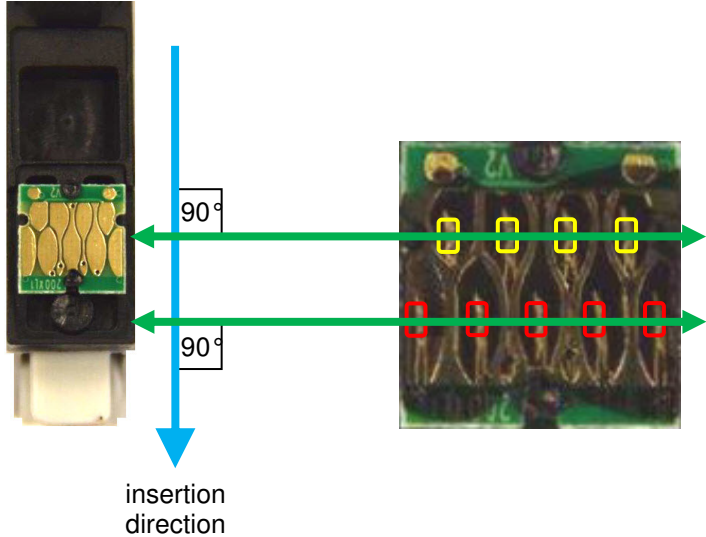
The contact portions shown above correspond to their printer-side contact forming members so that electrical

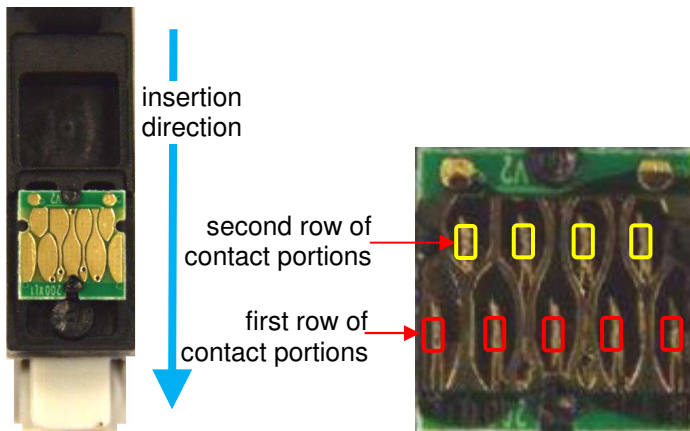
communication is enabled between the ink cartridge and the printer, e.g., so the printer can read remaining ink level and other information from the memory device as described above with respect to limitation 1c.

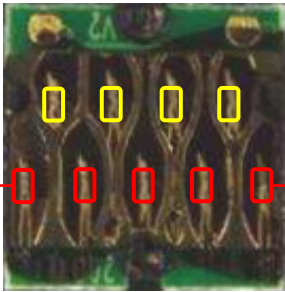
The above shown contact portions include a plurality of low voltage electronic device contact portions that are electrically coupled to the low voltage electronic device (specifically, the IC chip comprising a memory device). Each low voltage electronic device contact portion is electrically coupled 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):

	 <p>second high voltage electronic device contact portion</p> <p>first high voltage electronic device contact portion</p> <p>Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.</p>
<p>[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,</p>	<p>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.</p>  <p>insertion direction</p> <p>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)</p>

	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,	<p>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).</p>  <p>first row of contact portions (red squares) disposed further in insertion direction (blue arrow) than second row of contact portions (yellow squares)</p> <p>Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.</p>
[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.	<p>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.</p> <p>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</p>

	<p>portions.</p> <div data-bbox="682 352 901 598"> <p>second high voltage electronic device contact portion disposed at second end position of first row of contact portions</p> </div> <div data-bbox="922 279 1205 569">  </div> <div data-bbox="1230 352 1437 569"> <p>first high voltage electronic device contact portion disposed at first end position of first row of contact portions</p> </div> <p>Accordingly, the Accused '749 Ink Cartridges literally meet this limitation of claim 1 of the '749 patent.</p>
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31. On information and belief, Defendant has and is actively, knowingly and intentionally aiding and abetting and inducing infringement of the '749 patent by non-parties in violation of 35 U.S.C. § 271(b), including end-users, despite Defendant's knowledge of the '749 patent.

32. On information and belief, Defendant is 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. Defendant knows 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.

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

34. Defendant's 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 Defendant and its agents, servants, and employees, and all persons acting thereunder, in concert with, or on their behalf, from infringing the claims of the '749 patent.

35. Defendant is not licensed or otherwise authorized to make, use, import, sell, or offer to sell any ink cartridge or process/method claimed in the '749 patent, and Defendant's conduct is, in every instance, without Epson's consent.

36. On information and belief, Defendant's infringement has been and continues to be willful.

PRAYER FOR RELIEF

WHEREFORE, Epson prays for judgment against Defendant as follows:

- A. That the Epson Patents are valid and enforceable;
- B. That Defendant has infringed and is infringing the Epson Patents;
- C. That such infringement is willful;
- D. That Defendant and its subsidiaries, affiliates, parents, successors, assigns, officers, agents, representatives, servants, and employees, and all persons in active concert or participation with it, be preliminarily and permanently enjoined from continued infringement of the Epson Patents;
- E. That Defendant be ordered to pay Epson its damages caused by Defendant's 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.

DATED: March 3, 2017

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