

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION

SLINGSHOT PRINTING LLC,

Plaintiff,

v.

HP INC.,

Defendant.

C.A. No. 6:19-cv-00364-ADA

**Jury Trial Demanded**

**FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Slingshot Printing LLC (“Slingshot”) files this First Amended Complaint against Defendant HP Inc. (“HP”) for patent infringement of United States Patent Nos. 6,361,162; 6,485,124; 6,601,934; 6,666,449; 6,773,088; 7,222,936; 7,819,498; 7,841,712 and 8,113,618 (the “patents-in-suit”) (Exhibits 1-9) and alleges 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.*

**THE PARTIES**

2. Plaintiff Slingshot Printing LLC is a Delaware limited liability company with its principal place of business at 8455 Colesville Road, Suite 830, Silver Spring, MD 20910.

3. On information and belief, HP Inc. is a Delaware corporation with a place of business at 1501 Page Mill Road, Palo Alto, CA 94304. On information and belief,

since May 1998, HP has been registered to do business in the State of Texas under Texas SOS file Number 0012093906. On information and belief, since at least 2016, HP has had a place of business at 3800 Quick Hill Rd #100, Austin, TX 78728.

### **JURISDICTION AND VENUE**

4. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patents laws of the United States, 35 U.S.C. §§ 1 *et seq.*

5. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b).

6. HP is subject to this Court's personal jurisdiction, in accordance with due process and/or the Texas Long Arm Statute because HP "[r]ecruits Texas residents, directly or through an intermediary located in this state, for employment inside or outside this state." *See* Tex. Civ. Prac. & Rem. Code § 17.042.

7. This Court has personal jurisdiction over HP because, on information and belief, HP and its authorized resellers (or those acting on their behalf) and HP's customers committed and continue to commit acts of patent infringement in this judicial district. On information and belief, HP and its authorized resellers (or those acting on their behalf) make, use, sell, offer to sell and/or import HP inkjet products (including, without limitation, infringing inkjet printers, inkjet printheads, ink cartridges and associated accessories) in this judicial district and provide associated services in this judicial district. On information and belief, HP customers use HP inkjet

products (including, without limitation, infringing inkjet printers, inkjet printheads, ink cartridges and associated accessories) in this judicial district.

8. This Court has personal jurisdiction over HP because, *inter alia*, HP, on information and belief: (1) has committed acts of patent infringement in this judicial district, (2) has substantial, continuous, and systematic business contacts in this judicial district; (3) owns, manages and operates facilities in this judicial district; (4) enjoys substantial income from its operations, sales and services in this judicial district, (5) employs Texas residents in this judicial district and (5) solicits business and markets products and services in this judicial district including infringing products. As such, HP has purposefully availed itself of the privileges of conducting business within this judicial district; has established sufficient minimum contacts with this judicial district such that it should reasonably and fairly anticipate being hauled into court in this judicial district; has purposefully directed activities at residents of this judicial district; and at least a portion of the patent infringement claims alleged in this complaint arise out of or are related to one or more of the foregoing activities.

9. On information and belief, HP maintains a significant physical presence in this judicial district. Specifically, HP has a corporate office at 3800 Quick Hill Rd #100, Austin, TX 78728 ("Austin Office"). On information and belief, HP has data centers located in Austin, Texas.



Source: Google Streetview of 3800 Quick Hill Road (attached as Exhibit 10)  
(<https://www.google.com/maps/place/HP+Inc./@30.4703733,-97.6859262,3a,75y,90t/data=!3m8!1e2!3m6!1sAF1QipNp5EYyUhJS0qXzzgDwzf8UoOVahLlBmo2QpSjR!2e10!3e12!6shttps:%2F%2Fh5.googleusercontent.com%2Fp%2FAF1QipNp5EYyUhJS0qXzzgDwzf8UoOVahLlBmo2QpSjR%3Dw213-h120-k-no!7i4000!8i2250!4m13!1m7!3m6!1s0x8644ce11dbcc242d:0x5804b8f52b061c45!2s3800+Quick+Hill+Rd,+Austin,+TX+78728!3b1!8m2!3d30.4708993!4d-97.6876364!3m4!1s0x8644ce11dbcc242d:0xeceb1885722ffa93!8m2!3d30.4703733!4d-97.6859262>).

10. On information and belief, HP uses the Austin Office as a regular and established place of business. A number of key HP employees work in the Austin Office including, but not limited to, a Director of IT, a Director of Governmental Affairs, as well as software and hardware engineers.

11. HP's website lists fifty-one H-1B labor condition applications for people employed in Austin, Texas. *See* Exhibit 11 (<http://www.hp.com/hpinfo/>). Employees holding an H-1B visa are employed in a specialty occupation that requires "theoretical and practical application of a body of highly specialized knowledge . . . and attainment of a bachelor's or higher degree in the specific specialty. . . ." *See generally* 8 U.S.C. §

1184. As such, HP employees in Austin, Texas are highly specialized and important to the operation of HP.

12. HP lists job opening on its website for positions in Austin, Texas. *See* Exhibit 12 (<https://h30631.www3.hp.com/search-jobs/Austin?orgIds=3544&alp=6252001-4736286-4671654&alt=4>) (as of 9/18/19).

The screenshot displays the HP job search interface. At the top, there's a 'Search jobs' header with filters for Keyword, Category, Country/Region, State/Province, and City. Below this, a 'Filter results' sidebar on the left allows narrowing results by keyword, category, country/region, state/province, and city. A 'Sign up for updates' section is also present. The main area, titled '18 jobs found', lists various roles such as 'Managed Service Vendor Manager', 'Product Manager', 'Big Data Platform Engineer', and several 'Cyber Security Solutions Architect' and 'Cybersecurity Threat Intelligence Analyst' positions, all with 'Austin, Texas' listed as a location.

13. On information and belief, HP owns real estate in the Austin, Texas including properties at (a) 7501 N. Capital of Texas Highway, Austin, TX 78731, (b) 3301

Hibbets Rd, Austin, TX 78721, (c) 14231 Tandem Blvd, Austin, TX 78728 and (d) 14219 Tandem Blvd, Austin, TX 78728.

14. HP operates the HP Partners First Program throughout the United States including in this judicial district. *See generally*, Exhibit 13 (HP Partners First Program Brochure). This program is a partnership agreement between HP and retailers throughout the area that “is focused on being first in sales, speed and solutions, offering a comprehensive framework that encompasses a broad range of partner motions.”

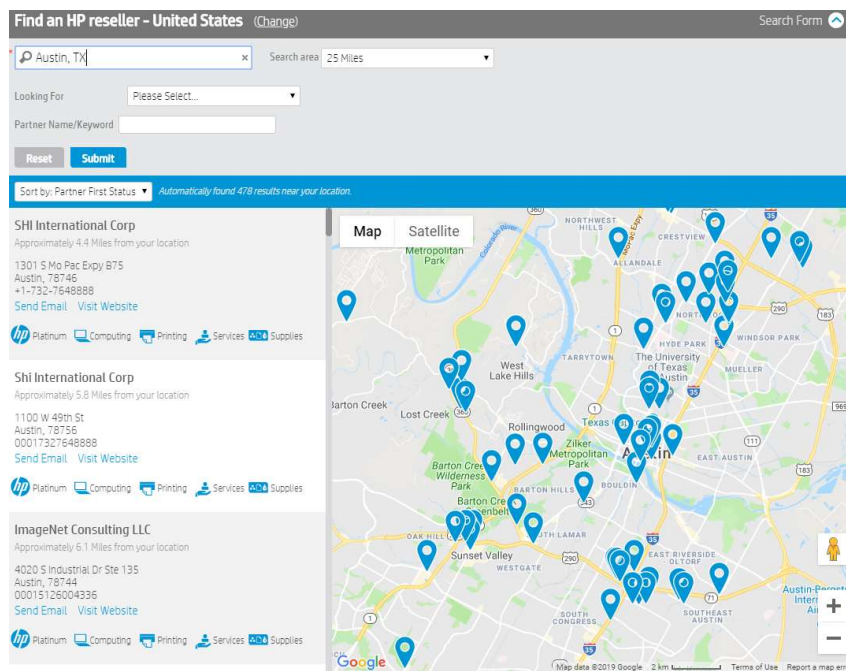


*See* Exhibit 13 at page 10.

15. The HP Partners First Program includes three tiers of partnership: Silver, Gold, and Platinum. At every level, the partners are required to enter into a formal Partner agreement with HP and provide sales certified printing, computing and supplies. *Id.* at 11. HP provides market development funds to Platinum members. *Id.* at 15. According to HP, “HP places great value in partnership with reseller partners contributing significantly towards HP’s business revenue. Visibility of partner’s

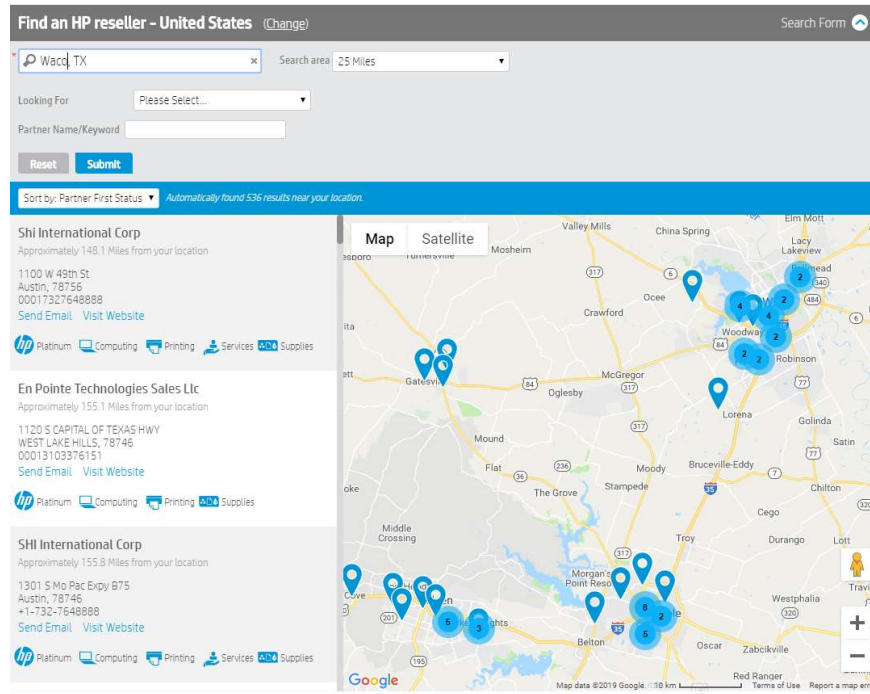
business are critical component towards fine-tuning of collaborative sales effort.” *Id* at 44.

16. Through the HP Partners First Program, HP has hundreds of partners physically located throughout this judicial district including, but not limited to, HP partners in Waco, Austin, and San Antonio. HP’s website provides existing and potential customers with the ability to search for resellers based on cities or zip codes in this judicial district. A search on HP’s website for Waco, Austin, and San Antonio provides the names and locations of numerous HP resellers:

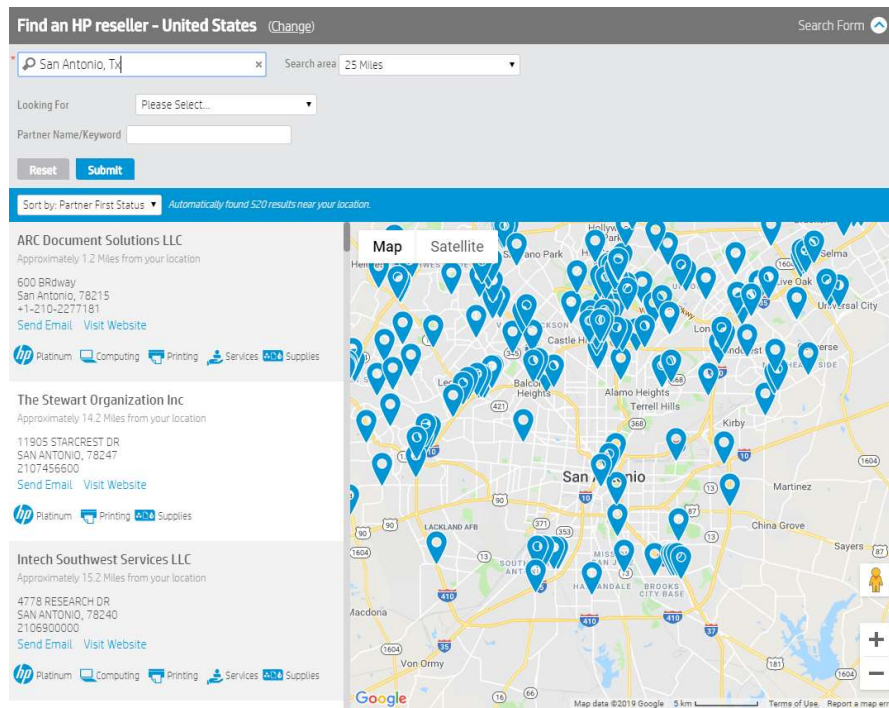


Austin, Texas





Waco, Texas



San Antonio, Texas

17. A search of the Austin, Texas area returns results for at least fifty-nine partners participating in the HP Partners First Program. Fifteen of those partners are



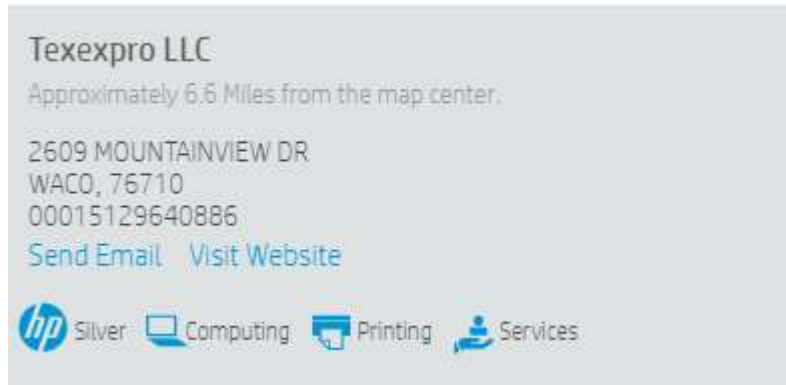
platinum partners who offer HP computing, printing, services and supplies to consumers in the Austin area. A search of the Waco, Texas area returns results for at least seven partners participating in the HP Partners First Program. All of those partners are Silver partners of the HP Partners First Program, and at least one of those silver members offers HP computing, printing and supplies to consumers in the Waco area. A search of the San Antonio, Texas area returns results for at least fifty-five partners participating in the HP Partners First Program. Seventeen of those partners are platinum partners who offer HP computing, printing, services and supplies to consumers in the San Antonio area.

18. ImageNet Consulting LLC is listed as a Platinum Partner selling printing services in Austin:



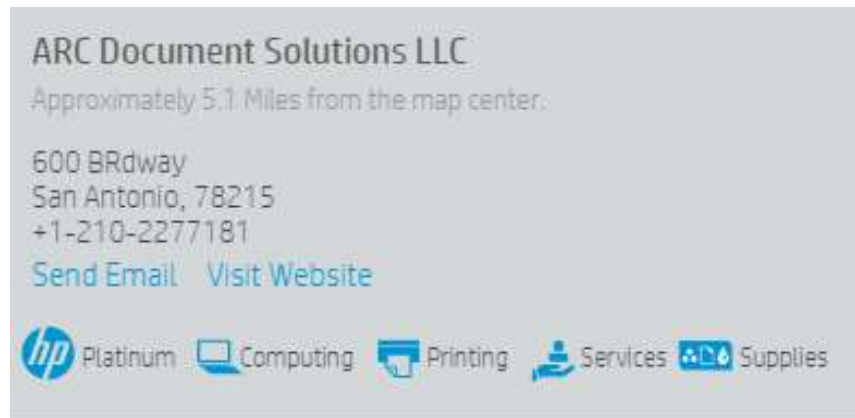
According to ImageNet Consulting LLC's website, the company offers several printers for sale including the HP PageWide Pro MFP P57750 and HP PageWide Managed E55650dn. See Exhibit 14 (<http://www.imagenetconsulting.com/products/copiers-printers-scanners/workteam-printers/>).

19. Texexpro LLC is listed as a Silver Partner selling printing services in Waco:



According to Texexpro LLC's website, the company offers several printers for sale including the HP OfficeJet 4650. See Exhibit 15 (<https://www.texexpro.com/copy-of-products>).

20. ARC Document Solutions LLC is listed as a Platinum Partner selling printing services in San Antonio:



According to Arc Document Solutions LLC's website, the company offers several printers for sale including the HP PageWide Enterprise Color 556dn Color Printer, HP PageWide Pro 750dw Color Printer, and the HP PageWide Pro 452dw Color Printer. See Exhibit 16 (<http://shop.arcsupplies.com/store/c-527-ink-printers.aspx>).

21. Consumers in this judicial district are also able to purchase infringing inkjet printers, inkjet printheads and ink cartridges directly from HP through its online website and have products delivered in this judicial district.

<https://store.hp.com/us/en>.

22. HP sells its products including, without limitation, infringing inkjet printers, inkjet printheads and ink cartridges through stores located in this judicial district such as Best Buy, S.P. Richards Co., Staples Inc. and Frys Electronics.

23. On information and belief, HP has previously litigated patent infringement cases before this Court without contesting jurisdiction and venue. *See Neodron, Ltd. v. HP Inc.*, Case No. 1:19-cv-00873-ADA and *Iron Oak Technologies, LLC v. HP Inc.*, Case No. 17-cv-1068, W.D. Texas.

## **BACKGROUND**

### **The Patents-in-Suit**

24. The patents-in-suit are the result of Lexmark International, Inc.'s ("Lexmark") many years of researching, designing and developing innovative and proprietary inkjet printing technologies.

25. Lexmark was formed in 1991 when IBM divested a number of its hardware manufacturing operations. Lexmark became a leading developer, manufacturer and supplier of inkjet printers, ink cartridges and their associated supplies and services.

26. Lexmark's research and development activity focused on, *inter alia*, inkjet printers, ink cartridges and printer supplies. Lexmark spent billions of dollars on

research and development – \$375 million in 2009, \$423 million in 2008, \$401 million in 2007, \$371 million in 2006, \$336 million in 2005, \$312 million in 2004, \$266 million in 2003, \$247 million in 2002, \$246 million in 2001, \$217 million in 2000, and \$184 million in 1999.

27. By April 2013, Lexmark held approximately 1,500 inkjet patents worldwide. Indeed, Lexmark's intellectual property was one of its major assets. Recognizing the tremendous value of Lexmark's intellectual property, in 2013, Funai Electric Co., Ltd. ("Funai") acquired Lexmark's inkjet printing technology and assets, including the patents-in-suit, for approximately \$100 million.

28. Funai subsequently assigned Slingshot all rights, title and interest in the patents-in-suit.

### **Inkjet Printer Technology**

29. The patents-in-suit relate to inkjet printer technology.

30. Inkjet printers have one or more printheads and multiple ink cartridges. The ink cartridges store different colors of ink (e.g., black, magenta, yellow, cyan) and provide the ink to the printhead(s) during printing.

31. Each printhead has hundreds of microscopic nozzles through which microscopic ink droplets are deposited onto a substrate (e.g., paper) during printing. In particular, the printhead is located on a carriage that moves back and forth across the substrate and deposits ink on the substrate as the substrate advances through the printer. For certain printers, the printhead is located on the ink cartridges themselves. For other printers, the printhead(s) are separate from the ink cartridges.

**United States Patent No. 6,361,162**

32. On March 26, 2002, the United States Patent and Trademark Office (“USPTO”) duly and legally issued United States Patent No. 6,361,162 (“the ‘162 patent”) entitled “Method and apparatus for fixing ink to a print receiving medium” to inventors Michael A. Penrod, Richard L. Reel, and Timothy J. Stephany. A true and correct copy of the ‘162 patent is attached as Exhibit 1.

33. The ‘162 patent relates to, among other things, a method for printing on a print receiving medium.

34. The ‘162 patent is presumed valid under 35 U.S.C. § 282.

35. Slingshot owns all rights, title, and interest in the ‘162 patent.

**United States Patent No. 6,485,124**

36. On November 26, 2002, the USPTO duly and legally issued United States Patent No. 6,485,124 (“the ‘124 patent”) entitled “Optical alignment method and detector” to inventors Dave G. King and Patrick L. Kroger. A true and correct copy of the ‘124 patent is attached as Exhibit 2.

37. The ‘124 patent relates to, among other things, a printing apparatus.

38. The ‘124 patent is presumed valid under 35 U.S.C. § 282.

39. Slingshot owns all rights, title, and interest in the ‘124 patent.

**United States Patent No. 6,601,934**

40. On August 5, 2003, the USPTO duly and legally issued United States Patent No. 6,601,934 (“the ‘934 patent”) entitled “Storage of total ink drop fired count in

an imaging device” to inventors Eric T. DeBusschere, David N. Mattingly and Stephen K. Cunnagin. A true and correct copy of the ’934 patent is attached as Exhibit 3.

41. The ’934 patent relates to, among other things, an imaging device and a method of providing a number approximating a total number of ink drops fired by an imaging device.

42. The ’934 patent is presumed valid under 35 U.S.C. § 282.

43. Slingshot owns all rights, title, and interest in the ’934 patent.

**United States Patent No. 6,666,449**

44. On December 23, 2003, the USPTO duly and legally issued United States Patent No. 6,666,449 (“the ’449 patent”) entitled “Star wheel surface enhancement and process of manufacture” to inventors Stephen F. DeFosse, Edward L. Kiely and Sean D. Smith. A true and correct copy of the ’449 patent is attached as Exhibit 4.

45. The ’449 patent relates to, among other things, a star wheel.

46. The ’449 patent is presumed valid under 35 U.S.C. § 282.

47. Slingshot owns all rights, title, and interest in the ’449 patent.

**United States Patent No. 6,773,088**

48. On August 10, 2004, the USPTO duly and legally issued United States Patent No. 6,773,088 (“the ’088 patent”) entitled “Double lipped printhead maintenance cap” to inventors Charles S. Aldrich, James M. Jackson, Martin A. Johnson and Herman A. Smith. A true and correct copy of the ’088 patent is attached as Exhibit 5.

49. The ’088 patent relates to, among other things, a printhead maintenance cap.



50. The '088 patent is presumed valid under 35 U.S.C. § 282.

51. Slingshot owns all rights, title, and interest in the '088 patent.

**United States Patent No. 7,222,936**

52. On May 29, 2007, the USPTO duly and legally issued United States Patent No. 7,222,936 ("the '936 patent") entitled "Printhead carrier positioning apparatus and method" to inventors Frederick C. Griesemer and Martin A. Johnson. A true and correct copy of the '936 patent is attached as Exhibit 6.

53. The '936 patent relates to, among other things, a method for positioning a printhead carrier for an imaging apparatus.

54. The '936 patent is presumed valid under 35 U.S.C. § 282.

55. Slingshot owns all rights, title, and interest in the '936 patent.

**United States Patent No. 7,819,498**

56. On October 26, 2010, the USPTO duly and legally issued United States Patent No. 7,819,498 ("the '498 patent") entitled "Methods and systems using printhead tank memory to determine printhead tank configuration" to inventor Jason T. McReynolds. A true and correct copy of the '498 patent is attached as Exhibit 7.

57. The '498 patent relates to, among other things, an ink tank.

58. The '498 patent is presumed valid under 35 U.S.C. § 282.

59. Slingshot owns all rights, title, and interest in the '498 patent.

**United States Patent No. 7,841,712**

60. On November 30, 2010, the USPTO duly and legally issued United States Patent No. 7,841,712 ("the '712 patent") entitled "Automatic printhead and tank install

positioning” to inventors Robert Muyskens and Gregory S. Woods. A true and correct copy of the ’712 patent is attached as Exhibit 8.

61. The ’712 patent relates to, among other things, a method for installing a printhead or an ink tank for a printing device.

62. The ’712 patent is presumed valid under 35 U.S.C. § 282.

63. Slingshot owns all rights, title, and interest in the ’712 patent.

#### **United States Patent No. 8,113,618**

64. On February 14, 2012, the USPTO duly and legally issued United States Patent No. 8,113,618 (“the ’618 patent”) entitled “Methods and systems using printhead tank memory to determine printhead tank configuration” to inventor Jason T. McReynolds. A true and correct copy of the ’618 patent is attached as Exhibit 9.

65. The ’618 patent relates to, among other things, an ink tank.

66. The ’618 patent is presumed valid under 35 U.S.C. § 282.

67. Slingshot owns all rights, title, and interest in the ’618 patent.

#### **CLAIMS FOR RELIEF**

##### **Count I – Infringement of United States Patent No. 6,361,162**

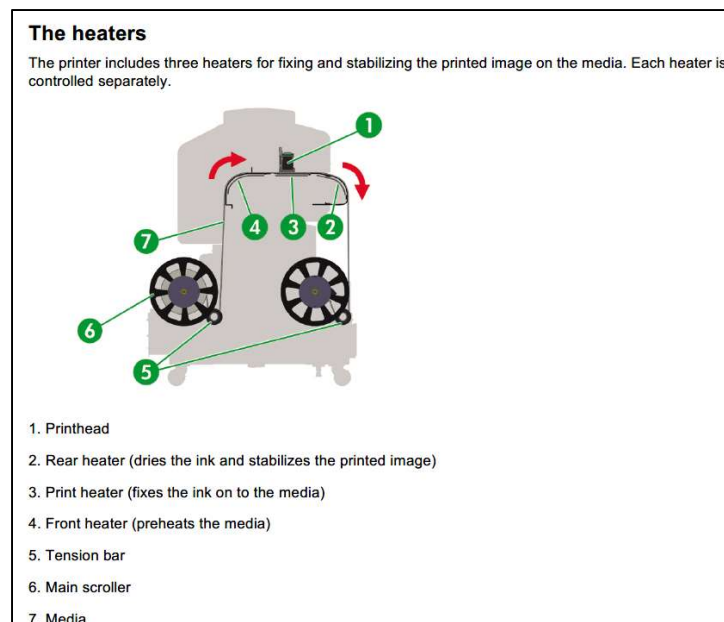
68. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

69. HP made, used, sold, offered to sell and/or imported in the United States HP 8000, 9000 and 10000 Series Printers that infringe (literally and/or under the doctrine of equivalents) at least claims 1 and 5 of the ’162 patent.

70. On information and belief, inkjet printers listed above were sold with inkjet printheads and ink cartridges. The inkjet printheads and ink cartridges could also be purchased separately from the inkjet printer.

71. On information and belief, with regard to the claim elements of the '162 patent, the HP 8000, 9000 and 10000 Series Printers function similarly to each other. Infringement of the '162 patent by these inkjet printers is demonstrated below using the HP 10000 Series Printer as an example.

72. The HP 10000 Series Printer ("HP 10000") performs a method for printing on a print receiving medium (e.g., paper).

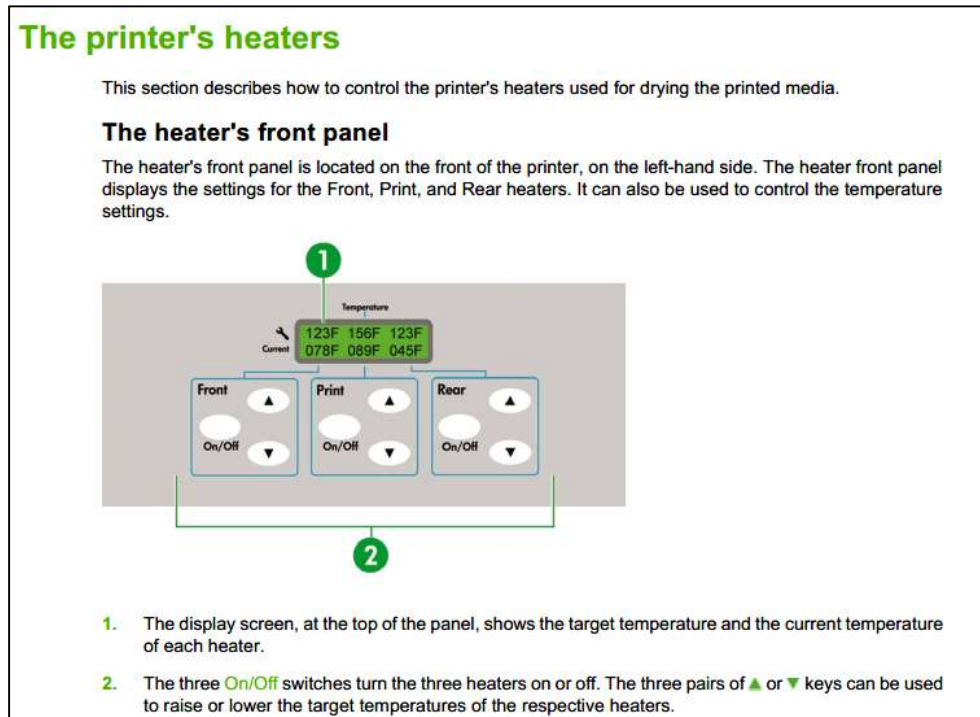


User's Guide, HP Designjet 10000s Printer series at p. 5.

73. The HP 10000 provides a portion of a print receiving medium in a print zone. The portion of the print zone receiving medium within the print zone is at least partially exposed to an atmosphere having a temperature.

74. The HP 10000 provides droplets of ink onto selected locations of the portion of the print receiving medium within the print zone.

75. On information and belief, the HP 10000 generally warms the droplets of ink provided on the portion of the print receiving medium within the print zone to a temperature of up to about 16° Celsius above the temperature of the atmosphere to which the print zone is at least partially exposed while the portion is substantially within the print zone. The heater temperatures of the HP 10000 are adjustable and HP provides recommended heater settings to its printer users:



User's Guide, HP Designjet 10000s Printer series at p. 12.

**HP Universal Photo Realistic Paper**

- **Which side is the printing side** - On the outside
- **Is there a double side printing capability** - N/A
- **Which media setting do I select in the front panel?** - Select 'Paper', but a custom setting can be created on the front panel.
- **What pressure setting should I use?** - Normal pressure
- **What heater temperature should I use?**
  - Rear heater - 45° C, 113° F
  - Printer Heater - 38° C, 100° F
  - Front Heater - 30° C, 86° F

**HP Premium Self-adhesive Vinyl**

- **Which side is the printing side** - On the outside
- **Is there a double side printing capability** - N/A
- **Which media setting do I select in the front panel?** - Select 'Matte' but a custom setting can be created on the front panel.
- **What pressure setting should I use?** - Normal pressure.
- **What heater temperature should I use?**
  - Rear heater: 48° C, 118° F
  - Printer Heater: 48° C, 118° F
  - Front Heater: 44° C, 111°F

<https://support.hp.com/us-en/document/c00891933>; see also HP DesignJet 9000s Printer Series, <https://support.hp.com/us-en/document/c00608546>;  
<https://support.hp.com/us-en/document/c00718655>

76. The HP 10000 provides the droplets of ink before the step of generally warming the droplets of ink. For example, the droplets are deposited on the print medium and then warmed by heat from the printer heater.

77. On information and belief, the HP 10000 generally warms the droplets of ink to a temperature of between about 4° to about 16° Celsius above the temperature of the atmosphere to which the print zone is at least partially exposed.

78. HP has been on notice of the '162 patent at least as early as the filing and service of this First Amended Complaint.

79. On information and belief, at least since its post-filing knowledge of the '162 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '162 patent, including by HP's actions that include, without limitation, actively and specifically instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers through HP's user guides/manuals, advertisement, promotional materials and instructions.

80. On information and belief, at least since its post-filing knowledge of the '162 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

81. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers including, without limitation, on HP's website that provides support on setting-up and/or using these products.

82. On information and belief, HP's customers directly infringe at least claims 1 and 5 of the '162 patent through their setup and use of HP inkjet printers.

83. On information and belief, HP's resellers directly infringe at least claims 1 and 5 of the '162 patent through their setup and use of HP inkjet printers.



84. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '162 patent, indirectly infringing and continues to indirectly infringe at least claims 1 and 5 of the '162 patent by actively, knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. The heater functionality/components of the HP inkjet printers are specifically configured according to the claims of the '162 patent, are material parts of the invention and do not have substantial non-infringing uses.

85. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count II - Infringement of United States Patent No. 6,485,124**

86. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

87. HP makes, uses, sells, offers to sell and/or imports inkjet printers in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 1 and 5-7 of the '124 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP OfficeJet Pro 7740, HP

PageWide Pro MFP 477dw, HP AMP 100, 120, 125, 130, HP 910, HP Deskjet 1010,

1011, 1012, 3700, 6940, 6943, 6980, 6983, 6988, D1500, D1600, D2300, D2600, D4100, D4200, D4300, D5500, HP Deskjet 3520, 3521, 3522, 3526; HP OfficeJet 4610, 4620, 4622; HP Photosmart 5510, 5512, 5514, 5515, 5520, 5525, C6340, 6510, 6512, 6515, 6520, 6525, 7510, 7515; HP Photosmart 7520, 7525, D7560, B8550, C6340, C6350, D7560, eStation, Plus, Premium, Premium Fax, Premium TouchSmart Web; HP OfficeJet 6958, 6962; HP OfficeJet Pro 6954, 6968, 6975, 6978; HP Officejet 7500A Wide Format - E910a; HP Officejet 6500 Wireless - E709n; HP Officejet 6000 - E609a; HP Officejet 6812, 6815, 6820; HP Officejet Pro 6230, 6230 ePrinter, 6830, 6835.

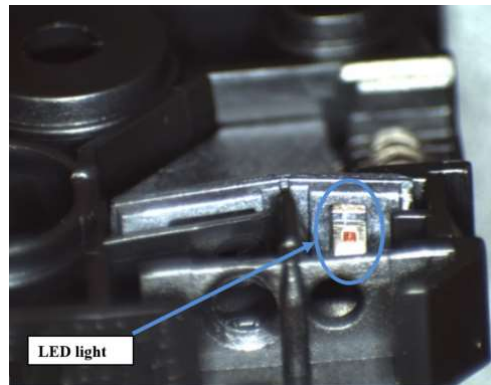
88. On information and belief, inkjet printers listed above are sold with ink cartridges. The ink cartridges can also be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

89. On information and belief, with regard to the claim elements of the '124 patent, the optical sensor of the inkjet printers listed above are structurally similar to each other. Infringement of the '124 patent by these inkjet printers is demonstrated below using the HP OfficeJet Pro 7740 as an example.

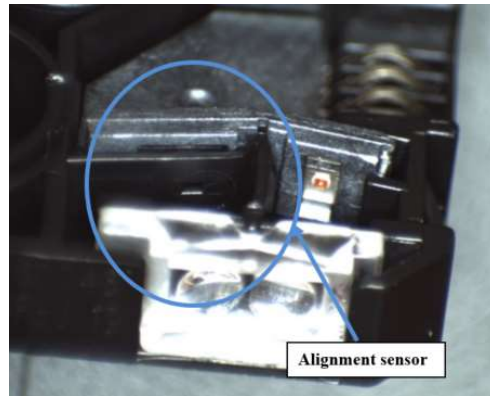
90. HP makes, uses, sells, offers to sell and/or imports a printing apparatus (e.g., HP OfficeJet Pro 7740 ("HP 7740")).



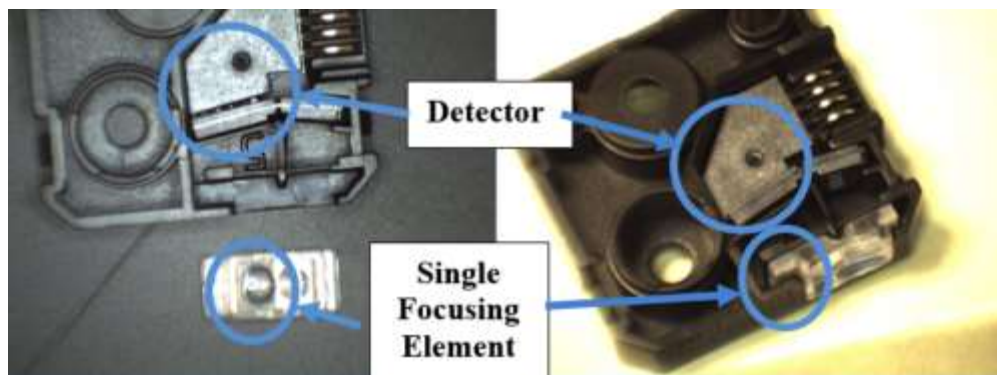
91. The HP 7740 has an LED light source.



92. The HP 7740 has an alignment sensor.



93. The alignment sensor of the HP 7740 includes a detector and a single focusing element to image a point on a media to a point on the detector.



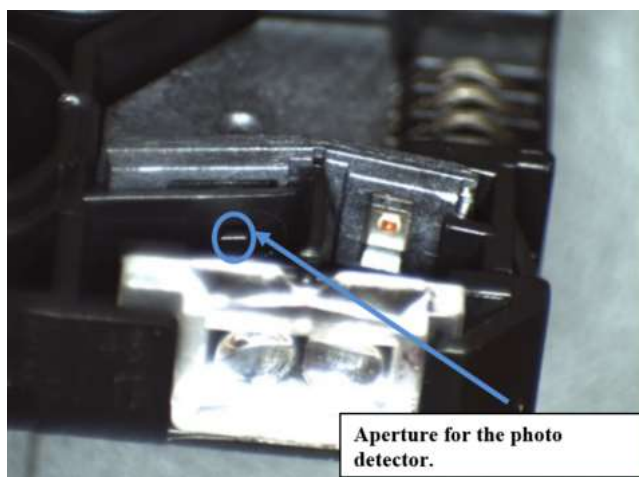
94. The HP 7740 has a control unit to determine whether the printing apparatus is aligned based on a detection by the alignment sensor of a predetermined mark(s) on the media.



95. The light source and alignment sensor of the HP 7740 are supported by a housing. The housing is positioned a distance away from the media equal to a focal length of the alignment sensor.



96. The detector of the HP 7740 is a photodetector having an aperture that is shaped to conform with the shape of the predetermined mark(s).



97. On information and belief, HP has been on notice of the '124 patent at least as early as the filing and service of the Complaint in this action.

98. On information and belief, at least since its post-filing knowledge of the '124 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '124 patent, including by HP's

actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers through HP's user guides/manuals, advertisement, promotional materials and instructions.

99. On information and belief, at least since its post-filing knowledge of the '124 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

100. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers including, without limitation, on HP's website which provides support on setting up and/or using these products.

101. On information and belief, HP's customers directly infringe at least claims 1 and 5-7 of the '124 patent through their setup and use of HP inkjet printers.

102. On information and belief, HP's resellers directly infringe at least claims 1 and 5-7 of the '124 patent through their setup, use, sale and offer for sale of HP inkjet printers.

103. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '124 patent, indirectly infringing and continues to indirectly infringe at least claims 1 and 5-7 of the '124 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP's optical sensors are specifically



configured according to the claims of the '124 patent, are material parts of the invention and do not have substantial non-infringing uses.

104. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count III – Infringement of United States Patent No. 6,601,934**

105. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

106. HP makes, uses, sells, offers to sell and/or imports inkjet printers in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 1, 8, 16 and 17 of the '934 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP Photosmart 5510 e-All-in-One Printer Series (B111), 6510 e-All-in-One Printer Series (B211), 7510 e-All-in-One Printer Series (C311), Premium All-in-One Printer Series (C309), e-All-in-One Printer Series (C310), Premium Fax All-in-One Printer Series (C410), PhotoSmart Plus e-All-in-One Printer Series(B209), PhotoSmart eStation e-All-in-One (C510) (e.g., PhotoSmart 5510 e-All-in-One - B111a, PhotoSmart 5512 e-All-in-One - B111a, PhotoSmart 5514, PhotoSmart 5515 e-All-in-One - B111a, PhotoSmart 6510 e-All-in-One - B211a, PhotoSmart 6512 e-All-in-One - B211a, PhotoSmart 6515 e-All-in-One - B211a, PhotoSmart 7510 e-All-in-One - C311a, PhotoSmart 7515 e-

All-in-One - C311a, PhotoSmart Plus B209a e-All-in-One, PhotoSmart Premium

All-in-One - C309g, PhotoSmart Premium All-in-One - C310a, PhotoSmart

Premium Fax All-in-One - C309a, PhotoSmart Premium Fax All-in-One - C410a,

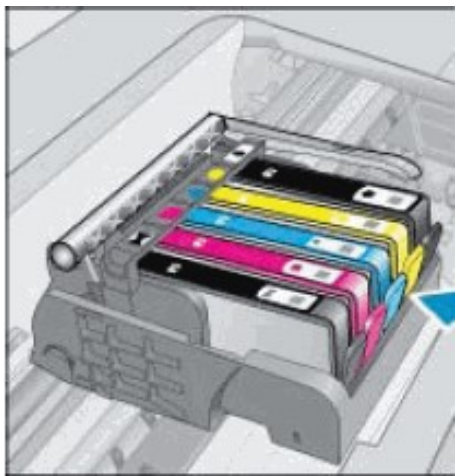
PhotoSmart Premium Touchsmart Web All-in-One - C309n).

107. On information and belief, inkjet printers listed above are sold with ink cartridges. The ink cartridges can also be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

108. On information and belief, with regard to the claim elements of the '934 patent, the inkjet printers listed above function similarly to each other. Infringement of the '934 patent by these inkjet printers and associated ink cartridges is demonstrated below using the HP Photosmart 7510 e-All-in-One (C311) Printer Series as an example.

109. HP makes, uses, sells, offers to sell and/or imports an imaging device (e.g., HP Photosmart 7510 e-All-in-One (C311) Printer Series ("HP Photosmart")).

110. The HP Photosmart has at least one ink printhead having at least one color of ink.



111. The HP Photosmart has an erasable memory which stores (a) at least one total ink consumed variable (“PHA Drops”) associated with a corresponding color and (b) at least one count variable associated with a corresponding color.

112. The HP Photosmart provides a “Print Quality Diagnostic Report.”

**Step one: Print a Print Quality Diagnostic Report**

Follow these steps to print a test page.

1. Load plain white U.S. letter or A4 size paper in the tray.
2. From the control panel home screen, touch the Settings icon (⚙️).
3. Touch **Tools**, and then touch **Print Quality Report**. The product prints a test page.

<https://support.hp.com/us-en/document/c02948596>

113. The “Print Quality Diagnostic Report” includes the line “PHA Drops” with numbers for each color ink cartridge. On information and belief, “PHA Drops” represents a total number of drops of ink that an ink cartridge has provided.

**Figure 3: Example Print Quality Diagnostic Report**



<https://support.hp.com/us-en/document/c02948596>

**Print Quality Diagnostic Report**

ABCDEFGH

B4c1e9w

1. Model Name: HP Photosmart 7510 e-All-in-One - C311a  
 2. Model Number: C311a  
 3. Serial Number: [REDACTED]  
 4. Product Number: C0677A  
 5. Service ID: 23140

6. Printer Zone (PX): 2  
 7. Total Pages Printed: 1263  
 8. Firmware Version: VEP1CN137CR (113926)  
 9. HP Patch Version: 0  
 10. Pen Alignment Status: Pass

11. PFA Installed: 05/20/2013  
 12. PFA TTDE Count: 1  
 13. PFA Hex ID: K: 3F706870\_S03d2307, C: 007062a0\_1a1d1107

14. Ink Supply:

Photo	Magenta	Cyan	Yellow	Black
15. Estimated Ink Level:				
16. Ink Zone:	2	2	2	2
17. Ink Install:	09/24/2013	03/12/2014	03/12/2014	08/25/2014
18. US:	0	0	0	0
19. HP:	1	1	1	1
20. Ink Warranty Ends:	07/02/2015	08/03/2015	08/17/2015	03/26/2015
21. Ink Number:	149/68/00	149/68/00	149/68/00	149/68/00
22. PI A Drops:	633736000	782360000	945576000	1271520000

**Additional Assistance**  
 Printer Toolbox - To perform various tasks such as cleaning or aligning the print cartridges, you can access this toolbox from the HP Photosmart 7510 e-All-in-One - C311a Printer Software under Printer Settings.  
 To obtain information about ink cartridge health and perform maintenance services (such as cleaning ink cartridges or printheads), use the Toolbox software (Windows) or the HP Printer Utility (Mac OS) on your computer. For further assistance with print quality, see the electronic User Guide available on your computer after you install the software either from the HP Photosmart 7510 e-All-in-One - C311a Printer Software (Windows) or the Help Viewer (Mac OS). (The user guide is also available online at [www.hp.com/support](http://www.hp.com/support).)  
 For detailed assistance on Print Quality related issues and how this report can be of assistance, please go to HP Photosmart 7510 e-All-in-One - C311a Printer Software Help & Support.

<https://h30434.www3.hp.com/t5/Printers-Archive-Read-Only/Where-do-I-find-sample-pages-for-7510-that-are-correct-and/td-p/4161758>

114. On information and belief, the HP Photosmart has a controller communicatively connected to the printhead and erasable memory. On information and belief, the controller of the HP Photosmart increments the count variable associated with a color of ink when the printhead fires an ink drop of that color on a substrate (e.g., paper).

115. The controller of the HP Photosmart increments the total ink consumed variable (“PHA Drops”) associated with a color when, on information and belief, the count variable equals or exceeds a predetermined number.

116. The HP Photosmart is an ink jet printer.

117. HP has been on notice of the ’934 patent at least as early as the filing and service of this First Amended Complaint.

118. On information and belief, at least since its post-filing knowledge of the ’934 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the ’934 patent, including by HP’s actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers through HP’s user guides/manuals, advertisement, promotional materials and instructions.

119. On information and belief, at least since its post-filing knowledge of the ’934 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP’s encouraging acts result in direct infringement by customers and resellers.

120. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers including, without limitation, on HP’s website which provides support on setting up and/or using these products.

121. On information and belief, HP’s customers directly infringe at least claims 1, 8, 16 and 17 of the ’934 patent through their setup and use of HP inkjet printers.



122. On information and belief, HP's resellers directly infringe at least claims 1, 8, 16 and 17 of the '934 patent through their setup, use, sale and offer for sale of HP inkjet printers.

123. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '934 patent, indirectly infringing and continues to indirectly infringe at least claims 1, 8, 16 and 17 of the '934 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP's ink usage tracking functionality/components are specifically configured according to the claims of the '934 patent, are material parts of the invention and do not have substantial non-infringing uses.

124. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count IV - Infringement of United States Patent No. 6,666,449**

125. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

126. HP makes, uses, sells, offers to sell and/or imports inkjet printers in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 1, 5 and 8 of the '449 patent. HP commits acts of patent infringement through the

manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP OfficeJet Pro 6978, HP PageWide Pro MFP 477dw, HP AMP 100, 120, 125, 130, HP 910, HP Deskjet 3700, 6940, 6943, 6980, 6983, 6988, D1500, D1600, D2300, D2600, D4100, D4200, D4300, D5500, HP Deskjet 3520, 3521, 3522, 3526; HP OfficeJet 4610, 4620, 4622; HP Photosmart 5510, 5512, 5514, 5515, 5520, 5525, C6340, 6510, 6512, 6515, 6520, 6525, 7510, 7515; HP Deskjet 1010, 1011, 1012, 1050, 1051, 1055, 1056, 1110, 1111, 1112, 1510, 1511, 1512, 1513, 1513, 1517, 2050, 2130, 2131, 2132, 2134, 2510, 2511, 2512, 2514, 2540, 2542, 2543, 2544, 3000, 2050, 2054, 2060, , 3050, HP Photosmart 7520, 7525, D7560, B8550, C6340, C6350, D7560, eStation, Plus, Premium, Premium Fax, Premium TouchSmart Web; HP OfficeJet 6958, 6962; HP OfficeJet Pro 6954, 6968, 6975, 6978; HP Officejet 7500A Wide Format - E910a; HP Officejet 6500 Wireless - E709n; HP Officejet 6000 - E609a; HP Officejet 6812, 6815, 6820; HP Officejet Pro 6230, 6230 ePrinter, 6830, 6835.

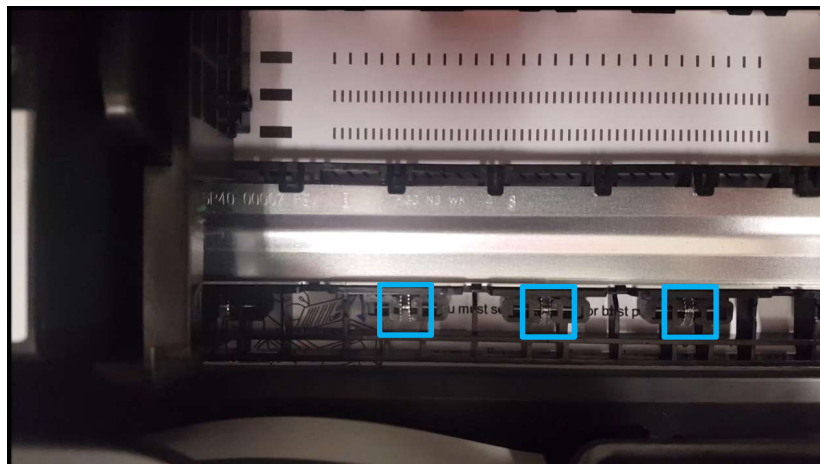
127. On information and belief, inkjet printers listed above are sold with ink cartridges. The ink cartridges can also be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

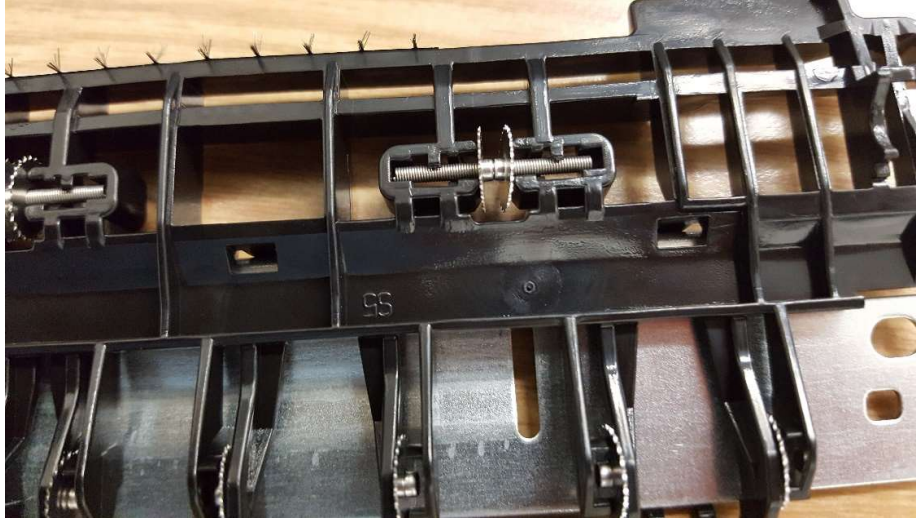
128. On information and belief, with regard to the claim elements of the '449 patent, the star wheels of the printers listed above are structurally similar to each other. Infringement of the '449 patent by these inkjet printers is demonstrated below using the HP OfficeJet Pro 6978 as an example.

129. HP makes, uses, sells, offers to sell and/or imports an inkjet printer (e.g., HP OfficeJet Pro 6978 (“HP 6978”)).

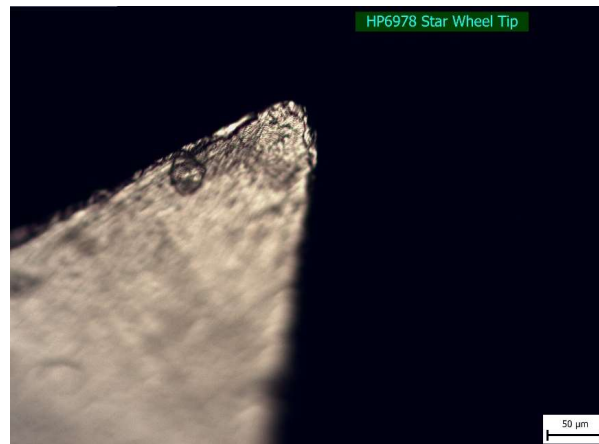


130. The HP 6978 has a print station including a media transport path therethrough and star wheels in the media path engaging printed surfaces of media (e.g., paper) exiting the print station. The star wheel has a metallic body.





131. The star wheel has a plurality of radially extending projections from the body and, on information and belief, each projection has at least a portion with an electropolished surface. Each projection has a tip on a distal end thereof. On information and belief, the electropolished surface is only on a distal end of each projection.



132. On information and belief, HP has been on notice of the '449 Patent at least as early as the filing and service of the Complaint in this action.

133. On information and belief, at least since its post-filing knowledge of the '449 patent, HP knowingly encourages, and continues to encourage, customers and

resellers to directly infringe one or more claims of the '449 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers through HP's user guides/manuals, advertisement, promotional materials and instructions.

134. On information and belief, at least since its post-filing knowledge of the '449 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

135. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers including, without limitation, on HP's website which provides support on setting up and/or using these products.

136. On information and belief, HP's customers directly infringe at least claims 1, 5 and 8 of the '449 patent through their setup and use of HP inkjet printers.

137. On information and belief, HP's resellers directly infringe at least claims 1, 5 and 8 of the '449 patent through their setup, use, sale and offer for sale of HP inkjet printers.

138. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '449 patent, indirectly infringing and continues to indirectly infringe at least claims 1, 5 and 8 of the '449 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage

infringement by HP's customers and resellers. HP's star wheels are specifically configured according to the claims of the '449 patent, are material parts of the invention and do not have substantial non-infringing uses.

139. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count V – Infringement of United States Patent No. 6,773,088**

140. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

141. HP makes, uses, sells, offers to sell and/or imports inkjet printers and inkjet printhead carriers in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 8, 9, 20 and 22 of the '088 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP OfficeJet Pro 6978; HP OfficeJet 6000, 6500, 6500A, 7000, 7500, 7500A Printer Series.

**Inkjet printhead carriers** including, without limitation, HP 920.

142. On information and belief, inkjet printers listed above incorporate inkjet printhead carriers and are sold with ink cartridges. The ink cartridges can also be purchased separately from the inkjet printer. The inkjet printhead carriers of the HP OfficeJet 6000, 6500, 6500A, 7000, 7500, 7500A Printer Series can be purchased

separately from the inkjet printers. The inkjet printhead carrier and ink cartridges are necessary for the operation of the inkjet printers and vice versa.

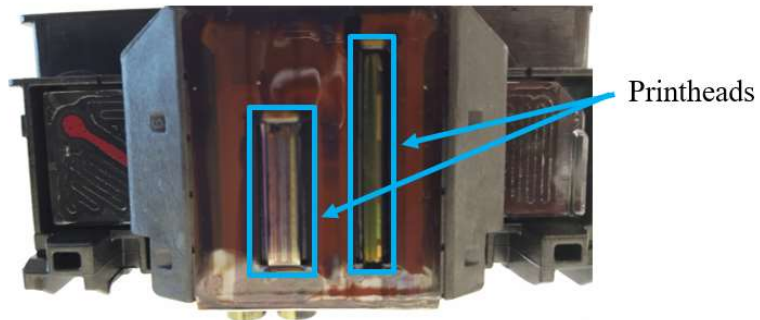
143. On information and belief, with regard to the claim elements of the '088 patent, the maintenance stations of the HP OfficeJet 6000, 6500, 6500A, 7000, 7500 and 7500A Printer Series are configured similarly to each other. Infringement of the '088 patent by these inkjet printers and associated inkjet printhead carrier is demonstrated below using the HP OfficeJet 6000 Series as an example. Infringement of the '088 patent is also demonstrated below using the HP OfficeJet Pro 6978.

144. HP makes, uses, sells, offers to sell and/or imports an imaging apparatus (e.g., HP OfficeJet Pro 6978 ("HP 6978")) which includes a printhead carrier.



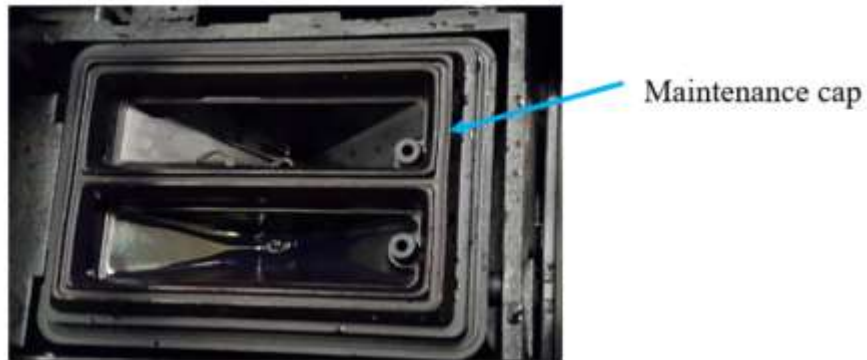


145. Two printheads are mounted to the bottom of the printhead carrier of the HP 6978.

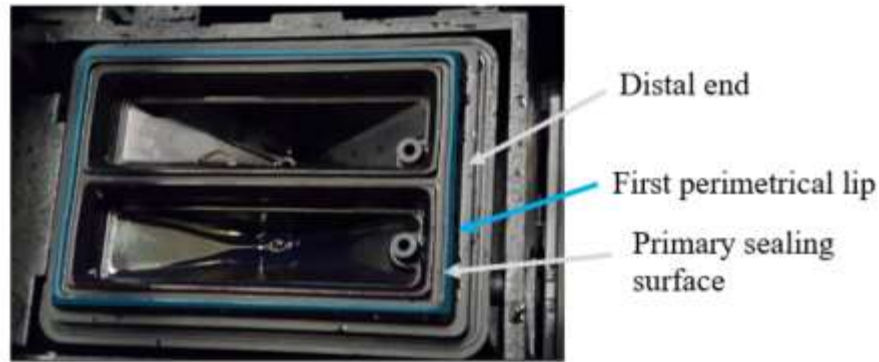


146. The HP 6978 has a printhead maintenance station that includes a printhead maintenance cap and a moving mechanism coupled to the printhead maintenance cap for moving the printhead maintenance cap relative to the printhead.

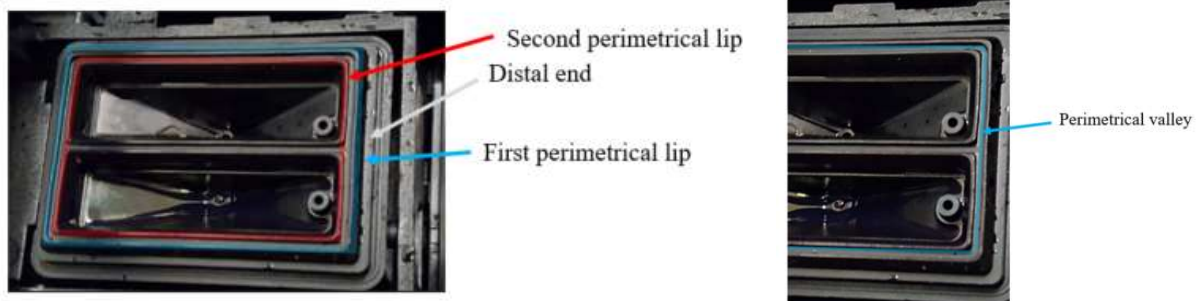




147. The printhead maintenance cap has a wall portion having a proximal end and a distal end. The wall portion defining an interior region. The printhead maintenance cap has a first perimetrical lip extending from the distal end of the wall portion by a first extent. The first perimetrical lip defining a primary sealing surface.



148. The printhead maintenance cap has a second perimetrical lip extending from the distal end of the wall portion by a second extent. The second perimetrical lip is spaced apart from the first perimetrical lip. A perimetrical valley is defined between the first perimetrical lip and the second perimetrical lip. The second perimetrical lip defines a secondary sealing surface.



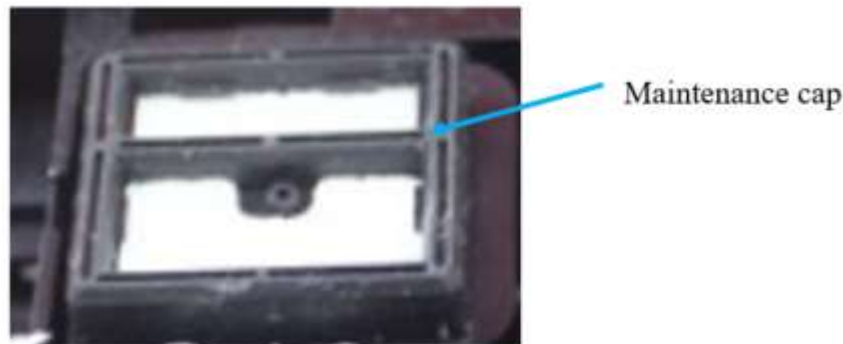
149. HP makes, uses, sells, offers to sell and/or imports an imaging apparatus (e.g., HP OfficeJet 6000 Series ("HP OfficeJet 6000")) that includes a printhead carrier (e.g., HP 920 printhead carrier).



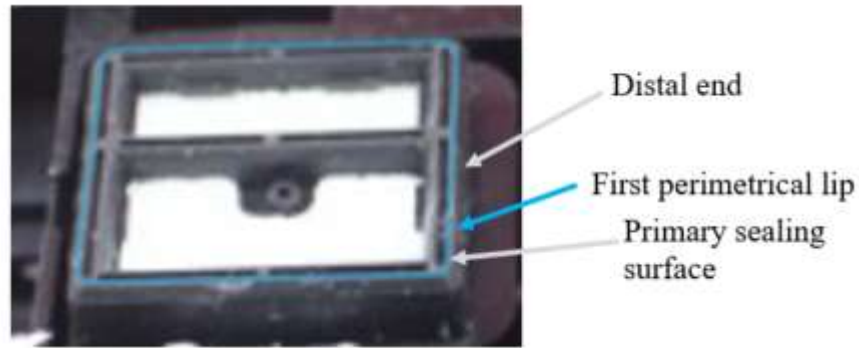
150. Two printheads are mounted to the bottom of the printhead carrier of the HP OfficeJet 6000.



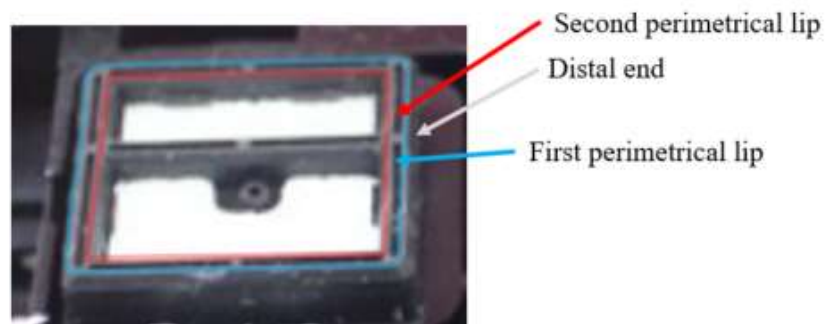
151. The HP OfficeJet 6000 has a printhead maintenance station that includes a printhead maintenance cap and a moving mechanism coupled to the printhead maintenance cap for moving the printhead maintenance cap relative to the printhead.



152. The printhead maintenance cap has a wall portion having a proximal end and a distal end. The wall portion defining an interior region. The printhead maintenance cap has a first perimetrical lip extending from the distal end of the wall portion by a first extent. The first perimetrical lip defining a primary sealing surface.



153. The printhead maintenance cap has a second perimetrical lip extending from the distal end of the wall portion by a second extent. The second perimetrical lip is spaced apart from the first perimetrical lip. A perimetrical valley is defined between the first perimetrical lip and the second perimetrical lip. The second perimetrical lip defines a secondary sealing surface.



154. On information and belief, HP has been on notice of the '088 patent at least as early as the filing and service of the Complaint in this action.

155. On information and belief, at least since its post-filing knowledge of the '088 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '088 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers and inkjet printhead carriers through HP's user guides/manuals, advertisement, promotional materials and instructions.

156. On information and belief, at least since its post-filing knowledge of the '088 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

157. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers and inkjet printhead carriers including, without limitation, on HP's website which provides support on setting up and/or using these products.

158. On information and belief, HP's customers directly infringe at least claims 8, 9, 20 and 22 of the '088 patent through their setup and use of HP inkjet printers and inkjet printhead carriers.

159. On information and belief, HP's resellers directly infringe at least claims 8, 9, 20 and 22 of the '088 patent through their setup, use, sale and offer for sale of HP inkjet printers and inkjet printhead carriers.

160. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '088 patent, indirectly infringing and continues to indirectly infringe at least claims 8, 9, 20 and 22 of the '088 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP's inkjet printer maintenance stations and maintenance caps are specifically configured according to the claims of the '088 patent, are material parts of the invention and do not have substantial non-infringing uses.

161. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count VI – Infringement of United States Patent No. 7,222,936**

162. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

163. HP makes, uses, sells, offers to sell and/or imports inkjet printers in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 8-10 of the '936 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP OfficeJet Pro 7740, 9015; HP OfficeJet 3830.

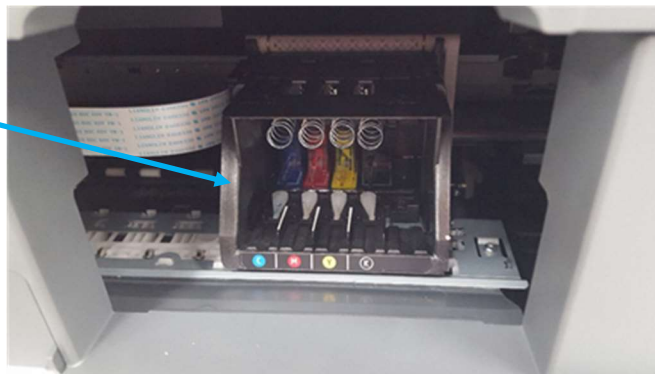
164. On information and belief, inkjet printers listed above are sold with ink cartridges. The ink cartridges can also be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

165. On information and belief, with regard to the claim elements of the '936 patent, the HP OfficeJet Pro 7740, 9015 and HP OfficeJet 3830 function similar to each other. Infringement of the '936 patent by these inkjet printers is demonstrated below using the HP OfficeJet Pro 9015 as an example.

166. HP makes, uses, sells, offers to sell and/or imports inkjet printers (e.g., HP OfficeJet Pro 9015 ("HP 9015")). The HP 9015 performs a method for positioning a printhead carrier.



Printhead carrier





167. Software of the HP 9015 activates a printhead carrier drive system of the HP 9015 to position the printhead carrier at a cartridge exchange opening when a cover of the imaging apparatus is detected to not be in a closed position. In particular, shortly after opening the cover of the HP 9015, the printhead carrier is positioned at the cartridge exchange opening.



168. Software of the HP 9015 activates the printhead carrier drive system to position the printhead carrier at a printhead home position if the cover is not positioned in the closed position within a predetermined amount of time after being opened. In particular, after approximately 14 minutes of the cover being opened, the printhead carrier is positioned at a printhead home position.



169. Software of the HP 9015 activates the printhead carrier drive system to reposition the printhead carrier at the cartridge exchange opening if, after the predetermined amount of time, the cover is open and a button is pressed by a user. In particular, if the cover remains open and the power button is pushed to power the HP 9015 OFF and then the power button is pushed again to power the HP 9015 ON, the printhead carrier drive system repositions the printhead carrier back to the ink cartridge exchange opening.





170. The printhead home position of the HP 9015 is a printhead capping position.

171. The predetermined amount of time for the HP 9015 is about 14 minutes – i.e., in a range of 5 minutes to 50 minutes.

172. On information and belief, HP has been on notice of the '936 patent at least as early as the filing and service of this First Amended Complaint.

173. On information and belief, at least since its post-filing knowledge of the '936 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '936 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers through HP's user guides/manuals, advertisement, promotional materials and instructions.

174. On information and belief, at least since its post-filing knowledge of the '936 patent, HP knows that the acts HP induced customers and resellers to take

constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

175. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers including, without limitation, on HP's website which provides support on setting up and/or using these products.

176. On information and belief, HP's customers directly infringe at least claims 8-10 of the '936 patent through their setup and use of HP inkjet printers.

177. On information and belief, HP's resellers directly infringe at least claims 8-10 of the '936 patent through their setup, use, sale and offer for sale of HP inkjet printers.

178. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '936 patent, indirectly infringing and continues to indirectly infringe at least claims 8-10 of the '936 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP's inkjet printer carriage positioning functionality/components are specifically configured according to the claims of the '936 patent, are a material part of the invention and do not have substantial non-infringing uses.

179. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count VII – Infringement of United States Patent No. 7,819,498**

180. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

181. HP makes, uses, sells, offers to sell and/or imports inkjet printers and ink cartridges in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 1 and 2 of the '498 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP DeskJet 450cbi, 5145, 5150, 5151, 5550, 5551, 5552, 5650, 5655, 5850, 9650, 9670, 9680; HP OfficeJet 4110, 4215, 5505, 5510, 5605, 5610, 6105, 6110; HP Photosmart 7150, 7260, 7350, 7450, 7459, 7550, 7660, 7755, 7760, 7762, 7960; HP PSC 1210, 1311, 1315, 1317, 1340, 1350, 1355, 2105, 2108, 2110, 2115, 2150, 2175, 2210, 2410, 2520; HP ENVY 5540, 5541, 5542, 5543, 5544, 5545, 5547, 5548, 5549, 5640, 5642, 5643, 5644, 5660, 5661, 5663, 5664, 5665, 7640, 7643, 7644, 7645; HP OfficeJet 200, 250, 252, 258, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 8040; HP Deskjet 1112, 2130, 2132, 3630, 3632, 3633, 3634, 3636, 3637; HP ENVY 4512, 4513, 4520, 4522, 4523, 4524; HP OfficeJet 3830, 3831, 3833, 4650, 4652, 4654, 4655; HP ENVY 6220, 6222, 6230, 6232, 6234, 6252, 6255, 7120, 7130, 7134, 7155, 7064, 7820, 7822, 7830, 7855, 7858, 7864; HP AMP

100; HP DeskJet 2620, 2621, 2622, 2624, 2630, 2632, 2633, 2652, 2655, 3720, 3721, 3722, 3723, 3732, 3733, 3735, 3750, 3752, 3755, 3758; HP ENVY 5010, 5020, 5030, 5032; HP DeskJet D4260, D4263, D4360, D4363, D4368; HP OfficeJet J5730, J5740, J5750, J5780, J5783, J5785, J5788, J6480, J6488; HP Photosmart C4210, C4240, C4250, C4280, C4283, C4285; HP OfficeJet 6100 ePrinter, 6600 H711a, 6700 Premium H711n, 7110 Wide Format ePrinter, 7510 Wide Format, 7610 Wide Format, 7612 Wide Format; HP OfficeJet Pro 276dw MFP, 8600-N911g, 860-N911n, 8600-N911a, 8610, 8620, 251dw, 8100-N811a 8630; HP OfficeJet Pro 7720, 7730, 7740, 8210, 8216, 8702, 8710, 8715, 8720, 8725, 8728, 8730, 8740, 8745; HP OfficeJet Pro 9025, 9020, 9018, 9015, 9010; HP OfficeJet Pro Premier; HP OfficeJet 9012; HP OfficeJet Pro X451dn, X451dw, X476dn MFP, X476dw MFP, X551dw, X576dw MFP; HP PageWide Pro 452dn, 452dw, 452dwt, 477dn, 477dw, 477dwt, 552dw, 552dwt, 577dw, 577z; HP OfficeJet Enterprise Color MFP X585dn, MFP X585f, X555dn, X555xh; HP OfficeJet Enterprise Color Flow MFP X585z; HP OfficeJet Managed Color MFP X585dnm; HP PageWide Enterprise Color 556dn, 556xh, MFP 586dn, MFP 586f; HP PageWide Enterprise Color Flow MFP 586z, HP PageWide Managed Color E55650dn, MFP E58650dn; HP Deskjet 3520, 3521, 3522, 3526; HP OfficeJet 4610, 4620, 4622; HP Photosmart 5510, 5512, 5514, 5515, 5520, 5525, C6340, 6510, 6512, 6515, 6520, 6525, 7510, 7515; HP Photosmart 7520, 7525, D7560, B8550, C6340, C6350, D7560, eStation, Plus, Premium, Premium Fax, Premium TouchSmart Web; HP OfficeJet 6958, 6962; HP OfficeJet Pro 6954, 6968, 6975, 6978; HP OfficeJet 7500A Wide Format - E910a; HP OfficeJet 6500 Wireless -

E709n; HP OfficeJet 6000 - E609a; HP OfficeJet 6812, 6815, 6820; HP OfficeJet Pro 6230, 6230 ePrinter, 6830, 6835.

**Ink cartridges**, including without limitation, HP 21, HP 22, HP 27, HP 54, HP 56, HP 57, HP 58, HP 60, HP 61, HP 62, HP 63, HP 64, HP 64, HP 65, HP 74, HP 75, HP 92, HP 93, HP 94, HP 95, HP 95, HP 97, HP 98, HP 99, HP 100, HP 102, HP 110, and HP 901 (regular and XL); HP 564, HP 564XL, HP 902, HP 902XL, HP 906XL, HP 920, HP 920 XL, HP 934, HP 935, HP 935 XL; HP 932, HP 932XL, HP 933, HP 933XL, HP 950, HP 950XL, HP 951, HP 951XL, HP 952, HP 952XL, HP 956XL, HP 962, HP 962XL, HP 966XL, HP 970, HP 970XL, HP 971, HP 971XL, HP 972, HP 972A, HP 972X, HP 976Y, HP 980, HP 981A, HP 981X, HP 981Y (setup and non-setup/replacement cartridges).

182. On information and belief, inkjet printers listed above are sold with setup ink cartridges that have a limited supply of ink. On information and belief, setup ink cartridges are used for initial configuration/calibration and/or proper operation of the printer. On information and belief, for inkjet printers that come with setup ink cartridges, a user must use a setup ink cartridge the first time that the printer is turned on/initialized. Setup ink cartridges are marked with the word "Setup" and, in some cases, identify non-setup/replacement ink cartridge(s) that should be used with an inkjet printer once the ink in the setup ink cartridge has been depleted. Exemplary setup ink cartridges are shown below.





183. Setup ink cartridges are structurally similar to non-setup/replacement ink cartridges. On information and belief, once a setup ink cartridge has been used to configure/calibrate a printer, another setup ink cartridge cannot subsequently be used in the printer. After the ink in the setup ink cartridge is depleted, customers must buy and use non-setup/replacement cartridges to continue to use the printer.

184. On information and belief, with regard to the claim elements of the '498 patent, memory of the HP 932, HP 932XL, HP 933, HP 933XL, HP 950, HP 950XL, HP 951, HP 951XL, HP 952, HP 952XL, HP 956XL, HP 962, HP 962XL, HP 966XL, HP 970, HP 970XL, HP 971, HP 971XL, HP 972, HP 972A, HP 972X, HP 976Y, HP 980, HP 981A, HP 981X and HP 981Y ink cartridges are functionally similar to each other. On information and belief, with regard to the claim elements of the '498 patent, memory of the HP 21, HP 22, HP 27, HP 54, HP 56, HP 57, HP 58, HP 60, HP 61, HP 62, HP 63, HP

64, HP 64, HP 65, HP 74, HP 75, HP 92, HP 93, HP 94, HP 95, HP 95, HP 97, HP 98, HP 99, HP 100, HP 102, HP 110, and HP 901 (regular and XL) ink cartridges are functionally similar to each other. On information and belief, with regard to the claim elements of the '498 patent, memory of the HP 564, HP 564XL, HP 902, HP 902XL, HP 906XL, HP 920, HP 920 XL, HP 934, HP 935 and HP 935 XL ink cartridges are functionally similar to each other. Infringement of the '498 patent by these ink cartridges and associated inkjet printers is demonstrated below using HP 902 and HP 64 ink cartridges and associated inkjet printer as examples.

185. The ink cartridges can be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

186. HP makes, uses, sells, offers to sell and/or imports an ink tank (e.g., HP 902).



187. The HP 902 has a reservoir for holding ink.

188. The HP 902 has a memory tag (chip) associated with the reservoir.



189. The data stored in the memory tag includes ink tank configuration instructions. As shown in the “Printer Status Report” from an HP OfficeJet Pro 6978 (below), on information and belief, the chip of the HP 902 provides the HP OfficeJet Pro 6978 with its ink tank identifier.

Printer Status Report

Product Information

1. Model Name: HP OfficeJet Pro 6978 All-in-One

2. Model Number: 6970

3. Serial Number: T162F2Q06J

4. Product Number: T0F29A

5. Service ID: 29178

6. Printer Zone (PX): 2

7. Firmware Version: MCP2CH1910AR

8. FW Patch Version: 0

9. Country/Region: US / 1

10. Duplexer: Installed

11. ADF: Installed

12. Quiet Mode: Off

13. DR: DOO

14. IRE: CUE

Connectivity Settings

17. Network Status: Ready

18. Active Connection Type: Wireless

19. URL: http://10.20.33.93

20. Hostname: HPFA5400

21. Admin Password: Not Set

22. Connected

23. 2019-06-13

Fax Settings

28. Speed: Medium (14400)

29. Backup Fax Reception: On

30. Fax Forwarding: Off

31. Auto Answer: On

32. Rings to Answer: 5

33. Distinctive Ring: All Rings

34. (ECM) Error Correction Mode: On

35. Fax to PC: Off

Scan Settings

24. Front Panel Destinations List: 0

25. Scanner Glass Test: Not Run

Scan Usage Information

26. Pages Scanned: 9

27. Scans From ADF: 6

Print Usage Information

15. Total Pages Printed: 17

16. Borderless Pages Printed: 0

Ink Delivery System Information

38. Ink Supply:

39. Estimated Ink Level:

40. Ink Zone:

2

2

2

2

41. Ink Install:

06/25/2019

06/25/2019

06/25/2019

06/25/2019

42. USE:

0

0

0

0

43. HP:

1

1

1

1

44. Ink Wasteb. Error:

01/01/2021

01/01/2021

01/08/2021

12/23/2020

45. Ink Number:

HP 902 H INSTANT INK

HP 902 H INSTANT INK

HP 902 H INSTANT INK

HP 902 H INSTANT INK

46. PE:

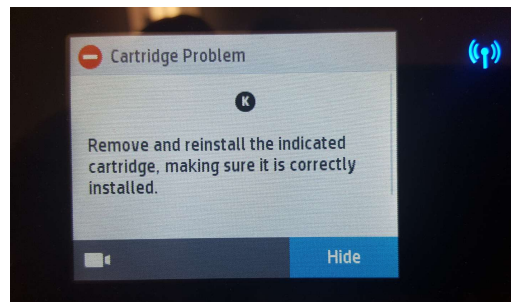
0

0

0

0

190. Upon installing an HP 564 ink cartridge in the “K” position (designated for an HP 902 black ink cartridge), the HP OfficeJet Pro 6978 does not recognize the ink cartridge and will display an error message for the “K” position – “Remove and reinstall the indicated cartridge.”



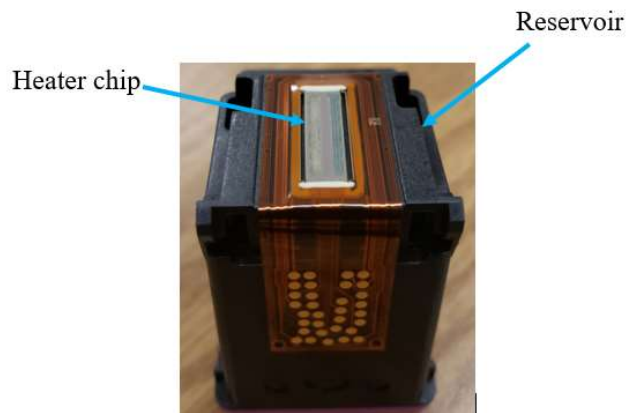
191. On information and belief, the ink tank configuration instructions identify a total number of ink tanks (4-ink tanks in the case of the HP 902) that are installed in a printing system when the ink tank is included as one of the installed tanks. On information and belief, the HP 902 ink tank configuration instructions identify the ink tank as one of N ink tanks in a N-ink tank configuration, where N represents a number greater than two (4-ink tanks in the case of the HP 902).

192. HP makes, uses, sells, offers to sell and/or imports an ink tank (e.g., HP 64).



193. The HP 64 has a reservoir for holding ink.

194. The HP 64 has a memory tag (memory on a heater chip) associated with the reservoir.



195. The data stored in the memory tag includes ink tank configuration instructions. As shown in the "Printer Status Report" from an HP ENVY Photo 6255 (below), on information and belief, the memory of the HP 64 provides the HP ENVY Photo 6255 with its ink tank identifier.

# Printer Status Report

## Product Information

- Model Name: HP ENVY Photo 6200 All-in-One Printer series
- Model Number: G255
- Serial Number: T18CJBJX01F
- Product Number: K7D18A
- Service ID: 29190
- Printer Zone (PX): 2
- Firmware Version: PALMIPPXN003.1845A.00
- FW Patch Version: 0
- Country/Region: US / 1
- Duplexer: Installed
- Quiet Mode: Off
- DRIPL: DO

## Connectivity Settings

- Network Status: Ready
- Active Connection Type: Wireless
- URL: http://192.168.1.19
- Hostname: HP5683FF
- Admin Password: Not Set

## Scan Settings

- Front Panel Destinations List: 0
- Scanner Glass Test: Not Run



## Scan Usage Information

- Pages Scanned: 0

## Print Usage Information

- Total Pages Printed: 20
- Borderless Pages Printed: 0

## Ink Delivery System Information

23. Ink Supply:	Color	Black
24. Estimated Ink Level:		
25. Ink Zone:	2	2
26. Status:	0	0
27. HP:	1	1

196. Upon installing an HP 62 tricolor ink cartridge in the “tricolor” position (designated for an HP 64 tricolor ink cartridge), the HP ENVY Photo 6255 does not recognize the ink cartridge and will display an error message for the “tricolor” position – “The indicated cartridges are not intended for use in this printer.”





197. On information and belief, the ink tank configuration instructions identify a total number of ink tanks (2-ink tanks in the case of the HP 64) that are installed in a printing system when the ink tank is included as one of the installed tanks. On information and belief, the HP 64 ink tank configuration instructions identify the ink tank as one of two ink tanks in a dual ink tank configuration.

198. On information and belief, HP has been on notice of the '498 patent at least as early as the filing and service of the Complaint in this action.

199. On information and belief, at least since its post-filing knowledge of the '498 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '498 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers and ink cartridges through HP's user guides/manuals, advertisement, promotional materials and instructions.

200. On information and belief, at least since its post-filing knowledge of the '498 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

201. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers and ink cartridges including, without limitation, on HP's website which provides support on setting up and/or using these products.

202. On information and belief, HP's customers directly infringe at least claims 1 and 2 of the '498 patent through their setup and use of HP inkjet printers and ink cartridges

203. On information and belief, HP's resellers directly infringe at least claims 1 and 2 of the '498 patent through their setup, use, sale and offer for sale of HP inkjet printers and ink cartridges.

204. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '498 patent, indirectly infringing and continues to indirectly infringe at least claims 1 and 2 of the '498 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP ink cartridge memory is specifically configured according to the claims of the '498 patent and is a material part of the invention.

205. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.



**Count VIII - Infringement of United States Patent No. 7,841,712**

206. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

207. HP makes, uses, sells, offers to sell and/or imports inkjet printers, inkjet printhead carriers and ink cartridges in the United States that infringe (literally and/or under the doctrine of equivalents) at least claims 9, 10 and 14 of the '712 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP DesignJet T100 and T500 Printer Series (e.g., HP DesignJet T120, T130, T520, T530).

**Inkjet printhead carriers** including, without limitation, HP 711.

**Ink cartridges** including, without limitation, HP 711.

208. On information and belief, inkjet printers listed above are sold with an inkjet printhead carrier and ink cartridges. The inkjet printhead carrier and ink cartridges can also be purchased separately from the inkjet printer. The inkjet printhead carrier and ink cartridges are necessary for the operation of the inkjet printers and vice versa.

209. On information and belief, with regard to the claim elements of the '712 patent, the HP DesignJet T120, T130, T520 and T530 are structurally similar to each other. Infringement of the '712 patent by these inkjet printers and associated inkjet printhead carriers and ink cartridges is demonstrated below using the HP DesignJet T120 as an example.

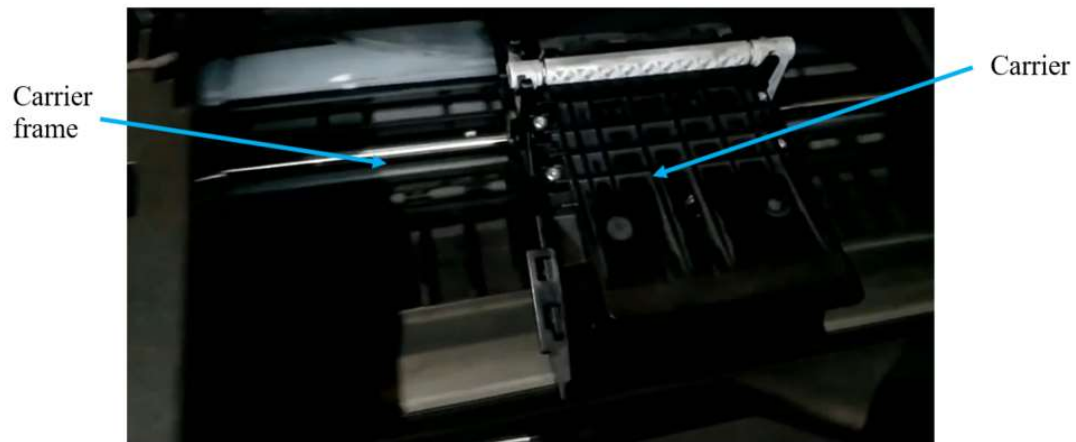
210. HP makes, uses, sells, offers to sell and/or imports a printing device (e.g., HP DesignJet T120 (“HP T Series”)).



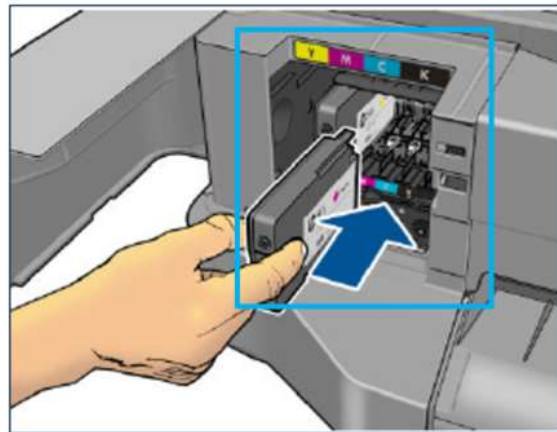
211. The HP T Series has a carrier for transporting at least one semi-permanent printhead and at least one ink tank.



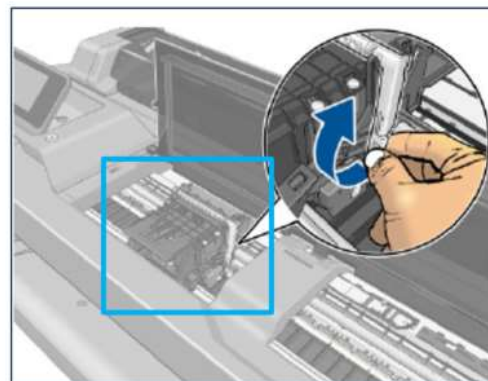
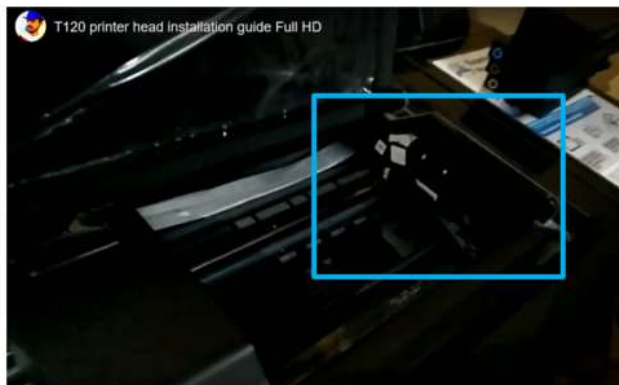
212. The carrier of the HP T Series moves along a carrier frame. During printhead and ink tank replacement/installation, the carrier is configured to stop at either a first or second of two different positions along the carrier frame.



**First position**

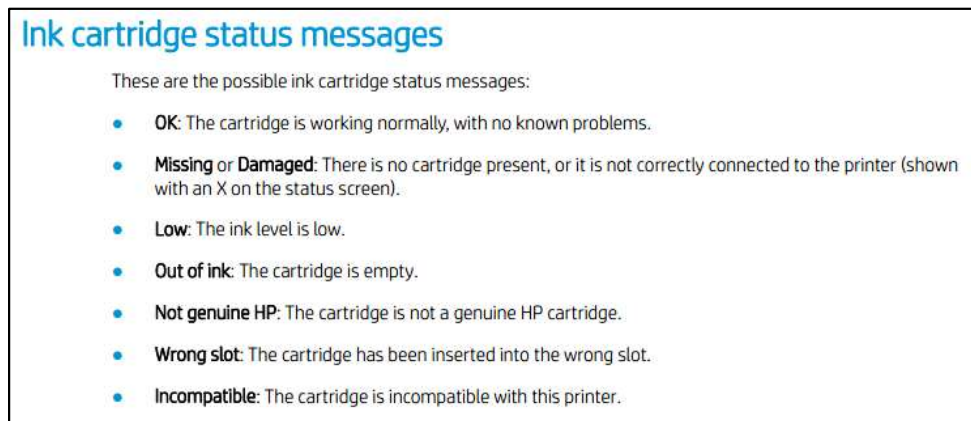


**Second position**



<https://www.bing.com/videos/search?q=t120+printhead+replacement&&view=detail&mid=2D7EEA4A1C71716D75EC2D7EEA4A1C71716D75EC&&FORM=VRDGAR>; HP DesignJet T120 and T520 Printer Series, User Guide at pp. 71-72.

213. The HP T Series has a first sensor for determining a status of the at least one ink tank.



HP DesignJet T120 and T520 Printer Series, User Guide at p. 105.



<https://support.hp.com/us-en/document/c06206692>

214. The HP T Series has a second sensor for determining a presence or not of the printhead.

## 16 Front-panel error messages

Occasionally you may see one of the following messages appear on the front-panel display. If so, follow the advice in the Recommendation column.

If you see an error message that does not appear here, and you feel in doubt about the correct response, or if the recommended action does not seem to solve the problem, contact HP Support. See [Contact HP Support on page 121](#).

Table 16-1 Text messages (continued)

Message	Recommendation
Missing or failed printhead.	Remove and reinsert the same printhead, or try cleaning the electrical connections. If necessary, insert a new printhead. See <a href="#">Replace the printhead on page 70</a> .  <b>NOTE:</b> The error message does not permit returning to the home screen to start the printhead replacement. Instead, press <b>Show more</b> .

HP DesignJet T120 and T520 Printer Series, User Guide at pp. 116-117.

215. The HP T Series has a processor for determining an appropriate installation position from the two different positions for the replacement or installation of the at least one printhead or the at least one ink tank to move the carrier along the carrier frame based on the status of the at least one ink tank and the presence of the printhead.

216. Given the messages displayed by the HP T Series (shown below), the first sensor of the HP T Series is an ink presence sensor.

### Ink cartridge status messages

These are the possible ink cartridge status messages:

- **OK:** The cartridge is working normally, with no known problems.
- **Missing or Damaged:** There is no cartridge present, or it is not correctly connected to the printer (shown with an X on the status screen).
- **Low:** The ink level is low.
- **Out of ink:** The cartridge is empty.
- **Not genuine HP:** The cartridge is not a genuine HP cartridge.
- **Wrong slot:** The cartridge has been inserted into the wrong slot.
- **Incompatible:** The cartridge is incompatible with this printer.

Occasionally you may see one of the following messages appear on the front-panel display. If so, follow the advice in the Recommendation column.

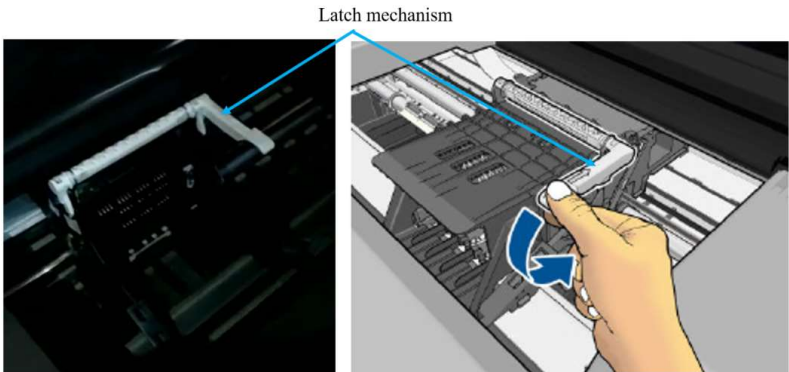
If you see an error message that does not appear here, and you feel in doubt about the correct response, or if the recommended action does not seem to solve the problem, contact HP Support. See [Contact HP Support on page 121](#).

Table 16-1 Text messages

Message	Recommendation
[Color] cartridge has expired	Replace the cartridge. See <a href="#">Replace an ink cartridge on page 64</a> .
[Color] cartridge is low on ink	Ensure that you have a new cartridge of the same color ready.
[Color] cartridge is very low on ink	Ensure that you have a new cartridge of the same color ready.
Depleted cartridges must be replaced to resume printing	Replace the cartridges as needed. See <a href="#">Replace an ink cartridge on page 64</a> .
Ink system failure	Contact HP Support. See <a href="#">Contact HP Support on page 121</a> .
Maintenance 1 advised	Contact HP Support. See <a href="#">Contact HP Support on page 121</a> .
Maintenance 2 advised	Contact HP Support. See <a href="#">Contact HP Support on page 121</a> .
Maintenance 3 advised	Contact HP Support. See <a href="#">Contact HP Support on page 121</a> .
One or more cartridges appear to be missing or damaged	Insert cartridges of the correct color as needed. See <a href="#">Replace an ink cartridge on page 64</a> .

HP DesignJet T120 and T520 Printer Series, User Guide at pp. 105, 116.

217. The HP T Series has a latch mechanism for preventing removal of the printhead while the carrier is in the installation position for installing the at least one ink tank.



<https://www.bing.com/videos/search?q=t120+printhead+replacement&&view=detail&mid=2D7EEA4A1C71716D75EC2D7EEA4A1C71716D75EC&&FORM=VRDGAR>; HP DesignJet T120 and T520 Printer Series, User Guide at p. 73.

218. On information and belief, HP has been on notice of the '712 patent at least as early as the filing and service of the Complaint in this action.



219. On information and belief, at least since its post-filing knowledge of the '712 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '712 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers, inkjet printhead carriers and ink cartridges through HP's user guides/manuals, advertisement, promotional materials and instructions.

220. On information and belief, at least since its post-filing knowledge of the '712 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

221. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers, inkjet printhead carriers and ink cartridges including, without limitation, on HP's website which provides support on setting up and/or using these products.

222. On information and belief, HP's customers directly infringe at least claims 9, 10 and 14 of the '712 patent through their setup and use of HP inkjet printers, inkjet printhead carriers and ink cartridges.

223. On information and belief, HP's resellers directly infringe at least claims 9, 10 and 14 of the '712 patent through their setup, use, sale and offer for sale of HP inkjet printers, inkjet printhead carriers and ink cartridges.

224. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '712 patent, indirectly infringing and continues to indirectly infringe at least claims 9, 10 and 14 of the '712 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP's inkjet printhead carrier/ink cartridge positioning functionality/components are specifically configured according to the claims of the '712 patent, are a material part of the invention and do not have substantial non-infringing uses.

225. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**Count IX – Infringement of United States Patent No. 8,113,618**

226. The allegations set forth above are re-alleged and incorporated by reference as if they were set forth fully here.

227. HP makes, uses, sells, offers to sell and/or imports inkjet printers and ink cartridges in the United States that infringe (literally and/or under the doctrine of equivalents) at least claim 1 of the '618 patent. HP commits acts of patent infringement through the manufacture, use, sale, offer for sale and/or importation of at least the following products:

**Inkjet printers** including, without limitation, HP DeskJet 450cbi, 5145, 5150, 5151, 5550, 5551, 5552, 5650, 5655, 5850, 9650, 9670, 9680; HP OfficeJet 4110, 4215,



5505, 5510, 5605, 5610, 6105, 6110; HP Photosmart 7150, 7260, 7350, 7450, 7459, 7550, 7660, 7755, 7760, 7762, 7960; HP PSC 1210, 1311, 1315, 1317, 1340, 1350, 1355, 2105, 2108, 2110, 2115, 2150, 2175, 2210, 2410, 2520; HP ENVY 5540, 5541, 5542, 5543, 5544, 5545, 5547, 5548, 5549, 5640, 5642, 5643, 5644, 5660, 5661, 5663, 5664, 5665, 7640, 7643, 7644, 7645; HP OfficeJet 200, 250, 252, 258, 5740, 5741, 5742, 5743, 5744, 5745, 5746, 8040; HP Deskjet 1110, 1112, 2130, 2132, 3630, 36332, 3633, 3634, 3636, 3637; HP ENVY 4512, 4513, 4520, 4522, 4523, 4524; HP OfficeJet 3830, 3831, 3833, 4650, 4652, 4654, 4655; HP ENVY 6220, 6222, 6230, 6232, 6234, 6252, 6255, 7120, 7130, 7134, 7155, 7064, 7820, 7822, 7830, 7855, 7858, 7864; HP AMP 100; HP DeskJet 2620, 2621, 2622, 2624, 2630, 2632, 2633, 2652, 2655, 3720, 3721, 3722, 3723, 3732, 3733, 3735, 3750, 3752, 3755, 3758; HP ENVY 5010, 5020, 5030, 5032; HP DeskJet D4260, D4263, D4360, D4363, D4368; HP OfficeJet J5730, J5740, J5750, J5780, J5783, J5785, J5788, J6480, J6488; HP Photosmart C4210, C4240, C4250, C4280, C4283, C4285; HP OfficeJet 6100 ePrinter, 6600 H711a, 6700 Premium H711n, 7110 Wide Format ePrinter, 7510 Wide Format, 7610 Wide Format, 7612 Wide Format; HP OfficeJet Pro 276dw MFP, 8600-N911g, 860-N911n, 8600-N911a, 8610, 8620, 251dw, 8100-N811a 8630; HP OfficeJet Pro 7720, 7730, 7740, 8210, 8216, 8702, 8710, 8715, 8720, 8725, 8728, 8730, 8740, 8745; HP OfficeJet Pro 9025, 9020, 9018, 9015, 9010; HP OfficeJet Pro Premier; HP OfficeJet 9012; HP OfficeJet Pro X451dn, X451dw, X476dn MFP, X476dw MFP, X551dw, X576dw MFP; HP PageWide Pro 452dn, 452dw, 452dwt, 477dn, 477dw, 477dwt, 552dw, 552dwt, 577dw, 577z; HP OfficeJet Enterprise Color MFP X585dn, MFP

X585f, X555dn, X555xh; HP OfficeJet Enterprise Color Flow MFP X585z; HP OfficeJet Managed Color MFP X585dnm; HP PageWide Enterprise Color 556dn, 556xh, MFP 586dn, MFP 586f; HP PageWide Enterprise Color Flow MFP 586z, HP PageWide Managed Color E55650dn, MFP E58650dn; HP Deskjet 3520, 3521, 3522, 3526; HP OfficeJet 4610, 4620, 4622; HP Photosmart 5510, 5512, 5514, 5515, 5520, 5525, C6340, 6510, 6512, 6515, 6520, 6525, 7510, 7515; HP Photosmart 7520, 7525, D7560, B8550, C6340, C6350, D7560, eStation, Plus, Premium, Premium Fax, Premium TouchSmart Web; HP OfficeJet 6958, 6962; HP OfficeJet Pro 6954, 6968, 6975, 6978; HP OfficeJet 7500A Wide Format - E910a; HP OfficeJet 6500 Wireless - E709n; HP OfficeJet 6000 - E609a; HP OfficeJet 6812, 6815, 6820; HP OfficeJet Pro 6230, 6230 ePrinter, 6830, 6835.

**Ink cartridges**, including without limitation, HP 21, HP 22, HP 27, HP 54, HP 56, HP 57, HP 58, HP 60, HP 61, HP 62, HP 63, HP 64, HP 64, HP 65, HP 74, HP 75, HP 92, HP 93, HP 94, HP 95, HP 95, HP 97, HP 98, HP 99, HP 100, HP 102, HP 110, and HP 901 (regular and XL); HP 564, HP 564XL, HP 902, HP 902XL, HP 906XL, HP 920, HP 920 XL, HP 934, HP 935, HP 935 XL; HP 932, HP 932XL, HP 933, HP 933XL, HP 950, HP 950XL, HP 951, HP 951XL, HP 952, HP 952XL, HP 956XL, HP 962, HP 962XL, HP 966XL, HP 970, HP 970XL, HP 971, HP 971XL, HP 972, HP 972A, HP 972X, HP 976Y, HP 980, HP 981A, HP 981X, HP 981Y (setup and non-setup/replacement cartridges).

228. On information and belief, inkjet printers listed above are sold with setup ink cartridges that have a limited supply of ink. On information and belief, setup ink

cartridges are used for initial configuration/calibration and/or proper operation of the printer. On information and belief, for inkjet printers that come with setup ink cartridges, a user must use a setup ink cartridge the first time that the printer is turned on/initialized. Setup ink cartridges are marked with the word “Setup” and, in some cases, identify non-setup/replacement ink cartridge(s) that should be used with an inkjet printer once the ink in the setup ink cartridge has been depleted. Exemplary setup ink cartridges are shown below.



229. Setup ink cartridges are structurally similar to non-setup/replacement ink cartridges. On information and belief, once a setup ink cartridge has been used to configure/calibrate a printer, another setup ink cartridge cannot subsequently be used in the printer. After the ink in the setup ink cartridge is depleted, customers must buy and use non-setup/replacement cartridges to continue to use the printer.

230. On information and belief, with regard to the claim elements of the '618 patent, memory of the HP 932, HP 932XL, HP 933, HP 933XL, HP 950, HP 950XL, HP 951, HP 951XL, HP 952, HP 952XL, HP 956XL, HP 962, HP 962XL, HP 966XL, HP 970, HP 970XL, HP 971, HP 971XL, HP 972, HP 972A, HP 972X, HP 976Y, HP 980, HP 981A, HP 981X and HP 981Y ink cartridges are functionally similar to each other. On information and belief, with regard to the claim elements of the '618 patent, memory of the HP 21, HP 22, HP 27, HP 54, HP 56, HP 57, HP 58, HP 60, HP 61, HP 62, HP 63, HP 64, HP 64, HP 65, HP 74, HP 75, HP 92, HP 93, HP 94, HP 95, HP 95, HP 97, HP 98, HP 99, HP 100, HP 102, HP 110, and HP 901 (regular and XL) ink cartridges are functionally similar to each other. On information and belief, with regard to the claim elements of the '618 patent, memory of the HP 564, HP 564XL, HP 902, HP 902XL, HP 906XL, HP 920, HP 920 XL, HP 934, HP 935 and HP 935 XL ink cartridges are functionally similar to each other. Infringement of the '618 patent by these ink cartridges and associated inkjet printers is demonstrated below using HP 902 and HP 64 ink cartridges and associated inkjet printer as examples.

231. The ink cartridges can be purchased separately from the inkjet printer. The ink cartridges are necessary for the operation of the inkjet printers and vice versa.

232. HP makes, uses, sells, offers to sell and/or imports an ink tank (e.g., HP 902).



233. The HP 902 has a housing for holding ink.

234. The HP 902 has a memory tag (chip) associated with the housing.



235. The data stored in the memory tag includes ink tank configuration instructions. As shown in the "Printer Status Report" from an HP OfficeJet Pro 6978 (below), on information and belief, the chip of the HP 902 provides the HP OfficeJet Pro 6978 with its ink tank identifier.

Printer Status Report

Product Information

1. Model Name: HP OfficeJet Pro 6978 All-in-One

2. Model Number: 6970

3. Serial Number: T162F2Q06J

4. Product Number: T0F29A

5. Service ID: 29178

6. Printer Zone (PX): 2

7. Firmware Version: MCP2CH1910AR

8. FW Patch Version: 0

9. Country/Region: US / 1

10. Duplexer: Installed

11. ADF: Installed

12. Quiet Mode: Off

13. DR: DOO

14. RE: CLE

Connectivity Settings

17. Network Status: Ready

18. Active Connection Type: Wireless

19. URL: http://10.20.33.93

20. Hostname: HPFA54D0

21. Admin Password: Not Set

22. Connected

23. 2019-06-13

Fax Settings

28. Speed: Medium (14400)

29. Backup Fax Reception: On

30. Fax Forwarding: Off

31. Auto Answer: On

32. Rings to Answer: 5

33. Distinctive Ring: All Rings

34. (ECM) Error Correction Mode: On

35. Fax to PC: Off

Scan Settings

24. Front Panel Destinations List: 0

25. Scanner Glass Test: Not Run

Scan Usage Information

26. Pages Scanned: 9

27. Scans From ADF: 6

Print Usage Information

15. Total Pages Printed: 17

16. Borderless Pages Printed: 0

Ink Delivery System Information

38. Ink Supply:

39. Estimated Ink Level:

40. Ink Zone:

2

2

2

2

41. Ink Install:

06/05/2019

06/25/2019

06/25/2019

06/25/2019

42. USE:

0

0

0

0

43. HP:

1

1

1

1

44. Ink Volume Error:

01/01/2021

01/01/2021

01/08/2021

12/23/2020

45. Ink Number:

HP 902 H INSTANT INK

HP 902 H INSTANT INK

HP 902 H INSTANT INK

HP 902 H INSTANT INK

46. PE:

READY

READY

READY

READY

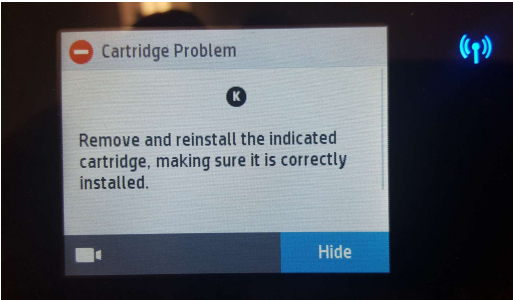
0

0

0

0

236. Upon installing an HP 564 ink cartridge in the “K” position (designated for an HP 902 black ink cartridge), the HP OfficeJet Pro 6978 does not recognize the ink cartridge and will display an error message for the “K” position – “Remove and reinstall the indicated cartridge.”



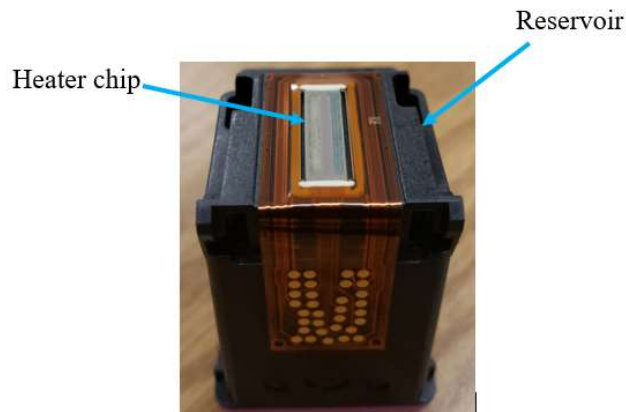
237. On information and belief, the ink tank configuration instructions identify a total number of ink wells (4 ink wells in the case of the HP 902) that are anticipated for installation in a printing system when the ink tank is included as one of the installation tanks.

238. HP makes, uses, sells, offers to sell and/or imports an ink tank (e.g., HP 64).



239. The HP 64 has a housing for holding ink.

240. The HP 64 has a memory tag (memory on a heater chip) associated with the housing.



241. The data stored in the memory tag includes ink tank configuration instructions. As shown in the “Printer Status Report” from an HP ENVY Photo 6255 (below), on information and belief, the memory of the HP 64 provides the HP ENVY Photo 6255 with its ink tank identifier.

# Printer Status Report

## Product Information

- Model Name: HP ENVY Photo 6200 All-in-One Printer series
- Model Number: G255
- Serial Number: T18CJBJX01F
- Product Number: K7G18A
- Service ID: 2919C
- Printer Zone (PX): 2
- Firmware Version: PALMPPX003.1845A.00
- FW Patch Version: 0
- Country/Region: US / 1
- Duplexer: Installed
- Quiet Mode: Off
- DIPI: 00

## Connectivity Settings

- Network Status: Ready
- Active Connection Type: Wireless
- URL: http://192.168.1.19
- Hostname: HP56B3FF
- Admin Password: Not Set

## Scan Settings

- Front Panel Destinations List: 0
- Scanner Glass Test: Not Run



## Scan Usage Information

- Pages Scanned: 0

## Print Usage Information

- Total Pages Printed: 20
- Borderless Pages Printed: 0

## Ink Delivery System Information

23 Ink Supply:	Color	Black
24 Estimated Ink Level:		
25 Ink Zone:	2	2
26 Status:	0	0
27 HP:	1	1

242. Upon installing an HP 62 tricolor ink cartridge in the “tricolor” position (designated for an HP 64 tricolor ink cartridge), the HP ENVY Photo 6255 does not recognize the ink cartridge and will display an error message for the “tricolor” position – “The indicated cartridges are not intended for use in this printer.”





243. On information and belief, the ink tank configuration instructions identify a total number of ink wells that are anticipated for installation in a printing system when the ink tank is included as one of the installation tanks.

244. On information and belief, HP has been on notice of the '618 patent at least as early as the filing and service of the Complaint in this action.

245. On information and belief, at least since its post-filing knowledge of the '618 patent, HP knowingly encourages, and continues to encourage, customers and resellers to directly infringe one or more claims of the '618 patent, including by HP's actions that include, without limitation, instructing and encouraging customers to use (and resellers to use, sell and offer to sell) HP inkjet printers and ink cartridges through HP's user guides/manuals, advertisement, promotional materials and instructions.

246. On information and belief, at least since its post-filing knowledge of the '618 patent, HP knows that the acts HP induced customers and resellers to take constitute patent infringement and HP's encouraging acts result in direct infringement by customers and resellers.

247. On information and belief, HP instructs and continues to instruct customers and resellers to setup, use and troubleshoot HP inkjet printers and ink cartridges including, without limitation, on HP's website which provides support on setting up and/or using these products.

248. On information and belief, HP's customers directly infringe at least claim 1 of the '618 patent through their setup and use of HP inkjet printers and ink cartridges

249. On information and belief, HP's resellers directly infringe at least claim 1 of the '618 patent through their setup, use, sale and offer for sale of HP inkjet printers and ink cartridges.

250. On information and belief, HP is in violation of 35 U.S.C. § 271(b) and has been, at least since its post-filing knowledge of the '618 patent, indirectly infringing and continues to indirectly infringe at least claim 1 of the '618 patent by knowingly and specifically intending to induce infringement by others (including, without limitation, HP's customers and resellers) and possessing specific intent to encourage infringement by HP's customers and resellers. HP ink cartridge memory is specifically configured according to the claims of the '618 patent and is a material part of the invention.

251. Slingshot has been damaged by the direct and/or indirect infringement of HP and is suffering and will continue to suffer irreparable harm and damages as a result of this infringement.

**JURY DEMANDED**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Slingshot hereby requests a trial by jury on all issues so triable.

**PRAYER FOR RELIEF**

WHEREFORE, Slingshot respectfully requests that the Court enter judgment in its favor and against HP as follows:

- a. finding that HP has infringed one or more claims of the '162 patent;
- b. finding that HP has infringed one or more claims of the '124 patent;
- c. finding that HP has infringed one or more claims of the '934 patent;
- d. finding that HP has infringed one or more claims of the '449 patent;
- e. finding that HP has infringed one or more claims of the '088 patent;
- f. finding that HP has infringed one or more claims of the '936 patent;
- g. finding that HP has infringed one or more claims of the '498 patent;
- h. finding that HP has infringed one or more claims of the '712 patent;
- i. finding that HP has infringed one or more claims of the '618 patent;
- j. awarding Slingshot damages under 35 U.S.C. § 284, or otherwise permitted by law, including supplemental damages for any continued post-verdict infringement;

- k. awarding Slingshot pre-judgment and post-judgment interest on the damages award and costs;
- l. awarding cost of this action (including all disbursements) and attorney fees pursuant to 35 U.S.C. § 285, or as otherwise permitted by the law; and
- m. awarding such other costs and further relief that the Court determines to be just and equitable.

Dated: September 20, 2019

Respectfully submitted,

/s/Raymond W. Mort, III

Raymond W. Mort, III

Texas State Bar No. 00791308

[raymort@austinlaw.com](mailto:raymort@austinlaw.com)

THE MORT LAW FIRM, PLLC  
100 Congress Avenue, Suite 2000  
Austin, Texas 78701  
Tel/Fax: 512-865-7950

*Of Counsel:*

Ronald M. Daignault (*pro hac vice*)

Chandran B. Iyer (*pro hac vice*)

Michael A. Siem (*pro hac vice*)

Jason S. Charkow (*pro hac vice* to be filed)

[rdaignault@goldbergsegalla.com](mailto:rdaignault@goldbergsegalla.com)

[ciyer@goldbergsegalla.com](mailto:ciyer@goldbergsegalla.com)

[msiem@goldbergsegalla.com](mailto:msiem@goldbergsegalla.com)

[jcharkow@goldbergsegalla.com](mailto:jcharkow@goldbergsegalla.com)

GOLDBERG SEGALLA LLP

711 Third Avenue, Suite 1900

New York, New York 10017

Telephone: (646) 292-8700

Richard Juang (*pro hac vice*)

[rjuang@goldbergsegalla.com](mailto:rjuang@goldbergsegalla.com)

GOLDBERG SEGALLA LLP

8000 Maryland Avenue, Suite 640

St. Louis, Missouri 63105  
Telephone: (314) 446-3367

Attorneys for Slingshot Printing LLC