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

INTELECTUAL VENTURES I LLC and INTELLECTUAL VENTURES II LLC,	)
Plaintiffs,	) C.A. No. 6:20-cv-624
v.	) JURY TRIAL DEMANDED
HP INC.,	)
Defendant.	)

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiffs Intellectual Ventures I LLC ("Intellectual Ventures I") and Intellectual Ventures II LLC ("Intellectual Ventures II") (collectively "Intellectual Ventures"), for their Complaint for Patent Infringement against Defendant HP Inc. ("HP" or "Defendant"), allege as follows:

## **INTRODUCTION**

1. This action arises under 35 U.S.C. § 271 for Defendant's infringement of United States Patent Nos. 6,841,830 ("the '830 patent"); 7,038,819 ("the '819 patent"); and 8,427,716 ("the '716 patent") (collectively, "the Patents-in-Suit").

#### THE PARTIES

- 2. Plaintiff Intellectual Ventures I is a Delaware limited liability company with its principal place of business at 3150 139th Ave. SE, Building 4, Bellevue, WA 98005.
- 3. Plaintiff Intellectual Ventures II is a Delaware limited liability company with its principal place of business at 3150 139th Ave. SE, Building 4, Bellevue, WA 98005.
- 4. Defendant HP Inc. is a Delaware corporation with a regular and established place of business at 3800 Quick Hill Road #100, Austin, TX 78728. Defendant may be served through its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, TX 75201.

#### **JURISDICTION AND VENUE**

- 5. Intellectual Ventures incorporates by reference the preceding paragraphs as if fully set forth herein.
- 6. This action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq*. The jurisdiction of this Court over the subject matter of this action is proper under 28 U.S.C. §§ 1331 and 1338(a).
- 7. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b) because HP has committed acts of infringement and has a regular and established place of business in this judicial district.
- 8. This Court has personal jurisdiction over HP because it, among other things: has committed, aided, abetted, contributed to, and/or participated in acts of patent infringement in violation of 35 U.S.C. § 271 in this District by, inter alia, directly and/or indirectly making, using, selling, offering for sale, and/or importing products and/or practicing methods that practice one or more claims of the Patents-in-Suit; and has a regular and established place of business in this judicial district. Furthermore, HP has transacted and conducted business in and with Texas residents by making, using, offering to sell, selling, and/or importing products and instrumentalities that practice one or more claims of the Patents-in-Suit. For example, HP directly and/or through intermediaries, uses, sells, ships, distributes, imports into, offers for sale, and/or advertises or otherwise promotes their products throughout the United States, including in the State of Texas. See, e.g., https://www8.hp.com/us/en/home.html. This has led to foreseeable harm and injury to Intellectual Ventures within this District.
- 9. This Court also has personal jurisdiction over HP because, among other things, it has established minimum contacts within the forum such that the exercise of jurisdiction over HP will not offend traditional notions of fair play and substantial justice. For example, HP has placed

products and/or services that practice the claims of the Patents-in-Suit into the stream of commerce with the knowledge, or reasonable expectation, that actual or potential users of such products and/or services were located within this judicial district. Those acts have caused and continue to cause injury to Intellectual Ventures within the District.

#### **THE PATENTS-IN-SUIT**

10. Intellectual Ventures incorporates by reference the preceding paragraphs as if fully set forth herein.

### A. The '830 Patent

- 11. The '830 patent, entitled "Metal Oxide Semiconductor Field Effect Transistors (MOSFETs) Used in Ink-Jet Head Chips and Method for Making the Same," was duly and properly issued by the United States Patent and Trademark Office on January 11, 2005. A copy of the '830 patent is attached hereto as Exhibit A.
- 12. Intellectual Ventures II is the owner and assignee of the '830 patent and holds the right to sue for and recover all damages for infringement thereof, including past infringement.
- 13. The '830 patent generally relates to MOSFETs, and more specifically, their design and fabrication and use in ink-jet head chips.
- 14. Among other things, the '830 patent discloses a method for manufacturing MOSFETs used in ink-jet head chips, which enables the fabrication of print head chips with a higher device density for use in controlling the voltage and/or current passing through an inkjet actuator.
- 15. Driving devices with switch and active characteristics such as transistors and ink droplet actuators can be integrated into a single inkjet print head chip. Such an integrated driver head can be made by connecting a MOSFET with a droplet actuating thermal resistor in series. A sufficiently high driving current has to pass through the MOSFET at a sufficient voltage for the thermal bubble actuator to generate bubbles that eject ink droplets.

16. The inventors of the '830 patent devised a chip structure, namely an integrated-driver ink-jet head for controlling the electrical voltage or current passing through an inkjet actuator, said structure containing a MOSFET with a source, a drain, and a gate. The MOSFET is covered with a borophosphosilicate (BPSG) glass and at least one contact hole through the BPSG is filled with a plug material at the position corresponding to the drain. The plug material prevents spiking of the contact between aluminum and silicon at the drain during subsequent processes. The MOSFET disclosed by the '830 avoids spiking at the Al-Si contact surface while increasing device density, thus enabling an increase in printing speed and printing resolution.

# B. The '819 Patent

- 17. The '819 patent, entitled "Depth of Field Adjustment Device and Method for an Automatic Document Feeder," was duly and properly issued by the United States Patent and Trademark Office on May 2, 2006. A copy of the '819 patent is attached hereto as Exhibit B.
- 18. Intellectual Ventures I is the owner and assignee of the '819 patent and holds the right to sue for and recover all damages for infringement thereof, including past infringement.
- 19. The '819 patent generally relates to a depth of field adjustment device and method for automatic document feeding.
- 20. At the time of the invention of the '819 patent, automatic document feeders had a guiding groove for keeping a certain depth of field height when scanning an object. However, when scanning a thicker object, the depth of field height required is different from that required to scan a thinner object. This caused an error of optical length, resulting in scanned images that were not clear.
- 21. The inventors of the '819 patent devised a depth of field adjustment device that overcame this problem. For example, the '819 patent discloses a document feeder with a guiding groove that has a scanning window at an appropriate position. The depth of field adjustment device comprises an adjustable suppressing mechanism that may adjust and change a depth of field height

of the object that passes through the scanning window.

### C. The '716 Patent

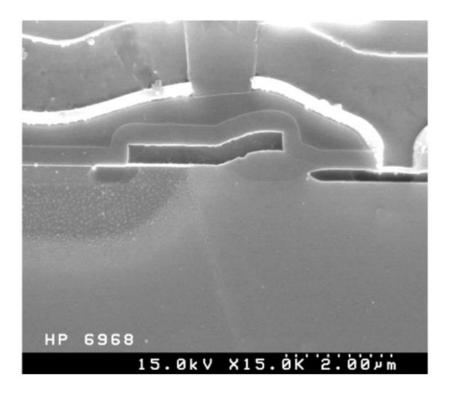
- 22. The '716 patent, entitled "Method for Automatically Identifying Scan Area," was duly and properly issued by the United States Patent and Trademark Office on April 23, 2013. A copy of the '716 patent is attached hereto as Exhibit C.
- 23. Intellectual Ventures I is the owner and assignee of the '716 patent and holds the right to sue for and recover all damages for infringement thereof, including past infringement.
- 24. The '716 patent generally relates to the field of scanning and more specifically to a method for automatically identifying a scan area.
- 25. At the time of the invention of the '716 patent, users encountered difficulties in accurately selecting a scan area in the conventional operating procedure of a scanner, especially when the user wanted to scan an irregular pattern or a specific pattern adjacent to a plurality of patterns. The conventional scanning method comprised arranging an original on a scanner to scan the entire original, displaying a preview window of the original, selecting a scan area from the preview window, and scanning a portion of the original corresponding to the scan area. However, the user encountered the limitation of manually selecting four corners (upper right, lower right, upper left, and lower left) of the scan area. Consequently, the scan area could include irrelevant areas in the periphery around the object. Therefore, the user had to take an extra step of selecting the wanted image after the scanning process was performed. Furthermore, users commonly encountered the problem of manually framing an irregular image of an irregular object.
- 26. The inventors of the '716 patent solved these problems by inventing an apparatus for readily selecting a scan area of interest of an object to be scanned that promotes a user-friendly interface. For example, one apparatus comprises circuitry configured to generate a preview of a scanned original, determine a scan area based at least in part on a confined area associated with one

or more objects, remove portions of the preview window beyond the confined area, and scan the scan area after the portions are removed. The apparatus eliminates the step of precisely controlling selection tools, such as a mouse, to select an accurate pattern in the scanning process. Thus, the user can readily obtain an accurate scan area of the desired object.

# **COUNT I INFRINGEMENT OF THE '830 PATENT**

- 27. Intellectual Ventures incorporates by reference paragraphs 1 through 26 as if fully set forth herein.
  - 28. The '830 patent is valid and enforceable.
- 29. HP makes, uses, offers to sell, sells, and/or imports printers, such as the HP OfficeJet including without HP Pro family of products, limitation the OfficeJet Pro 8100/8600/8610/8620/8630/8640, the HP OfficeJet Pro CM751/752, the HP OfficeJet Pro 251dw/276dw, the HP OfficeJet Pro N811A, and the HP OfficeJet Pro 6950/6960/6963/6964/6966/6968/6670/6971. In addition, HP makes, uses, offers to sell, sells, and/or imports other products with similar infringing technology.
- 30. HP has infringed and continues to infringe one or more claims of the '830 patent under 35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, and/or selling in the United States, and/or importing into the United States, products encompassed by those claims, including for example, by making, using, offering for sale, selling, and/or importing printers and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology.
- 31. For example, HP has infringed and infringes claim 1 of the '830 patent by making, using, offering to sell, selling, and/or importing printers (such as the HP OfficeJet Pro 6968) comprising:

a. A metal oxide semiconductor field effect transistor (MOSFET) used in inkjet head chip (such as the MOSFET in the print head of the HP OfficeJet Pro 6968), which is connected to an inkjet actuator for controlling the electrical voltage or current passing through the inkjet actuator (such as the inkjet actuator of the HP OfficeJet Pro 6968); the MOSFET comprising at least a source, a drain, and a gate and being characterized in that (such as the MOSFET of the HP OfficeJet Pro 6968, which contains a source, a drain, and a gate): the MOSFET is covered with a borophosphosilicate glass (BPSG) (such as the BPSG utilized in MOSFETs in the print head of the HP OfficeJet Pro 6968); at least one contact hole through the BPSG is filled with a plug material at the position corresponding to the drain (such as the contact hole filled with a plug material in the HP OfficeJet Pro 6968); the gate length is between 0.35 μm and 3.5 μm, and the sum of junction depths at the source and the drain is 0.2 to 0.75 times that of the gate length (such as the junction depths and gate length of the HP OfficeJet Pro 6968).



IC Lab Services RE Report on HP 6968 Printer

- 32. HP has had knowledge of the '830 patent and its infringement of that patent since at least June 13, 2019. In particular, Senior Litigation Counsel at HP confirmed that HP received a presentation from IV sent on June 12, 2019. That presentation, provided to HP as part of a licensing discussion, provided notice of the '830 patent and its applicability to at least the HP8600 and HP6968 OfficeJet Pro Printers. In addition, HP was on notice of the '830 patent and its infringement of that patent since, at the latest, the service of this complaint upon HP. Accordingly, HP has known and intended that its products infringe the '830 patent and that HP's continued actions would actively induce, and contribute to, the infringement of one or more claims of the '830 patent.
- 33. HP has induced infringement of, and continues to induce infringement of, one or more claims of the '830 patent under 35 U.S.C. § 271(b), either literally and/or under the doctrine of equivalents, by, among other things, actively inducing others, including its customers, to make, use, offer to sell, sell, and/or import in or into the United States without authorization printers and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology. HP knowingly and intentionally instructs its customers, OEMs, distributors, and/or other third parties to infringe at least through user manuals, product documentation, services, and other materials, such as those located on HP's website at https://www8.hp.com/us/en/home.html. Additional, non-limiting examples include the software, drivers, and firmware found on HP's website at https://support.hp.com/us-en/product/hp-officejet-pro-8600-plus-e-all-in-one-printer-series-n911/4322915 and https://support.hp.com/us-en/product/hp-officejet-pro-6960-all-in-one-printer-series/8289579/model/11161242.
- 34. HP has contributed to the infringement of, and continues to contribute to the infringement of, one or more claims of the '830 patent under 35 U.S.C. § 271(c), either literally and/or under the doctrine of equivalents, by, among other things, offering to sell, selling, and/or importing

in or into the United States printers and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology, which constitute a material part of the invention of the '830 patent, knowing the accused products to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use.

- 35. Intellectual Ventures has been damaged and continues to be damaged by HP's infringement of the '830 patent and is entitled to recover from HP the damages sustained by Intellectual Ventures as a result of HP's wrongful acts in an amount adequate to compensate Intellectual Ventures for HP's infringement.
- 36. In committing these acts of infringement, HP has acted and continues to act despite knowing that its actions constituted infringement of a valid patent, or recklessly disregarded the fact that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent.
- 37. HP's infringement of the '830 patent was and is deliberate and willful, entitling Intellectual Ventures to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

# COUNT II INFRINGEMENT OF THE '819 PATENT

- 38. Intellectual Ventures incorporates by reference paragraphs 1 through 26 as if fully set forth herein.
  - 39. The '819 patent is valid and enforceable.
- 40. HP makes, uses, offers to sell, sells, and/or imports scanners, such as the HP Scanjet family, including without limitation the HP Scanjet Enterprise Flow 7500. In addition, HP makes, uses, offers to sell, sells, and/or imports other products with similar infringing technology.
  - 41. HP has infringed and continues to infringe one or more claims of the '819 patent under

35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, and/or selling in the United States, and/or importing into the United States, products encompassed by those claims, including for example, by making, using, offering for sale, selling, and/or importing scanners and other products, including but not limited to the Scanjet family and all other devices with similar infringing technology.

- 42. For example, HP has infringed and infringes claim 1 by making, using, offering to sell, selling, and/or importing scanners (such as the HP Scanjet Enterprise Flow 7500) comprising:
  - a. A depth of field adjustment device for an automatic document feeder (such as the scanning strip of the HP Scanjet Enterprise Flow 7500), the automatic document feeder having a guiding groove (such as the automatic document feeder (ADF) with a guiding groove of the HP Scanjet Enterprise Flow 7500), the guiding groove having a scanning window at an appropriate position (such as the scanning window located beneath the scanning strip on the automatic document feeder of the HP Scanjet Enterprise Flow 7500), the scanning window to allow an optical chassis to obtain an image of an object to be scanned that passes through the guiding groove (such as the aforementioned scanning window of the HP Scanjet Enterprise Flow 7500, which allows for optical imaging of documents), said depth of field adjustment device comprising:
  - b. an adjustable suppressing mechanism, said adjustable suppressing mechanism corresponding to the scanning window at an appropriate position of the guiding groove (such as the scanning strip of the HP Scanjet Enterprise Flow 7500, located above the scanning window), wherein a depth of field height of the object to be scanned that passes by the scanning window is adjustable by the adjustable suppressing mechanism (such as the springs adjusting the depth of field in the HP Scanjet Enterprise Flow 7500 in accordance with media fed through the

automatic document feeder).



HP Scanjet Enterprise Flow 7500

- 43. HP has had knowledge of the '819 patent and its infringement of that patent since at least July 9, 2020 because of a letter Intellectual Ventures sent to HP providing notice of the patent and HP's infringement. In addition, HP was on notice of the '819 patent and its infringement of that patent since, at the latest, the service of this complaint upon HP. Accordingly, HP has known and intended that its products infringe the '819 patent and that HP's continued actions would actively induce, and contribute to, the infringement of one or more claims of the '819 patent.
- 44. HP has induced infringement of, and continues to induce infringement of, one or more claims of the '819 patent under 35 U.S.C. § 271(b), either literally and/or under the doctrine of equivalents, by, among other things, actively inducing others, including its customers, to make, use, offer to sell, sell, and/or import in or into the United States without authorization scanners and other products, including but not limited to the Scanjet family and all other devices with similar infringing technology. HP knowingly and intentionally instructs its customers, OEMs, distributors, and/or other

third parties to infringe at least through user manuals, product documentation, services, and other materials, such as those located on HP's website at https://www8.hp.com/us/en/home.html.

Additional, non-limiting examples include the software, drivers, and firmware found on HP's website at https://support.hp.com/us-en/drivers/selfservice/hp-scanjet-enterprise-flow-7500-flatbed-scanner/5448147.

- 45. HP has contributed to the infringement of, and continues to contribute to the infringement of, one or more claims of the '819 patent under 35 U.S.C. § 271(c), either literally and/or under the doctrine of equivalents, by, among other things, offering to sell, selling, and/or importing in or into the United States scanners and other products, including but not limited to the Scanjet family and all other devices with similar infringing technology, which constitute a material part of the invention of the '819 patent, knowing the accused products to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use.
- 46. Intellectual Ventures has been damaged and continues to be damaged by HP's infringement of the '819 patent and is entitled to recover from HP the damages sustained by Intellectual Ventures as a result of HP's wrongful acts in an amount adequate to compensate Intellectual Ventures for HP's infringement.
- 47. In committing these acts of infringement, HP has acted and continues to act despite knowing that its actions constituted infringement of a valid patent, or recklessly disregarded the fact that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent.
- 48. HP's infringement of the '819 patent was and is deliberate and willful, entitling Intellectual Ventures to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

# COUNT III INFRINGEMENT OF THE '716 PATENT

- 49. Intellectual Ventures incorporates by reference paragraphs 1 through 26 as if fully set forth herein.
  - 50. The '716 patent is valid and enforceable.
- 51. HP makes, uses, offers to sell, sells, and/or imports scanners, such as the HP OfficeJet Pro family of products, including without limitation the HP OfficeJet Pro 6978. In addition, HP makes, uses, offers to sell, sells, and/or imports other products with similar infringing technology.
- 52. HP has infringed and continues to infringe one or more claims of the '716 patent under 35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, and/or selling in the United States, and/or importing into the United States, products encompassed by those claims, including for example, by making, using, offering for sale, selling, and/or importing scanners and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology.
- 53. For example, HP has infringed and infringes claim 8 by making, using, offering to sell, selling, and/or importing an apparatus (such as the HP OfficeJet Pro 6978) comprising:
  - a. circuitry configured to generate a preview of a scanned original, wherein the scanned original comprises one or more objects, and wherein the preview comprises a profile for the one or more objects (such as the preview function of the HP OfficeJet Pro 6978);
  - b. circuitry configured to determine a scan area based, at least in part, on a confined area associated with the one or more objects and on a removal of portions of the preview window that are beyond the confined area, wherein the profile of the one or more objects defines the confined area (such as the "Scan Multiple Photos with Auto Crop" function of the HP OfficeJet Pro 6978); and

- c. circuitry configured to scan the scan area after the portions are removed (such as the "Scan" function of the HP OfficeJet Pro 6978).
- 54. HP has had knowledge of the '716 patent and its infringement of that patent since at least June 13, 2019. In particular, Senior Litigation Counsel at HP confirmed that HP received a presentation from IV sent on June 12, 2019. That presentation, provided to HP as part of a licensing discussion, provided notice of the '716 patent and its applicability to at least the HP OfficeJet Pro 6978 All-in-One Printer. In addition, HP was on notice of the '716 patent and its infringement of that patent since, at the latest, the service of this complaint upon HP. Accordingly, HP has known and intended that its products infringe the '716 patent and that HP's continued actions would actively induce, and contribute to, the infringement of one or more claims of the '716 patent.
- 55. HP has induced infringement of, and continues to induce infringement of, one or more claims of the '716 patent under 35 U.S.C. § 271(b), either literally and/or under the doctrine of equivalents, by, among other things, actively inducing others, including its customers, to make, use, offer to sell, sell, and/or import in or into the United States without authorization scanners and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology. HP knowingly and intentionally instructs its customers, OEMs, distributors, and/or other third parties to infringe at least through user manuals, product documentation, services, and other materials, such as those located on HP's website at https://www8.hp.com/us/en/home.html. Additional, non-limiting examples include the software, drivers, and firmware found on HP's website at https://support.hp.com/us-en/product/hp-officejet-pro-6970-all-in-one-printer-series/8289585/model/11161264.
- 56. HP has contributed to the infringement of, and continues to contribute to the infringement of, one or more claims of the '716 patent under 35 U.S.C. § 271(c), either literally and/or

under the doctrine of equivalents, by, among other things, offering to sell, selling, and/or importing in or into the United States scanners and other products, including but not limited to the OfficeJet Pro family and all other devices with similar infringing technology, which constitute a material part of the invention of the '716 patent, knowing the accused products to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use.

- 57. Intellectual Ventures has been damaged and continues to be damaged by HP's infringement of the '716 patent and is entitled to recover from HP the damages sustained by Intellectual Ventures as a result of HP's wrongful acts in an amount adequate to compensate Intellectual Ventures for HP's infringement subject to proof at trial.
- 58. In committing these acts of infringement, HP has acted and continues to act despite knowing that its actions constituted infringement of a valid patent, or recklessly disregarded the fact that its actions constituted an unjustifiably high risk of infringement of a valid and enforceable patent.
- 59. HP's infringement of the '716 patent was and is deliberate and willful, entitling Intellectual Ventures to increased damages under 35 U.S.C. § 284 and to attorney fees and costs incurred in prosecuting this action under 35 U.S.C. § 285.

#### RELIEF REQUESTED

Wherefore, Intellectual Ventures respectfully requests that this Court enter judgment against HP as follows:

- a) that HP has infringed each of the Patents-in-Suit;
- b) that HP's infringement of the Patents-in-Suit is and/or has been willful;
- c) that Intellectual Ventures be awarded damages in accordance with 35 U.S.C. § 284, including treble damages and, if necessary to adequately compensate Intellectual Ventures for HP's infringement, an accounting;

- d) that this case is exceptional under 35 U.S.C. § 285;
- e) that Intellectual Ventures be awarded the attorney's fees, costs, and expenses that it incurs in prosecuting this action; and
- f) that Intellectual Ventures be awarded further relief at law or in equity as the Court deems just and proper.

## **DEMAND FOR JURY TRIAL**

Intellectual Ventures demands a trial by jury on all claims and issues so triable.

Dated: July 10, 2020 By: /s/ Derek Gilliland

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