IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEBRASKA

MIDWEST ATHLETICS AND SPORTS ALLIANCE, LLC, Plaintiff, v. XEROX CORP., Defendant.	Case No.: 8:17-CV-00478-RFR-SMB **FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT** **JURY TRIAL REQUESTED IN OMAHA**

Plaintiff Midwest Athletics and Sports Alliance LLC ("MASA") files this First Amended Complaint for Patent Infringement and Jury Demand against Defendant Xerox Corporation ("Defendant" or "Xerox") and alleges as follows:

THE PARTIES

1. MASA, a wholly-owned subsidiary of Midwest Youth A&S, Inc. (a Delaware public benefit corporation), is a Delaware limited liability corporation with its principal place of business at 1321 Jones Street, Suite 206, Omaha, NE 68102.

2. MASA provides services, funding and equipment for youth sports organizations to help those organizations inspire youths in a positive way and promotes the value and importance of sports and physical activity in the development of children. MASA believes in the principles of positive coaching and mentorship to not only ensure that each child learns the skills, tactics and strategies of the game but also learns the value of sportsmanship, problem-solving and leadership skills. MASA's ultimate purpose is to see that every child has the ultimate sports experience and learns key life lessons that will be instrumental for them now and in the future.

3. Defendant is an American corporation that sells document solutions and services, and document technology products worldwide.

4. Defendant is a New York corporation, with its principal place of business at 201 Merritt 7, Norwalk, Connecticut, 06851.

JURISDICTION AND VENUE

5. This action arises under the Patent Act, 35 U.S.C. § 101 *et seq*. This Court has original jurisdiction over this controversy pursuant to 28 U.S.C. §§ 1331 and 1338.

6. This Court has personal jurisdiction over Defendant. Defendant does business in this District and has, and continues to, infringe MASA's patents (described below) in this District. Defendant is incorporated in the State of New York. In addition, the Court has personal jurisdiction over Defendant because Defendant has established minimum contacts with the forum and the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

7. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b) and (c) and/or 1400(b).

8. Venue is proper because Defendant has committed acts of patent infringement within the District and has a regular and established place of business located in the State of Nebraska.

9. Defendant has committed acts of patent infringement in Nebraska, and throughout the United States, because it makes, uses, sells, offers for sale, and/or imports in Nebraska the Accused Products (identified below).

10. Defendant has a regular and established place of business located in the State of Nebraska. For example, Defendant maintains corporate offices and/or a place of business

located at 9300 Underwood Ave. #150, Omaha, NE 68114; 2025 S 17th St., Suite B, Lincoln NE 68502; 2716 13th St., Suite 7, Columbus, NE 68601; 1314 O St., Lincoln, NE 68508; and 4526 F Street, Omaha, NE 68117. Furthermore, Defendant's website indicates that it hires employees to work in Nebraska, such as Field Service Technicians.

THE PATENTS-IN-SUIT

11. MASA owns the following United States Patents: 6,203,005, 6,305,684, 6,411,314, 6,462,756, 6,509,974, 6,718,285, 6,724,998, 6,799,005, 6,909,856, 6,993,278, 7,502,582, 7,658,375, 7,720,425, 8,005,415, 8,019,255, 8,220,795, 8,554,089, 8,591,022, 8,634,113, and 8,805,239 (collectively referred to as the "MASA Patents").

12. On March 20, 2001, U.S. Patent No. 6,203,005 ("the '3005 Patent"), entitled FEEDER APPARATUS FOR DOCUMENTS AND THE LIKE, was issued to Tomasz K. Bednarek and Jose S. Pioquinto. A true and correct copy of the '3005 Patent is attached to this Complaint as Exhibit 1 and is incorporated by reference herein.

13. All rights, title, and interest in the '3005 Patent have been assigned to MASA, which is the sole owner of the '3005 Patent.

14. The '3005 Patent's abstract states that this patent is generally directed to a sheet feeder for engaging and removing a sheet of paper or other material from a stack and feeding it along a path. The sheet feeder can include a skimmer, a bumper, a separator, and a guide plate.

15. On October 23, 2001, U.S. Patent No. 6,305,684 ("the '684 Patent"), entitled FEED ROLLERS WITH REVERSING CLUTCH, was issued to Werner R. Lightner, Donald J. Stefanich, Jr., Jim T. Russo, Jose S. Pioquinto, and Paul E. Brodzik. A true and correct copy of the '684 Patent is attached to this Complaint as Exhibit 2 and is incorporated by reference herein.

16. All rights, title, and interest in the '684 Patent have been assigned to MASA, who is the sole owner of the '684 Patent.

17. The '684 Patent's abstract states that this patent is generally directed to a sheet feeder for engaging and removing a sheet of paper or other material from a stack and feeding it along a path. The sheet feeder can include a sheet separator designed for advancing the engaged sheet while retarding any adjacent sheets.

18. On June 25, 2002, U.S. Patent No. 6,411,314 ("the '314 Patent"), entitled SYSTEM AND METHOD FOR REPRESENTING AND CONTROLLING A PRODUCTION PRINTING WORKFLOW, was issued to David R. Hansen and Robert K. Holzwarth. A true and correct copy of the '314 Patent is attached to this Complaint as Exhibit 3 and is incorporated by reference herein.

19. All rights, title, and interest in the '314 Patent have been assigned to MASA, who is the sole owner of the '314 Patent.

20. The '314 Patent's abstract states that this patent is generally directed to a system and method for managing production printing workflow.

21. On October 8, 2002, U.S. Patent No. 6,462,756 ("the '756 Patent"), entitled SYSTEM AND METHOD FOR VISUAL REPRESENTATION OF PAGES IN A PRODUCTION PRINTING WORKFLOW, was issued to David. R. Hansen and Robert K. Holzwarth. A true and correct copy of the '756 Patent is attached to this Complaint as Exhibit 4 and is incorporated by reference herein.

22. All rights, title, and interest in the '756 Patent have been assigned to MASA, who is the sole owner of the '756 Patent.

23. The ‘756 Patent’s abstract states that this patent is generally directed to a system and method for managing production printing workflow. The system includes workflow management software which manages and facilitates the procedural stages of the workflow including job origination, job preparation, job submission and job fulfillment.

24. On January 21, 2003, U.S. Patent No. 6,509,974 (“the ‘974 Patent”), entitled AUTOMATED JOB CREATION FOR JOB PREPARATION, was issued to David R. Hansen. A true and correct copy of the ‘974 Patent is attached to this Complaint as Exhibit 5 and is incorporated by reference herein.

25. All rights, title, and interest in the ‘974 Patent have been assigned to MASA, who is the sole owner of the ‘974 Patent.

26. The ‘974 Patent’s abstract states that this patent is generally directed to a system and method for providing production printing instructions for a printed end document to a job preparation station.

27. On April 6, 2004, U.S. Patent No. 6,718,285 (“the ‘285 Patent”), entitled OPERATOR REPLACEABLE COMPONENT LIFE TRACKING SYSTEM, was issued to Thomas Leonard Schwartz, Richard Robert Tilney Carling, and Kenneth Thomas Doty. A true and correct copy of the ‘285 Patent is attached to this Complaint as Exhibit 6 and is incorporated by reference herein.

28. All rights, title, and interest in the ‘285 Patent have been assigned to MASA, who is the sole owner of the ‘285 Patent.

29. The ‘285 Patent’s abstract states that this patent is generally directed to operator replaceable component devices that enable an operator that is not a skilled field engineer or

service technician, to perform maintenance on a digital printing system, resulting in significantly higher uptime for the press.

30. On April 20, 2004, U.S. Patent No. 6,724,998 ("the '998 Patent"), entitled IMAGE FORMING APPARATUS WITH VARIABLE TONING BIAS OFFSET SERVICE UTILITY, was issued to Matthias Regelsberger, David Hockey and Anna Lairmore. A true and correct copy of the '998 Patent is attached to this Complaint as Exhibit 7 and is incorporated by reference herein.

31. All rights, title, and interest in the '998 Patent have been assigned to MASA, who is the sole owner of the '998 Patent.

32. The '998 Patent's abstract states that this patent is generally directed towards an electrographic print engine that has a variable primary charger and toning bias which places the machine in abnormal reproduction modes in order to provide service and diagnostic information to troubleshoot subsystems involved in the electrographic process.

33. On September 28, 2004, U.S. Patent No. 6,799,005 ("the '9005 Patent"), entitled METHOD AND SYSTEM OF PRE-SELECTING ORDERED MEDIA IN A PRINTING SYSTEMS, was issued to James E. Bodine and Thomas R. Hull. A true and correct copy of the '9005 Patent is attached to this Complaint as Exhibit 8 and is incorporated by reference herein.

34. All rights, title, and interest in the '9005 Patent have been assigned to MASA, who is the sole owner of the '9005 Patent.

35. The '9005 Patent's abstract states that this patent is generally directed to a method of pre-selecting ordered media in a printing system, wherein ordered media, such as tabs, are pre-selected into a part for use in a print run and an unwanted part to be discarded.

36. On June 21, 2005, U.S. Patent No. 6,909,856 ("the '856 Patent"), entitled FUNCTIONALITY SWITCHING FOR MICR PRINTING, was issued to John F. Crichton. A true and correct copy of the '856 Patent is attached to this Complaint as Exhibit 9 and is incorporated by reference herein.

37. All rights, title, and interest in the '856 Patent have been assigned to MASA, who is the sole owner of the '856 Patent.

38. The '856 Patent's abstract states that this patent is generally directed to an electrographic printing machine operable in combination with an installed one of a plurality of developing, or toning, stations. Each of the plurality of toning stations is associated with a toner type, with one of the toning stations associated with Magnetic Ink Character Recognition ("MICR") toner.

39. On January 31, 2006, U.S. Patent No. 6,993,278 ("the '278 Patent"), entitled FIXING DEVICE TRANSPORT FOR A DIGITAL PRINTER OR COPIER MACHINE, was issued to Gerhard Bartscher, Frank-Michael Morgenweck, Kai-Uwe Preissig, Domingo Rohde, Detlet Schulze-Hagenest, Ralf Gerald Allner, Thomas Biber, and Markus Weber. A true and correct copy of the '278 Patent is attached to this Complaint as Exhibit 10 and is incorporated by reference herein.

40. All rights, title, and interest in the '278 Patent have been assigned to MASA, who is the sole owner of the '278 Patent.

41. The '278 Patent's abstract states that this patent is generally directed towards a digital printer or copier machine proposed for the single-sided or double-sided printing of a substrate, with at least one fixing device for fixing toner onto the substrate, whereby the fixing device has at least one heating device for fusing the toner.

42. On March 10, 2009, U.S. Patent No. 7,502,582 ("the '582 Patent"), entitled METHOD AND APPARATUS FOR PRINTING USING A TANDEM ELECTROSTATOGRAPHIC PRINTER, was issued to Yee S. Ng and Robert C. Logel. A true and correct copy of the '582 Patent is attached to this Complaint as Exhibit 11 and is incorporated by reference herein.

43. All rights, title, and interest in the '582 Patent have been assigned to MASA, who is the sole owner of the '582 Patent.

44. The '582 Patent's abstract states that this patent is generally directed towards a tandem color electrostatographic printer apparatus having five or more color printing stations or modules for applying respective color separation toner images to a receiver member to form a pentachrome color image in a single pass.

45. On Feb. 9, 2010, U.S. Patent No. 7,758,375 ("the '375 Patent"), entitled PRINTER AND DUAL TRAYS FOR IMAGE RECEIVER MEDIA SHEETS, was issued to Randal M. Wong, Juan Belon, and Petrica D. Balcan. A true and correct copy of the '375 Patent is attached to this Complaint as Exhibit 12 and is incorporated by reference herein.

46. All rights, title, and interest in the '375 Patent have been assigned to MASA, who is the sole owner of the '375 Patent.

47. The '375 Patent's abstract states that this patent is generally directed towards a printer having a sheet tray, a driver for advancing sheets past a marking mechanism, and a picker to remove sheets from an aligned tray including a load position and a pick position.

48. On May 18, 2010, U.S. Patent No. 7,720,425 ("the '425 Patent"), entitled METHOD AND APPARATUS FOR PRINTING USE A TANDEM ELECTROSTATOGRAPHIC PRINTER, was issued to Yee S. Ng and Robert C. Logel. A true

and correct copy of the ‘425 Patent is attached to this Complaint as Exhibit 13 and is incorporated by reference herein.

49. All rights, title, and interest in the ‘425 Patent have been assigned to MASA, who is the sole owner of the ‘425 Patent.

50. The ‘425 Patent’s abstract states that this patent is generally directed towards a tandem color electrostatographic printer apparatus having five or more color printing stations or modules for applying respective color separation toner images to a receiver member to form a pentachrome color image in a single pass.

51. On Aug. 23, 2011, U.S. Patent No. 8,005,415 (“the ‘415 Patent”), entitled METHOD AND APPARATUS FOR PRINTING USE A TANDEM ELECTROSTATOGRAPHIC PRINTER, was issued to Yee S. Ng and Robert C. Logel. A true and correct copy of the ‘415 Patent is attached to this Complaint as Exhibit 14 and is incorporated by reference herein.

52. All rights, title, and interest in the ‘415 Patent have been assigned to MASA, who is the sole owner of the ‘415 Patent.

53. The ‘415 Patent’s abstract states that this patent is generally directed towards a tandem color electrostatographic printer apparatus having five or more color printing stations or modules for applying respective color separation toner images to a receiver member to form a pentachrome color image in a single pass.

54. On Sept. 12, 2011, U.S. Patent No. 8,019,255 (“the ‘255 Patent”), entitled ALIGNMENT METHOD FOR A PLURALITY OF COUPLED DIGITAL PRINT ENGINES, was issued to Michael T. Dobbertin and Alan E. Rapkin. A true and correct copy of the ‘255 Patent is attached to this Complaint as Exhibit 15 and is incorporated by reference herein.

55. All rights, title, and interest in the ‘255 Patent have been assigned to MASA, who is the sole owner of the ‘255 Patent.

56. The ‘255 Patent’s abstract states that this patent is generally directed towards an adjustment method to align printing engines in a print assembly that is capable of printing on a receiver to form one or more final prints and includes corrections for cross-track misregistration.

57. On July 17, 2012, U.S. Patent No. 8,220,795 (“the ‘795 Patent”), entitled PRINTER AND DUAL TRAYS FOR IMAGE RECEIVER MEDIA SHEETS, was issued to Randal M. Wong, Juan Belon, and Petrica D. Balcan. A true and correct copy of the ‘795 Patent is attached to this Complaint as Exhibit 16 and is incorporated by reference herein.

58. All rights, title, and interest in the ‘795 Patent have been assigned to MASA, who is the sole owner of the ‘795 Patent.

59. The ‘795 Patent’s abstract states that this patent is generally directed towards a printer having a sheet tray, a drive for advancing sheets past a marking mechanism, and a picker to remove sheets from an aligned tray.

60. On Oct. 8, 2013, U.S. Patent No. 8,554,089 (“the ‘089 Patent”), entitled JOB ERROR CORRECTION IN A MULTICOLOR ELECTROPHOTOGRAPHIC PRINT ENGINE, was issued to James D. Shifley, Alan J. Swire, and Thomas N. Tombs. A true and correct copy of the ‘089 Patent is attached to this Complaint as Exhibit 17 and is incorporated by reference herein.

61. All rights, title, and interest in the ‘089 Patent have been assigned to MASA, who is the sole owner of the ‘089 Patent.

62. The ‘089 Patent’s abstract states that this patent is generally directed towards a method and system for printing image documents using a variety of toners where some toners

use a multi-development station having two or more development stations. These toners are co-printed prior to fixing on the receiver by the multi-development station.

63. On Nov. 26, 2013, U.S. Patent No. 8,591,022 ("the '022 Patent"), entitled PRINTING APPARATUS WITH PIVOTABLE DUPLEXING UNIT, was issued to Slew Pern Chuang, Richard A. Murray, Venkatesh Mysore Nagaraja Rao, and Keng Leong Ng. A true and correct copy of the '022 Patent is attached to this Complaint as Exhibit 18 and is incorporated by reference herein.

64. All rights, title, and interest in the '022 Patent have been assigned to MASA, who is the sole owner of the '022 Patent.

65. The '022 Patent's abstract states that this patent is generally directed towards a pivotable duplexing unit attached to the wall of a printer using a hinge having an axis that is substantially perpendicular to the base.

66. On Jan. 21, 2014, U.S. Patent No. 8,634,113 ("the '113 Patent"), entitled RECORDING MEDIA PATH IN A MULTIFUNCTION PRINTER, was issued to Richard A. Murray. A true and correct copy of the '113 Patent is attached to this Complaint as Exhibit 19 and is incorporated by reference herein.

67. All rights, title, and interest in the '113 Patent have been assigned to MASA, who is the sole owner of the '113 Patent.

68. The '113 Patent's abstract states that this patent is generally directed towards a multifunction printer which includes a printing apparatus having a printer chassis having a media input region, a printing region, a media support element, a carriage configured to move a printhead in a carriage scan direction along a printing region, and a plurality of rollers configured to transport a recording medium from the media input region across the media support element

and to the printing region. The multifunction printer also includes a scanning apparatus to convert an image into digitized data, the scanning apparatus including a base that is affixed to the printer chassis, wherein the base of the scanning apparatus comprises a guide for the recording medium.

69. On Aug. 12, 2014, U.S. Patent No. 8,805,239 ("the '239 Patent"), entitled ACTUATION DEVICE FOR PRESSURE ROLLERS, was issued to Lennardt Jader and Peter Schmidt. A true and correct copy of the '239 Patent is attached to this Complaint as Exhibit 20 and is incorporated by reference herein.

70. All rights, title, and interest in the '239 Patent have been assigned to MASA, who is the sole owner of the '239 Patent.

71. The '239 Patent's abstract states that this patent is generally directed towards a device for moving a plurality of pressure rollers relative to respective counter rollers in a printing machine, wherein, in a non-energy mode, the pressure rollers are arranged in a non-contact position.

THE ACCUSED PRODUCTS

72. Xerox makes, uses, sells, offers for sale, and/or imports into the United States and this District a variety of office equipment, including printers, scanners, and/or multifunction systems that include functionality such as printing, scanning and copying (the "Xerox Office Equipment").

73. The Xerox Office Equipment includes a variety of models, including those referred to as WorkCentre, Phaser, iGen, Brenva, ColorQube and Color (the "Xerox Printer Models"). Xerox makes, uses, sells, offers for sale, and/or imports into the United States and this District the Xerox Office Equipment, including the Xerox Printer Models.

74. A depiction of a WorkCentre printer is provided below:

Ex. 21 (PDF of http://www.office.xerox.com/multifunction-printer/multifunction-under-30ppm/workcentre-5300-series/enus.html).

75. Various models of the WorkCentre printers (e.g., Xerox WorkCentre 5335, 5330, 5325) use one or more of the MASA Patents.

76. A depiction of a Versalink printer is provided below:

Ex. 22 (PDF of http://www.office.xerox.com/printers/color-printers/versalink-c400/enus.html).

77. Various models of the Versalink printers (e.g., Xerox B400, C400) use one or more of the MASA Patents.

78. A depiction of a Phaser printer (e.g., Xerox Phaser 5500, 5550, 6500, 6505, 6510,

7500, and 7800) is provided below:

Ex. 23 (PDF of http://www.office.xerox.com/printers/color-printers/phaser-7500/enus.html).

79. Various models of the Phaser 5500 (e.g., Xerox Phaser 5500, 5550, 6500, 6505, 6510, 7500, and 7800) use one or more of the MASA Patents.

80. A depiction of an iGen printer is provided below:

Ex. 24 (PDF of https://www.xerox.com/digital-printing/digital-printing-press/color-printing/xerox-igen5/enus.html).

81. Various models of the iGen printers (e.g., Xerox iGen 5) use one or more of the MASA Patents.

82. A depiction of a Brenva printer is provided below:

Ex. 25 (PDF of https://www.xerox.com/digital-printing/digital-printing-press/color-printing/brenva-hd/enus.html).

83. Various models of the Brenva printers (e.g., Xerox Brenva HD Production Inkjet Press) use one or more of the MASA Patents.

84. A depiction of a ColorQube printer is provided below:

Ex. 26 (PDF of http://www.office.xerox.com/multifunction-printer/color-multifunction/colorqube-9201-9202-9203/enus.html).

85. Various models of the ColorQube printers (e.g., Xreox ColorQube 9201, 9202, 9203) use one or more of the MASA Patents.

86. A depiction of a Color printer (e.g. Xerox Color 800/1000 Press and Xerox Color 800i/1000i Press) is provided below:

Ex. 27 (PDF of https://www.xerox.com/digital-printing/printers/digital-press/xerox-800-1000/enus.html).

87. Various models of the Color (e.g., Xerox Color 800i/1000) use one or more of the MASA Patents.

88. Xerox also makes, uses, sells, offers for sale, and/or imports into the United States and this District its Xerox FreeFlow (Print Server, Core, Publisher) and IntegratedPLUS Finishing Solution (collectively "Xerox FreeFlow").

89. Xerox FreeFlow is compatible with a wide variety of Xerox's multifunction units, digital presses, production printers and copiers, and continuous feed printers, including but not limited to, the following:

> ***Multifunction*:** Xerox D136; DocuColor 242/252/260; Xerox 700i/700; Xerox Color 550/560/570; Xerox Color C60/C70; Xerox D95A/D110/D125; Xerox D136
>
> ***Digital Presses*:** DocuColor 7002/8002; DocuColor 7000AP/8000AP; DocuColor 8080; Xerox Versant 80 Press; Xerox Versant 2100 Press; Xerox Brenva HD Production Inkjet

Press; Xerox Color 8250; Xerox iGen3; Xerox iGen4 Xerox iGen4™ Diamond Edition; Xerox iGen4 EXP; Xerox iGen 5 Press; Xerox iGen 150

***Production Printers & Copiers*:** Xerox D136; Color 800i/1000i Presses; DocuColor 242/252/260; DocuColor 7000/8000; DocuPrint 100MX; DocuPrint 115MX; DocuPrint 135MX; DocuPrint 155MX; DocuPrint 180MX; DocuTech 128 HighLight Color; DocuTech 155 HighLight Color; DocuTech 180 HighLight Color; DocuTech 6100; DocuTech 6115; DocuTech 6135; DocuTech 6135 ExcellencePlus Series; DocuTech 6155; DocuTech 6180; DocuTech 6180 ExcellencePlus Series; Xerox 700i/700; Xerox 770; Xerox 4112/4127 EPS; Xerox 4112/4127 C/P; Xerox Color C75 Press; Xerox Color 550/560/570; Xerox Color C60/C70; Xerox D95A/D110/D125; Xerox D136; Xerox Color J75 Press; Xerox Nuvera 1XX EA Series; Xerox Nuvera 200/288/314 EA

***Continuous Feed Printers*:** CiPress 325 / CiPress 500; DocuPrint 525; DocuPrint 1050; Xerox 490/980 Xerox 495™; Xerox 650/1300

Ex. 28 (PDF of https://www.xerox.com/digital-printing/workflow/dfes-controllers/freeflow-print-server/enus.html).

90. Xerox FreeFlow suite of software uses one or more of the MASA patents.

COUNT I
(Direct Infringement of the '3005 Patent pursuant to 35 U.S.C. § 271(a))

91. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

92. Defendant has infringed and continues to infringe one or more claims of the '3005 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

93. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

94. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services, including have been without the permission, consent, authorization, or license of MASA.

95. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox WorkCentre 5335, 5330 and 5325 and Xerox Phaser 6500.

96. Claim 1 of the '3005 Patent is recited below:

A sheet feeder comprising:

1[a] a skimmer for engaging and removing a sheet from one end of a stack of sheets and feeding the engaged sheet edgewise along a feed path, said skimmer comprising a first friction element including a generally cylindrical endless rotating peripheral surface carried on a support defined at least in part by a rotating shaft;

1[b] a separator spaced downstream along the feed path from the skimmer for advancing the engaged sheet while retarding any adjacent sheets; and

1[c] a first guide plate extending between said skimmer and said separator substantially parallel to said feed path to guide the engaged single sheet substantially along the feed path, preventing buckling of the engaged single sheet perpendicular to the feed path,

1[d] wherein said first guide plate is supported at least in part by and mounted to be pivotable independent of the rotation of said rotating shaft with respect to said support.

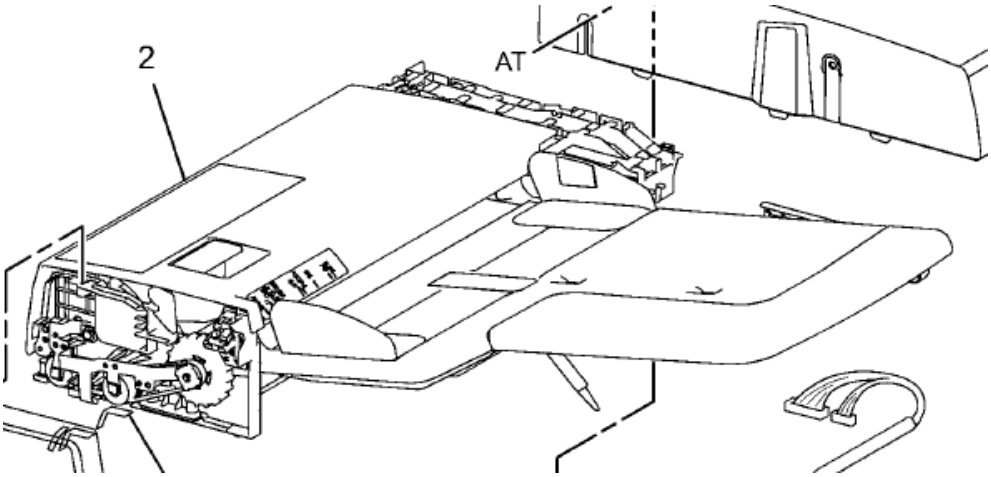
97. As one example, the WorkCentre 5335 meet the limitations of claim 1 of the '3005 Patent for at least the reasons described below.

98. An image of the WorkCentre 5335 is provided below:

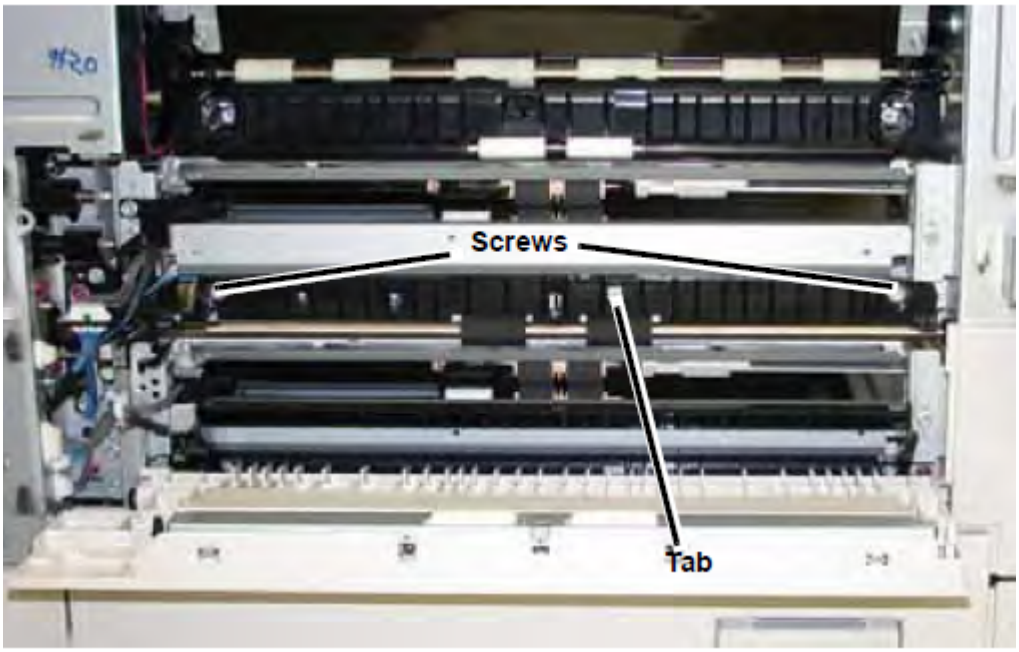
Ex. 29 (WorkCentre® 5325-5330-5335 User Guide, coverpage).

99. In general and as explained below, the limitations of claim 1 are satisfied because WorkCentre 5335 includes sheet feeders that separate and guide paper from a paper stack into the printer.

100. Claim limitation 1[a] is satisfied for at least the following reasons. The WorkCentre 5335's Feeder Assembly is shown below which includes a skimmer for engaging and removing a sheet from one end of a stack of sheets and feeding the engaged sheet edgewise along a feed path:

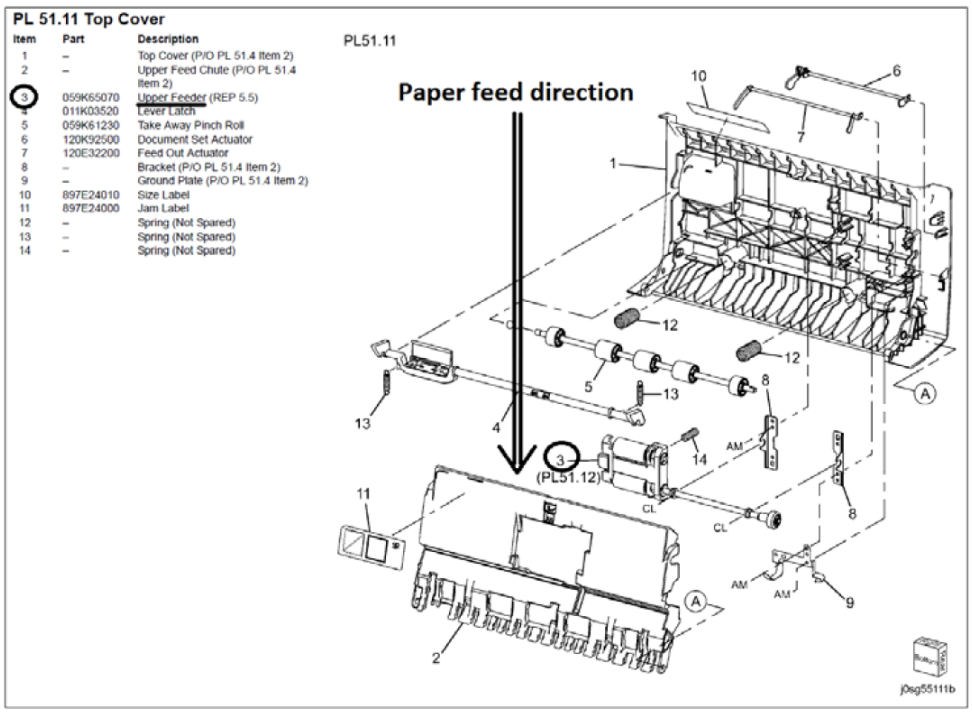


Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1380).



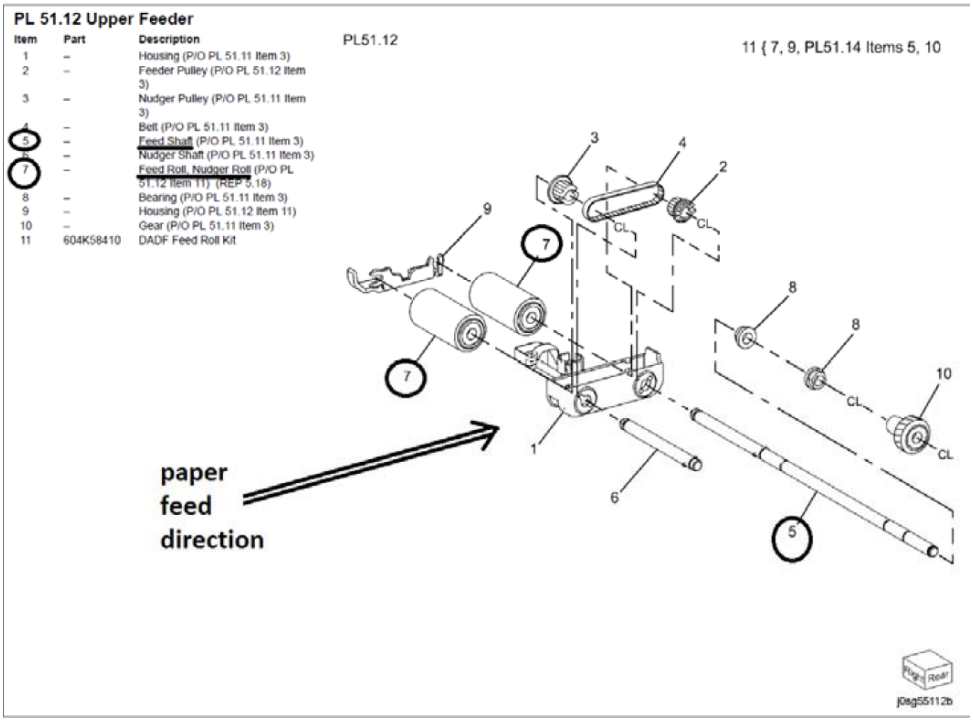
Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1123).

101. The document feeder of the WorkCentre 5335 includes a skimmer such as feed roller (3, 7) that engages and feeds at least one sheet of paper from a stack of sheets edgewise in the document feeder tray, along a feed path, as shown below. The feed roller is an endless rotating cylindrical friction element carried on a rotating shaft.



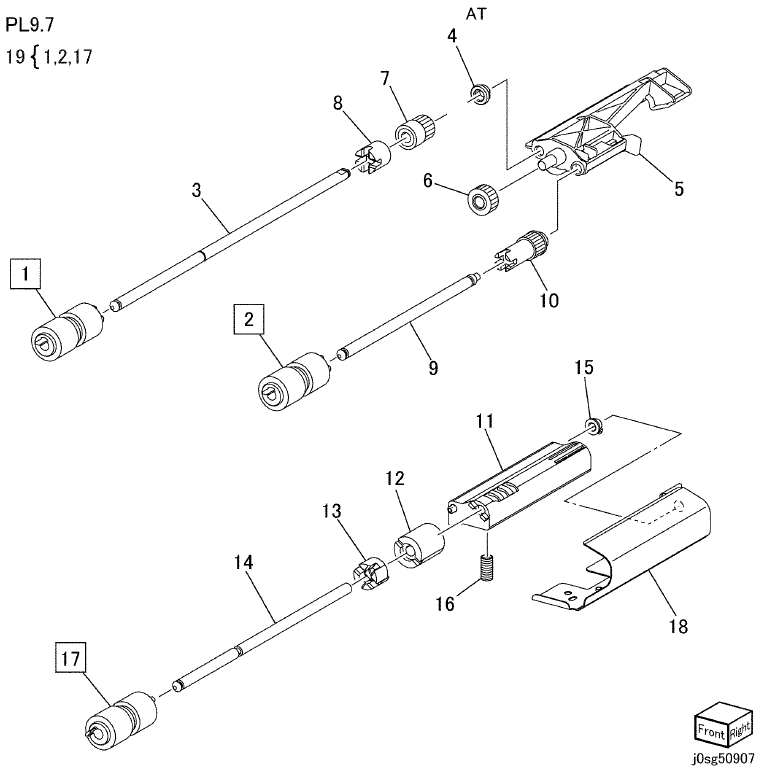
Ex. 30 (Xerox_WC_5335F_SD.pdf; p. 1389).

102. Additionally, the WorkCentre 5335's skimmer comprises a first friction element (feed roll [7]) including a generally cylindrical endless rotating peripheral surface carried on a support defined at least in part by a rotating shaft (feed shaft [5]), as shown below.



Ex. 30 (Xerox_WC_5335F_SD.pdf; p. 1390).

103. As shown below, the WorkCentre 5335 includes a skimmer such as feed roller [1] for each tray, the skimmer has a friction element that includes a generally cylindrical endless rotating peripheral surface carried on a support defined at least in part by a rotating shaft [3] :

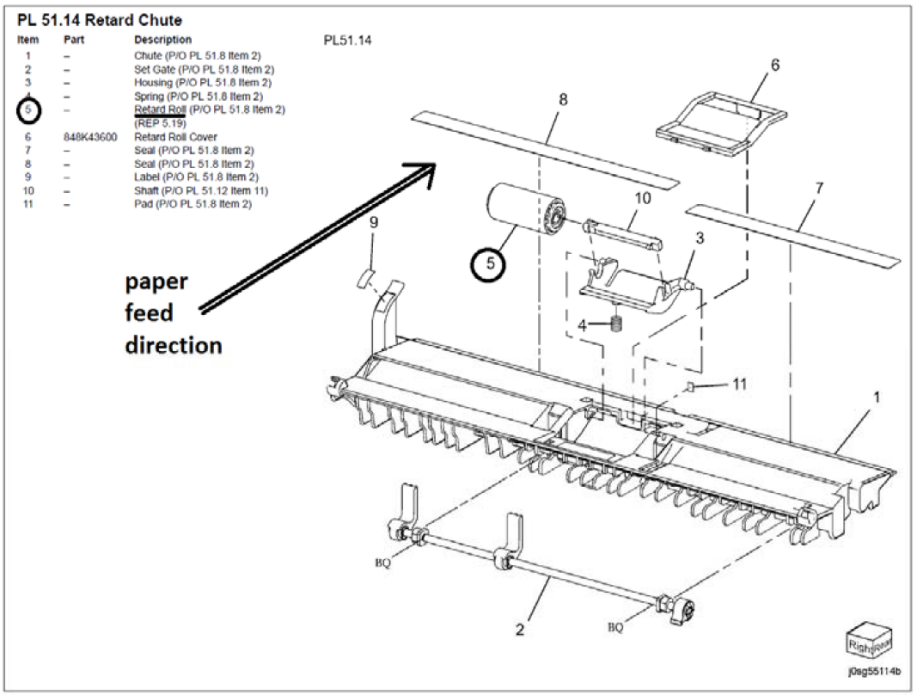


PL 9.7 Tray 1/2 Feed Roll, Nudger Roll, Retard Roll

Item	Part	Description
1	–	Feed Roll (P/O PL 9.7 Item 19) (REP 8.5)
2	–	Nudger Roll (P/O PL 9.7 Item 19) (REP 8.5)
3	–	Feed Shaft (Not Spared)

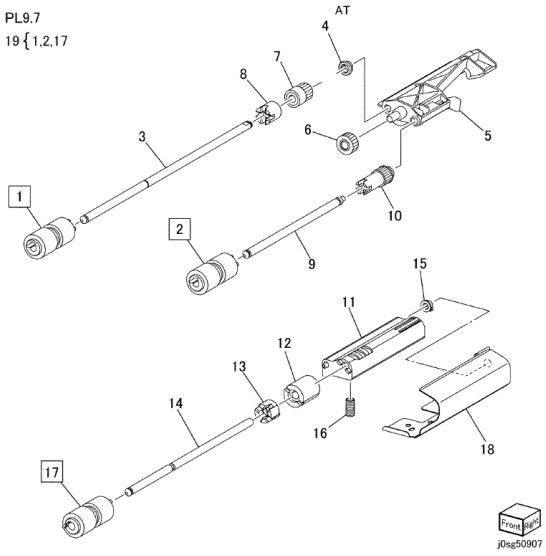
Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1296).

104. Claim limitation 1[b] is satisfied for at least the following reasons. The WorkCentre 5335 includes a separator such as the retard chute having a separator roller (retard roller [5]) located downstream from the skimmer that will advance sheets while retarding any additional sheets, as shown below.



Ex. 30 (Xerox_WC_5335F_SD.pdf; p. 1392).

105. Additionally, the feeding mechanisms of WorkCentre 5335 comprise a separator (retard roller [17]) spaced downstream along the feed path from the skimmer for advancing the engaged sheet while retarding any adjacent sheets, as shown below:

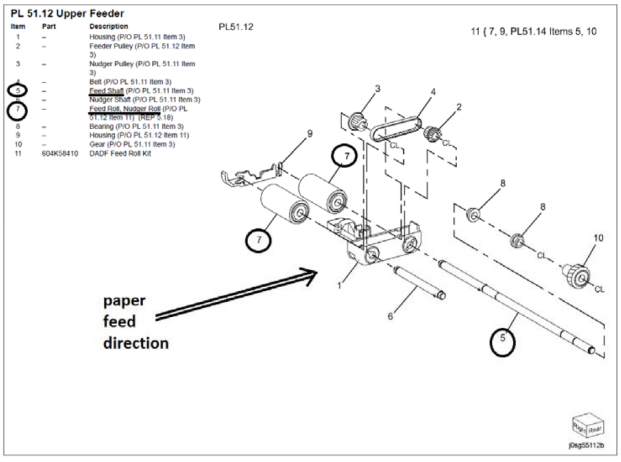


PL 9.7 Tray 1/2 Feed Roll, Nudger Roll, Retard Roll

Item	Part	Description
1	–	Feed Roll (P/O PL 9.7 Item 19) (REP 8.5)
2	–	Nudger Roll (P/O PL 9.7 Item 19) (REP 8.5)
3	–	Feed Shaft (Not Spared)
4	–	Bearing (Not Spared)
5	–	Nudger Support (Not Spared)
6	007E79380	Gear (33T)
7	005K06760	Clutch Assembly (22T)
8	005K05890	Oneway Clutch
9	–	Nudger Shaft (Not Spared)
10	–	Gear (25T) (Not Spared)
11	–	Retard Support (Not Spared)
12	005K09290	Friction Clutch
13	–	Spacer (Not Spared)
14	–	Retard Shaft (Not Spared)
15	–	Bearing (Not Spared)
16	–	Spring (Not Spared)
17	–	Retard Roll (P/O PL 9.7 Item 19) (REP 8.5)
18	–	Feed In Chute (Not Spared)
19	604K56080	FeedRoll/Nudger Roll/Retard Roll Kit (Includes Items 1, 2, 17) (REP 8.5)

Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1296).

106. Claim limitation 1[c] is satisfied for at least the following reasons. The WorkCentre 5335 includes a housing component (e.g., housing component (1) of the upper feeder, depicted in the Upper Feeder) for the skimmer (feed roller (7)). At least a portion of this housing (the first guide plate) extends between the skimmer (feed roller (7)) and the separator substantially parallel to the feed path, guides fed sheets along the feed path, and prevents buckling of the fed sheet in a direction perpendicular to the feed path. The first guide plate, substantially parallel to the feed path, is shown below:

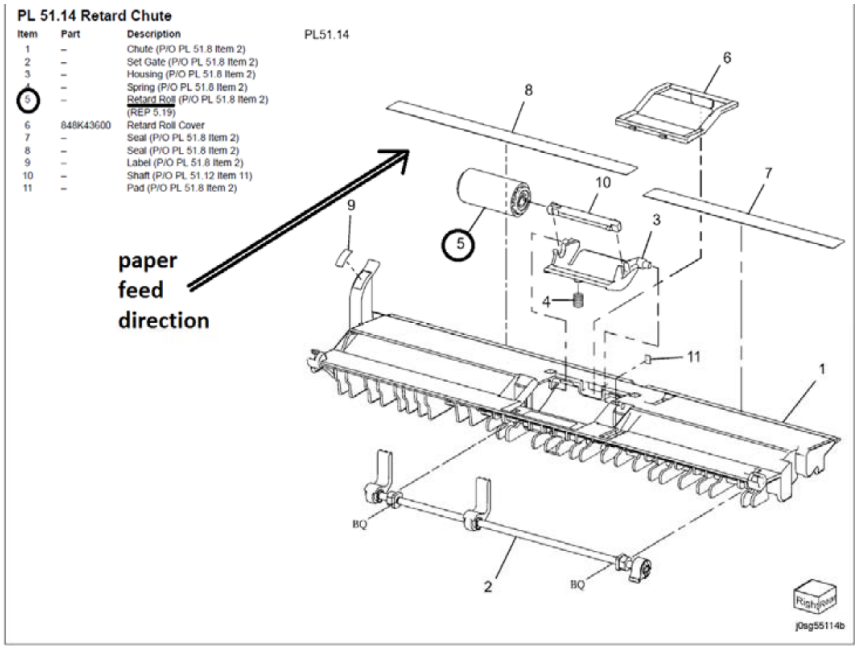


Ex. 30 (Xerox_WC_5335F_SD.pdf;p. 1390).

Figure 2 Retard Roll Removal

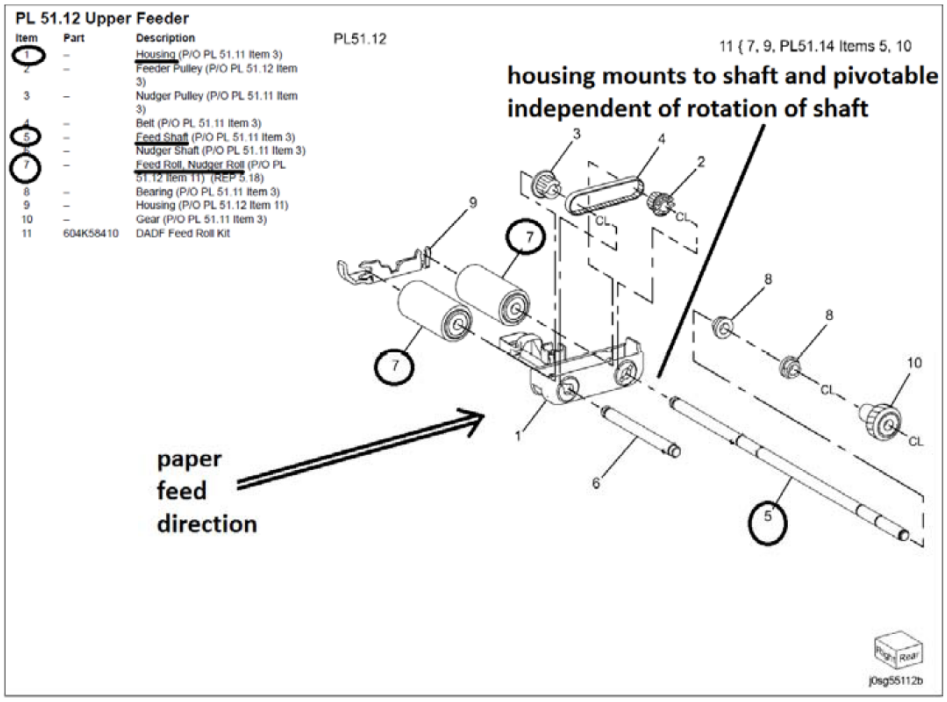
Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1094).

107. Additionally, the WorkCentre 5335 includes a chute [1] that is the first guide plate extending between said skimmer and said separator substantially parallel to said feed path (along the arrow) to guide the engaged single sheet:

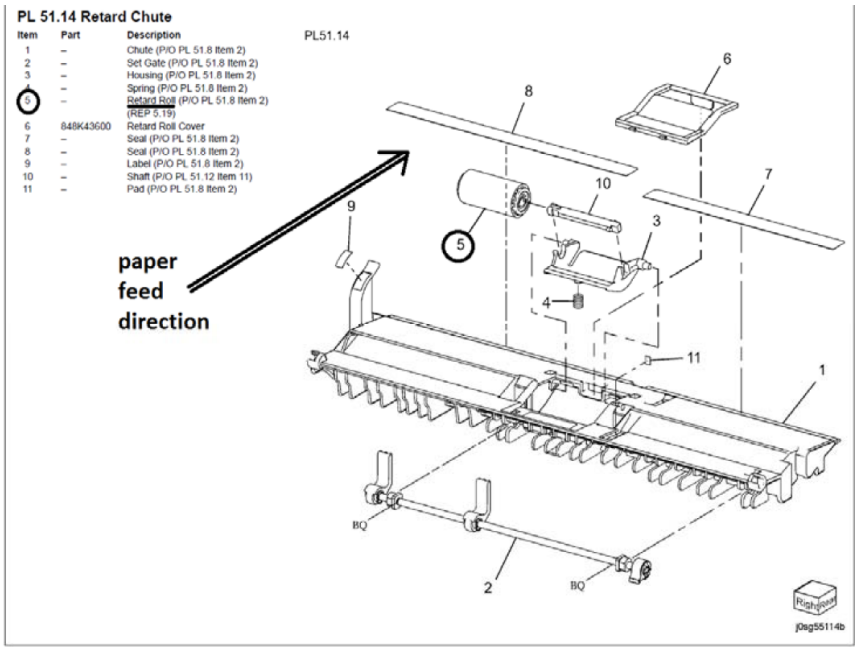


Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1392).

108. Claim limitation 1[d] is satisfied for at least the following reasons. The housing components (1) of the skimmer (feed roller (7)) in WorkCentre 5335 is supported by and mounted to the feed roller shaft (5) in a manner that allows it to be pivotable with respect to the shaft independent of rotation of the shaft, as shown below. Moreover, the retard chute [1] is supported by the spring [4] and is pivotable.

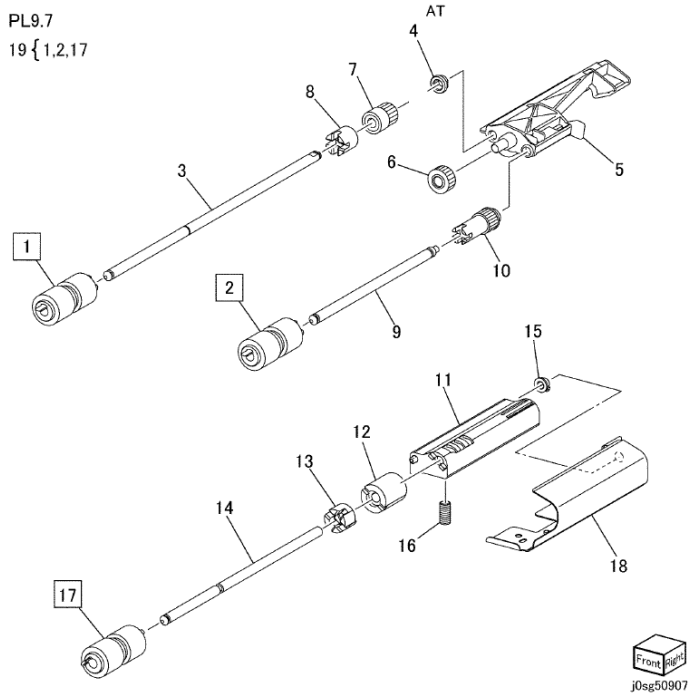


Ex. 30 (Xerox_WC_5335F_SD.pdf; p. 1390).



Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1392).

109. Additionally, the first guide plate which is supported by and mounted to the retard shaft [14] is pivotable because it is supported by the spring [16].



PL 9.7 Tray 1/2 Feed Roll, Nudger Roll, Retard Roll

Item	Part	Description
1	–	Feed Roll (P/O PL 9.7 Item 19) (REP 8.5)
2	–	Nudger Roll (P/O PL 9.7 Item 19) (REP 8.5)
3	–	Feed Shaft (Not Spared)
4	–	Bearing (Not Spared)
5	–	Nudger Support (Not Spared)
6	007E79380	Gear (33T)
7	005K06760	Clutch Assembly (22T)
8	005K05890	Oneway Clutch
9	–	Nudger Shaft (Not Spared)
10	–	Gear (25T) (Not Spared)
11	–	Retard Support (Not Spared)
12	005K09290	Friction Clutch
13	–	Spacer (Not Spared)
14	–	Retard Shaft (Not Spared)
15	–	Bearing (Not Spared)
16	–	Spring (Not Spared)
17	–	Retard Roll (P/O PL 9.7 Item 19) (REP 8.5)
18	–	Feed In Chute (Not Spared)
19	604K56080	FeedRoll/Nudger Roll/Retard Roll Kit (Includes Items 1, 2, 17) (REP 8.5)

Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1296).

110. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[c]. For example, and without limitation, WorkCentre 5335 performs substantially the same function in substantially the same way and achieves substantially the same result at least because they comprise a guiding surface that runs along the path where the paper sheets are fed into the sheet feeder. This guiding surface performs the same function of guiding the paper along the sheet path, in the same way, to achieve the same result of feeding sheets of paper into the sheet feeder.

111. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

112. Defendant's infringement of the '3005 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT II
(Direct Infringement of the '684 Patent pursuant to 35 U.S.C. § 271(a))

113. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

114. Defendant has infringed and continues to infringe one or more claims of the '684 Patent in violation of 35 U.S.C. § 271(a).

115. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

116. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization, or license of MASA.

117. Defendant's infringement includes the manufacture, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 5500/5550.

118. Claim 1 of the '684 Patent is recited below:

A sheet separator, comprising:

1[a] a sheet path along which a sheet having a first and second surfaces is passed;

1[b] an advancing roller positioned to drive forward the first surface of a sheet in said sheet path;

1[c] a retarding roller positioned to drive the second surface of a sheet in said sheet path;

1[d] a drive for driving said retarding roller backward;

1[e] a roller shaft on which said retarding roller is mounted in fixed relation, said roller shaft extending axially from said retarding roller;

1[f] a friction clutch spaced from said retarding roller and connecting said drive with said roller shaft;

1[g]. said clutch permitting said retarding roller to be driven forward when fewer than two sheets are engaged between said advancing and retarding rollers, and

1[h]. said clutch permitting said retarding roller to be driven backward when two or more sheets are engaged by said advancing and retarding rollers.

119. As one example, Xerox Phaser 5500 meets the limitations of claim 1 of the '684 Patent for at least the reasons described below.

120. An image of Xerox Phaser 5500 is provided below:

Ex. 31 (Xerox Phaser 5500/5550 Printer Service Manual, front page).

121. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 5500 is a printer that includes a sheet feeder such that a sheet of paper may be fed into and advanced through the printer.

122. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox Phaser 5500 includes a sheet separator that passes a sheet of paper along a sheet path, as shown by the red arrows below.

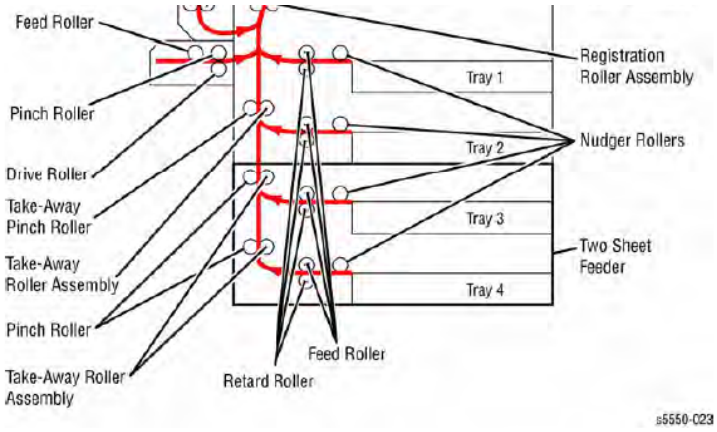


Figure 4 Media Transport Path

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 528).

123. Additionally, Xerox Phaser 5500 includes a sheet path as shown by the circled arrow in diagram below, along which a sheet of paper that has two sides (a first and second surface) is passed.

2000-Sheet Feeder

The 2000-Sheet Feeder, when connected to the printer, adds up to 2,000 sheets of paper input capacity. The following describes the major components and operation of the 2000-Sheet Feeder.

Tray 6 Paper Path Components

Paper path components of the 2000-Sheet Feeder include:

- Nudger Roller
- Feed Roller
- Retard Roller
- Take Away Roller

The Nudger, Feed, and Retard Rollers are driven by the Feed/Lift Motor. The paper fed by the Feed and Retard Rollers passes through the Pre-Feed Sensor. The Pre-Feed Sensor detects the presence of paper fed from the tray and detects paper jams. The Pre-Feed Sensor controls the Feed/Lift Motor speed, and the Nudger Solenoid. The Take Away Roller, located inside Door J, is driven by the Take Away Motor. Paper fed by the Take Away Roller passes through the Tray 6 Feed Out Sensor #6 and into the printer. The Feed Out Sensor #6 signal indicates when the Feed/Lift Motor should stop and the Take Away Motor's speed. The Feed Out Sensor #6 signal is also used to detect jams.

Figure 1 illustrates these components.

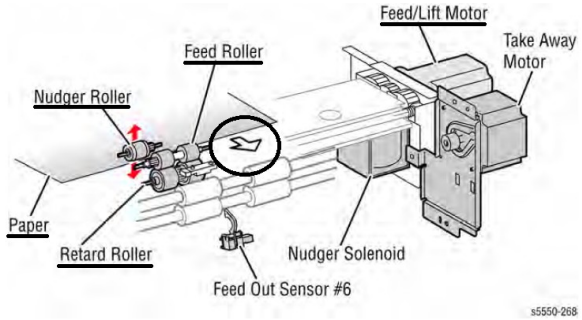


Figure 1 Tray 6 Paper Path Components

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

124. Claim limitation 1[b] is satisfied for at least the following reasons. Phaser 5500 has an advancing roller, such as a feed roller or a Nudger Roller positioned to drive forward the first surface of a sheet in said sheet path, as shown below:

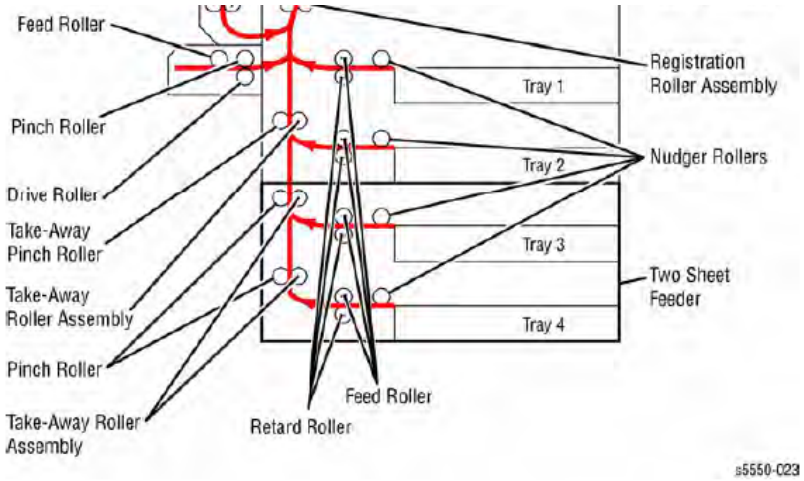
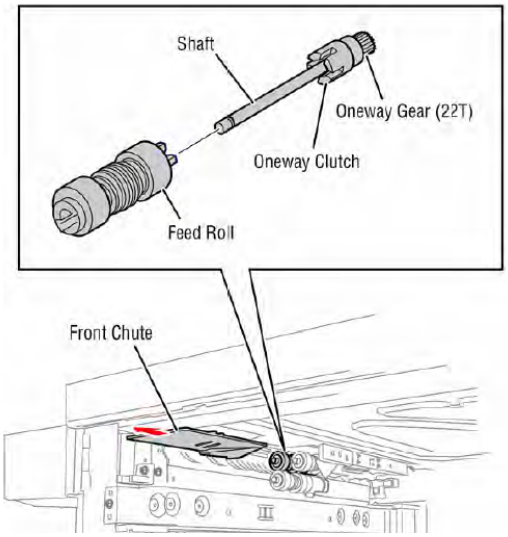


Figure 4 Media Transport Path

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 528).



Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 261).

125. Additionally, as shown below, Xerox Phaser 5500 has an advancing roller such as nudger roller 20 and feed roller 21 positioned to drive forward a first surface of a sheet of paper in the sheet path.

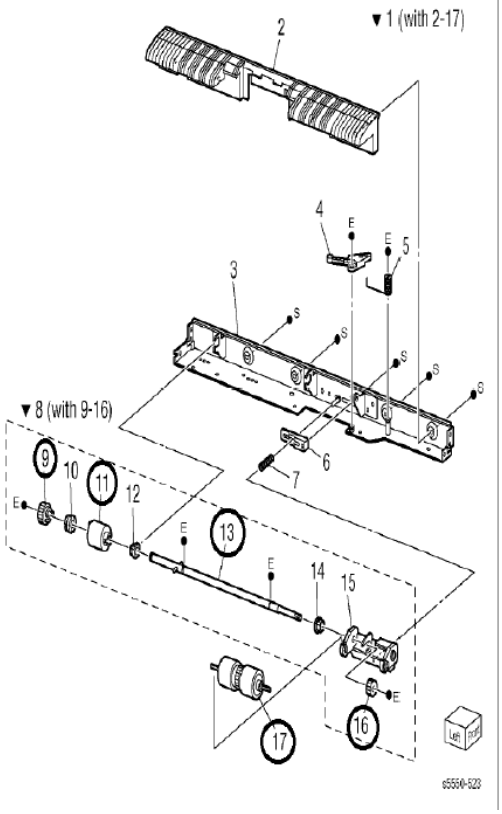
Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 425).

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

126. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox Phaser 5500 includes a retarding roller such as retard roller 17 that is positioned to drive a second surface of a sheet of paper in the sheet path (e.g., the other side of the paper), as shown below.

PL 22.6 Tray 6 Feeder (3/3)

Item	Part	Description
1	–	Feeder Assy Lower (with 2~17)
2	–	Chute Lower (P/O PL 22.6 Item 1)
3	–	Frame Assy-Lower HCF (P/O PL 22.6 Item 1)
4	–	Lever Retard (P/O PL 22.6 Item 1)
5	–	Spring RET Down (P/O PL 22.6 Item 1)
6	–	Slide Retard (P/O PL 22.6 Item 1)
7	809E41221	Spring Retard (P/O PL 22.6 Item 1)
8	–	Shaft Assy Retard (P/O PL 22.6 Item 1) (with 9~16)
9	–	Gear 22T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
10	–	Collar (P/O PL 22.6 Item 1, PL 22.6 Item 8)
11	005K06701	Clutch Assy Friction (Retard Clutch) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
12	–	Bearing (P/O PL 22.6 Item 1, PL 22.6 Item 8)
13	–	Shaft Assy-RET (P/O PL 22.6 Item 1, PL 22.6 Item 8)
14	–	Bearing-6 (P/O PL 22.6 Item 1, PL 22.6 Item 8)
15	068K24821	Bracket Assy Retard (with Bracket and Pad) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
16	–	Gear 15T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
17	–	Roller Assy Retard (P/O PL 22.6 Item 1, PL 22.5 Item 9)



Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 426).

127. Additionally, as shown below, Xerox Phaser 5500 includes a retarding roller (retard roller) that is positioned to drive the second surface of a sheet in said sheet path:

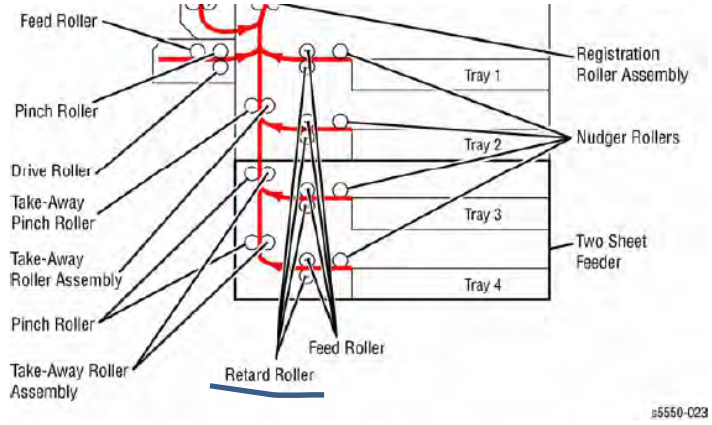


Figure 4 Media Transport Path

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.528).

128. As shown below, the retard roller is positioned on the opposite to the feed roller side of the sheet.

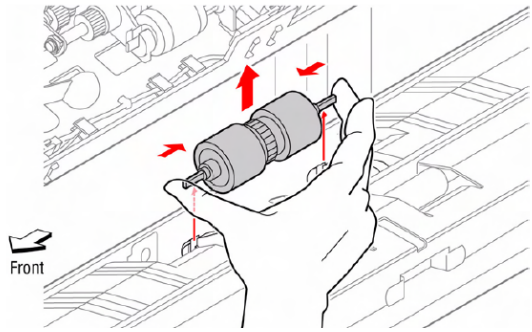
Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

REP 22.26 Tray 6 Retard Roller

Parts List on PL 22.6 Item 17

Removal

1. Open Door J.
2. Open the Upper Feeder Assembly using the black release lever located towards the front of the feeder.
3. Remove the Retard Roller from the Lower Feeder by compressing the shaft ends with your fingers.



Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.284).

129. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox Phaser 5500 includes a drive assembly that is a drive, attached to the feeder assembly, to drive (e.g., using a feed/lift motor) the retarding roller backwards. Xerox Phaser 5500 includes a Feed Motor that is the drive for driving the retarding roller backward, as shown below.

REP 22.17 Tray 6 Drive Frame Assembly

Parts List on PL 22.4 Item 3

Removal

1. Remove the Feeder Assembly (REP 22.15).
2. Remove the three screws securing the Drive Frame to the Feeder.

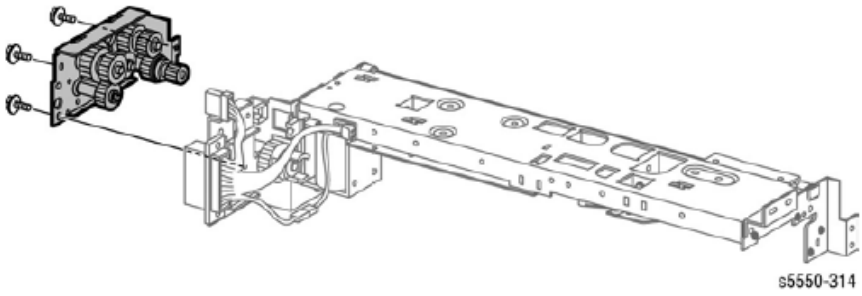


Figure 1 Removing the Drive Frame Assembly

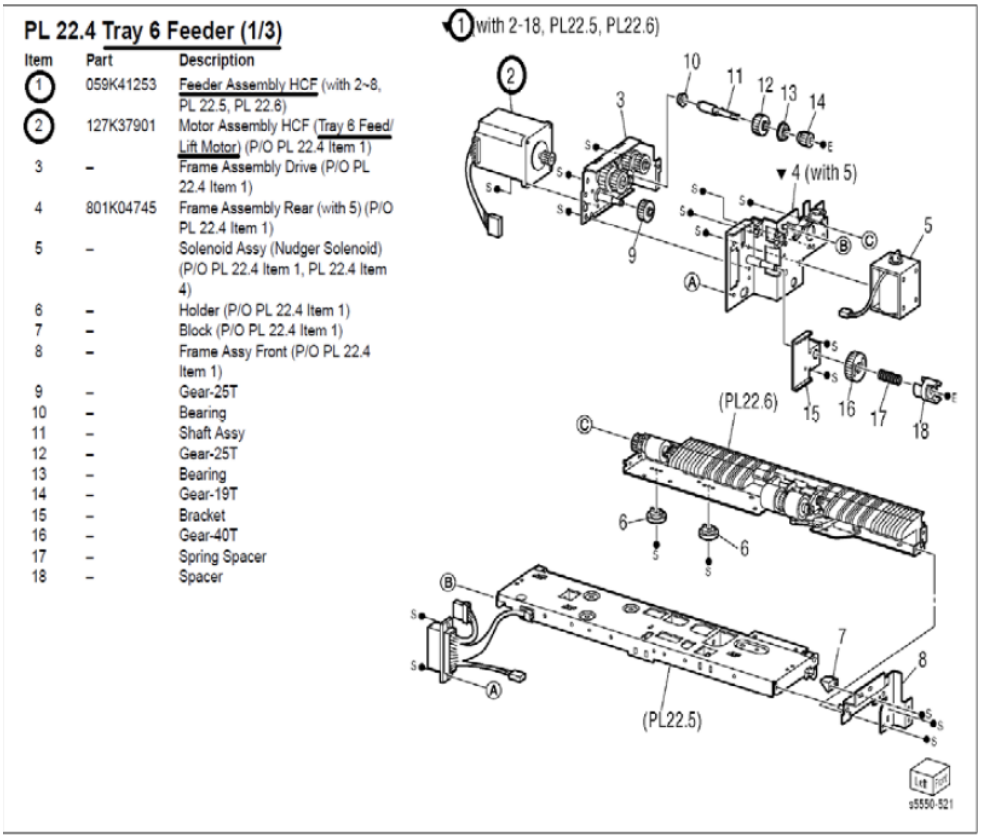
Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.280).

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

When the control logic calls for paper feed, the Nudger Roller moves a sheet of paper to the Feed Roller. The Feed Roller moves a single sheet of paper out of the tray and toward the tray's Take Away Roller. The Retard Roller ensures only one sheet of paper is fed. The paper then moves past the Pre-Feed Sensor and up the vertical path driven by a sequence of Take Away Rollers. Feed Out Sensors at each feed point notify the Engine Control Board that the paper has arrived at the next Take Away Roller in the path. The paper continues along the path until the sheet of paper arrives at the Registration Roller.

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.528).

130. Additionally, Xerox Phaser 5500 includes a drive such as feed/lift motor [2] for driving the retarding roller (e.g., retard roller [17]) backward, as shown below.

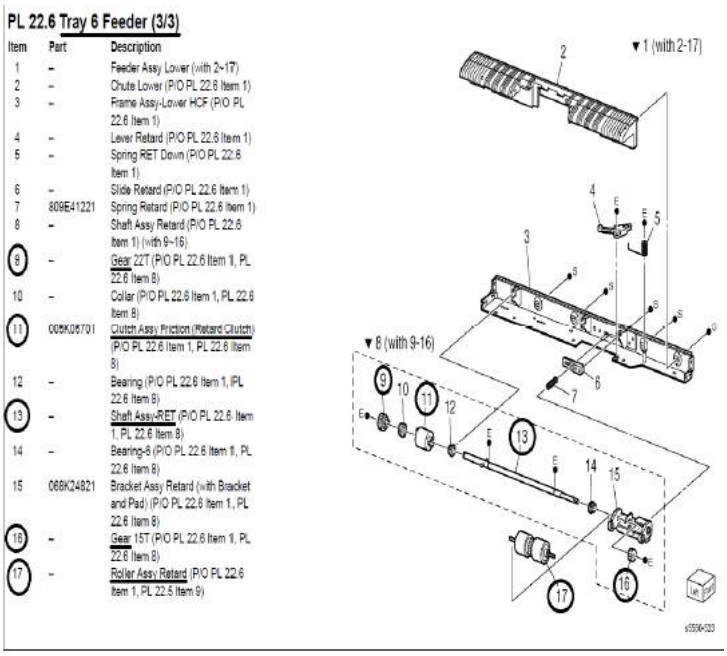


PL 22.4 Tray 6 Feeder (1/3)

Item	Part	Description
1	059K41253	Feeder Assembly HCF (with 2~8, PL 22.5, PL 22.6)
2	127K37901	Motor Assembly HCF (Tray 6 Feed/ Lift Motor) (P/O PL 22.4 Item 1)
3	–	Frame Assembly Drive (P/O PL 22.4 Item 1)
4	801K04745	Frame Assembly Rear (with 5) (P/O PL 22.4 Item 1)
5	–	Solenoid Assy (Nudger Solenoid) (P/O PL 22.4 Item 1, PL 22.4 Item 4)
6	–	Holder (P/O PL 22.4 Item 1)
7	–	Block (P/O PL 22.4 Item 1)
8	–	Frame Assy Front (P/O PL 22.4 Item 1)
9	–	Gear-25T
10	–	Bearing
11	–	Shaft Assy
12	–	Gear-25T
13	–	Bearing
14	–	Gear-19T
15	–	Bracket
16	–	Gear-40T
17	–	Spring Spacer
18	–	Spacer

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 424).

131. As shown below, Xerox Phaser 5500 include gears [9] and/or [16] that are driven by the feed/lift motor. The feed/lift motor rotates the shaft (e.g., [13]) of the retard roller in the counterfeed direction — when two or more sheets are engaged between the feed roller and the retard roller.



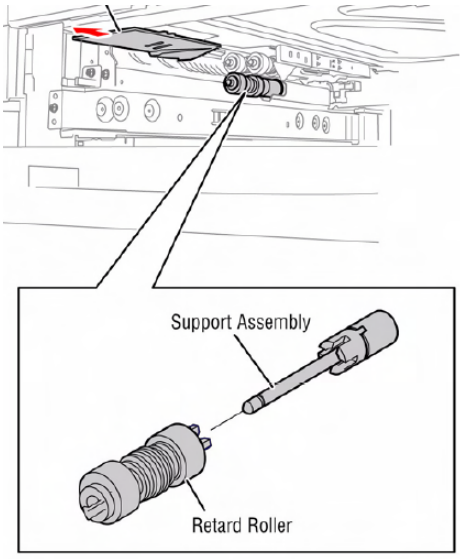
PL 22.6 Tray 6 Feeder (3/3)

Item	Part	Description
1	–	Feeder Assy Lower (with 2~17)
2	–	Chute Lower (P/O PL 22.6 Item 1)
3	–	Frame Assy-Lower HCF (P/O PL 22.6 Item 1)
4	–	Lever Retard (P/O PL 22.6 Item 1)
5	–	Spring RET Down (P/O PL 22.6 Item 1)
6	–	Slide Retard (P/O PL 22.6 Item 1)
7	809E41221	Spring Retard (P/O PL 22.6 Item 1)
8	–	Shaft Assy Retard (P/O PL 22.6 Item 1) (with 9~16)
9	–	Gear 22T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
10	–	Collar (P/O PL 22.6 Item 1, PL 22.6 Item 8)
11	005K06701	Clutch Assy Friction (Retard Clutch) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
12	–	Bearing (P/O PL 22.6 Item 1, PL 22.6 Item 8)
13	–	Shaft Assy-RET (P/O PL 22.6 Item 1, PL 22.6 Item 8)
14	–	Bearing-6 (P/O PL 22.6 Item 1, PL 22.6 Item 8)
15	068K24821	Bracket Assy Retard (with Bracket and Pad) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
16	–	Gear 15T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
17	–	Roller Assy Retard (P/O PL 22.6 Item 1, PL 22.6 Item 9)

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.426).

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 526).

132. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox Phaser 5500 includes a support assembly such as a roller shaft that extends axially from said retarding roller, as shown below.

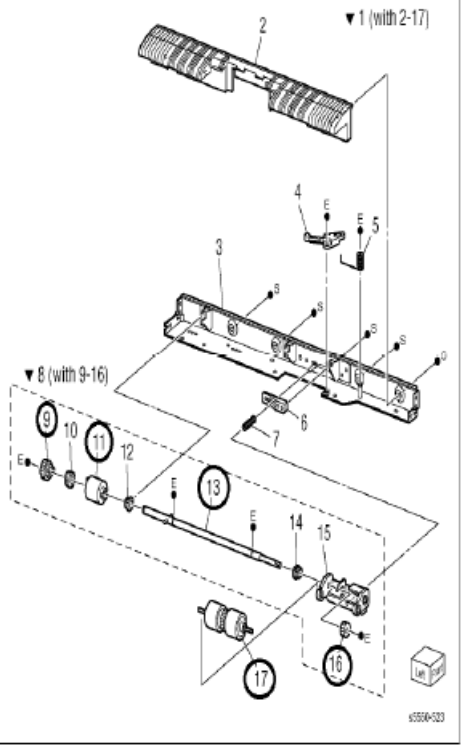


Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.220).

133. Additionally, Xerox Phaser 5500 includes a shaft (e.g., [13]) on which the retarding roller (e.g., retard roller [17]) is mounted in fixed relation, and which extends axially from the retarding roller.

PL 22.6 Tray 6 Feeder (3/3)

Item	Part	Description
1	–	Feeder Assy Lower (with 2-17)
2	–	Chute Lower (P/O PL 22.6 Item 1)
3	–	Frame Assy-Lower HCF (P/O PL 22.6 Item 1)
4	–	Lever Retard (P/O PL 22.6 Item 1)
5	–	Spring RET Down (P/O PL 22.6 Item 1)
6	–	Slide Retard (P/O PL 22.6 Item 1)
7	809E41221	Spring Retard (P/O PL 22.6 Item 1)
8	–	Shaft Assy Retard (P/O PL 22.6 Item 1) (with 9-16)
9	–	Gear 22T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
10	–	Collar (P/O PL 22.6 Item 1, PL 22.6 Item 8)
11	005K06701	Clutch Assy Friction (Retard Clutch) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
12	–	Bearing (P/O PL 22.6 Item 1, PL 22.6 Item 8)
13	–	Shaft Assy-RET (P/O PL 22.6 Item 1, PL 22.6 Item 8)
14	–	Bearing-S (P/O PL 22.6 Item 1, PL 22.6 Item 8)
15	068K24821	Bracket Assy Retard (with Bracket and Pad) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
16	–	Gear 15T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
17	–	Roller Assy Retard (P/O PL 22.6 Item 1, PL 22.5 Item 9)

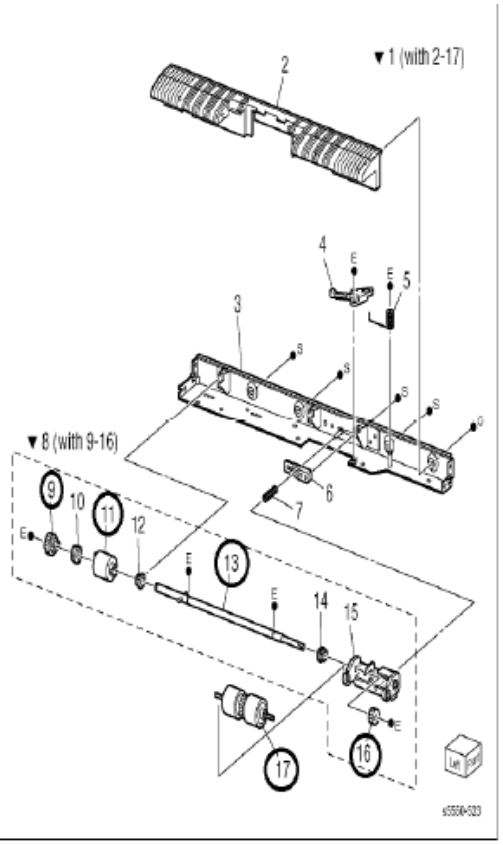


Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 426).

134. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox Phaser 5500 includes a friction clutch such as clutch assy friction [11] (retard clutch) spaced from the retarding roller (e.g., retard roller [17]). The friction clutch connects the drive (feed/lift motor) with the roller shaft (e.g., [13]). For example, the feed/lift motor can drive the retard roller via the retard clutch and one or more of the gears (e.g., [9], [16]) of the retard roller assembly.

PL 22.6 Tray 6 Feeder (3/3)

Item	Part	Description
1	–	Feeder Assy Lower (with 2~17)
2	–	Chute Lower (P/O PL 22.6 Item 1)
3	–	Frame Assy-Lower HCF (P/O PL 22.6 Item 1)
4	–	Lever Retard (P/O PL 22.6 Item 1)
5	–	Spring RET Down (P/O PL 22.6 Item 1)
6	–	Slide Retard (P/O PL 22.6 Item 1)
7	809E41221	Spring Retard (P/O PL 22.6 Item 1)
8	–	Shaft Assy Retard (P/O PL 22.6 Item 1) (with 9~16)
9	–	Gear 22T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
10	–	Collar (P/O PL 22.6 Item 1, PL 22.6 Item 8)
11	005K26701	Clutch Assy Friction (Retard Clutch) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
12	–	Bearing (P/O PL 22.6 Item 1, PL 22.6 Item 8)
13	–	Shaft Assy-RET (P/O PL 22.6 Item 1, PL 22.6 Item 8)
14	–	Bearing-S (P/O PL 22.6 Item 1, PL 22.6 Item 8)
15	068K24821	Bracket Assy Retard (with Bracket and Pad) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
16	–	Gear 15T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
17	–	Roller Assy Retard (P/O PL 22.6 Item 1, PL 22.6 Item 9)



Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 426).

135. Furthermore, the friction clutch (retard clutch) is spaced from the retarding roller and connects the drive with the roller shaft (retard shaft), as shown below:

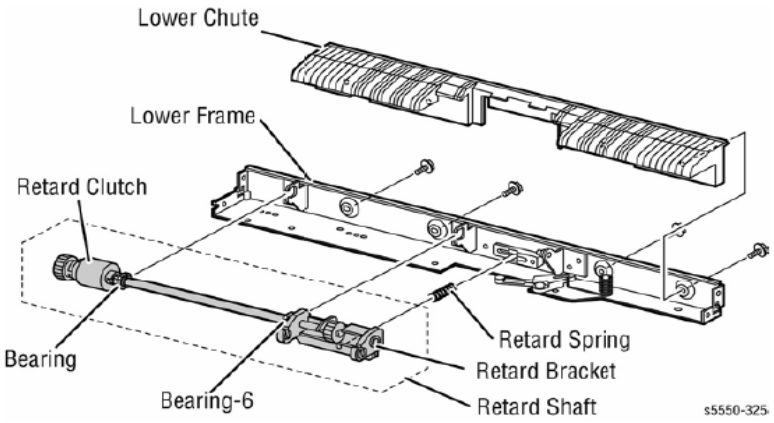


Figure 1 Removing the Retard Clutch, Bracket, or Spring

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.285).

136. Claim limitation 1[g] is satisfied for at least the following reasons. The friction clutch (retard clutch) permits the retarding roller to be driven forward when fewer than two sheets of paper are engaged between the advancing roller and the retarding roller, as shown below:

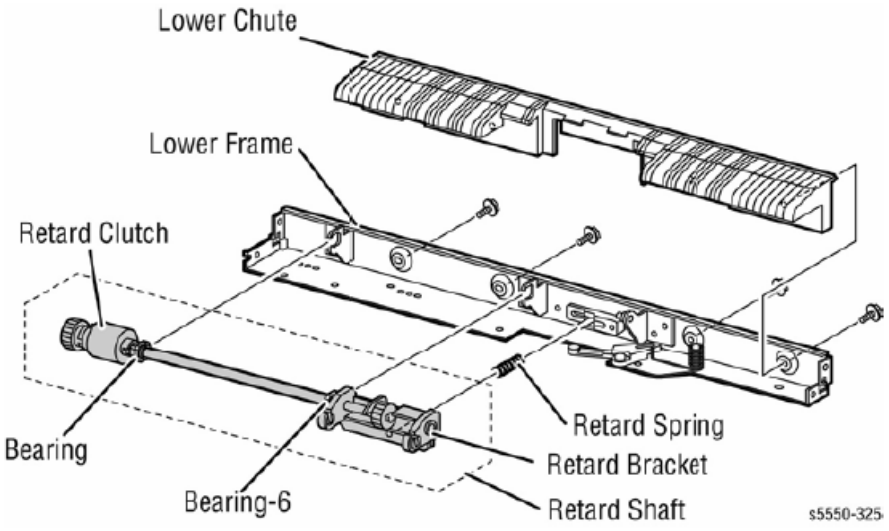


Figure 1 Removing the Retard Clutch, Bracket, or Spring

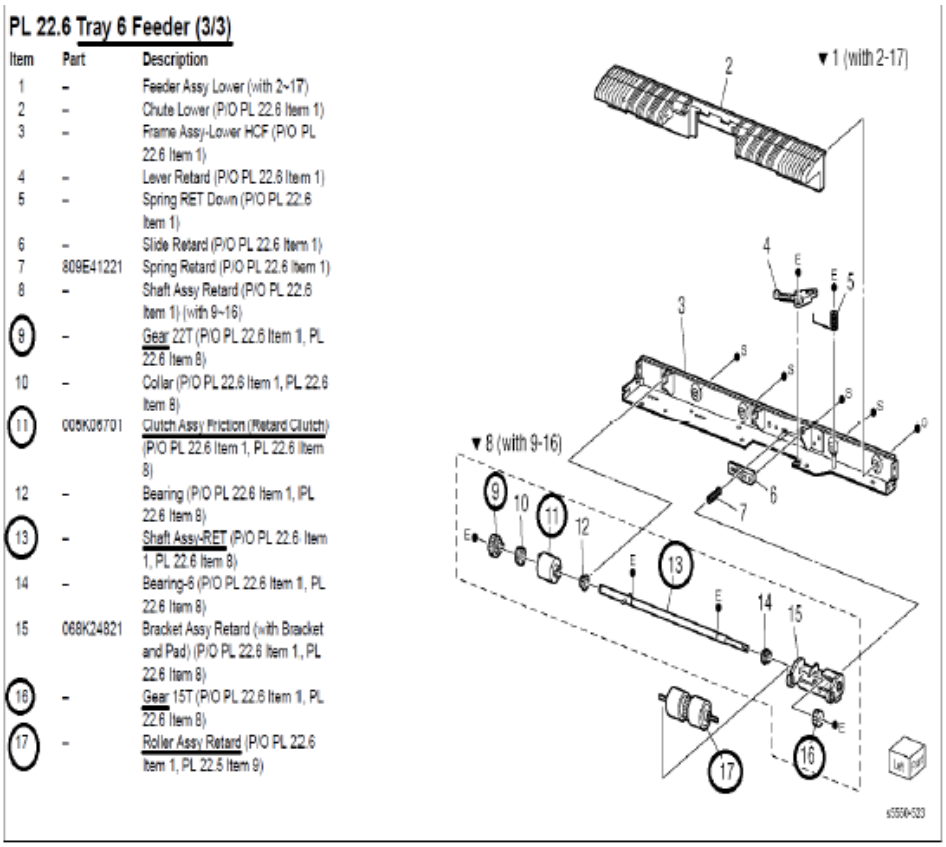
Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.285).

137. Additionally, the friction clutch in Xerox Phaser 5500 (e.g., retard clutch [11]) permits the retarding roller (e.g., retard roller [17]) to be driven forward, i.e., in the feed direction, when fewer than two sheets are nipped between the advancing roller (e.g., the feed roller) and the retarding roller. For example, when a single sheet of paper is nipped, the retard clutch (which operates on friction) is not engaged (i.e., not connected to the feed/lift motor) because the feed roller's rotational force is transferred to the single sheet of paper and to the retard roller, preventing the retard roller from slowing down sufficiently for the retard clutch to engage with the feed/lift motor. Because the feed/lift motor does not connect with the retard roller via the gears under these circumstances, the retard roller merely rotates in the feed direction under the influence of the feed roller's rotational force.

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

138. Claim limitation 1[h] is satisfied for at least the following reasons. Phaser Printer's retard clutch (e.g., [11]) permits the retarding roller (e.g., retard roller [17]) to be driven backward, i.e., in the counterfeed direction, when two or more sheets are nipped by the advancing roller (feed roller) and the retarding roller. For example, when two or more sheets of paper are nipped, the retard clutch (which operates on friction) is engaged (i.e., connected to the

feed/lift motor) due to slippage between the two or more sheets of paper. This paper-to-paper slippage in a multi-feed limits the feed roller's ability to transfer its rotational force to the retard roller. Because the feed/lift motor is connected with the retard roller via the gears under these circumstances, the feed/lift motor drives the retard roller in the counterfeed direction so as to prevent multi-pick.



PL 22.6 Tray 6 Feeder (3/3)

Item	Part	Description
1	-	Feeder Assy Lower (with 2~17)
2	-	Chute Lower (P/O PL 22.6 Item 1)
3	-	Frame Assy-Lower HCF (P/O PL 22.6 Item 1)
4	-	Lever Retard (P/O PL 22.6 Item 1)
5	-	Spring RET Down (P/O PL 22.6 Item 1)
6	-	Slide Retard (P/O PL 22.6 Item 1)
7	809E41221	Spring Retard (P/O PL 22.6 Item 1)
8	-	Shaft Assy Retard (P/O PL 22.6 Item 1) (with 9~16)
9	-	Gear 22T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
10	-	Collar (P/O PL 22.6 Item 1, PL 22.6 Item 8)
11	005K06701	Clutch Assy Friction (Retard Clutch) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
12	-	Bearing (P/O PL 22.6 Item 1, PL 22.6 Item 8)
13	-	Shaft Assy-RET (P/O PL 22.6 Item 1, PL 22.6 Item 8)
14	-	Bearing-S (P/O PL 22.6 Item 1, PL 22.6 Item 8)
15	068K24821	Bracket Assy Retard (with Bracket and Pad) (P/O PL 22.6 Item 1, PL 22.6 Item 8)
16	-	Gear 15T (P/O PL 22.6 Item 1, PL 22.6 Item 8)
17	-	Roller Assy Retard (P/O PL 22.6 Item 1, PL 22.5 Item 9)

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 426).

139. Additionally, as shown below, the drive control logic, controlling the feed assembly and the motor, drives the driving rollers. In particular retard roller ensures only one sheet of paper is fed into the printer:

When the control logic calls for paper feed, the Nudger Roller moves a sheet of paper to the Feed Roller. The Feed Roller moves a single sheet of paper out of the tray and toward the tray's Take Away Roller. The Retard Roller ensures only one sheet of paper is fed. The paper then moves past the Pre-Feed Sensor and up the vertical path driven by a sequence of Take Away Rollers. Feed Out Sensors at each feed point notify the Engine Control Board that the paper has arrived at the next Take Away Roller in the path. The paper continues along the path until the sheet of paper arrives at the Registration Roller.

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p.528).

140. As shown below, the Feed Motor and sensors control the clutch permitting the retarding roller to be driven backward when two or more sheets are engaged by said advancing and retarding rollers:

Ex. 31 (Phaser 5500/5550 Printer Service Manual, p. 555).

141. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in

substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[g]. For example, and without limitation, Xerox Phaser 5500 performs substantially the same function in substantially the same way and achieves substantially the same result at least because they include a clutch to engage a roller in such a way that the roller only allows one sheet of paper to be fed into the printer.

142. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

143. Defendant's infringement of the '684 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT III
(Direct Infringement of the '314 Patent pursuant to 35 U.S.C. § 271(a))

144. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

145. Defendant has infringed and continues to infringe one or more claims of the '314 Patent in violation of 35 U.S.C. § 271(a).

146. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

147. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

148. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox FreeFlow.

149. Claim 1 of the '314 Patent is recited below:

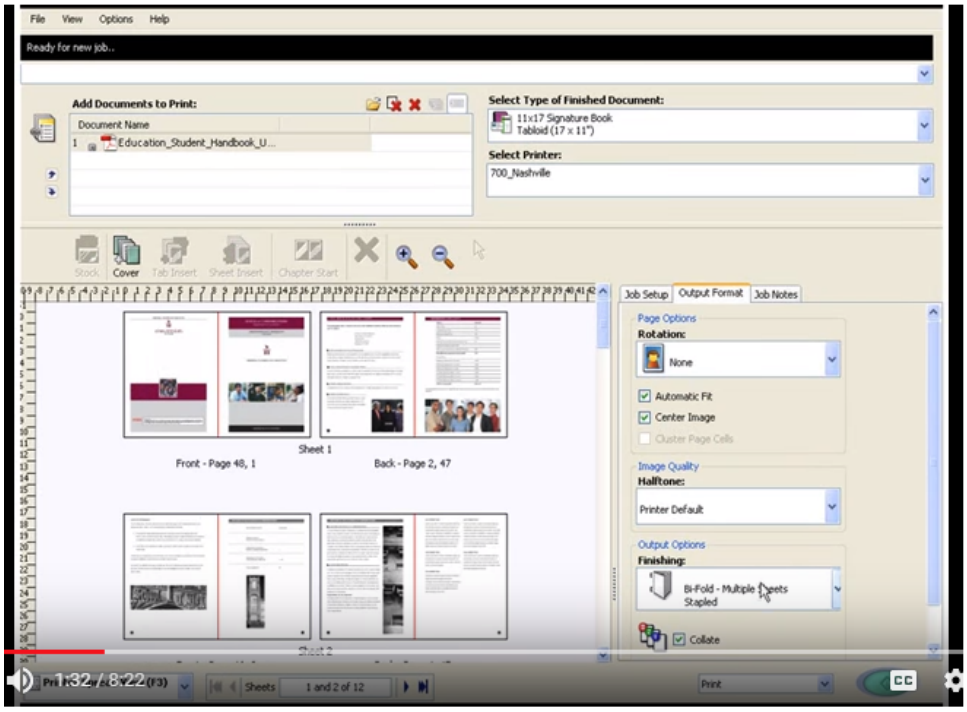
> An interface, implemented in a computer, for representing and controlling a production printing workflow comprising:
>
> 1[a] a display;
>
> 1[b] a first document object representing a document, said document further comprising content and formatting, said formatting defining at least one page in said document, said first document object being associated with a first visual representation on said display;
>
> 1[c] a document ticket object representing global document attributes, said document ticket object being associated with a second visual representation on said display and capable of being associated with said first document object;
>
> 1[d] a page object representing a page attribute of one of said at least one page, said page object being associated with a third visual representation on said display and capable of being associated with said first document object; and
>
> 1[e] a first user input device for selectively associating at least two of said first, second and third visual representations;
>
> 1[f] wherein association of said first, second and third visual representations results in association of said respective objects.

150. As one example, Xerox FreeFlow meets the limitations of claim 1 of the '314 Patent for at least the reasons described below.

151. As a general matter and as described below, the limitations of claim 1 are satisfied for a number of reasons. For example, Xerox FreeFlow includes a graphical user interface ("GUI") that displays (represents) a document that includes at least one page, and print job details in order to produce a printed document (a production workflow). The GUI also enables the adjustment of values using GUI objects displayed on the GUI to produce the printed document (control the production printing workflow).

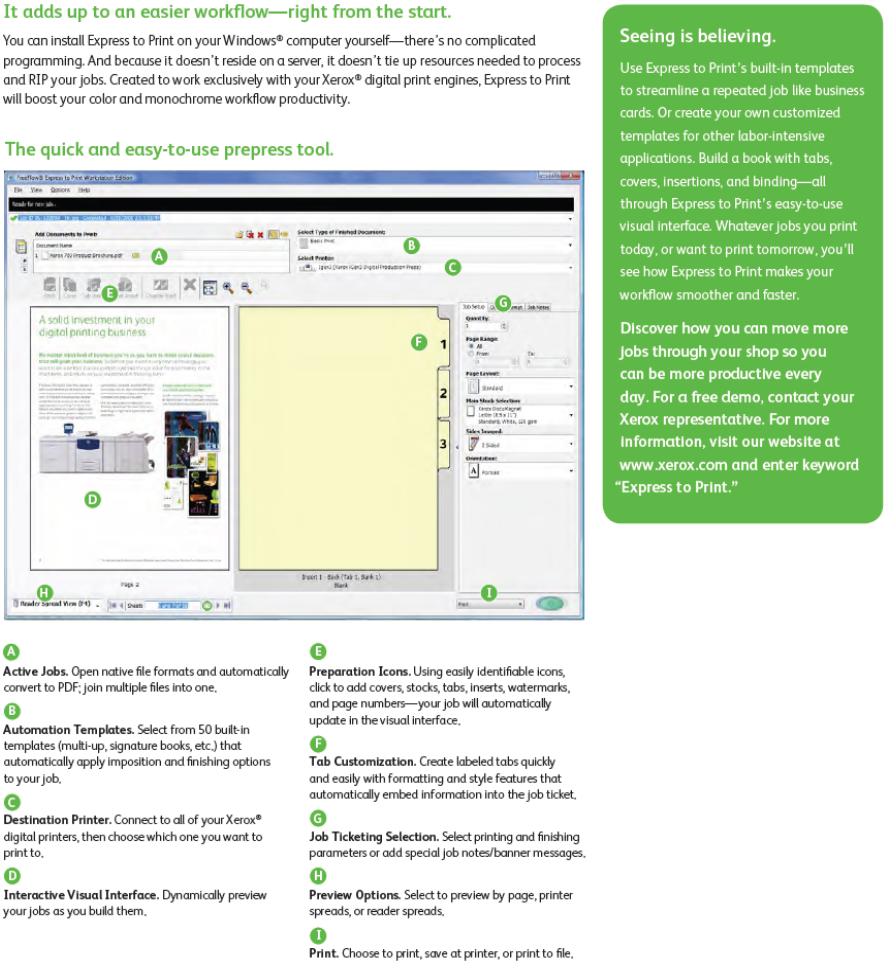
152. As shown in the figure below, Xerox FreeFlow includes an interface with instructions that generate graphics data to render a main GUI to a display. The main GUI represents a production printing workflow because it displays a document (e.g., the document titled "Education_Student_Handbook_U…") that includes at least one page (e.g., page 2, page 48) and print job details (e.g., details included in the "job setup" tab) that are used to produce at

least one printed document. The main GUI interface also controls the production printing workflow because at least one page of a document and a print job each include their own respective GUI objects that are displayed within the main GUI and include adjustable values.



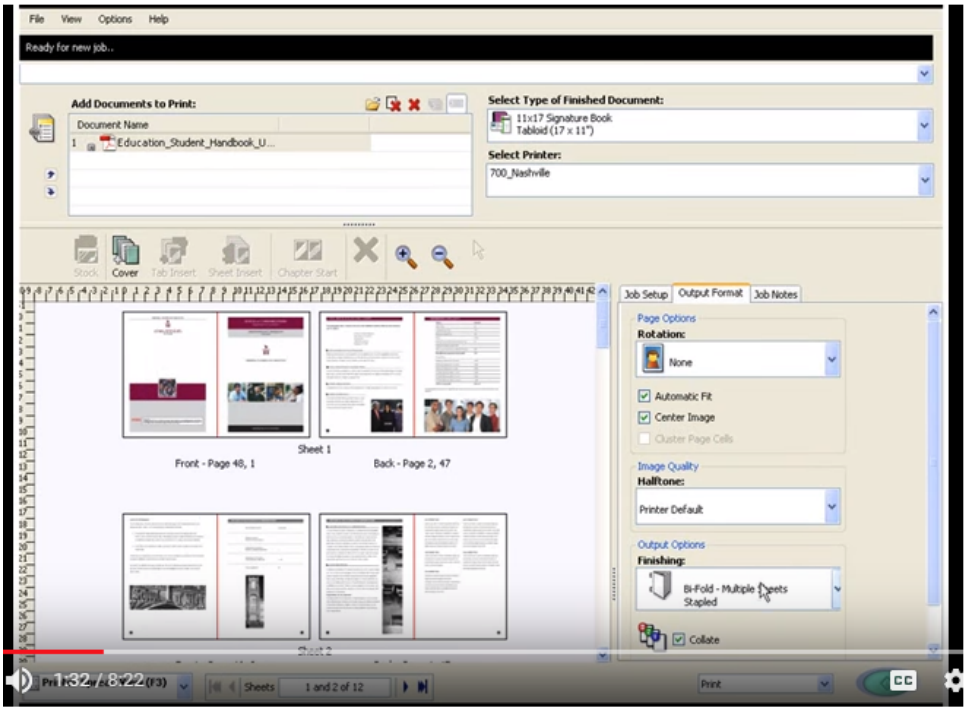
Ex. 32 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

153. As shown below, Xerox FreeFlow includes built-in templates for repeated jobs as well as the functionality to build a book with tabs, covers, insertions, and binding, all within the main GUI when doing a print job.



Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 3).

154. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox FreeFlow is configured to be rendered to a cathode ray tube ("CRT") or liquid crystal display ("LCD") monitors (a display). For example, as shown in the screenshot below, Xerox FreeFlow produces graphics data to generate an interface for displaying human readable information.



Ex. 32 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

155. In addition, as shown in the table below, Xerox FreeFlow hardware specifications require, at a minimum, the use of either CRT or LCD monitors (a display).

Xerox® FreeFlow® Express to Print Specifications

Hardware Components

Minimum Requirements:

- Processor: Intel® Core Duo 2.0 GHz or better, or equivalent AMD Processor
- System Memory: 2 GB
- Hard Drive Capacity: 80 GB SATA 7200 RPM
- Video Capability: Video Controller (AGP or PCI-based) with 128 MB RAM
- Ethernet Capability: 100/1000 MB/sec
- Display: CRT or LCD Monitor
- Input Devices: Keyboard and Mouse
- Peripheral Devices: DVD Drive

Software Components

Supported Operating Systems:

- Microsoft® Windows® XP Professional (32-bit) with Service Pack 3
- Microsoft® Windows® 7 Professional or Ultimate (32-bit)

Optional Application Software Supported:

- Microsoft® Office 2003 (Word, Excel®, PowerPoint®, and Publisher)
- Microsoft® Office 2007 (Word, Excel®, PowerPoint®, and Publisher)
- Adobe® Acrobat® Standard 9.3
- Adobe® Acrobat® Professional 9.3

Supported Image File Formats:

- TIFF
- JPEG
- PostScript®
- EPS
- RDO
- Adobe® PDF
- Microsoft® Office (Word, PowerPoint®, Excel®, and Publisher)*

*Requires optional MS Office 2003 or 2007 software.

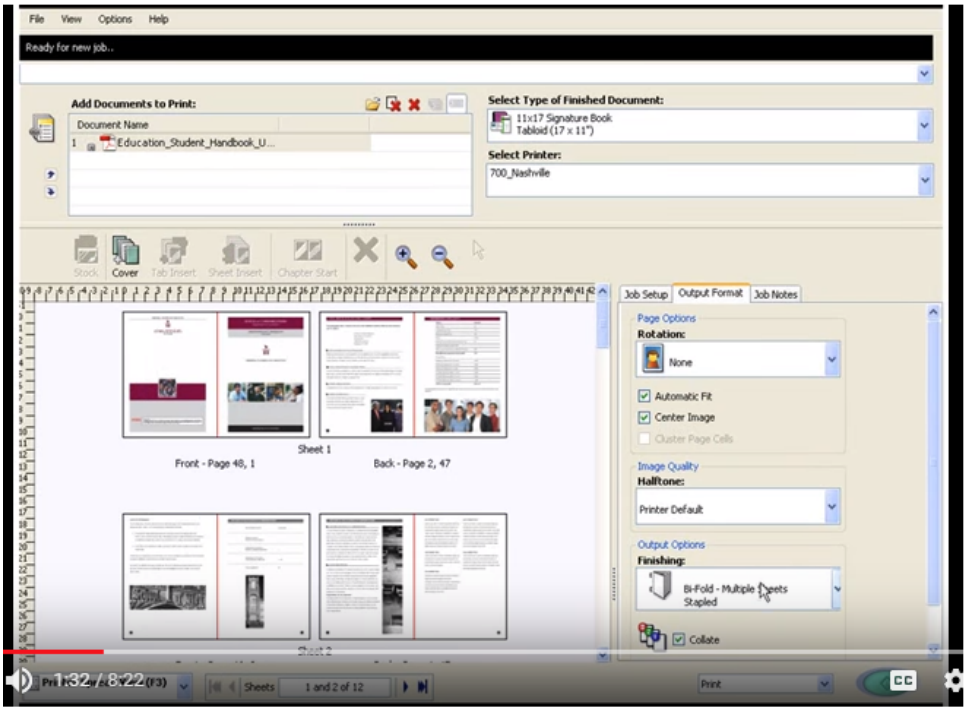
Supported Printers

For a complete list of supported printers, please visit www.xerox.com/freeflow

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 4).

156. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox FreeFlow stores data values that represent a document within a region in memory resident within a computer that executes Xerox FreeFlow (a first document object representing a document). Xerox FreeFlow also generates graphics data to render selectable GUI objects within a main interface (a first visual representation on said display). Documents launched within Xerox FreeFlow include text and/or image data (content) displayed on the main interface that can be adjusted based in-part on selectable options (said formatting defining at least one page in said document). Modifications made to documents on the main interface correspondingly adjust appropriate document attribute values, for a given document, that are stored in memory (said first document object being associated with a first visual representation on said display).

157. As shown in the figure below, Xerox FreeFlow generates graphics data to render the document "Education_Student_Handbook_U…" as a selectable .PDF GUI object (a first visual representation on said display) within the main interface. Furthermore, as depicted below, at least one page of the document "Education_Student_Handbook_U…" (e.g., page 2, page 48) includes text and/or image data (content). As depicted below, Xerox FreeFlow formats at least one page (e.g., page 2, page 48) of the document "Education_Student_Handbook_U…" when it defines a selectable "rotation" option, a selectable "automatic fit" option, and/or a selectable "center image" option for the page (said formatting defining at least one page in said document).



Ex. 32 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

158. Xerox FreeFlow also stores data values that represent the "Education_Student_Handbook_U…"document (e.g., document attribute values) within a region in memory resident within a computer that executes instructions for Xerox FreeFlow (a first document object representing a document). In this fashion, modifications made to the "Education_Student_Handbook_U…" document on the main interface will correspondingly adjust the appropriate document attribute values for the document stored in memory (said first document object being associated with a first visual representation on said display).

159. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox FreeFlow stores data values that represent "job setup" data within a region in memory resident within a computer that executes Xerox FreeFlow (a document ticket object). The job setup data includes document attribute data that can be defined for all pages of a given document (global document attributes). In this manner, Xerox FreeFlow generates graphics data to render a

selectable "job setup" GUI tab (a second visual representation on said display) that displays job setup data for the document within the main interface. Modifications made to values displayed in the job setup GUI tab correspondingly adjust the appropriate data values stored in memory (said document ticket object being associated with a second visual representation on said display). Moreover, modifications made to values displayed in the job setup GUI tab will also correspondingly adjust the appropriate document attribute values, stored in memory, for the document (document ticket object being capable of being associated with said first document object).

160. As shown in the figure below, Xerox FreeFlow includes instructions that generate graphics data to render a selectable "job setup" GUI tab (a second visual representation on said display) that displays job details data for the "Education_Student_Handbook_U…" document within the main interface. As depicted below, the "job setup" GUI tab includes global document attributes that define a "standard" page layout, a "1 sided" print mode, and a "portrait" orientation for all pages of the "Education_Student_Handbook_U…" document (global document attributes).

Ex. 33 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

161. Xerox FreeFlow also stores data values that represent the "job setup" data values within a region in memory resident within a computer that executes the instructions for Xerox FreeFlow (a document ticket object representing global document attributes). In this fashion, modifications made to values displayed in the job setup GUI tab will correspondingly adjust the appropriate data values stored in memory (said document ticket object being associated with a second visual representation on said display). Moreover, modifications made to values displayed in the job setup GUI tab will also correspondingly adjust the appropriate document attribute values for the "Education_Student_Handbook_U " document stored in memory (document ticket object being capable of being associated with said first document object).

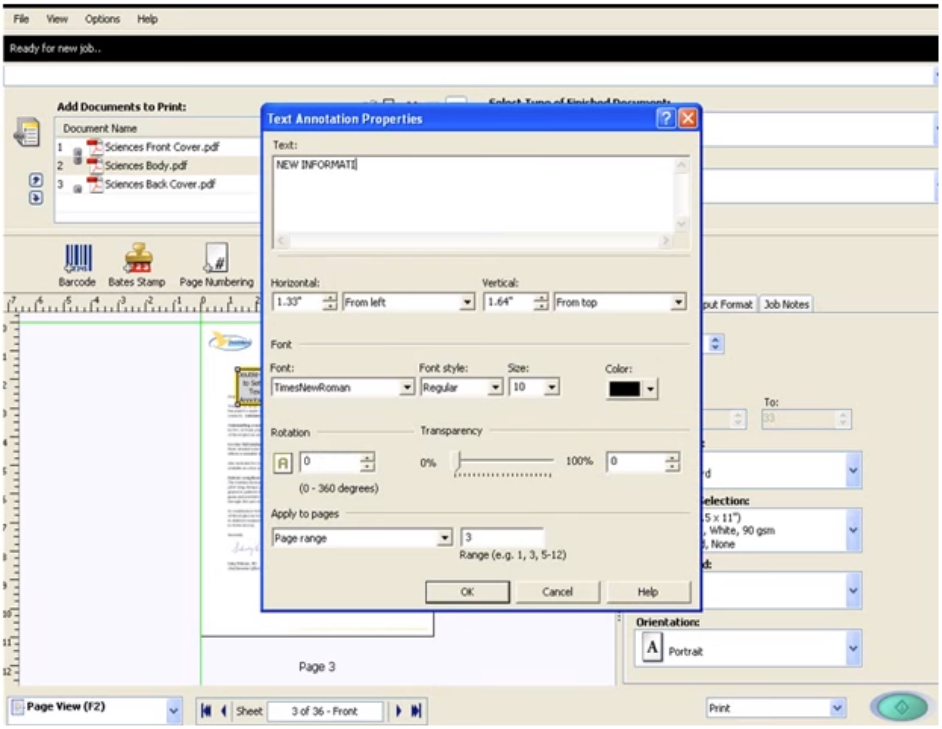
162. As shown in the figure below, Xerox FreeFlow includes a job ticketing selection (document ticket object) mechanism to "select printing and finishing parameters or add special job notes/banner messages" for a particular document.

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 3).

163. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox FreeFlow stores data values that represent "page view" attribute data within a region in memory resident within a computer that executes Xerox FreeFlow (a page object representing a page attribute of one of said at least one page). Also, Xerox FreeFlow generates graphics data to render a selectable "page view" GUI object (a third visual representation on said display). As such, modifications made to a page via the page view GUI correspondingly adjusts the appropriate page attribute values for the page in memory (said page object being associated with a third visual representation on said display). Moreover, modifications made to the page via the page view GUI also correspondingly adjusts the appropriate document attribute values for the document in memory (page object being capable of being associated with said first document object).

164. As shown in the figure below, Xerox FreeFlow includes instructions that generate graphics data to render a selectable "page view" GUI object (a third visual representation on said display) on a main GUI. As such, the selection of the "page view" GUI object presents a display of the page details of a particular page of the "Sciences Body" document (a first document object).

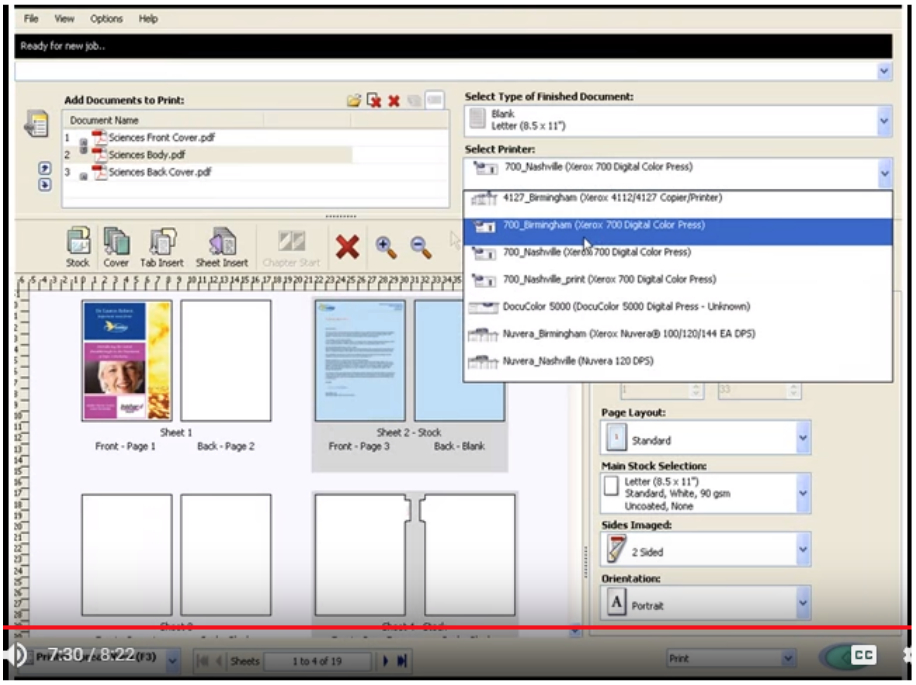
165. In addition, Xerox FreeFlow stores data values that represent the "page view" attribute values of page 9 within a region in memory resident within a computer that executes instructions for Xerox FreeFlow (a page object representing a page attribute of one of said at least one page). In this fashion, modifications made to page 9 of the "Sciences Body" document on the main interface (e.g., via the page view GUI) will correspondingly adjust the appropriate page attribute values for the page in memory (said page object being associated with a third visual representation on said display). Moreover, modifications made to page 9 of the "Sciences Body" document will also correspondingly adjust the appropriate document attribute values for the "Sciences Body" document itself in memory (page object being capable of being associated with said first document object). For instance, as shown below, page 9 can be annotated in order for the page to have special attention drawn to it relative to other pages included within the "Sciences Body" document. Accordingly, data included in the annotation will (1) adjust the appropriate page attribute values for page 9 in memory and (2) adjust the appropriate document attribute values for the "Sciences Body" document itself in memory.



Ex. 35 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print")).

166. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox FreeFlow includes one or more input processing software modules (a first input device) that receives input to associate a "job setup" GUI object with a GUI object for a particular document, along with their respective data values stored in memory (selectively associating at least two of said first, second and third visual representations).

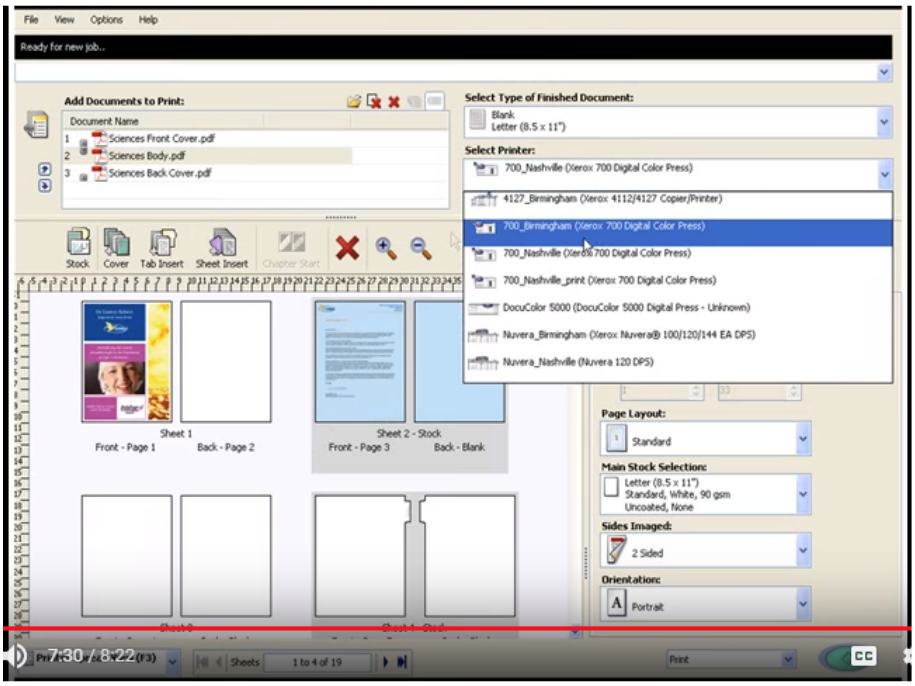
167. As shown in the figure below, Xerox FreeFlow associates at least two of said first, second and third visual representations when its input processing software modules assist in the production of a printed document via the main interface. For instance, as depicted below, input processing software modules process a selected printer, which correspondingly associates the "job setup" GUI object with the selectable .PDF GUI for the "Sciences Body" document along with their respective data values stored in memory.



Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

168. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox FreeFlow displays a document GUI object (the first visual representation on said display), the selectable "job setup" GUI tab (the second visual representation on said display), and the selectable "page view" GUI object (the third visual representation on said display) at the same time within the same main interface (association of said first, second and third visual representations) when a print job is set to be executed. As a result, Xerox FreeFlow associates the respective objects of the document, at least one page, and the job setup when it prints the document based on the values set within the GUIs of the document, at least one page, and the job setup.

169. As shown in the figure below, Xerox FreeFlow associates the first, second and third visual representations when a print job for a document (e.g., "Sciences Body ") is set to be executed. For instance, when a print job is set to be executed, Xerox FreeFlow displays the document's GUI object (the first visual representation on said display), the selectable "job setup" GUI tab (the second visual representation on said display), and the selectable "page view" GUI object (the third visual representation on said display) at the same time within the same main interface. Xerox FreeFlow associates the respective objects when it displays the respective data values that represent the "page view" attribute values, the document attribute values, and the "job setup" data values which are stored in memory at the time the print job is set to be executed. In this fashion, Xerox FreeFlow will use identifiers (e.g., document IDs, page IDs) stored in a database or memory structure to retrieve the aforementioned values.



Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

170. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[f]. For example, and without limitation, Xerox FreeFlow performs substantially the same function in substantially the same way and achieves substantially the same result at least because it generates a display in which data values associated with the underlying objects of a document, the document's job ticket, and at least one page of the document are displayed at the same time within the same display.

171. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

172. Defendant's infringement of the '314 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT IV
(Direct Infringement of the '756 Patent pursuant to 35 U.S.C. § 271(a))

173. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

174. Defendant has infringed and continues to infringe one or more claims of the '756 Patent in violation of 35 U.S.C. § 271(a).

175. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

176. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

177. Defendant's infringement includes the manufacture, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox FreeFlow.

178. Claim 1 of the '756 Patent is recited below:

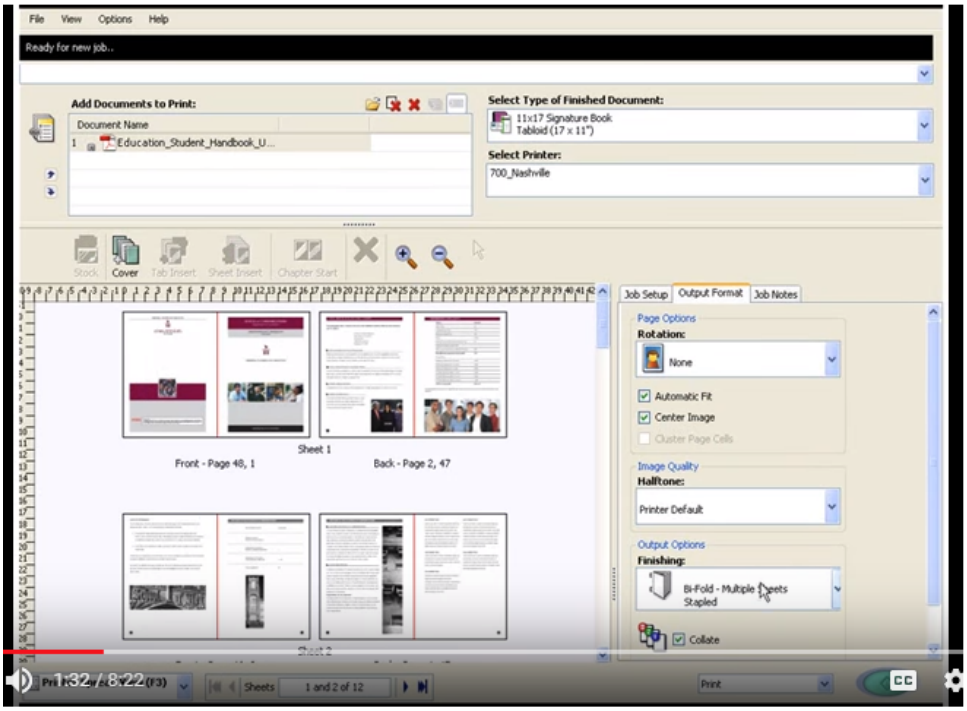
> An interface, implemented in a computer, for representing and controlling a production printing workflow comprising:
>
> 1[a] a display;
>
> 1[b] a first document object representing a document, said document further comprising content and formatting, said formatting defining at least one page in said document, said first document object being associated with a first visual representation on said display;
>
> 1[c] a document ticket object representing global document attributes, said document ticket object being associated with a second visual representation on said display and capable of being associated with said first document object;
>
> 1[d] a page object representing a page attribute of one of said at least one page, said page object being associated with a third visual representation on said display and capable of being associated with said first document object; and
>
> 1[e] a first user input device for selectively associating at least two of said first, second and third visual representations;
>
> 1[f] a second user input device for creating said page object, said second user input device operative to allow selection of said page attribute, setting of a value of said page attribute and selection of one or more of said at least one page in said document to apply said page attribute to wherein upon application, one or more of said page objects are created and associated with each of said one or more of said at least one page and said corresponding document object;
>
> 1[g] wherein association of said first, second and third visual representations results in association of said respective objects;
>
> 1[h] and further wherein said applied page attribute is visually represented on a visual representation of said one or more of said at least one page.

179. As one example, the Xerox FreeFlow meets the limitations of claim 1 of the '756

Patent for at least the reasons described below.

180. In general and as explained below, the limitations of claim 1 are satisfied for at least the following reasons. Xerox FreeFlow includes a graphical user interface ("GUI") that displays (represents) a document, and includes at least one page, and print job details in order to produce a printed document (a production workflow). The GUI also enables adjusting values using GUI objects displayed on the GUI to produce the printed document in a desirable and efficient manner (control the production printing workflow). Xerox FreeFlow is also configured to be rendered to cathode ray tube ("CRT") or liquid crystal display ("LCD") monitors (a display).

181. As shown in the figure below, Xerox FreeFlow includes an interface and instructions that generate graphics data to render a GUI to a display. As depicted below, the main GUI represents a production printing workflow because it displays a document (e.g., the document titled "Education_Student_Handbook_U…") that includes at least one page (e.g., page 2, page 48) and print job details (e.g., details included in the "job setup" tab) that are used to produce at least one printed document. The main GUI interface controls the production printing workflow because at least one page of a document, and print job each include their own respective GUI objects that are displayed within the main GUI and include adjustable values.



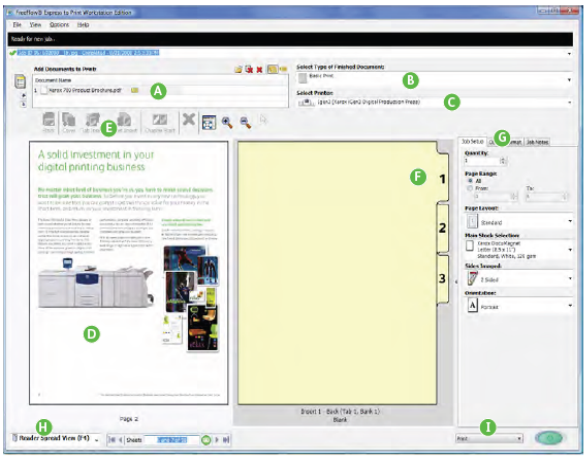
Ex. 32 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

182. As shown below, Xerox FreeFlow includes built-in templates for repeated jobs and also includes the functionality to build a book with tabs, covers, insertions, and binding, all within the main GUI.

It adds up to an easier workflow—right from the start.

You can install Express to Print on your Windows® computer yourself—there's no complicated programming. And because it doesn't reside on a server, it doesn't tie up resources needed to process and RIP your jobs. Created to work exclusively with your Xerox® digital print engines, Express to Print will boost your color and monochrome workflow productivity.

The quick and easy-to-use prepress tool.



A **Active Jobs.** Open native file formats and automatically convert to PDF; join multiple files into one.

B **Automation Templates.** Select from 50 built-in templates (multi-up, signature books, etc.) that automatically apply imposition and finishing options to your job.

C **Destination Printer.** Connect to all of your Xerox® digital printers, then choose which one you want to print to.

D **Interactive Visual Interface.** Dynamically preview your jobs as you build them.

E **Preparation Icons.** Using easily identifiable icons, click to add covers, stocks, tabs, inserts, watermarks, and page numbers—your job will automatically update in the visual interface.

F **Tab Customization.** Create labeled tabs quickly and easily with formatting and style features that automatically embed information into the job ticket.

G **Job Ticketing Selection.** Select printing and finishing parameters or add special job notes/banner messages.

H **Preview Options.** Select to preview by page, printer spreads, or reader spreads.

I **Print.** Choose to print, save at printer, or print to file.

Seeing is believing.

Use Express to Print's built-in templates to streamline a repeated job like business cards. Or create your own customized templates for other labor-intensive applications. Build a book with tabs, covers, insertions, and binding—all through Express to Print's easy-to-use visual interface. Whatever jobs you print today, or want to print tomorrow, you'll see how Express to Print makes your workflow smoother and faster.

Discover how you can move more jobs through your shop so you can be more productive every day. For a free demo, contact your Xerox representative. For more information, visit our website at www.xerox.com and enter keyword "Express to Print."

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 3).

183. Claim limitation 1[a] is satisfied for at least the following reasons. As shown in the table below, Xerox FreeFlow hardware specifications require, at a minimum, the use of either CRT or LCD monitors (a display).

Xerox® FreeFlow® Express to Print Specifications

Hardware Components

Minimum Requirements:

- Processor: Intel® Core Duo 2.0 GHz or better, or equivalent AMD Processor
- System Memory: 2 GB
- Hard Drive Capacity: 80 GB SATA 7200 RPM
- Video Capability: Video Controller (AGP or PCI-based) with 128 MB RAM
- Ethernet Capability: 100/1000 MB/sec
- Display: CRT or LCD Monitor
- Input Devices: Keyboard and Mouse
- Peripheral Devices: DVD Drive

Software Components

Supported Operating Systems:

- Microsoft® Windows® XP Professional (32-bit) with Service Pack 3
- Microsoft® Windows® 7 Professional or Ultimate (32-bit)

Optional Application Software Supported:

- Microsoft® Office 2003 (Word, Excel®, PowerPoint®, and Publisher)
- Microsoft® Office 2007 (Word, Excel®, PowerPoint®, and Publisher)
- Adobe® Acrobat® Standard 9.3
- Adobe® Acrobat® Professional 9.3

Supported Image File Formats:

- TIFF
- JPEG
- PostScript®
- EPS
- RDO
- Adobe® PDF
- Microsoft® Office (Word, PowerPoint®, Excel®, and Publisher)*

*Requires optional MS Office 2003 or 2007 software.

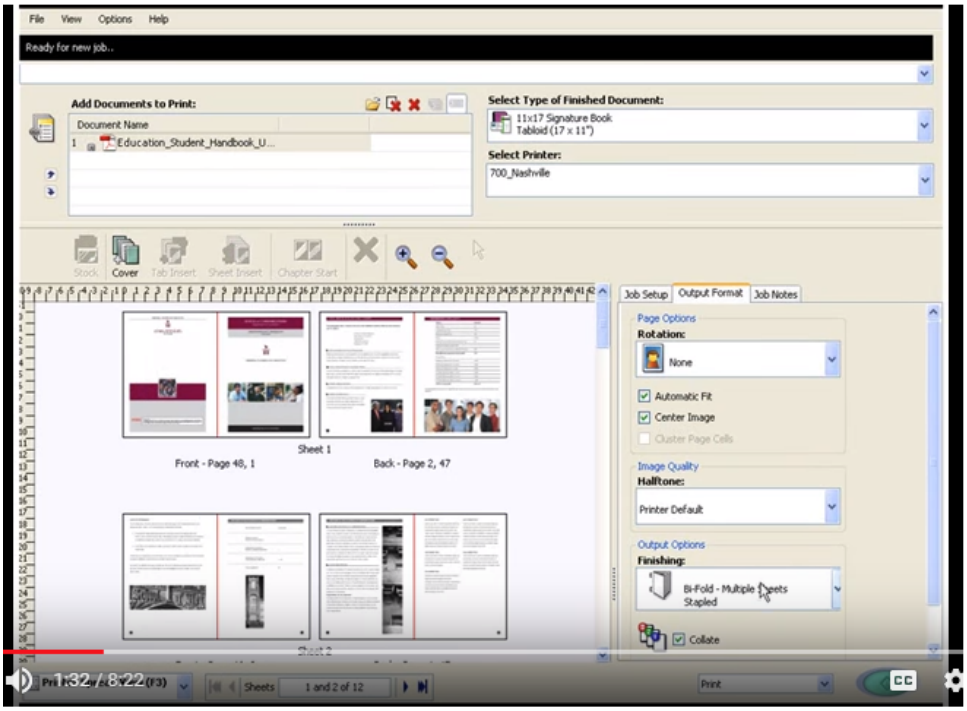
Supported Printers

For a complete list of supported printers, please visit www.xerox.com/freeflow

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 4).

184. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox FreeFlow stores data values, that represent a document, within a region in memory resident within a computer that executes Xerox FreeFlow (a first document object representing a document). Xerox FreeFlow also generates graphics data to render selectable GUI objects within a main interface (a first visual representation on said display). Documents launched within Xerox FreeFlow include text and/or image data (content) displayed on the main interface that can be adjusted based in-part on selectable options (said formatting defining at least one page in said document). Modifications made to documents on the main interface correspondingly adjust appropriate document attribute values, for a given document, that are stored in memory (said first document object being associated with a first visual representation on said display).

185. As shown in the figure below, Xerox FreeFlow generates graphics data to render the document "Education_Student_Handbook_U…" as a selectable .PDF GUI object (a first visual representation on said display) within the main interface. Furthermore, as depicted below, at least one page of the document "Education_Student_Handbook_U…" (e.g., page 2, page 48) includes text and/or image data (content). Xerox FreeFlow® formats at least one page (e.g., page 2, page 48) of the document "Education_Student_Handbook_U…" when it defines a selectable "rotation" option, a selectable "automatic fit" option, and/or a selectable "center image" option for the page (said formatting defining at least one page in said document).



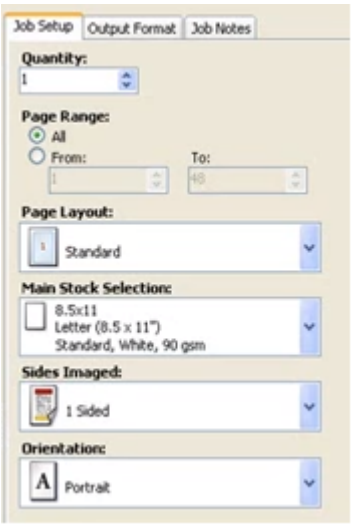
Ex. 32 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

186. Xerox FreeFlow stores data values that represent the "Education_Student_Handbook_U…"document (e.g., document attribute values) within a region in memory resident within a computer that executes instructions for Xerox FreeFlow® (a first document object representing a document). In this fashion, modifications made to the "Education_Student_Handbook_U…"document on the main interface will correspondingly adjust the appropriate document attribute values for the document stored in memory (said first document object being associated with a first visual representation on said display).

187. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox FreeFlow stores data values that represent "job setup" data within a region in memory resident within a computer that executes Xerox FreeFlow (a document ticket object). The job setup data includes document attribute data that can be defined for all pages of a given document (global document attributes). In this manner, Xerox FreeFlow generates graphics data to

render a selectable "job setup" GUI tab (a second visual representation on said display) that displays job setup data for the document within the main interface. Modifications made to values displayed in the job setup GUI tab correspondingly adjust the appropriate data values stored in memory (said document ticket object being associated with a second visual representation on said display). Moreover, modifications made to values displayed in the job setup GUI tab will also correspondingly adjust the appropriate document attribute values, stored in memory, for the document (document ticket object being capable of being associated with said first document object).

188. As shown in the figure below, Xerox FreeFlow includes instructions that generate graphics data to render a selectable "job setup" GUI tab (a second visual representation on said display) that displays job details data for the "Education_Student_Handbook_U…" document within the main interface. As depicted below, the "job setup" GUI tab includes global document attributes that define a "standard" page layout, a "1 sided" print mode, and a "portrait" orientation for all pages of the "Education_Student_Handbook_U…" document (global document attributes).



Ex. 33 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

189. Xerox FreeFlow stores data values that represent the "job setup" data values within a region in memory resident within a computer that executes instructions for Xerox FreeFlow (a document ticket object representing global document attributes). In this fashion, modifications made to values displayed in the job setup GUI tab will correspondingly adjust the appropriate data values stored in memory (said document ticket object being associated with a second visual representation on said display). Moreover, modifications made to values displayed in the job setup GUI tab will also correspondingly adjust the appropriate document attribute values for the "Education_Student_Handbook_U " document stored in memory (document ticket object being capable of being associated with said first document object).

190. As shown in the figure below below, the job ticketing selection of the Xerox FreeFlow (document ticket object) includes the functionality to "select printing and finishing parameters or add special job notes/banner messages" for a particular document.

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 3).

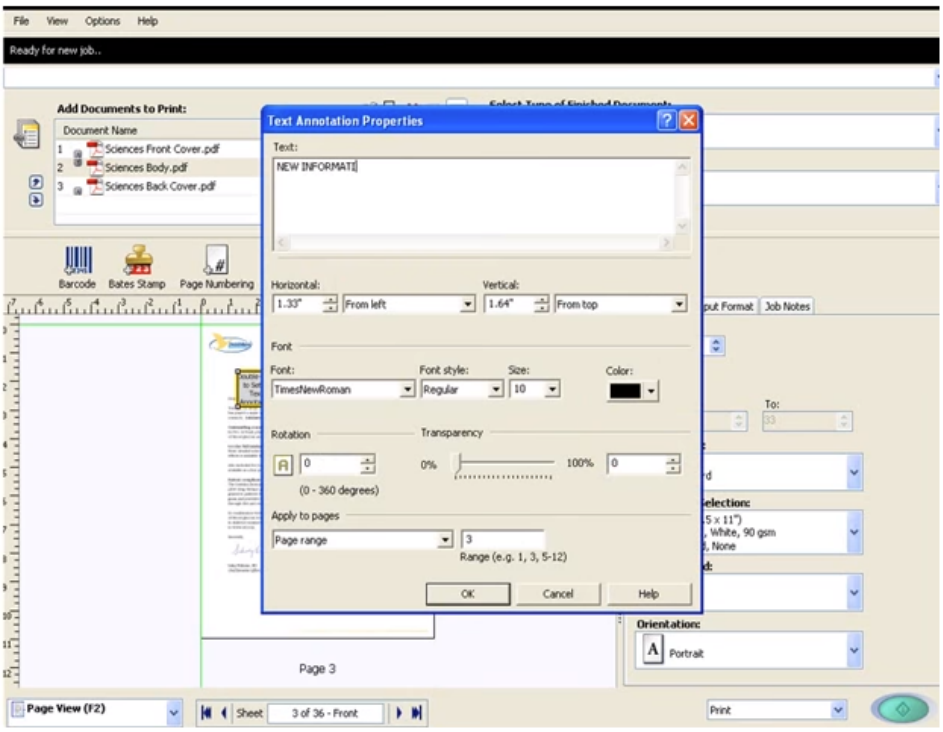
191. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox FreeFlow stores data values that represent "page view" attribute data within a region in memory resident within a computer that executes Xerox FreeFlow (a page object representing a page attribute of one of said at least one page). Also, Xerox FreeFlow generates graphics data to render a selectable "page view" GUI object (a third visual representation on said

display). As such, modifications made to a page via the page view GUI correspondingly adjusts the appropriate page attribute values for the page in memory (said page object being associated with a third visual representation on said display). Moreover, modifications made to the page via the page view GUI also correspondingly adjusts the appropriate document attribute values for the document in memory (page object being capable of being associated with said first document object). The manner in which Xerox FreeFlow meets this claim element is described in more detail below.

192. As shown in the figure below, Xerox FreeFlow generates graphics data to render a selectable "page view" GUI object (a third visual representation on said display) on a main GUI. As such, the selection of the "page view" GUI object presents a display of the page details of a particular page of the "Sciences Body" document (a first document object).

193. Xerox FreeFlow stores data values that represent the "page view" attribute values of a page within a region in memory resident within a computer that executes instructions for Xerox FreeFlow (a page object representing a page attribute of one of said at least one page). In this fashion, modifications made to a page of the "Sciences Body" document on the main interface (e.g., via the page view GUI) will correspondingly adjust the appropriate page attribute values for the page in memory (said page object being associated with a third visual representation on said display). Moreover, modifications made to a page of the "Sciences Body" document will also correspondingly adjust the appropriate document attribute values for the "Sciences Body" document itself in memory (page object being capable of being associated with said first document object). For instance, as shown below, the page can be annotated in order for the page to have special attention drawn to it relative to other pages included within the "Sciences Body" document. Accordingly, data included in the

annotation will (1) adjust the appropriate page attribute values for a page in memory and (2) adjust the appropriate document attribute values for the "Sciences Body" document itself in memory.

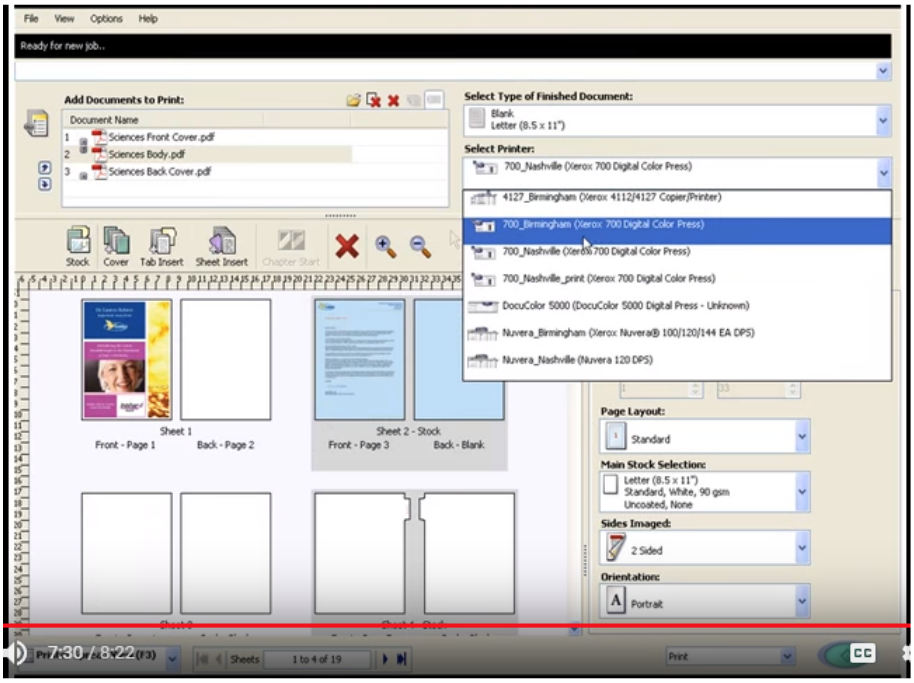


Ex. 35 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

194. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox FreeFlow includes an input processing software module (a first input device) that receives input to associate a "job setup" GUI object with a GUI object for a particular document, along with their respective data values stored in memory (selectively associating at least two of said first, second and third visual representations).

195. As shown in the figure below, Xerox FreeFlow associates at least two of said first, second and third visual representations when its input processing software modules assist in the production of a printed document provided via the main interface. For instance, as depicted below, input processing software modules process a selected printer which

correspondingly associates the "job setup" GUI object with the selectable .PDF GUI object for the "Sciences Body" document along with their respective data values stored in memory.

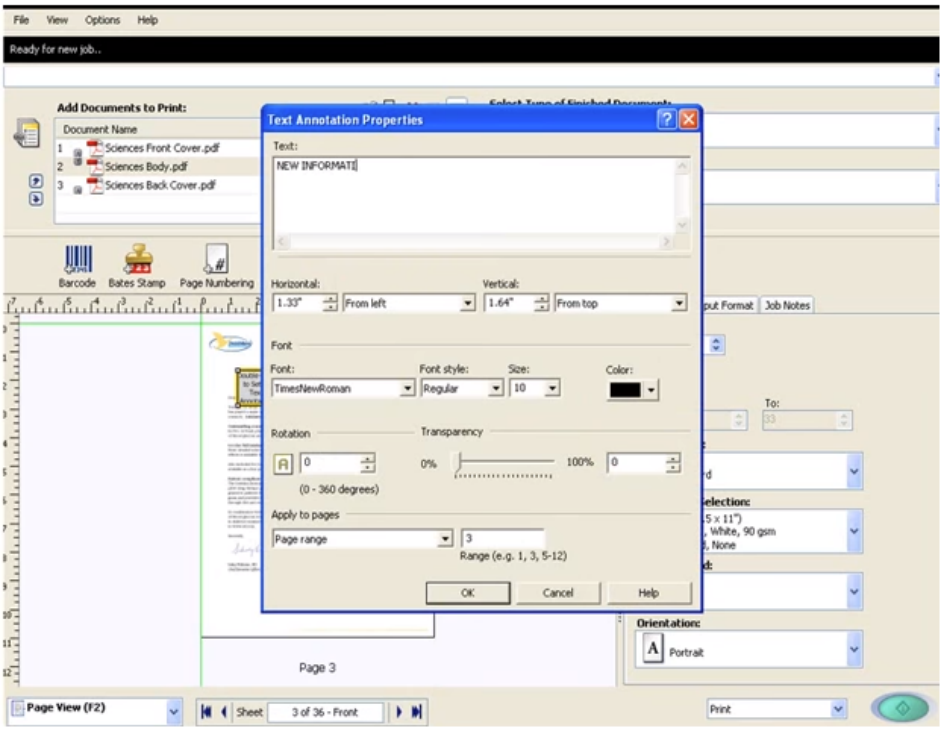


Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print")).

196. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox FreeFlow includes an input processing module (a second input device) that receives input to create "page view" attribute data within a region in memory resident within a computer that executes Xerox FreeFlow (page object). The input processing module enables selection of a value for the page view attribute which is then applied to one or more pages within a document to be printed. As a result, the input processing module of Xerox FreeFlow associates the respective objects of the document and at least one page of the document with page objects when it prints the document based on the values set for the page.

197. As shown in the figure below, Xerox FreeFlow creates page objects when it uses an input processing module that receives character values for a particular page of a document

(page attribute) that allows for selection of a particular page attribute displayed on a GUI (second user input device operative to allow selection of said page attribute, setting of a value of said page attribute and selection of one or more of said at least one page in said document to apply said page attribute).



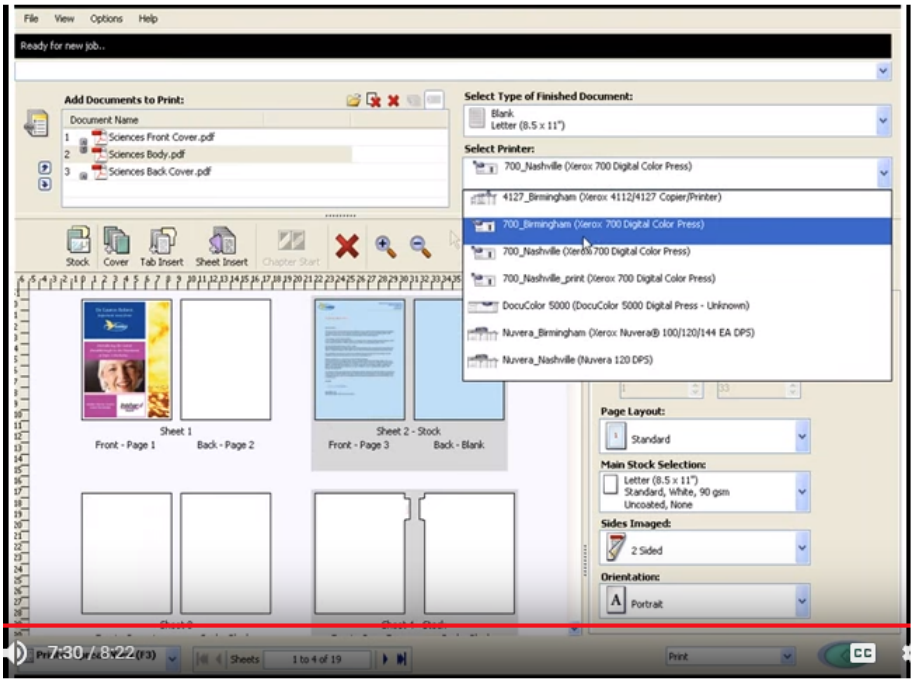
Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow®Express to Print)).

198. Xerox FreeFlow stores data values that represent the "page view" attribute values of the page within a region in memory resident within a computer that executes Xerox FreeFlow. In this fashion, these values, stored in memory, are linked to the page and document that includes the page (wherein upon application, one or more of said page objects are created and associated with each of said one or more of said at least one page and said corresponding document object).

199. Claim limitation 1[g] is satisfied for at least the following reasons. Xerox FreeFlow displays the document GUI object (the first visual representation on said display),

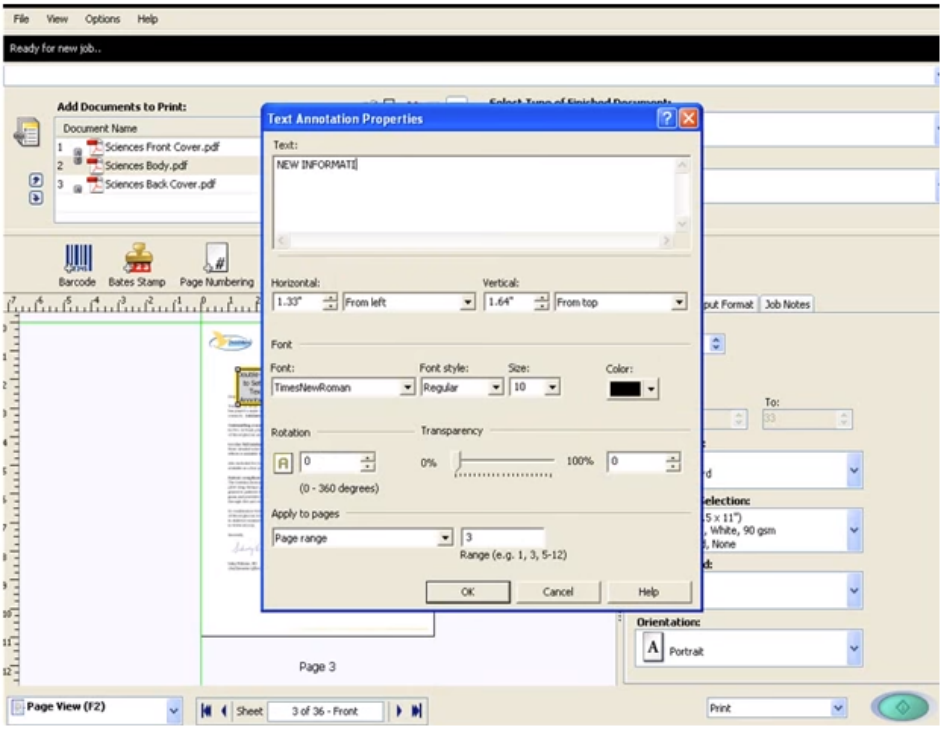
the selectable "job setup" GUI tab (the second visual representation on said display), and the selectable "page view" GUI object (the third visual representation on said display) at the same time within the same main interface (association of said first, second and third visual representations) when a print job is set to be executed. As a result, Xerox FreeFlow associates the respective objects of the document, at least one page, and the job setup when it prints the document based on the values set within the GUIs of the document, at least one page, and the job setup.

200. As shown in the figure below, Xerox FreeFlow associates said first, second and third visual representations when a print job for a document (e.g., "Sciences Body ") is set to be executed . For instance, when a print job is set to be executed, Xerox FreeFlow displays the document's GUI object (the first visual representation on said display), the selectable "job setup" GUI tab (the second visual representation on said display), and the selectable "page view" GUI object (the third visual representation on said display) at the same time within the same main interface. As shown below, Xerox FreeFlow associates the respective objects when it displays the respective data values that represent the "page view" attribute values, the document attribute values, and the "job setup" data values which are stored in memory at the time the print job is set to be executed. In this fashion, Xerox FreeFlow will use identifiers (e.g., document IDs, page IDs) stored in a database or memory structure to retrieve the aforementioned values.



Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow® Express to Print)).

201. Claim limitation 1[h] is satisfied for at least the following reasons. Xerox FreeFlow meets the recited claim language when it generates graphics data to render a GUI object that displays page attribute values of a page. As shown in the figure below, applied page attribute values are displayed by Xerox FreeFlow when it displays a page view of a particular page.



Ex. 36 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

202. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[g]. For example, and without limitation, Xerox FreeFlow performs substantially the same function in substantially the same way and achieves substantially the same result at least because it generates a display in which data values associated with the underlying objects of a document, the document's job ticket, and at least one page of the document are displayed at the same time within the same display.

203. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

204. Defendant's infringement of the '756 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT V
(Direct Infringement of the '974 Patent pursuant to 35 U.S.C. § 271(a))

205. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

206. Defendant has infringed and continues to infringe one or more claims of the '974 Patent in violation of 35 U.S.C. § 271(a).

207. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

208. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

209. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox FreeFlow, including FreeFlow used alone, or in conjunction with other products including at least Xerox FreeFlow Core and Xerox FreeFlow Express to Print.

210. Claim 1 of the '974 Patent is recited below:

> A method for providing production printing instructions relating to a printed end document to a job preparation station, wherein the printed end document comprises a plurality of documents in a predefined order, the plurality of documents each comprising content and document formatting, the method comprising:
>
> 1[a] receiving the plurality of documents in electronic format from a job submission station operator, and
>
> 1[b] transmitting the documents in electronic format to a computer;
>
> 1[c] placing said plurality of documents into an electronic folder in the computer;

1[d] arranging the plurality of documents in said folder in the order the documents are to be printed in the printed end document;

1[e] said computer automatically converting the plurality of documents into a ready for printer format and merging the plurality of documents together to create a single document in said ready for printer format where the plurality of documents comprise a main portion and at least one exception page;

1[f] delaying the printing of the main portion at a production device associated with the single document, while the at least one exception page is printed at an alternate output device;

1[g] receiving at the production device the at least one exception page from the alternate output device;

1[h] printing at the production device the main portion and where the production device collates the at least one exception page with the main portion; and

1[i] said computer automatically creating an electronic job ticket providing global attributes for the printed end document.

211. As one example, Xerox FreeFlow meets the limitations of claim 1 of the '974 Patent for at least the reasons described below.

212. In general and as explained below, the limitations of claim 1 are satisfied because Xerox FreeFlow provides a method that performs steps by production printers and finishers. The method performed by Xerox FreeFlow produces a printed end document from multiple documents received from, for example, "hot folders" and/or documents that are dragged and dropped into graphical user interface ("GUI") locations recognized by Xerox FreeFlow. Documents processed by Xerox FreeFlow using the method include text and/or image data that can be formatted in accordance with certain preferences.

213. As shown in the excerpt below, Xerox FreeFlow Core performs a method when it produces printed end documents that comprise a plurality of documents in a predefined order when it receives multiple documents, such as .PDF documents, that are dragged and dropped from their stored locations on a file system into a "hot folder" or other locations recognizable to Xerox FreeFlow.

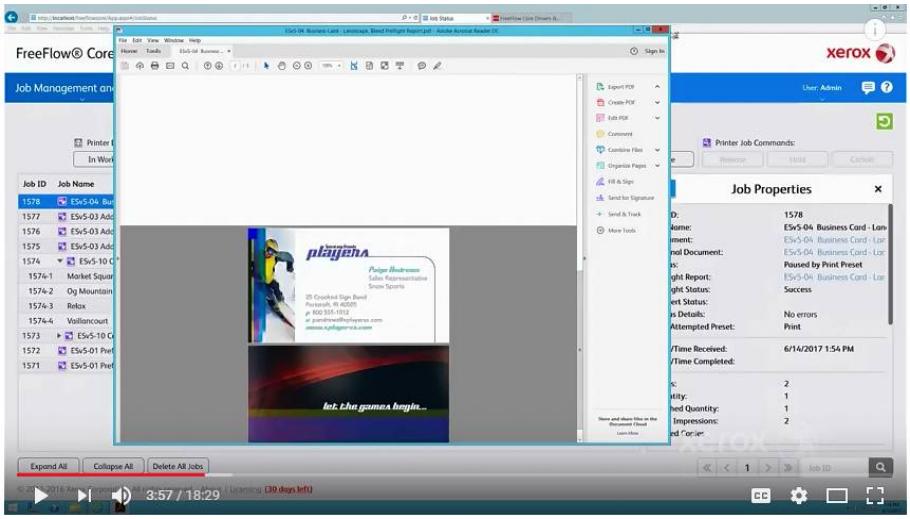
In combination with the Versant and Plockmatic hardware, the IntegratedPLUS Finishing software oversees jobs from start to finish for a fully automated booklet workflow. It all starts with Xerox® FreeFlow® Core. It automates all prepress steps like imposition and preflight as well as coordinating the printer and production finisher as a single unit—all without any operator intervention.

At prepress, either hot folders or a Web-to-print portal can be used to enter jobs into the system. PDF files can be dragged and dropped into a hot folder and the system will auto-select the stock size and make the adjustments to the stitch head and trimmer to match binding and trimming instructions including bleeds, cover insertions and folding. Press sheets then pass directly from the printer to the booklet maker, along with the JDF data required for automatic finishing setup. Other than loading paper and unloading booklets, the operator is free to take care of other tasks and let the IntegratedPLUS Finishing Solution handle the details from start to finish.

Ex. 37 (One-Click Xerox IntegratedPLUS Finishing Solution.pdf at page 1).

214. As show in the figure below, documents processed by Xerox FreeFlow using the method include content and document formatting because the documents include textual and/or

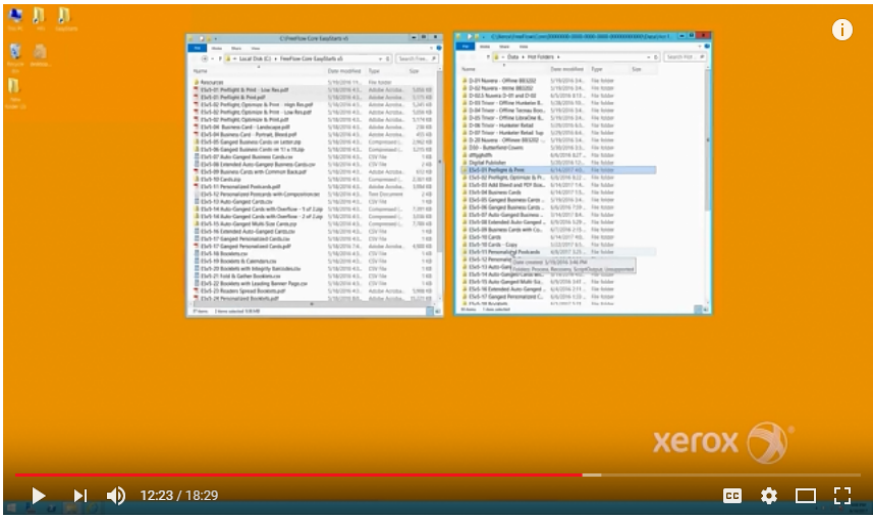
image data that have a default format.



Ex. 38 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

215. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox FreeFlow includes software receiver components that receive electronic copies of documents, from computer memory. These receiver components transmit data to various hardware and/or software components of the computer system in order to produce a document.

216. As shown in the figure below, Xerox FreeFlow includes software components that act as a receiver when it receives electronic versions of documents from computer memory (e.g., hard disk memory, random-access memory ("RAM"), dynamic random-access memory ("DRAM"), solid state drive(s) ("SSD"), and the like) in order to process a print job. The documents are provided to the receiver in an electronic format (e.g., .PDF, .doc) from the computer system (job submission station operator).



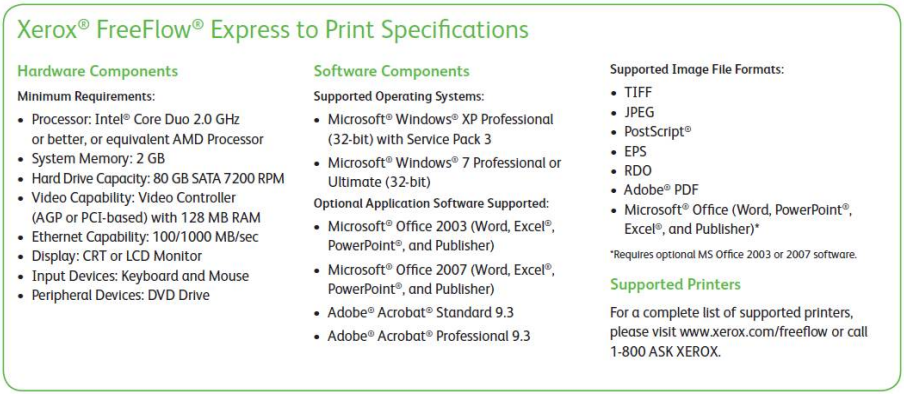
Ex. 39 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

217. As shown in the table below, the receiver components of Xerox FreeFlow store received documents in computer memory.

Minimum System Requirements		
Hardware Components	**Basic**	**High Performance**
Processor	Intel Core i7 Processor, 3.3 GHz or better	Intel Xeon Processor E5, 2.5 GHz or better (4 or more Cores)
System Memory	8 GB	16 GB
Hard Drive **Note** Minimum of 25% free space available at all times.	500 GB SATA Hard Disk Drive (HDD) (single disk partition)	500 GB, SATA Solid State Drive (SSD), 3Gbps (RAID 5) **Note** Non-RAID configurations may be used as long as full backups are performed.

Ex. 40 (Xerox_FreeFlowCore_CustomerExpectations.pdf at page 14).

218. As shown in the figures below, Xerox FreeFlow Express to Print includes software components to perform their respective functions in a manner that enables Xerox FreeFlow to process document print jobs.



Xerox® FreeFlow® Express to Print Specifications

Hardware Components

Minimum Requirements:

- Processor: Intel® Core Duo 2.0 GHz or better, or equivalent AMD Processor
- System Memory: 2 GB
- Hard Drive Capacity: 80 GB SATA 7200 RPM
- Video Capability: Video Controller (AGP or PCI-based) with 128 MB RAM
- Ethernet Capability: 100/1000 MB/sec
- Display: CRT or LCD Monitor
- Input Devices: Keyboard and Mouse
- Peripheral Devices: DVD Drive

Software Components

Supported Operating Systems:

- Microsoft® Windows® XP Professional (32-bit) with Service Pack 3
- Microsoft® Windows® 7 Professional or Ultimate (32-bit)

Optional Application Software Supported:

- Microsoft® Office 2003 (Word, Excel®, PowerPoint®, and Publisher)
- Microsoft® Office 2007 (Word, Excel®, PowerPoint®, and Publisher)
- Adobe® Acrobat® Standard 9.3
- Adobe® Acrobat® Professional 9.3

Supported Image File Formats:

- TIFF
- JPEG
- PostScript®
- EPS
- RDO
- Adobe® PDF
- Microsoft® Office (Word, PowerPoint®, Excel®, and Publisher)*

*Requires optional MS Office 2003 or 2007 software.

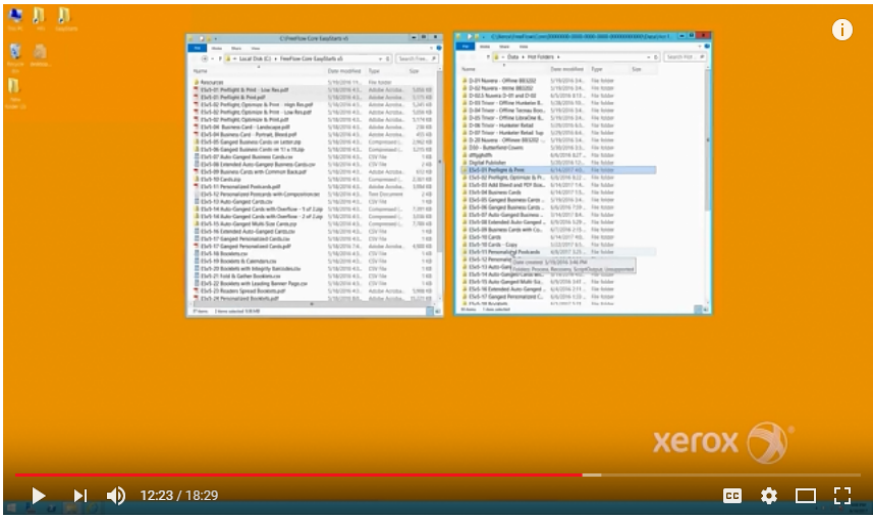
Supported Printers

For a complete list of supported printers, please visit www.xerox.com/freeflow or call 1-800 ASK XEROX.

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 4).

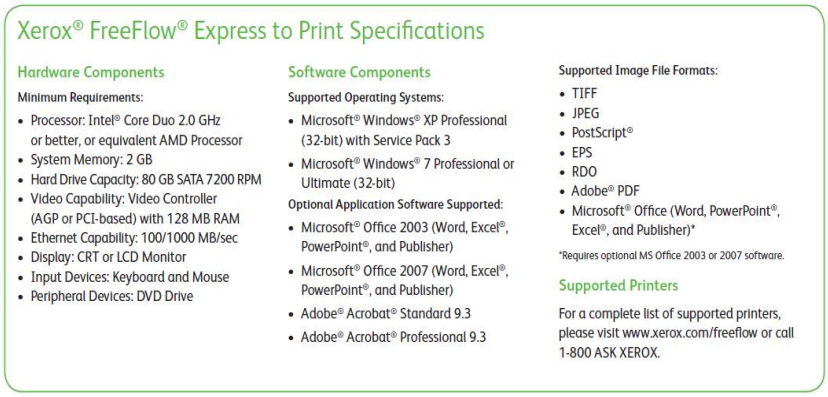
219. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox FreeFlow includes software and hardware receiver components that transmit data to various hardware and/or software components of the computer system in order to produce a document.

220. As shown in the figure below, the receiver components of Xerox FreeFlow transmit the documents received in, for example, a "hot folder" to other components of a computer system. In this fashion, the receiver components transmit data associated with documents to other hardware and software computer system components utilized by Xerox FreeFlow in order to produce a document.



Ex. 39 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

221. As shown in the figure below, Xerox FreeFlow Express to Print includes software components that act as a receiver that are disposed at the computer system when it receives electronic versions of documents from computer memory (e.g., hard disk memory, random-access memory ("RAM"), dynamic random-access memory ("DRAM"), solid state drive(s) ("SSD"), and the like) in order to process a print job. The documents are provided to the receiver in an electronic format (e.g., .PDF, .doc) from the computer system (job submission station operator). In this fashion, the receiver components transmit data associated with documents to other hardware and software computer system components utilized by Xerox FreeFlow in order to produce a document.



Xerox® FreeFlow® Express to Print Specifications

Hardware Components

Minimum Requirements:

- Processor: Intel® Core Duo 2.0 GHz or better, or equivalent AMD Processor
- System Memory: 2 GB
- Hard Drive Capacity: 80 GB SATA 7200 RPM
- Video Capability: Video Controller (AGP or PCI-based) with 128 MB RAM
- Ethernet Capability: 100/1000 MB/sec
- Display: CRT or LCD Monitor
- Input Devices: Keyboard and Mouse
- Peripheral Devices: DVD Drive

Software Components

Supported Operating Systems:

- Microsoft® Windows® XP Professional (32-bit) with Service Pack 3
- Microsoft® Windows® 7 Professional or Ultimate (32-bit)

Optional Application Software Supported:

- Microsoft® Office 2003 (Word, Excel®, PowerPoint®, and Publisher)
- Microsoft® Office 2007 (Word, Excel®, PowerPoint®, and Publisher)
- Adobe® Acrobat® Standard 9.3
- Adobe® Acrobat® Professional 9.3

Supported Image File Formats:

- TIFF
- JPEG
- PostScript®
- EPS
- RDO
- Adobe® PDF
- Microsoft® Office (Word, PowerPoint®, Excel®, and Publisher)*

*Requires optional MS Office 2003 or 2007 software.

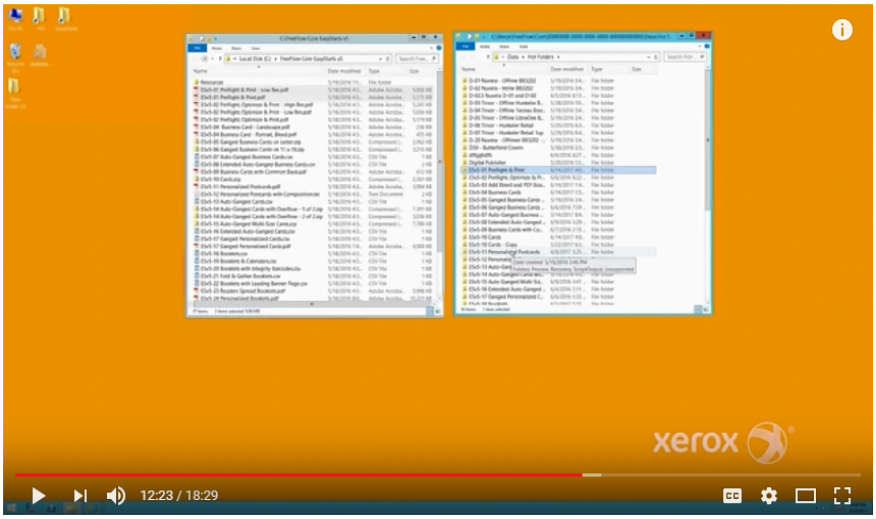
Supported Printers

For a complete list of supported printers, please visit www.xerox.com/freeflow or call 1-800 ASK XEROX.

Ex. 34 (Xerox FreeFlow Express to Print Brochure.pdf at page 4).

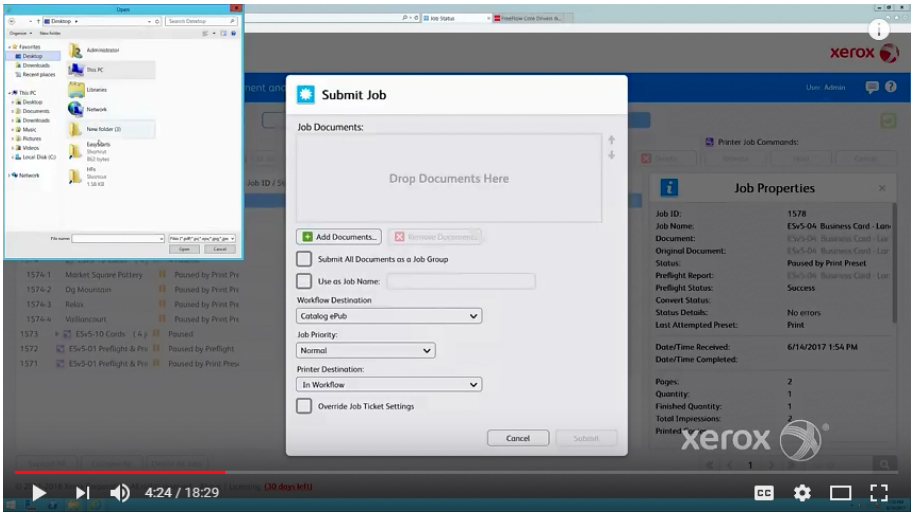
222. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox FreeFlow includes software components that place received documents within "hot folders" or other locations that are recognizable to Xerox FreeFlow in order to produce a document.

223. As shown in the figure below, Xerox FreeFlow receives instructions to place separate pages (documents) within an electronic folder such as a "hot folder." These documents can be "dragged and dropped" into the electronic folder based on instructions specified by a user (operator).



Ex. 39 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

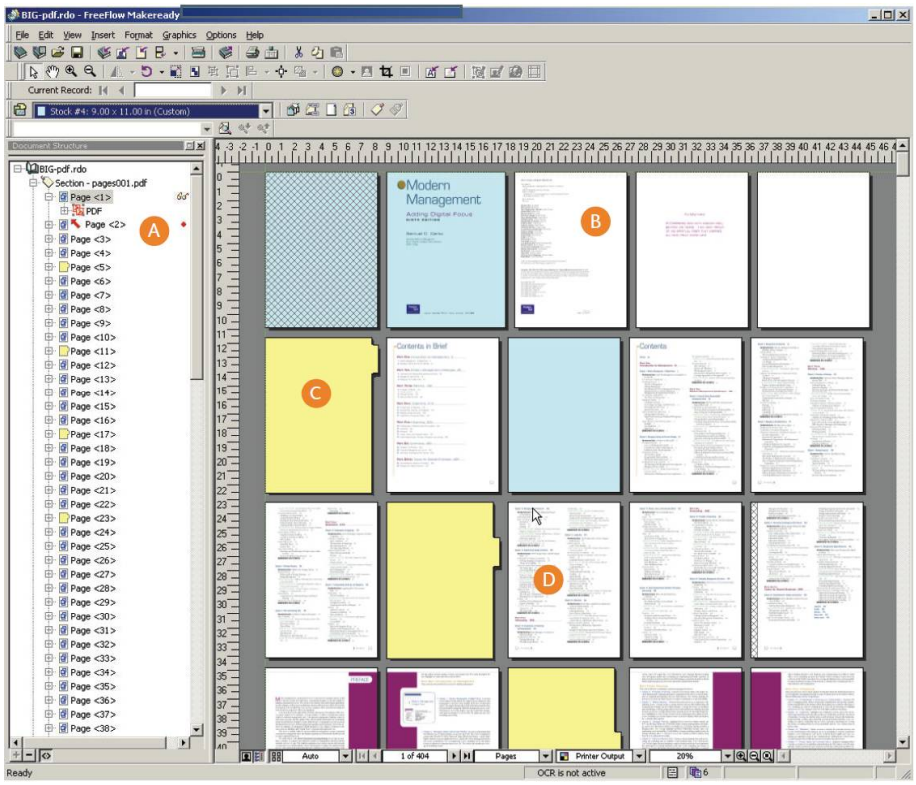
224. As shown in the figure below, Xerox FreeFlow receives instructions to place separate pages (documents) to form a new document via the "submit job" option in which files are dragged and dropped into an electronic folder.



Ex. 41 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

225. As shown in the figure below, Xerox FreeFlow Make Ready process provides instructions to place separate pages (documents) to form a new document (e.g., the "BIG-pdf.rdo" document). The pages are then all grouped and stored as a single document. The

resulting single file is then stored within a location (electronic folder) in a file-system (e.g., local file system or cloud-based file system). Xerox FreeFlow further defines a file format which contains both the data to be printed along with printer control instructions that can be directly interpreted by the internal processing engine of a printer or other form of hard copy output device in order to rasterize the data image onto the output media

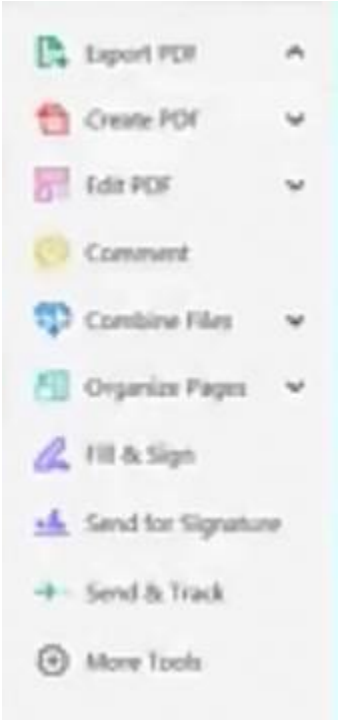


Ex. 42 (FreeFlow MakeReady.pdf at page 4).

226. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox FreeFlow arranges documents in the electronic folder in accordance with an order specified via a GUI.

227. As depicted in the figure below, Xerox FreeFlow Core enables individual documents to be re-arranged within the same resultant single document using the "organize pages" feature. A final arrangement can then be determined whereupon the resultant document

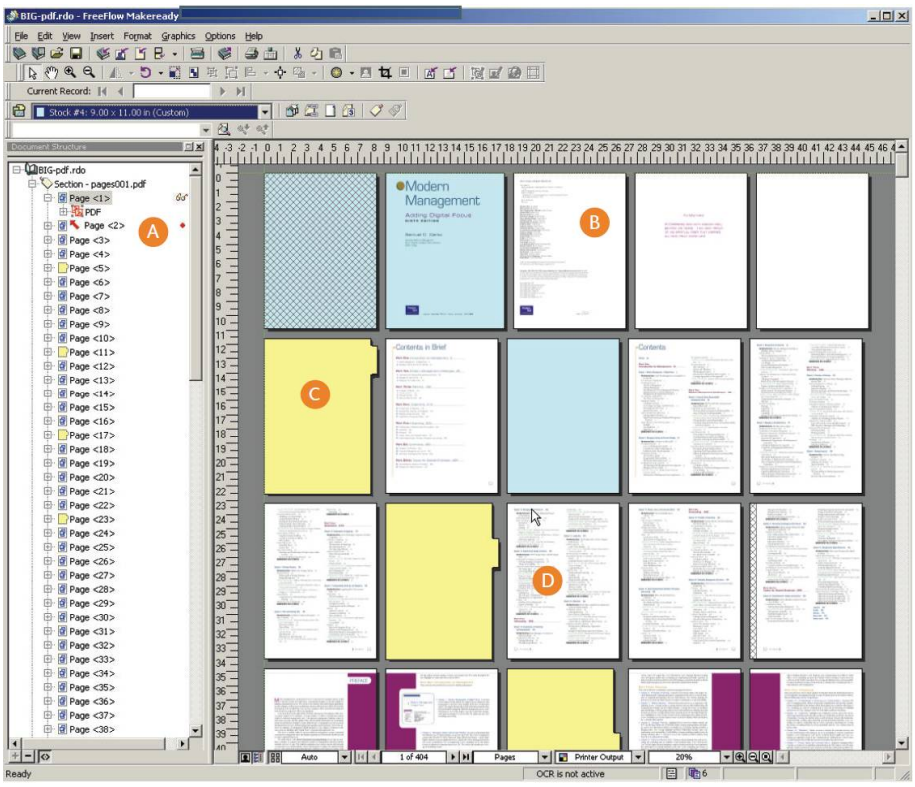
can be printed in accordance with the final arrangement (printed end document). Also, as shown below, Xerox FreeFlow merges the plurality of documents together to create a single document in said ready for printer format using features that, for example, combine files, export files in a particular format (e.g., PDF), and create files in a particular form (e.g., PDF).



Ex. 43 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

228. As shown in the figure below, Xerox FreeFlow Make Ready receives instructions to produce a final arrangement whereupon the resultant single document can be

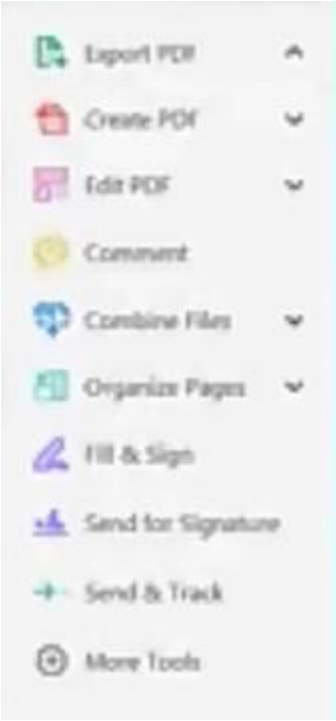
printed in accordance with the final arrangement (printed end document).



Ex. 42 (FreeFlow MakeReady.pdf at page 4).

229. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox FreeFlow merges the arranged documents into a single document in response to instructions received via a selection from the GUI and converts the documents into a ready for printer format by formatting the merged single document in accordance with a printer recognizable format. The documents used to produce the single document include a main portion and an exception portion that includes, for example, bates numbers, page numbers, watermarks, logos, tabs, different colored paper, images, or similar portions of a document that add value to a final printed end document. Both the main portion and exception portions can be combined to form the single document for print.

230. As depicted in the figure below, Xerox FreeFlow merges the plurality of documents together to create a single document in a ready for printer format using features that, for example, combine files, export files in a particular format (e.g., PDF), and create files in a particular form (e.g., PDF).



Ex. 43 (PDF of https://www.youtube.com/watch?v=GfjGxXHuof4&t=13s (Xerox Freeflow Core: Instructional Video Demonstration)).

231. As shown in the excerpt below, Xerox FreeFlow automatically converts the plurality of documents into a ready for printer format that is recognizable to a production print engine and/or an inline finisher.

When the Dual-Mode Sheet Feeder is attached directly to a Xerox® production print engine and an inline finisher, you can automatically switch between inline or offline workflows—no operator intervention is required.

The Dual-Mode Bourg Sheet Feeder (BSF) can also be used as input to an offline booklet maker. A handheld scanner is used to read a barcode from a job-specific banner sheet that prints and travels with the printed stacks. The barcode is used to retrieve JDF information required for finishing. This ensures that the finisher is automatically configured correctly for every job.

The Dual-Mode BSF works with the entire Xerox® production fleet of engines. It combines the benefits of an inline booklet maker (as configurations permit) with the convenience and cost effectiveness of a shared offline finisher.

Ex. 37 (Xerox IntegratedPlus Finishing Solution.pdf at page 6).

232. As shown in the excerpt below, Xerox FreeFlow utilizes FreeFlow Print Server technology to process both a main portion of a document produced by a printer and the exception portions (e.g., page numbers, watermarks, logos, tabs, different colored paper, images, and the like) of a document produced by an alternative output device, such as finishing equipment.

More Productivity – With Workflow Automation

The FreeFlow Print Server is tightly integrated with extended workflow solutions from Xerox to add value to your operations beyond the printer. For example, the Xerox® IntegratedPLUS Colour Management Solution can help automate your colour management processes and the Xerox® IntegratedPLUS Finishing Solution automates the programming and operation of your finishing equipment.

Ex. 44 (V21DS-01W.pdf at page 1).

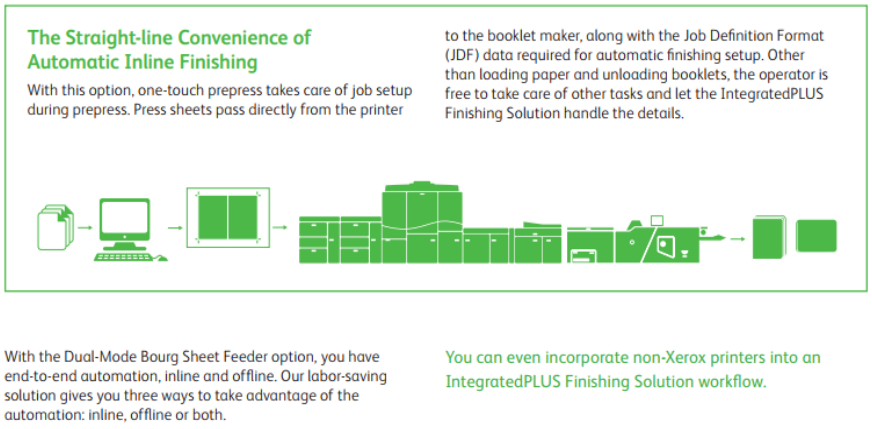
233. As shown in the excerpt below, Xerox FreeFlow produces exception pages that include different stock sizes, colors, side images, etc.

Exception Pages Pages within a job where special page characteristics are set. Exception Pages can be a different stock size or color, side imaged or other options available on FreeFlow® Print Server.

Ex. 45 (FreeFlow_OutputMgr_UserGuide.pdf at page 344).

234. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox FreeFlow communicates print job details to both production printers and finishers using data, such as JDF data, and coordinates functions performed by both a printer (production device) and a finisher (alternative device) in order to produce the printed document. For instance, Xerox FreeFlow performs procedures that delay the performance of the printer producing the main portion of a document, while the finisher produces the one or more exception pages. In this fashion, Xerox FreeFlow enables the printer to print the main portion of the document and also collate exception pages with the main portion.

235. As shown in the figure below, Xerox FreeFlow Core prints exception pages using an alternate output device, such as a booklet maker, to produce booklets using JDF data. Additionally, based on the excerpt below, Xerox FreeFlow can delay the printing of the main portion of a document at a production device while exception pages are printed at an alternate output device by sending instructions to the production printer and/or alternative printer (e.g., booklet maker).



Ex. 37 (Xerox IntegratedPLUS Finishing Solution.pdf at page 5).

236. Claim limitation 1[g] is satisfied for at least the following reasons. Xerox FreeFlow receives exception pages at the printer as explained below.

237. As shown in the figure below, Xerox FreeFlow sends instructions to a production device to perform finishing procedures for a printed document using exception pages (e.g., bates numbers, page numbers, watermarks, logos, tabs, different colored paper, images, and the like) received from a different device.

Collate

On the *Finishing* menu on the *Paper/Output Tab Overview*.

Select one of the following options to determine the order that pages are printed when you select to print multiple copies of a document:

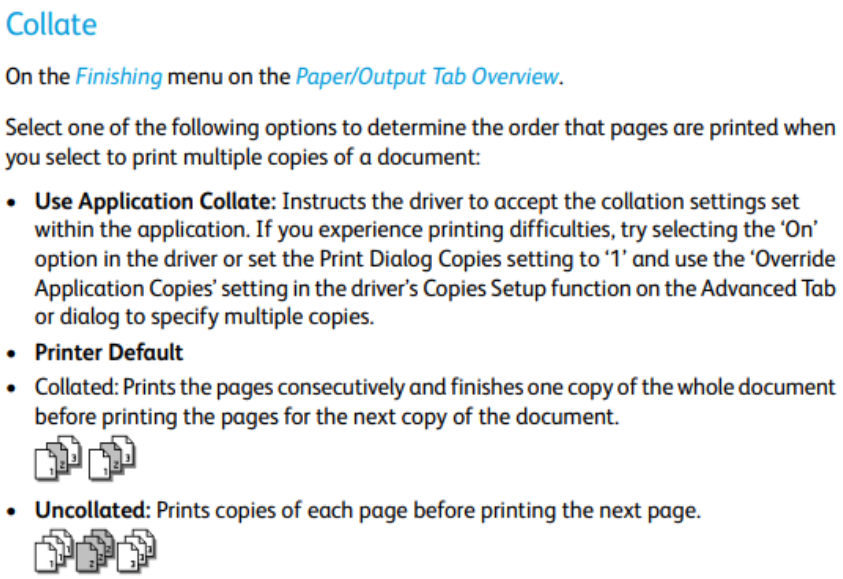
- **Use Application Collate:** Instructs the driver to accept the collation settings set within the application. If you experience printing difficulties, try selecting the 'On' option in the driver or set the Print Dialog Copies setting to '1' and use the 'Override Application Copies' setting in the driver's Copies Setup function on the Advanced Tab or dialog to specify multiple copies.
- **Printer Default**
- Collated: Prints the pages consecutively and finishes one copy of the whole document before printing the pages for the next copy of the document.

- **Uncollated:** Prints copies of each page before printing the next page.

Ex. 46 (Xerox FreeFlow Print Server-Help for the Xerox Global Print Driver.pdf at page 27).

238. Claim limitation 1[h] is satisfied for at least the following reasons. Xerox FreeFlow allows for printing the main portion of the document at the printer and also collating exception pages with the main portion of the document.

239. As shown in the figure below, Xerox FreeFlow sends instructions to a production device to print the main portion of the document. Instructions provided by Xerox FreeFlow enable the production device to collate exception pages with a main portion of the document.



Collate

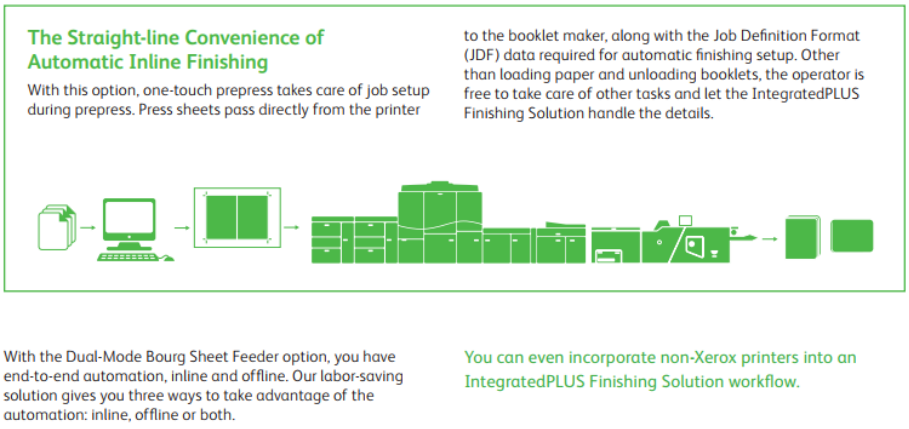
On the *Finishing* menu on the *Paper/Output Tab Overview*.

Select one of the following options to determine the order that pages are printed when you select to print multiple copies of a document:

- **Use Application Collate:** Instructs the driver to accept the collation settings set within the application. If you experience printing difficulties, try selecting the 'On' option in the driver or set the Print Dialog Copies setting to '1' and use the 'Override Application Copies' setting in the driver's Copies Setup function on the Advanced Tab or dialog to specify multiple copies.
- **Printer Default**
- Collated: Prints the pages consecutively and finishes one copy of the whole document before printing the pages for the next copy of the document.
- **Uncollated:** Prints copies of each page before printing the next page.

Ex. 46 (Xerox FreeFlow Print Server-Help for the Xerox Global Print Driver.pdf at page 27).

240. Claim limitation 1[i] is satisfied for at least the following reasons. Xerox FreeFlow creates job tickets that include global print details of a particular print job using JDF data. As shown in the figure below, Xerox FreeFlow creates job tickets include global print details through the use of JDF data.



Ex. 37 (Xerox IntegratedPLUS Finishing Solution.pdf at page 5).

241. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[h]. For example, and without limitation, Xerox FreeFlow performs substantially the same function in substantially the same way and achieves substantially the same result at least because it produces a printed end document based on a device responsible for producing exception portions of a document coordinating its functionality with a production device that produces main portions of the same document to produce the printed end document.

242. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

243. Defendant's infringement of the '974 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT VI
(Direct Infringement of the '285 Patent pursuant to 35 U.S.C. § 271(a))

244. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

245. Defendant has infringed and continues to infringe one or more claims of the '285 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

246. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

247. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

248. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 7800.

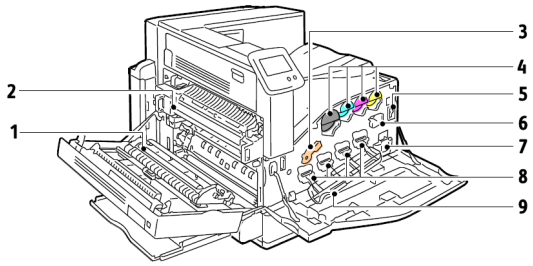
249. Claim 1 of the '285 Patent is recited below:

> A system with operator enabled maintenance comprising:
>
> 1[a] at least one computational element within said system
>
> 1[b] a plurality of operator replaceable component (ORC) devices within said system, each of said ORC devices having an expected life span;
>
> 1[c] a use mechanism coupled to each said computational element and said ORC devices, said use mechanism tracking use of at least one of said ORC devices using a predetermined parameter;
>
> 1[d] a comparison mechanism that compares use of said ORC devices to said expected life span; and
>
> 1[e] an operator alert mechanism responsive to said comparison mechanism to provide said operator alert when the result of said comparison satisfies a predetermined parameter representing at least one of said expected life spans where said expected life span for a single of said ORC devices is the shortest expected life span.

250. As one example, Xerox Phaser 7800 meets the limitations of claim 1 of the '285 Patent for at least the reasons described below.

251. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 7800 is a multifunction electrographic color printer, including operator replaceable parts, such as a transfer roller, fuser, toner cartridges, transfer belt cleaner, waste cartridge, imaging units, that allow for operator enabled maintenance. As shown below, the routine maintenance items and the customer replaceable units of Xerox Phaser 7800 come with installation instructions for the operators to carry out maintenance:

Internal Components



1. Transfer Roller
2. Fuser
3. Imaging Unit Lock Lever
4. Toner Cartridges
5. Main Power Switch
6. Transfer Belt Cleaner
7. Waste Cartridge
8. Imaging Units
9. Imaging Unit Cover

Routine Maintenance Items

Routine maintenance items are printer parts that have a limited life and require periodic replacement. Replacements can be parts or kits. Routine maintenance items are typically customer replaceable.

Routine maintenance items for this printer include the following:

- Imaging Units (Cyan, Magenta, Yellow, and Black)
- Belt Cleaner
- Suction Filter
- Waste Cartridge

Note: Each routine maintenance item includes installation instructions.

Customer Replaceable Units

Customer replaceable units (CRUs) are printer parts that can be replaced without need for technical service intervention. These parts have longer rated lives than routine maintenance items.

Customer Replaceable Units for this printer include the following:

- 110 V Fuser for the Phaser 7800 Color Printer
- 220 V Fuser for the Phaser 7800 Color Printer
- Feed Roller Kit
- Transfer Roller

Note: Each customer replaceable unit includes installation instructions.

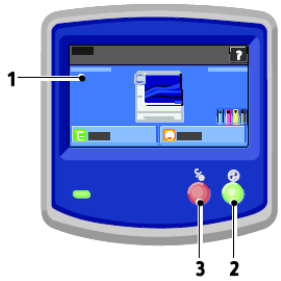
Ex. 47 (phaser_7800_user_manual.pdf at pp. 19 and 96).

252. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox Phaser 7800 includes at least one computational element, such as a control panel. The control panel consists of a touch screen and selectable buttons for controlling various operational features of the system, such as configuring power usage, initiating a pause or cancel function for a job, providing access to tools, and setup menus.

Control Panel

The control panel consists of a touch screen and buttons you press to control the functions available on the printer. The control panel:

- Displays the current operating status of the printer.
- Provides access to print features.
- Provides access to reference materials.
- Provides access to Tools and Setup menus.
- Provides access to Troubleshooting menus and videos.
- Prompts you to load paper, replace supplies, and clear jams.
- Displays errors and warnings.
- Plays event-driven videos.



1. **Touch Screen** displays information and provides access to printer functions.
2. **Power Saver** enters Sleep mode, and exits Low Power or Sleep mode.
3. **Pause** temporarily stops the current print job, allowing you to cancel or resume the job.

Ex. 47 (phaser_7800_user_manual.pdf at p. 19).

253. Claim 1[b] is satisfied for at least the following reasons. Xerox Phaser 7800 contains several ORC devices, each of the ORC devices having an expected life span. As shown below, Xerox Phaser 7800 system include ORC devices, such as customer replaceable units such as transfer rollers, fusers, toner cartridges, transfer belt cleaners, waste cartridges, and imaging units, that may be replaced by operators for carrying out routine maintenance.

Routine Maintenance Items

Routine maintenance items are printer parts that have a limited life and require periodic replacement. Replacements can be parts or kits. Routine maintenance items are typically customer replaceable.

Routine maintenance items for this printer include the following:

- Imaging Units (Cyan, Magenta, Yellow, and Black)
- Belt Cleaner
- Suction Filter
- Waste Cartridge

Note: Each routine maintenance item includes installation instructions.

Customer Replaceable Units

Customer replaceable units (CRUs) are printer parts that can be replaced without need for technical service intervention. These parts have longer rated lives than routine maintenance items.

Customer Replaceable Units for this printer include the following:

- 110 V Fuser for the Phaser 7800 Color Printer
- 220 V Fuser for the Phaser 7800 Color Printer
- Feed Roller Kit
- Transfer Roller

Note: Each customer replaceable unit includes installation instructions.

Ex. 47 (phaser_7800_user_manual.pdf at p. 96).

254. As shown below, each of the ORC devices, such as the CRU components, of Xerox Phaser 7800 has an expected life span (e.g., corresponding life counts). The general troubleshooting checklist of Xerox Phaser 7800 clearly instructs an operator to check life counts of the ORC devices before beginning troubleshooting operations.

General Troubleshooting Checklist

Before starting to troubleshoot, always check these items.

6. Check the printer's condition. Are there accumulations of dust at the air vents? Check the life counts of the CRU components.

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 139).

255. As another example, a list of the ORC devices with associated life counts is provided in Table 1 reproduced below.

Table 1 Service Diagnostics Routines

Test	Control Panel Display	Test Description
dc135 CRU/HFSI Read & Reset	• Y/M/C/KToner • Fuser • Belt Cleaner • Transfer Roller • Waste Cartridge • Y/M/C/K Imaging Unit • Transfer Belt • Staple Cartridge R1/R2/R3 • Suction Filter • Feed Roller 1/2/3/4/5 • Developer 1/2/3/4 • Punch Waste	Provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset: • Fuser • Accumulator (IBT) Belt • Transfer Roller • Developers • Belt Cleaner • Suction Filter • Feed Rollers

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 141).

256. As another example, service information related to the ORC devices, such as black toner, fuser, and belt cleaner, is provided based on remaining life information for each of the ORC devices as shown below.

dc135 CRU/HFSI Read & Reset

The dc135 CRU/HFSI routine provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset.

1. Access the Service Diagnostics Menu - Entering Service Diagnostics.
2. Touch **Service Information**.
3. Touch **dc135 CRU/HFSI Read & Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
   - Component Name
   - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components can be reset include:
   - Fuser
   - Belt Cleaner
   - Transfer Roller
   - Transfer Belt
   - Developer

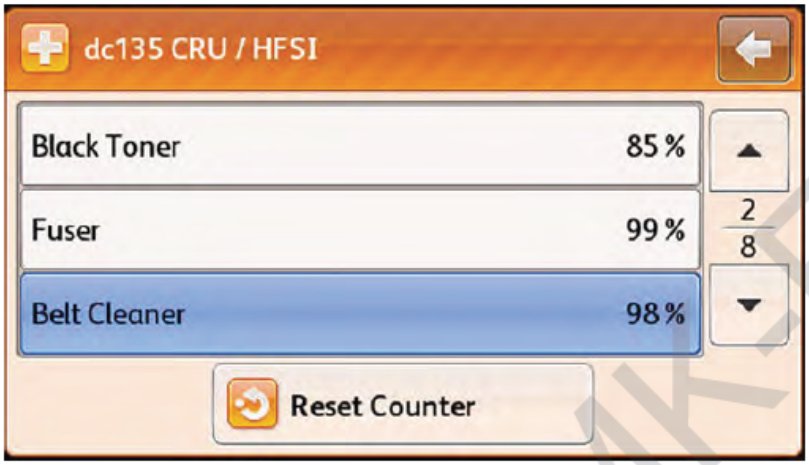


Figure 6 Selecting the Component

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 203).

257. Claim 1[c] is satisfied for at least the following reasons. Xerox Phaser 7800 include a use mechanism (e.g., a module for controlling service diagnostic routines implemented via a control panel and a touch-screen display) coupled to each computational element, such as a control panel, and each ORC device (e.g., transfer rollers, fusers, toner cartridges, transfer belt cleaners, waste cartridges, imaging units.).

258. For example, as shown below, Xerox Phaser 7800 includes a page counter for providing a page count for each incoming print job. The page counter enables use tracking for each of the ORC devices using a predetermined parameter such as the page count.

- Grayscale images printed with the composite black setting increment the color pages counter, because color consumables are used. Composite black is the default setting on most printers.

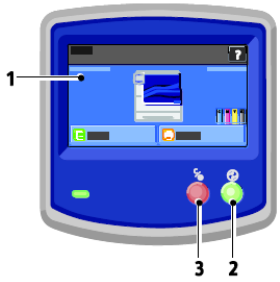
Ex. 47 (phaser_7800_user_manual.pdf) at p. 146).

259. As another example, as shown below, Xerox Phaser 7800 includes a use mechanism (e.g., , service diagnostics routines) that tracks usage of each of the ORC devices using a predetermined parameter (e.g., remaining life information for one or more ORC devices). The use mechanism is coupled to the computational element, such as the control panel and touch screen display, and each of the ORC devices to track usage by providing access to tools and setup menus, troubleshooting menus, display of error and warnings.

Control Panel

The control panel consists of a touch screen and buttons you press to control the functions available on the printer. The control panel:

- Displays the current operating status of the printer.
- Provides access to print features.
- Provides access to reference materials.
- Provides access to Tools and Setup menus.
- Provides access to Troubleshooting menus and videos.
- Prompts you to load paper, replace supplies, and clear jams.
- Displays errors and warnings.
- Plays event-driven videos.



1. **Touch Screen** displays information and provides access to printer functions.
2. **Power Saver** enters Sleep mode, and exits Low Power or Sleep mode.
3. **Pause** temporarily stops the current print job, allowing you to cancel or resume the job.

Ex. 47 (phaser_7800_user_manual.pdf) at p. 19.

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 141).

260. As shown below, the service diagnostic routine tracks use of several ORC devices, including toners, fusers, belt cleaners, transfer rollers, imaging units, waste cartridges, suction filters, feed rollers, developers, and displays remaining life information for each of the ORC devices based on a predetermined parameter, such as an amount of toner remaining.

dc135 CRU/HFSI Read & Reset

The dc135 CRU/HFSI routine provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset.

1. Access the Service Diagnostics Menu - Entering Service Diagnostics.
2. Touch **Service Information**.
3. Touch **dc135 CRU/HFSI Read & Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
   - Component Name
   - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components can be reset include:
   - Fuser
   - Belt Cleaner
   - Transfer Roller
   - Transfer Belt
   - Developer

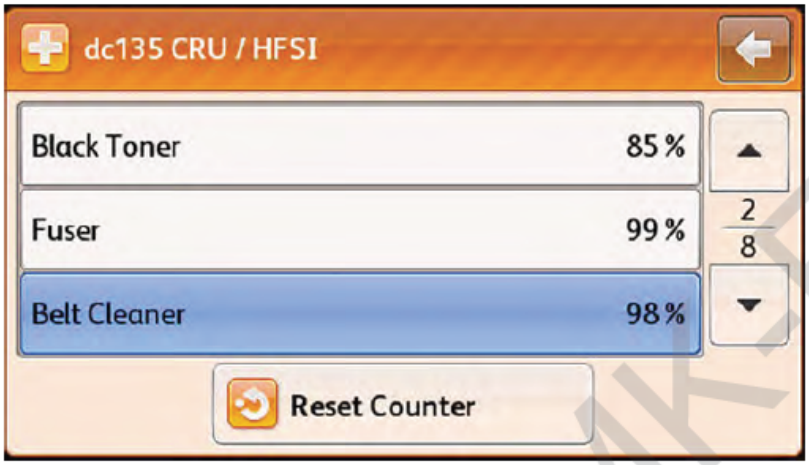


Figure 6 Selecting the Component

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 203).

261. Claim 1[d] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800 includes a comparison mechanism that compares use of the ORC devices to their expected life spans by displaying remaining life information for each of the ORC devices via a life counter. As shown below, the remaining life information for each ORC device is based on a comparison mechanism that compares a usage of the ORC device (e.g., 85% life of black toner) with an expected life span for the ORC device (e.g., 100% life of black toner).

dc135 CRU/HFSI Read & Reset

The dc135 CRU/HFSI routine provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset.

1. Access the Service Diagnostics Menu - Entering Service Diagnostics.
2. Touch **Service Information**.
3. Touch **dc135 CRU/HFSI Read & Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
   - Component Name
   - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components can be reset include:
   - Fuser
   - Belt Cleaner
   - Transfer Roller
   - Transfer Belt
   - Developer

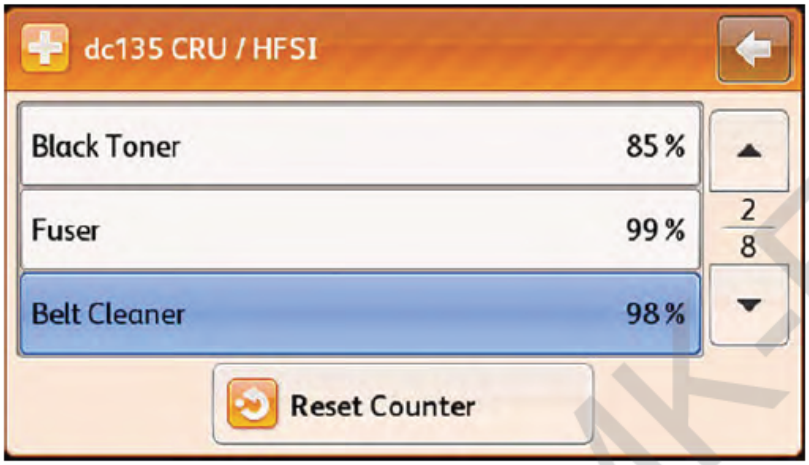


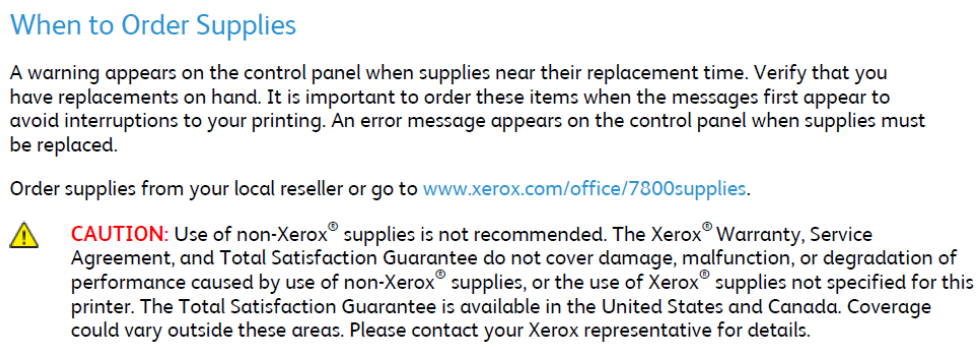
Figure 6 Selecting the Component

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 203).

262. Claim 1[e] is satisfied for at least the following reasons. Xerox Phaser 7800 includes an operator alert mechanism, which displays a warning on the control panel, when the result of the comparison satisfies a predetermined parameter representing at least one of the expected life spans and the expected life span for a single of said ORC devices is the shortest expected life span.

263. As shown below, Xerox Phaser 7800 includes an operator alert mechanism, including a warning that appears on the control panel, when printer supplies need to be ordered. The operator alert mechanism is responsive to the comparison mechanism satisfying a

predetermined parameter, such as a predetermined amount of toner usage, that is representative of at least one of the expected life spans of the ORC devices. Moreover, Xerox Phaser 7800 includes additional operator alert mechanisms, such as error warnings, when an ORC needs immediate replacement.



When to Order Supplies

A warning appears on the control panel when supplies near their replacement time. Verify that you have replacements on hand. It is important to order these items when the messages first appear to avoid interruptions to your printing. An error message appears on the control panel when supplies must be replaced.

Order supplies from your local reseller or go to www.xerox.com/office/7800supplies.

CAUTION: Use of non-Xerox® supplies is not recommended. The Xerox® Warranty, Service Agreement, and Total Satisfaction Guarantee do not cover damage, malfunction, or degradation of performance caused by use of non-Xerox® supplies, or the use of Xerox® supplies not specified for this printer. The Total Satisfaction Guarantee is available in the United States and Canada. Coverage could vary outside these areas. Please contact your Xerox representative for details.

dc135 CRU/HFSI Read & Reset

The dc135 CRU/HFSI routine provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset.

1. Access the Service Diagnostics Menu - Entering Service Diagnostics.
2. Touch **Service Information**.
3. Touch **dc135 CRU/HFSI Read & Reset**.
4. A dc135 CRU/HFSI screen is displayed. Information includes:
   - Component Name
   - % Remaining
5. To reset a non-CRUM supply item, select the item. Touch the **Reset Counter** to reset the life counter. Components can be reset include:
   - Fuser
   - Belt Cleaner
   - Transfer Roller
   - Transfer Belt
   - Developer

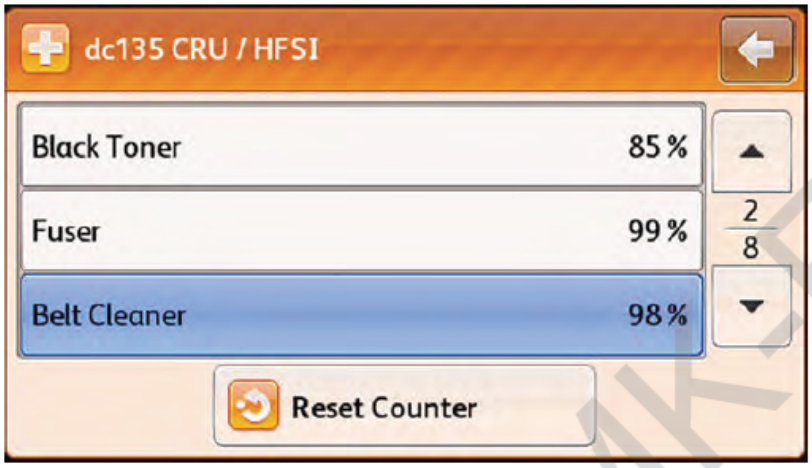


Figure 6 Selecting the Component

Ex. 47 (phaser_7800 user manual.pdf at p. 97); Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 203).

264. As shown above, Xerox Phaser 7800 displays an expected life span (for example, remaining life information 85%) for the Black toner first, followed by an expected life span the fuser (99%) and an expected life span for the belt cleaner (98%), wherein the expected life span for the Black toner is the shortest.

265. As another example, Xerox Phaser 7800 includes an operator alert mechanism that displays status messages. For example, the control panel shows status messages indicating

life information for one or more ORC device such as "Developer 1 is past end of life," "Feed roller 1 is past end of life."

Status Messages

Status messages are informational and do not stop printer operation.The following table contains a comprehensive list of the status messages that can be displayed on the control panel.

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at p. 205).

Table 1 Status Messages

Status Code	Condition to Activate	Associated Fault Code
09-600-00	Waste Cartridge Is Near Full	
09-601-00	Waste Cartridge Full	
09-602-00	Cyan Toner Low	
09-603-00	Magenta Toner Low	
09-604-00	Yellow Toner Low	
09-605-00	Black Toner Low	
09-606-00	Transfer Roller Is PAST End Of Life	
09-607-00	Belt Cleaner Is PAST End Of Life	
09-608-01	Developer 1 Is PAST End Of Life	
09-608-02	Developer 2 Is PAST End Of Life	
09-608-03	Developer 3 Is PAST End Of Life	
09-608-04	Developer 4 Is PAST End Of Life	
09-609-01	Feed Roller 1 Is PAST End Of Life	
09-609-02	Feed Roller 2 Is PAST End Of Life	
09-609-03	Feed Roller 3 Is PAST End Of Life	
09-609-04	Feed Roller 4 Is PAST End Of Life	
09-609-05	Feed Roller 5 Is PAST End Of Life	
09-612-00	Fuser Past EOL	
09-613-00	Transfer Belt Is PAST End Of Life	
09-615-00	Imaging Unit 1 Is PAST End Of Life	
09-616-00	Imaging Unit 2 Is PAST End Of Life	
09-617-00	Imaging Unit 3 Is PAST End Of Life	
09-618-00	Imaging Unit 4 Is PAST End Of Life	

Ex. 48 (Xerox_Phaser_7800 service manual and parts list.pdf at pp. 205 and 206).

266. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[e]. For example, and without limitation, Xerox Phaser 7800 performs

substantially the same function in substantially the same way and achieves substantially the same result at least because it provides an operator alert mechanism, such as a warning, a life counter, and a status message, that appears on the control panel when an ORC device needs to be ordered. This operator alert mechanism is responsive to the comparison mechanism when the result of the comparison satisfies a predetermined parameter (for example, a predetermined amount of toner usage and a predetermined count on the life counter) representing at least one of the expected life spans of the ORC devices, and wherein the expected life span for one of the ORC devices is the shortest expected life span (for example, an error warning that is indicative of the ORC device requiring immediate replacement).

267. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

268. Defendant's infringement of the '285 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT VII
(Direct Infringement of the '998 Patent pursuant to 35 U.S.C. § 271(a))

269. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

270. Defendant has infringed and continues to infringe one or more claims of the '998 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

271. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

272. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

273. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 6505/6500

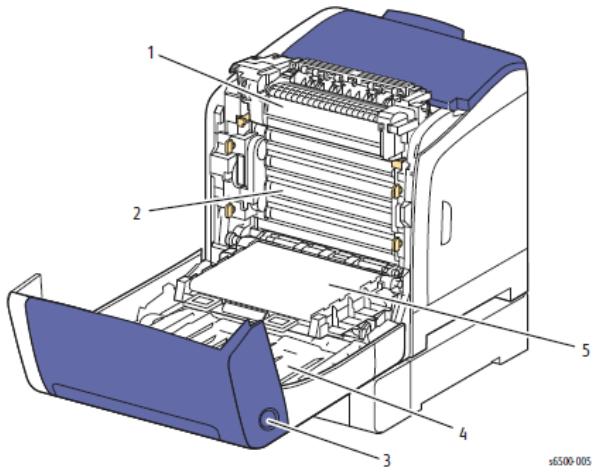
274. Claim 1 of the '998 Patent is recited below:

> An image forming apparatus comprising:
>
> 1[a] a primary charger for providing a primary charging voltage on an image support
>
> 1[b] an image support for supporting an electrostatic latent image on the surface thereof;
>
> 1[c] a developing unit having a developing agent support, the developing agent support retaining a developing agent, including toner and carriers, contained in the developing unit, and the developing unit converting the latent image on the image support into a toner image by causing the toner to adhere to the surface of the image support;
>
> 1[d] a developing bias supplying unit for supplying a developing bias voltage to the developing agent support of the developing unit; and
>
> 1[e] a controller for setting the developing bias voltage and primary charging voltage at predetermined values undesirable for normal image forming operation in order to provide diagnostic information on the image forming apparatus.

275. As one example, Xerox Phaser 6505/6500 meets the limitations of claim 1 of the '998 Patent for at least the reasons described below

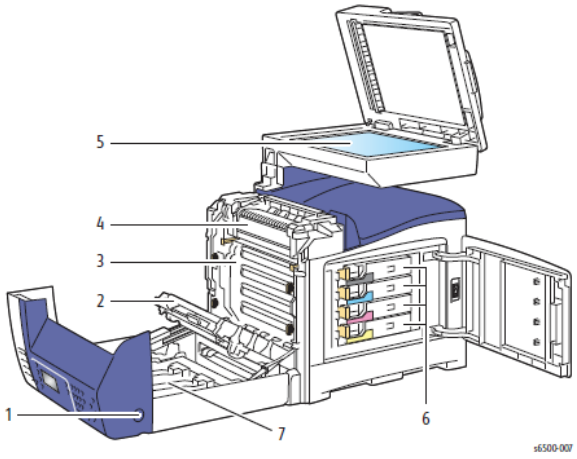
276. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 6505/6500is an image forming printer that prints images in color or black and white. As shown below, Xerox 6505 is an image forming apparatus comprising an imaging unit and a fuser for printing images, with a duplex unit allowing for double-sided printing of images. Shown below are the internal views of Xerox Phaser 6505/6500single-

function printer configuration and Xerox Phaser 6505/6500 multi-function printer configuration, respectively.



1. Fuser
2. Imaging Unit
3. Front Cover and Duplex Unit release.
4. Duplex Unit
5. Transfer Belt (Tray 1 removed so the Transfer Belt folds down completely).

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 34).



1. Front Cover and Duplex Unit release
2. Transfer Belt
3. Imaging Unit
4. Fuser
5. Document Glass
6. Toner Cartridges
7. Duplex Unit

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 35).

277. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox Phaser 6505/6500contains a primary charger, such as a high-voltage power supply unit, for providing a primary charging voltage to an imaging support, such as a drum.

278. As shown below, Xerox Phaser 6505/6500 includes a high-voltage power supply (HVPS) for negatively biasing a surface of the photoconductor drum unit. The negative terminal of the HVPS is connected to a bias charge roller (BCR) and negatively biases the drum surface that is in contact with the BCR.

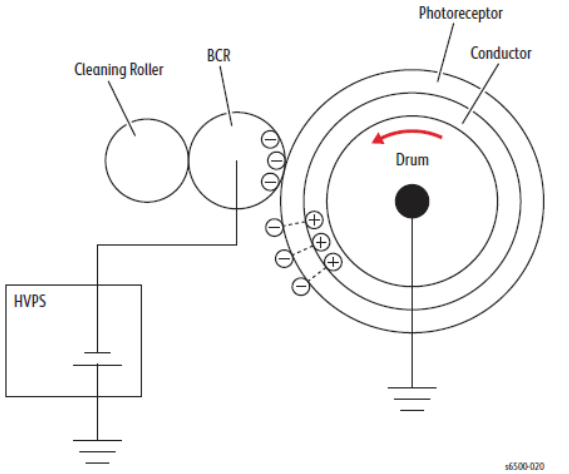
Charging

Each Imaging Unit drum's surface is charged with negative electricity by discharging of the bias charge roller (BCR) while rotating at a constant speed. This process is performed in parallel for Cyan, Magenta, Yellow, and Black.

The BCR is kept in contact with the drum and rotates with the drum. The BCR is a conductive roller, which receives negative voltage from the High-Voltage Power Supply (HVPS) and discharges a negative Direct Current (DC) voltage.

The drum surface is uniformly and negatively charged with DC bias voltage. The drum surface is a photoreceptor (which is an insulator in a dark areas and a conductor when exposed to light) and the drum inside is composed of conductor.

The cleaning roller is a sponge that contacts the BCR to catch the toner.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 60).

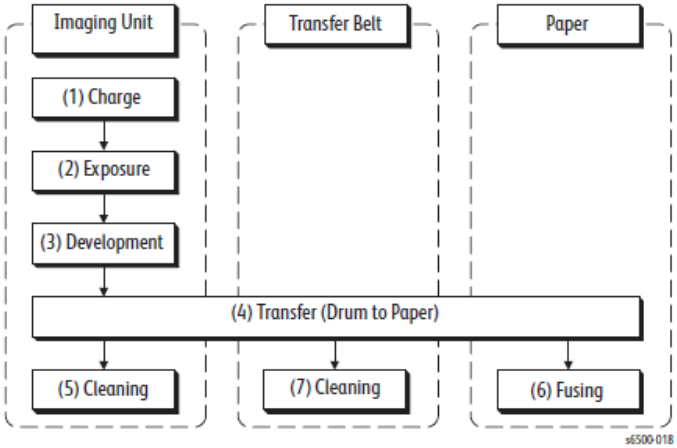
279. As another example, an overview of the print process for Xerox Phaser 6505/6500 is shown below. The primary charger would supply the primary charging voltage to the image support during the charging process, causing the image support, such as the drum surface, to be charged with a primary charging voltage. The image support is then exposed to laser beams for selectively forming an electrostatic distribution of charges that attract toner to the image support during an image development phase.

Print Process

The following block diagram provides the sequence of events for the xerographic process (dashed lines) and the paper flow (solid lines) into and out of the printer.

The print process consists of the following steps:

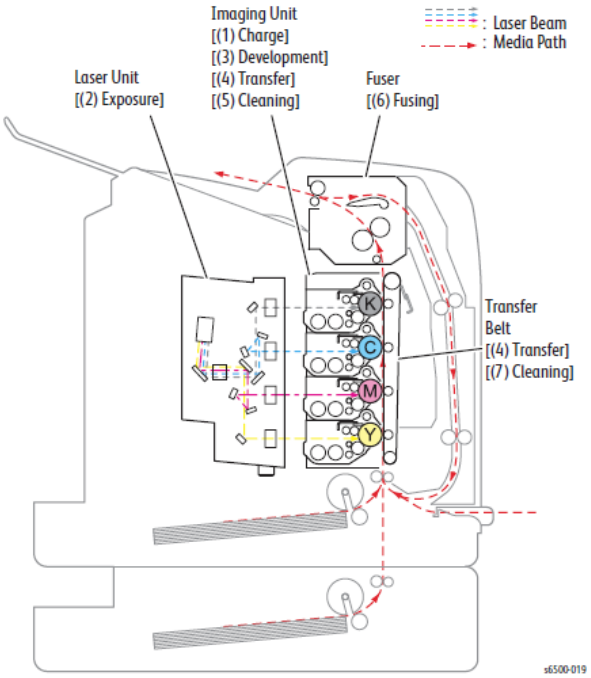
1. Charging – The drum surfaces are charged with electricity.
2. Exposure – The drums are exposed to laser beams.
3. Development – Image is developed with toner.
4. Image Transfer – Four color finished toner image on the drums is transferred onto the paper.
5. Cleaning – Excess toner is removed from the drum and BCR.
6. Fusing – The Fuser applies toner on to paper using heat and pressure.
7. Cleaning – Remaining toner is removed from the belt.



The following diagram shows the location of components involved in the print process for both the SFP and MFP.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 58).

280. As another example, shown below is the imaging unit of Xerox Phaser 6505/6500 wherein the image support, such as drum surface, is charged (1). The imaging unit also provides toner development, toner transfer, and excess toner cleaning.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 59).

281. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6505/6500 includes an image support, such as the drum, for supporting an electrostatic latent image. Each drum's surface is negatively charged via the bias charge roller that is connected to the negative terminal of the HVPS. The outer surface of the drum that is called the photoreceptor accumulates negative charges and the inner conductive section of the drum accumulates positive charges in response to the accumulation of negative charges on the photoreceptor surface.

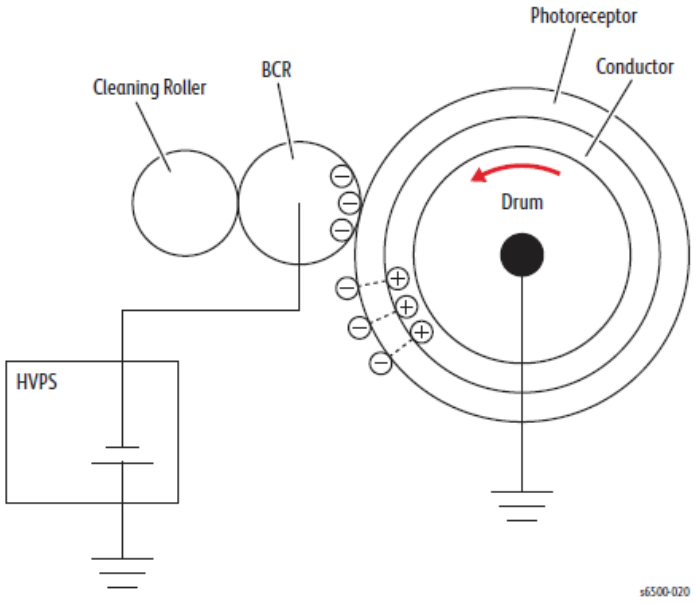
Charging

Each Imaging Unit drum's surface is charged with negative electricity by discharging of the bias charge roller (BCR) while rotating at a constant speed. This process is performed in parallel for Cyan, Magenta, Yellow, and Black.

The BCR is kept in contact with the drum and rotates with the drum. The BCR is a conductive roller, which receives negative voltage from the High-Voltage Power Supply (HVPS) and discharges a negative Direct Current (DC) voltage.

The drum surface is uniformly and negatively charged with DC bias voltage. The drum surface is a photoreceptor (which is an insulator in a dark areas and a conductor when exposed to light) and the drum inside is composed of conductor.

The cleaning roller is a sponge that contacts the BCR to catch the toner.

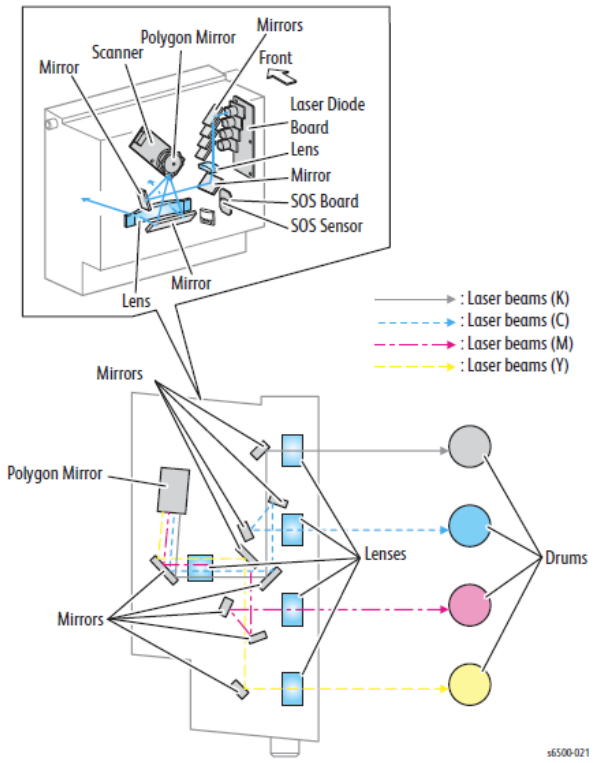


Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 60).

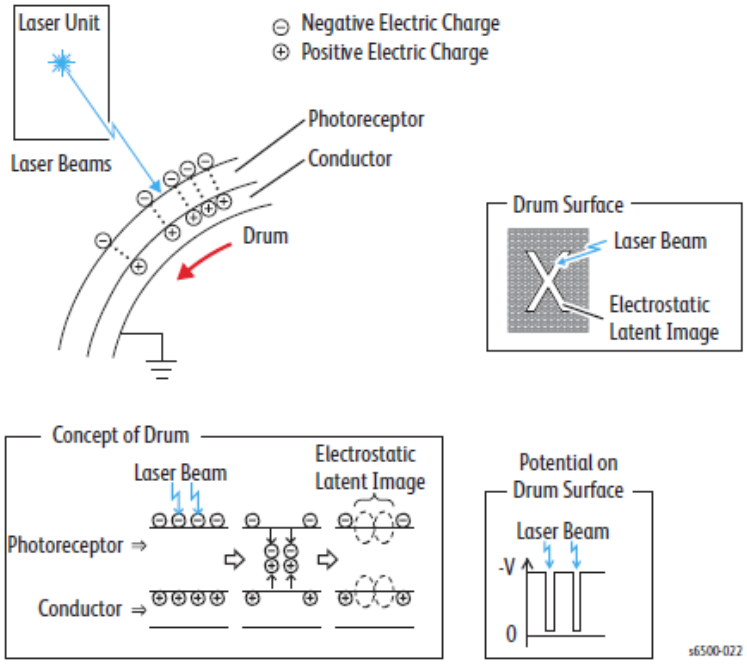
282. As another example, during the exposure phase of the print process shown below, the negatively charged drum surfaces of Xerox Phaser 6505/6500 are scanned by laser beams to form an invisible electrostatic latent image on the drum surfaces. The electrostatic latent images are formed based on print data that controls the operation of the laser unit. Areas on the negatively charged drum surfaces that are exposed to the laser, begin to lose their negative charges because these negative charges flow from the drum surfaces to the inner positive conductor surfaces via conductive channels that form due to the incidence of laser light.

Exposure

Four laser diodes (one for each color) in the Laser Unit emit laser beams. The beams are directed by mirrors to the rotating polygon mirror attached to the scanner motor. As the polygon mirror rotates, the beams are directed through a series of lenses and mirrors to each of the drums, which are scanned by the beams from end to end in the axial direction.



The negatively charged drum surface is scanned by the laser beams to form an invisible electrostatic latent image on the drum surface. The process is performed in parallel for all colors. The area on the drum where the laser beam strikes becomes conductive. The negative charge on the surface flows to the more positive drum, lowering the voltage potential.



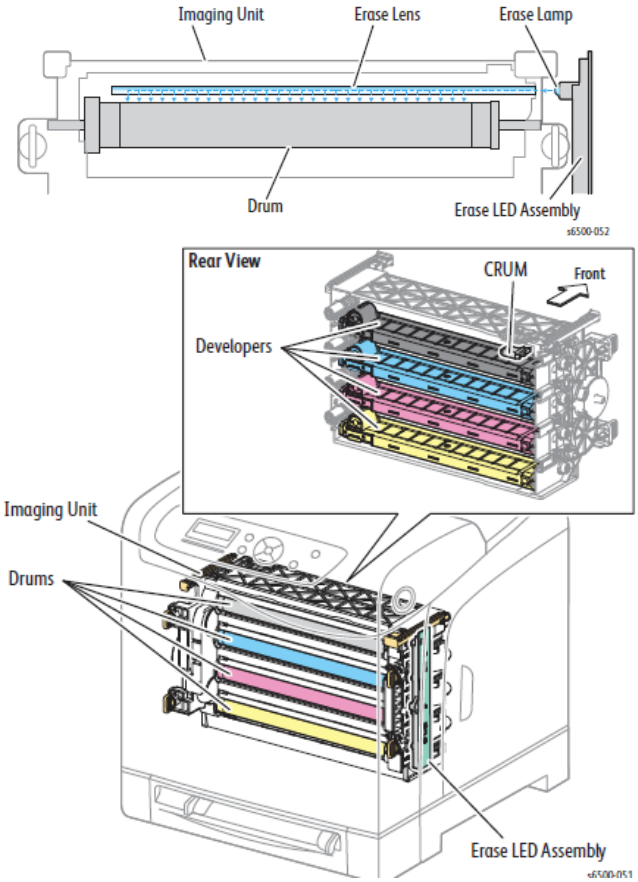
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at pp. 61-62).

283. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6505/6500 includes a developing unit, such as an imaging unit, that includes several developing agent supports including cartridges, carriers, rollers and drums. The developing unit of Xerox Phaser 6505/6500converts latent image on the image support such as electrostatic images on the drum surfaces into toner images by causing the toner to adhere to the surface of the image support.

The Imaging Unit is a customer replaceable item that carries out the charging, development, transfer, and cleaning steps in the print process (see "Print Process" on page 2-2).

The Imaging Unit consists of the following items:

- Developers — Each of the four developers includes the augers that distribute the toner and the magnet roller that applies toner to the drum to develop the latent image.
- Drums — Each drum is given a latent image to which toner is applied by the developer. The resulting toner image is transferred to the paper.
- CRUM — Information specific to the Imaging Unit is stored in the CRUM.
- Erase Lamp (LED) — The light of the LED passes through the lens of the Developer, illuminates the drum, and eliminates the charge on the drum.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 91).

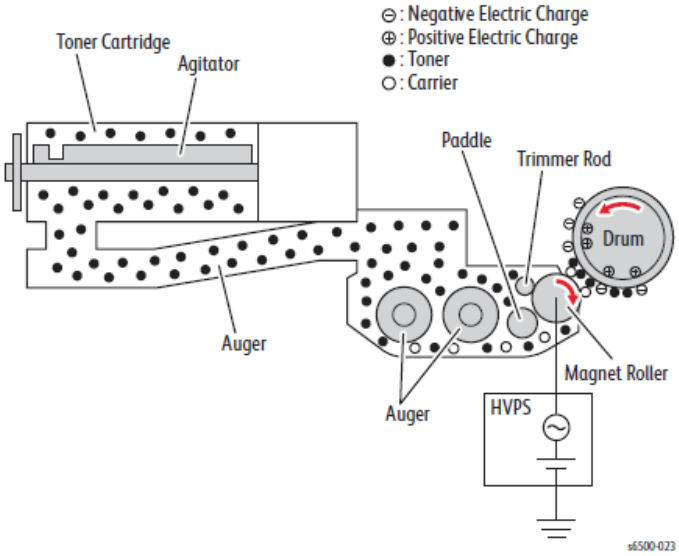
284. As another example, the developing unit, such as the imaging unit, provides a developing bias voltage to a magnetic roller that attracts toner from the toner cartridges and allows the toner to electrostatically bind to the negative charges distributed on the image support, such as the drum surface.

Development

Toner is electrically attached to the invisible electrostatic latent image on the drum surface to form the visible toner image on the drum.

The toner in the Toner Cartridge is agitated by the built-in agitator and fed into the developer. The augers are driven by the toner motors and the developer motor in the Main Drive Assembly. The toner is consumed according to the print count and fed into the developer. This process, called toner dispensation, is controlled by two processes: pixel count dispense control (PCDC) and automatic density control (ADC).

The toner fed into the developer is agitated by the auger, and supplied to the magnet roller. The toner and carrier are charged by friction due to agitation (toner in negative, carrier in positive), and they are attracted electrically. A uniform layer is formed by the trimmer bar as the carrier is attracted to the magnetic roller.



The magnet roller is covered by a thin semi-conductive sleeve. A developing bias voltage is supplied to the sleeve from the High Voltage Power Supply (HVPS). The developing bias voltage is negative DC voltage combined with AC voltage. The DC voltage holds the magnet roller at a constant negative voltage against the photoreceptor layer of the drum. Therefore, at the area where the negative electric charge on the drum surface does not decrease, the potential is lower than that of the magnet roller, while the potential is higher than that of the magnet roller at the area where the negative charge on the drum surface decreases.

The AC voltage waveform releases the developer on the magnet roll so that the toner moves to the drum. Thus, only the portions of the drum surface where the negative charge has decreased below that of the magnet roll (electrostatic latent image) attract toner to form an image on the drum.

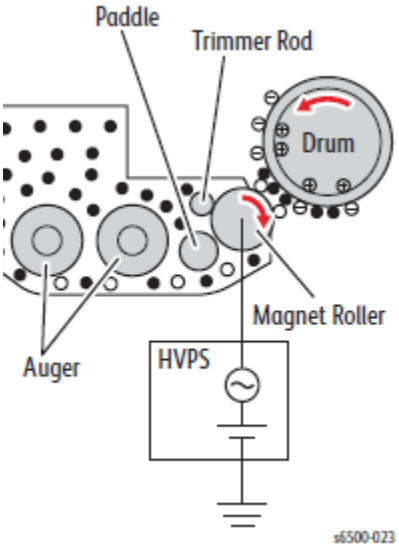
Once the toner is deposited on the drum, the potential and the toner-attracting force of the corresponding portion decreases because the increase of negative charge lowers the potential at that portion.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 63).

285. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox Phaser 6505/6500 meet the recited claim language because they include a developing bias supplying unit such as a high-voltage power supply (HVPS) unit for supplying a negative direct

current bias to a developing agent support such as a magnet roller of the developing unit, such as an imaging unit.

286. As shown below, the HVPS unit supplies a developing bias voltage to the magnet roller. The negative charge on the magnet roller attracts positively charged toner particles from the toner cartridge during the development phase of the printing process.



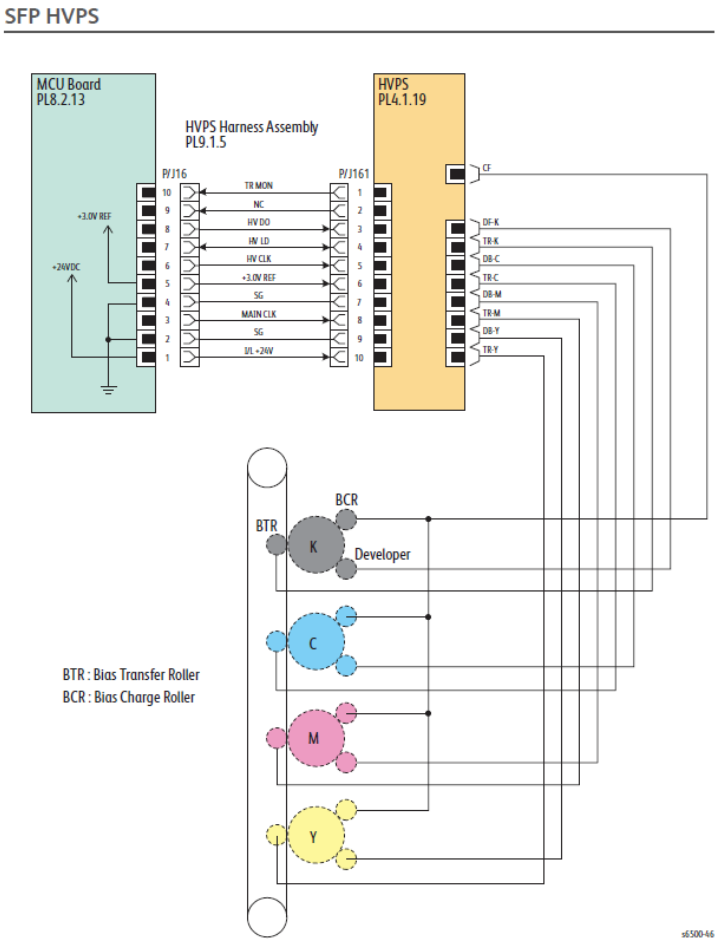
The magnet roller is covered by a thin semi-conductive sleeve. A developing bias voltage is supplied to the sleeve from the High Voltage Power Supply (HVPS). The developing bias voltage is negative DC voltage combined with AC voltage. The DC voltage holds the magnet roller at a constant negative voltage against the photoreceptor layer of the drum. Therefore, at the area where the negative electric charge on the drum surface does not decrease, the potential is lower than that of the magnet roller, while the potential is higher than that of the magnet roller at the area where the negative charge on the drum surface decreases.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 63).

287. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox Phaser 6505/6500 meet the recited claim language because Xerox Phaser 6505/6500 includes a controller such as an MCU board for setting the developing bias voltage and primary charging voltage respectively supplied to the magnet roller and the bias charge roller, via the HVPS unit. In order to provide diagnostic information on Xerox 6505, the HVPS unit sets different

predetermined values for the developing bias voltage and primary charging voltage that are undesirable for normal image forming operation.

288. As shown below, the controller such as the MCU board is connected to the HVPS unit for setting the developing bias voltage at the developer and the primary charging voltage at the bias charge roller. The controller would set predetermined values for the developing bias voltage and primary charging voltage depending upon whether Xerox 6505 is in normal image forming operation or undergoing diagnostic procedures.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 743).

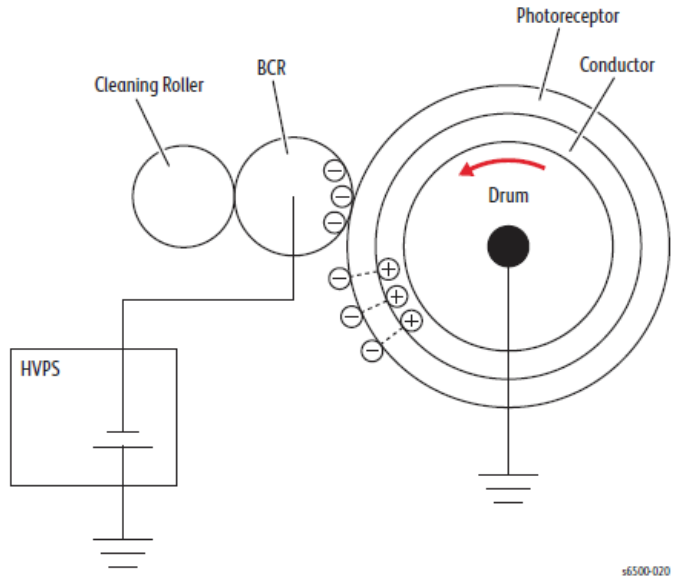
289. As shown below, the HVPS supplies a negative bias voltage to the bias charge roller that causes the photoreceptor surface of the drum to acquire a negative charge.

Each Imaging Unit drum's surface is charged with negative electricity by discharging of the bias charge roller (BCR) while rotating at a constant speed. This process is performed in parallel for Cyan, Magenta, Yellow, and Black.

The BCR is kept in contact with the drum and rotates with the drum. The BCR is a conductive roller, which receives negative voltage from the High-Voltage Power Supply (HVPS) and discharges a negative Direct Current (DC) voltage.

The drum surface is uniformly and negatively charged with DC bias voltage. The drum surface is a photoreceptor (which is an insulator in a dark areas and a conductor when exposed to light) and the drum inside is composed of conductor.

The cleaning roller is a sponge that contacts the BCR to catch the toner.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 60).

290. As shown below, Xerox Phaser 6505/65005 includes a controller for setting the developing bias voltage and primary charging voltage at different predetermined values. HVPS provides the bias and charging voltages to the developer and the bias charge roller (BCR).

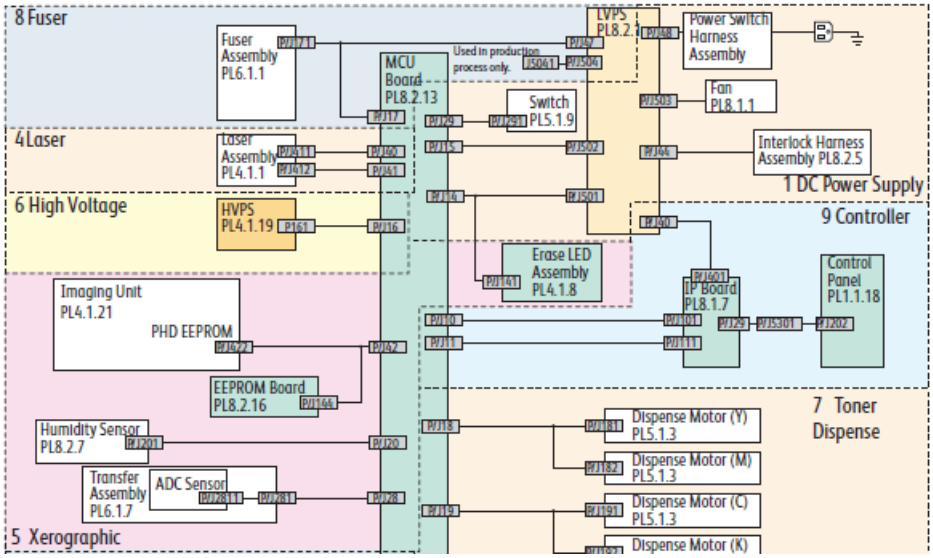
High-Voltage Power Supply

The HVPS provides high-voltage power to the Transfer Belt and Imaging Unit for charging, development, and primary transfer to the BCR, BTR, and Developer.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 95).

291. As another example, shown below are the system connections for Xerox Phaser 6505/6500 that show the MCU board connected to the HVPS unit.

SFP System Connections



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 736).

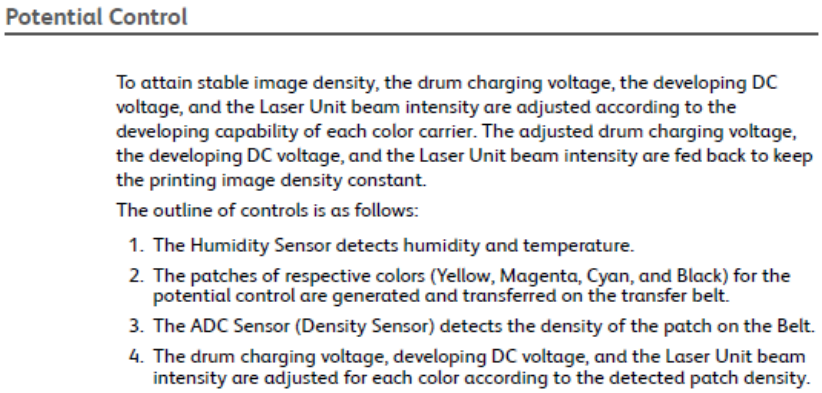
292. As shown below, diagnostic and troubleshooting procedures involve monitoring voltage readings at various points of Xerox Phaser 6505/6500 system.

Step 3: Find the Cause of the Problem

1. Use the Error Messages and Codes and troubleshooting procedures to find the cause of the problem.
2. Use Service Diagnostics to check the printer and optional components.
3. Use the Wiring Diagrams and Plug/Jack Locator to locate test points.
4. Take voltage readings as instructed in the appropriate troubleshooting procedure.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 134).

293. As shown below, potential control forms stable image densities. The potential control involves setting the drum charging voltage and the developing bias voltage values.



Potential Control

To attain stable image density, the drum charging voltage, the developing DC voltage, and the Laser Unit beam intensity are adjusted according to the developing capability of each color carrier. The adjusted drum charging voltage, the developing DC voltage, and the Laser Unit beam intensity are fed back to keep the printing image density constant.

The outline of controls is as follows:

1. The Humidity Sensor detects humidity and temperature.
2. The patches of respective colors (Yellow, Magenta, Cyan, and Black) for the potential control are generated and transferred on the transfer belt.
3. The ADC Sensor (Density Sensor) detects the density of the patch on the Belt.
4. The drum charging voltage, developing DC voltage, and the Laser Unit beam intensity are adjusted for each color according to the detected patch density.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 100).

294. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[e]. For example, and without limitation, Xerox Phaser 6505/6500 performs substantially the same function in substantially the same way and achieves substantially the same result at least because it includes a controller, such as an MCU board for setting the developing bias voltage (for example, drum voltage) and the primary charging voltage (for example, charge roller voltage) at different predetermined values that are undesirable for normal printing and for providing diagnostic information on the operation of Xerox 6505.

295. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

296. Defendant's infringement of the '998 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT VIII
(Direct Infringement of the '9005 Patent pursuant to 35 U.S.C. § 271(a))

297. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

298. Defendant has infringed and continues to infringe one or more claims of the '9005 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

299. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

300. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

301. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox FreeFlow.

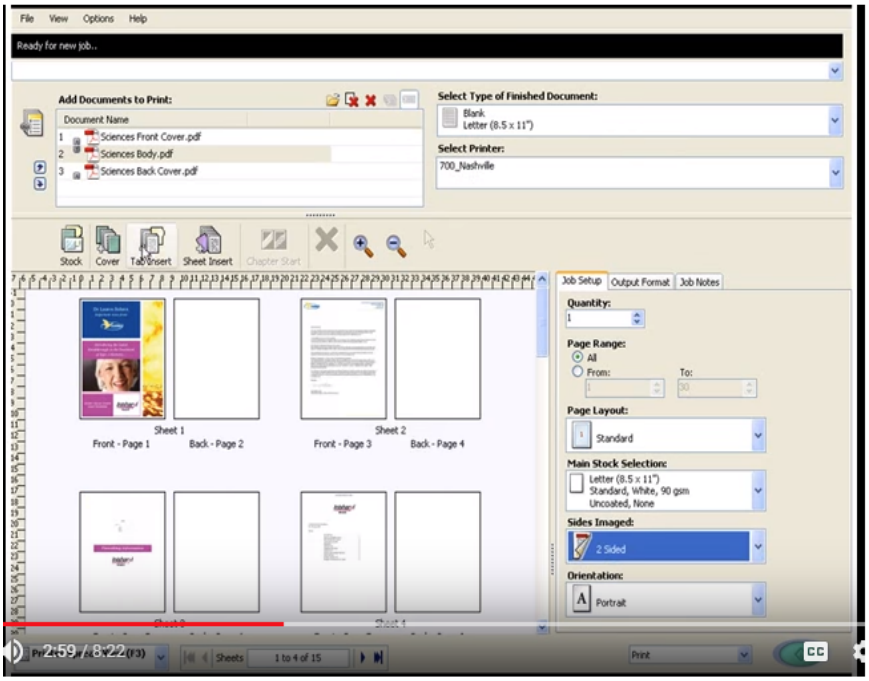
302. Claim 1 of the '9005 Patent is recited below:

> A system for pre-selecting ordered media in a printing system, comprising:
>
> 1[a] an input source to store at least one set of the ordered media;
>
> 1[b] a user interface having an input device to select the ordered media from a paper catalog, and to pre-select a first part of the ordered media set to be used in a print job and a second unwanted part of the ordered media set to be discarded;
>
> 1[c] a first job output;
>
> 1[d] a second job output; and
>
> 1[e] a central processing unit configured to send the first part of the ordered media set directly to the first job output and the second part of the ordered media set directly to the second job output.

303. As one example, the Xerox FreeFlow meets the limitations of claim 1 of the '9005 Patent for at least the reasons described below.

304. In general and as explained below, the limitations of claim 1 are satisfied. Xerox FreeFlow meets the recited claim language because it provides a system for creating a printed document (printing system) that includes a graphical user interface ("GUI") that enables selection of documents for use in a print job (pre-selecting ordered media). Xerox FreeFlow is configured to retrieve documents for use in the print job from memory resident on the computer system (input source).

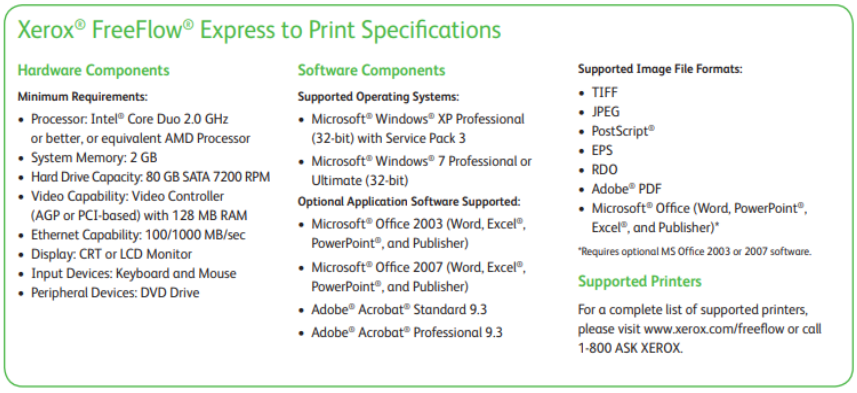
305. As shown in the figure below, Xerox FreeFlow provides a system for printing a document because it provides components that enable selection of which pages of a document are to be used in a print job (system for pre-selecting ordered media in a printing system).



Ex. 50 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

306. As shown in the excerpt below, Xerox FreeFlow uses an input source to store at least one set of the ordered media when it retrieves, from storage, data portions of the ordered

media from computer memory ((e.g., random-access memory ("RAM"), read-only memory ("ROM"), and the like).



Xerox® FreeFlow® Express to Print Specifications

Hardware Components

Minimum Requirements:

- Processor: Intel® Core Duo 2.0 GHz or better, or equivalent AMD Processor
- System Memory: 2 GB
- Hard Drive Capacity: 80 GB SATA 7200 RPM
- Video Capability: Video Controller (AGP or PCI-based) with 128 MB RAM
- Ethernet Capability: 100/1000 MB/sec
- Display: CRT or LCD Monitor
- Input Devices: Keyboard and Mouse
- Peripheral Devices: DVD Drive

Software Components

Supported Operating Systems:

- Microsoft® Windows® XP Professional (32-bit) with Service Pack 3
- Microsoft® Windows® 7 Professional or Ultimate (32-bit)

Optional Application Software Supported:

- Microsoft® Office 2003 (Word, Excel®, PowerPoint®, and Publisher)
- Microsoft® Office 2007 (Word, Excel®, PowerPoint®, and Publisher)
- Adobe® Acrobat® Standard 9.3
- Adobe® Acrobat® Professional 9.3

Supported Image File Formats:

- TIFF
- JPEG
- PostScript®
- EPS
- RDO
- Adobe® PDF
- Microsoft® Office (Word, PowerPoint®, Excel®, and Publisher)*

*Requires optional MS Office 2003 or 2007 software.

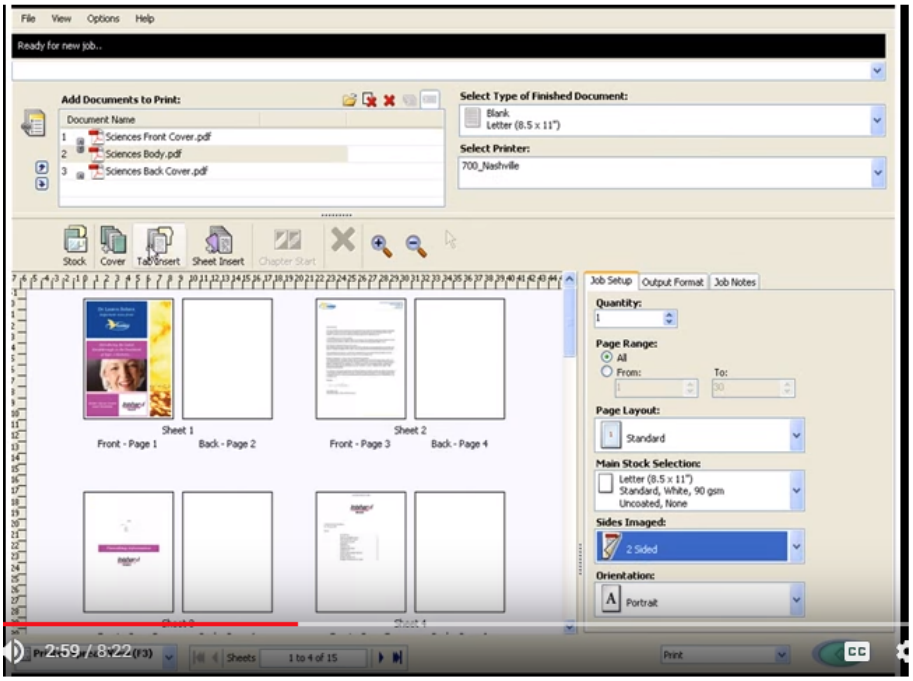
Supported Printers

For a complete list of supported printers, please visit www.xerox.com/freeflow or call 1-800 ASK XEROX.

Ex. 71 (FFSBR-02U.pdf at page 4).

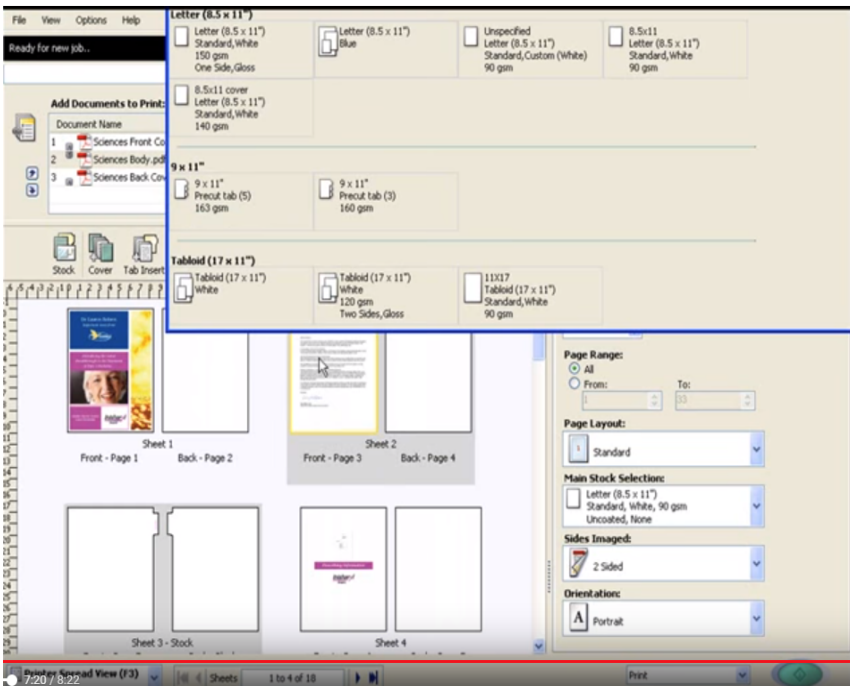
307. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox FreeFlow provides a user interface having an input device that selects the ordered media from a paper catalog when it enables use of the GUI to select paper with desirable proprieties, from a paper catalog, for use in a print job. Xerox FreeFlow pre-selects a first part of the ordered media set to be used in a print job when it provides a GUI that enables selection of a subset of documents to be printed. Furthermore, Xerox FreeFlow pre-selects a second unwanted part of the ordered media set to be discarded when it determines which portions of the document are unwanted for the print job.

308. As shown in the figure below, Xerox FreeFlow generates graphics data to display a "main stock selection" GUI object button on a main interface. The "main stock selection" GUI button displays a paper catalog that includes an assortment of different types of paper, including different colors, textures, sizes, etc.



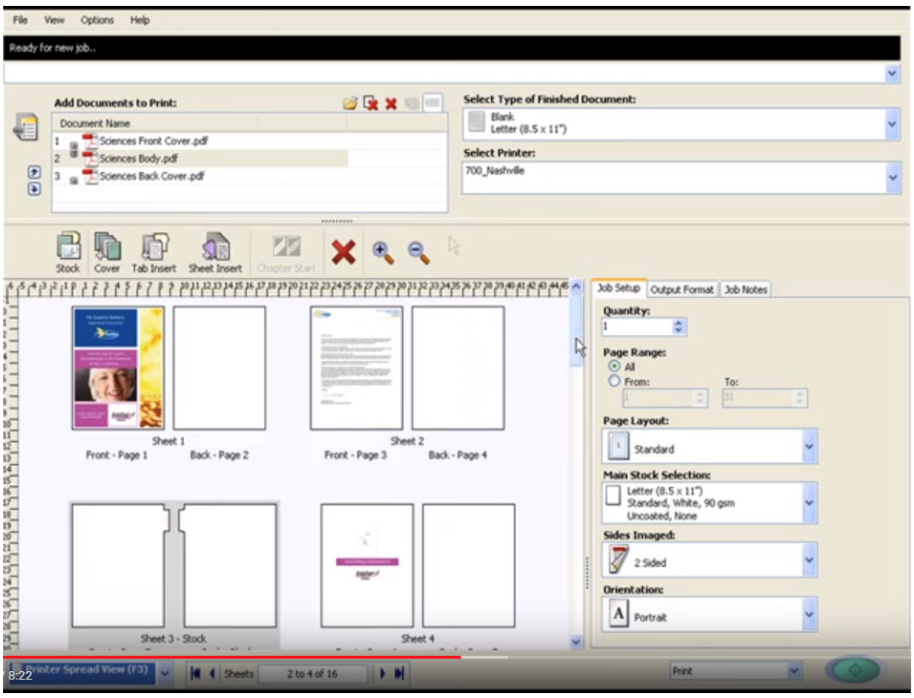
Ex. 50 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

309. For instance, as shown in the figure below, upon selection of the "main stock selection" GUI button, Xerox FreeFlow presents a paper catalog that includes "8.5 x 11" letter sized paper in white, blue, etc. Also, the paper catalog includes 9 x 11 precut tabs in different gsm (e.g., 160 gsm, 163 gsm). Additionally, the paper catalog includes tabloid 17 x 11 in different categories including, "white," "white 120 gsm," "standard, white 90 gsm," etc. In response to a selection (input on an interface) of paper within the paper catalog (entry in a paper catalog), Xerox FreeFlow maps the corresponding selection to a physical set of paper available for a print job.



Ex. 51 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

310. As shown below, Xerox FreeFlow determines, based on a selection from the main interface, a "page range" GUI object which includes radio buttons that enable (1) all pages within a particular document to be included in a print job or (2) a subset of all the pages to be included in a print job. In this fashion, the selected page range (input on the interface) includes a portion of the ordered media (e.g., tabs included in a document) to be included or discarded for use in a print job.



Ex. 50 (PDF of https://www.youtube.com/watch?v=JbbG-Yuhae4 (Xerox FreeFlow Express to Print)).

311. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox FreeFlow specifies that media that includes, for example, tabs (ordered media) be outputted to a tray specified via a GUI. As shown in the excerpt below, ordered media (e.g., media that includes usage of tabs) includes a main job where the main portion of a document (i.e., portion that uses tabs) can be sent to a specific tray.

FreeFlow Output Locations and Fiery Output Tray Destinations for jobs with tabs and unused tabs

For information about how the FreeFlow Output Locations correspond to the Fiery Output Tray Output Destinations for Main Job and Blank Tab, see the following table. For the EX/EX-P Print Server's Mixed Media print option, the unused tabs listed as blanks have the output tray set in Mixed Media.

Ex. 72 (Xerox EX 2100 Customer Notes - Unused.pdf at page 4).

312. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox FreeFlow specifies that media that includes, for example, unused tabs (ordered media) be outputted to a tray, specified via a GUI, that is different from the first job output.

313. As shown in the excerpt below, Xerox FreeFlow configures the printing system to send the first part of the ordered media set directly to a first job output when it specifies that (1) media that includes usage of tabs (ordered media) is to be outputted to one tray and (2) one or more exceptions (i.e., the unused tabs) are sent to a different tray.

FreeFlow Output Locations and Fiery Output Tray Destinations for jobs with tabs and unused tabs

For information about how the FreeFlow Output Locations correspond to the Fiery Output Tray Output Destinations for Main Job and Blank Tab, see the following table. For the EX/EX-P Print Server's Mixed Media print option, the unused tabs listed as blanks have the output tray set in Mixed Media.

Ex. 72 (Xerox EX 2100 Customer Notes - Unused.pdf at page 4).

314. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox FreeFlow can configure multiple output trays to be used when processing a print job. In this fashion, portions of the ordered media for print can be outputted to a first tray and unused portions of the ordered media can be ejected to a second tray.

315. As shown in the excerpt below, Xerox FreeFlow configures the printing system to send the first part of the ordered media set directly to a first job output when it specifies that (1) media that includes usage of tabs (ordered media) is to be outputted to one tray and (2) one or more exceptions (i.e., the unused tabs) are sent to a different tray.

FreeFlow Output Locations and Fiery Output Tray Destinations for jobs with tabs and unused tabs

For information about how the FreeFlow Output Locations correspond to the Fiery Output Tray Output Destinations for Main Job and Blank Tab, see the following table. For the EX/EX-P Print Server's Mixed Media print option, the unused tabs listed as blanks have the output tray set in Mixed Media.

Ex. 72 (Xerox EX 2100 Customer Notes - Unused.pdf at page 4).

316. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[e]. For example, and without limitation, Xerox FreeFlow performs substantially the same function in substantially the same way and achieves substantially the same result at least because it produces a printed end document based on information received from a GUI which caused portions of a print job, that were to be included in the printed end document, to be routed to a first output tray and the portions to be excluded to a second output tray.

317. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

318. Defendant's infringement of the '9005 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT IX
(Direct Infringement of the '856 Patent pursuant to 35 U.S.C. § 271(a))

319. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

320. Defendant has infringed and continues to infringe one or more claims of the '856 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

321. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

322. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

323. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 7700 and Xerox Phaser 7800.

324. Claim 1 of the '856 Patent is recited below:

> A method of operating an electrographic printing machine, comprising the steps of:
>
> 1[a]. installing one of a plurality of toning stations into the printing machine, each of the plurality of toning stations associated with a toner type,
>
> 1[b]. and having an indicator corresponding to the toner type;
>
> 1[c]. sensing the indicator of the installed one of the plurality of toning stations to determine the toner type of the installed one of the plurality of toning stations;
>
> 1[d]. responsive to the sensing step determining that the installed one of the plurality of toning stations corresponds to toner of a first type, selecting a set of process setpoints associated with the toner of the first type; and
>
> 1[e]. operating the printing machine to electrographically print images using the selected set of process setpoints and the installed one of the toning stations.

325. As one example, Xerox Phaser 7700 meets the limitations of claim 1 of the '856 Patent for at least the reasons described below.

326. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 7700 is a is a color printer that operates as an electrographic printing machine that includes electrophotographic components such as a laser unit, developers, toners, and photoconductor drums.

Phaser® 7700
Color Laser Printer

Ex. 53 (Xerox Phaser 7700.pdf at p. 1).

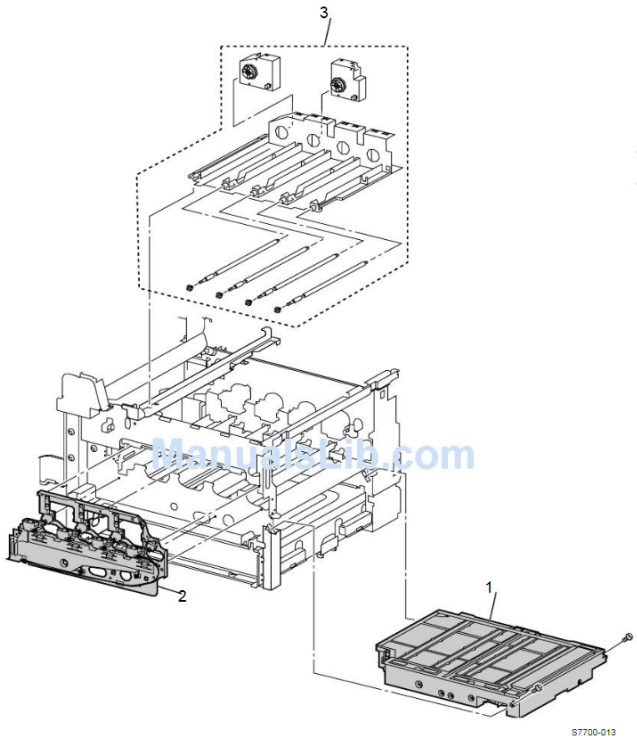


Figure 8-14 Electrophotographic Components FRUs

Ex. 53 (Xerox Phaser 7700.pdf at p. 287).

327. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox Phaser 7700 includes a plurality of toning stations (such as for toner development), each toning station associated with a toner type (e.g., Magenta, Cyan, Yellow and Black toner colors). As shown below, Xerox Phaser 7700 allows for the installation of multiple toning stations containing

toner cartridges of a particular type, such as Cyan (C), Magenta (M), Yellow (Y), and Black (K).

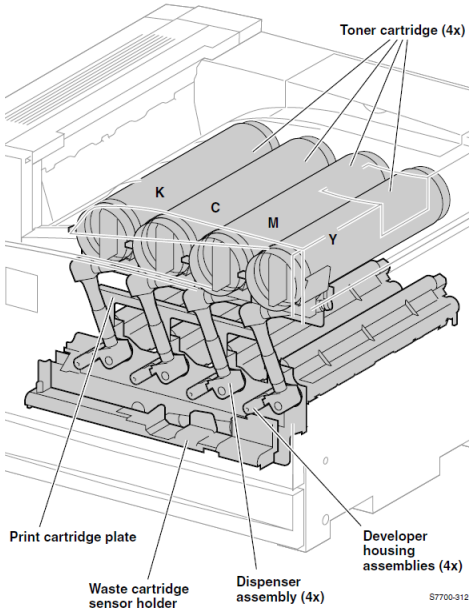


Figure 1-14 Assemblies of the Print Engine (cont'd.)

Ex. 53 (Xerox Phaser 7700.pdf at p. 48).

328. From Figure 1-14 reproduced above and as shown below, the toning stations of Xerox Phaser 7700 include toner dispenser assemblies, toner auger systems, and toner developer systems.

Troubleshooting the Toner Dispense/Auger/Developer System

Failures relating to Toner Dispense, Toner Auger, and Developer System include:

- False "Replace Toner Cartridge" message
- ATC Sensor errors 12, 13, 14, and 15
- Faded or missing primary colors

Checking the Toner Cartridge

1. Ensure the Toner Cartridge is correctly installed and rotated into its opened position.
2. Remove the Toner Cartridge in question.
3. Inspect the cartridge's cap to ensure it is securely taped in placed.
4. Tilt the cartridge back and forth to ensure it contains toner.
5. Rotate the Gear at the rear of the cartridge. You should hear the Auger Coil move inside the Toner Cartridge. If the Auger Coil and Gear rotate correctly, the cartridge is good.

Figure 3-2 Toner Cartridge Gear

Ex. 53 (Xerox Phaser 7700.pdf at p. 127).

329. Xerox Phaser 7700 also includes an indicator, such as an automatic toner correction (ATC) sensor, corresponding to each toner type (e.g., Cyan, Magenta, Yellow, and Black) as shown below.

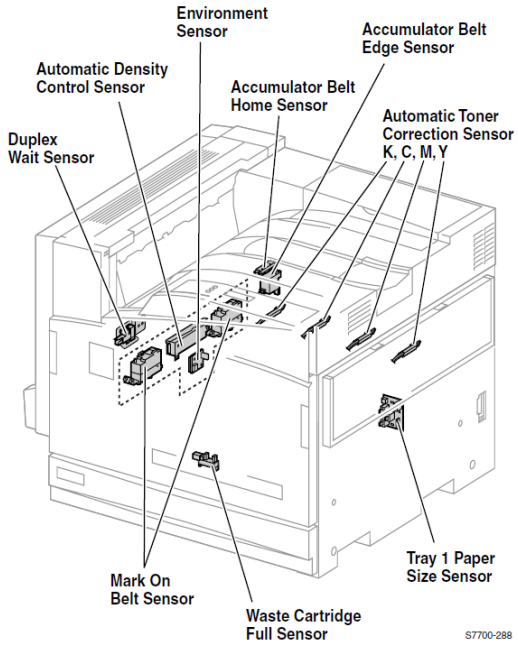


Figure 1-7 Print Engine Sensors and Switches (cont'd.)

Ex. 53 (Xerox Phaser 7700.pdf at p. 41).

330. Each ATC sensor is associated with one of the four different toner types.

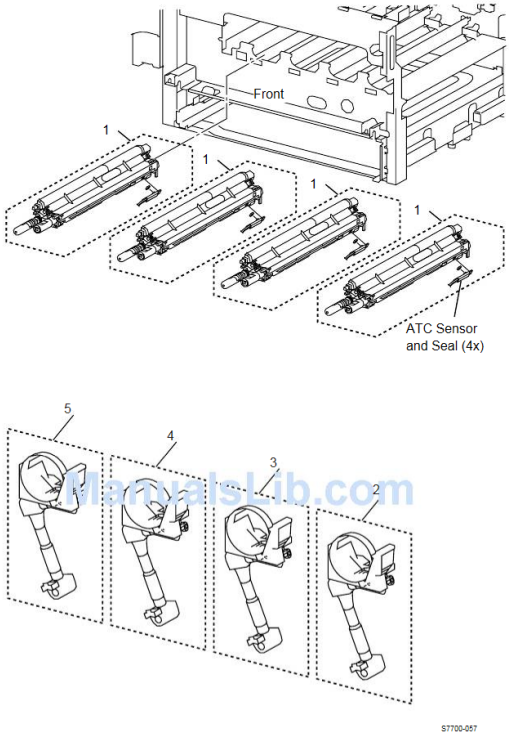


Figure 8-15 Electrophotographic Components FRUs (cont'd.)

Ex. 53 (Xerox Phaser 7700.pdf at p. 289).

331. The ATC sensors are also used for adjusting toner calibration values and performing diagnostic test functions.

ATC Sensor	ATC 1 is nnn ATC 2 is nnn ATC 3 is nnn ATC 4 is nnn	ATC = Automatic Toner Calibration Value range (0 - 1000)

Table 2-2 Service Diagnostics Test Menu Functions (cont'd.)

Test	Front Panel Display	Test Operation, Results and Function Definition
RegiCon 685 Setup Cycle		Refer to (Processes of the RegiCon Adjustment on page 4-127).
RegiCon Results Display		Refer to Processes of the RegiCon Adjustment on page 4-127.
ATC Sensor Setup		Refer to ATC Sensor Setup on page 4-142.
TRC Adjust		Engineering use only
ADC Output Check	Measuring: Result = 0 Stop Status = 0 ADC Sensor Fail = 0 ADC shutter Fail - 0	This tests the Automatic Density Correction sensor. The highlighted line indicates test results.
Tone Up/Down	Measuring: Result = 0 Status = 0 ATC Sensor Fail = None ATC Limit Warn = None ATC Change Warn = None	This tests the Automatic Toner Calibration sensor. The highlighted line indicates test results.

Ex. 53 (Xerox Phaser 7700.pdf at pp. 69 and 74).

332. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox Phaser 7700 senses the indicator, such as the ATC sensor, of the installed one of the plurality of toning stations that respectively correspond to a toner type (e.g., M, C, Y, and B) via a processing unit coupled to memory for processing and storing data received from the ATC sensor for determining the toner type installed in the corresponding toning station.

333. As shown below, Xerox Phaser 7700 senses the indicator, by, for example, reading and examining ATC values from the ATC sensor, of the installed one of the plurality of toning stations.

9. Examine the ATC values for the color you are testing. As toner is consumed but no fresh toner is augered into the Developer Housing, the toner concentration will fall. In a properly working Developer Housing, the values **Ave ATC** and **ATC Vol** should rise (about 20 points) to reflect this concentration change. (A change of about 30 points should trigger a Replace Toner Cartridge message.) **ATC Control** and **ATC Corr** should remain unchanged.
10. If the ATC values do not change as expected as toner is consumed in the Developer, replace the ATC Sensor.

Note For ATC Sensor errors 12, 13, 14, and 15, be sure to clear the Tech-Rep Faults 09-380 to 09-383 using the Service Diagnostic's **NVRAM Access: Clear Tech Rep Fault**.

Ex. 53 (Xerox Phaser 7700.pdf at p. 131).

334. As another example, the ATC sensor's calibration values are sensed and stored into the memory of Xerox Phaser 7700.

ATC Sensor Setup

When you replace an ATC Sensor or a Developer, make sure to program the ATC Sensor's calibration value into the printer's engine's NVRAM. Use the **Adjustment/Calibrations** menu's **ATC Sensor Setup Test**.

Backup the new engine NVRAM values to the printer's hard drive using the **NVRAM Access** menu's **Store Engine NVRAM** menu item.

Replacement ATC Sensors and the ATC Sensor on a replacement Developer Housing both include a tear off sticker with the Sensor's calibration value printed on it. Apply the sticker near to the corresponding Developer, behind the Waste Cartridge. (Next to the laser-cleaning slot is good location.)

Ex. 53 (Xerox Phaser 7700.pdf at p. 132).

335. Claim limitation 1[c] is satisfied for at least the following reasons. Responsive to the sensing step (such as based on the ATC sensor's calibration values), Xerox Phaser 7700 determines that one of the plurality of toning stations corresponds to a toner of a first type, such as a color toner Magenta, and selects a set of process setpoints associated with the toner of the first type (as further described for claim limitation 1[d] below).

336. As shown below, Xerox Phaser 7700 includes an ATC sensor setup process whenever an ATC sensor or developer is replaced. This setup process includes storing the ATC sensor's calibration values, for a particular toner, into the memory of Xerox Phaser 7700.

ATC Sensor Setup

When you replace an ATC Sensor or a Developer, make sure to program the ATC Sensor's calibration value into the printer's engine's NVRAM. Use the **Adjustment/Calibrations** menu's **ATC Sensor Setup Test**.

Backup the new engine NVRAM values to the printer's hard drive using the **NVRAM Access** menu's **Store Engine NVRAM** menu item.

Replacement ATC Sensors and the ATC Sensor on a replacement Developer Housing both include a tear off sticker with the Sensor's calibration value printed on it. Apply the sticker near to the corresponding Developer, behind the Waste Cartridge. (Next to the laser-cleaning slot is good location.)

Ex. 53 (Xerox Phaser 7700.pdf at p. 132).

337. As shown below, the ATC sensor measures an amount of toner in each developer and associated set of process setpoints including an intrinsic gain and output value that are stored in the memory of Xerox Phaser 7700.

ATC Sensor Setup

The Automatic Toner Calibration (ATC) sensor measures the amount of toner in each developer. These sensors have an intrinsic gain and output value are stored in printer NVRAM. New values must be entered when a new Developer Housing Housing is installed. Incorrect values have color balance effects.

On the side of each new Developer Housing Assembly is a small white tag with a bold-faced three-digit number printed near the bottom. The first digit is always "0." The other digits range between 0 and 99. There is a tear off section of the tag that should be placed on the chassis somewhere in plain view when the front door is open.

To set the new values:

1. Enter Service Diagnostics.
2. Highlight **Adjustments/Calibrations** menu and press **OK**.
3. Highlight **ATC Sensor Setup Test** and press **OK**.
4. Note the current values for the tag numbers on the front panel display. They should correspond to the tag numbers of the developers actually installed.
5. Select the color of the developer you installed.
6. Enter the tag number. You can only modify the lower two digits. Use the **Back** and **Info** keys to select which digit you want to change. Use the **Up** and **Down** keys to actually modify the digit.
7. Press **OK** to enter the data in engine NVRAM.
8. Press any button to abort the test.

Ex. 53 (Xerox Phaser 7700.pdf at p. 172).

338. Claim limitation 1[d] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7700 uses the ATC calibration values, which are a set of process setpoints associated with the toner of the first type, while using the respective toner. Xerox Phaser 7700

electrographically prints images based on the selected set of process setpoints (e.g., ATC sensor's calibration values) and the installed one of the toning stations.

339. For example, Xerox Phaser 7700 uses the developer ATC sensor's selected set of process setpoints (e.g., ATC Corr = 459, Ave ATC = 472, etc.) and one of the toning stations that contain the toner required toner during the print process.

Checking the Developer ATC Sensor

1. Power-up the printer in Service Diagnostics mode.
2. Scroll to the **Adjustment Calibration: Tone Up/Down** menu item. Press **OK**. The test displays information regarding the Developer ATC Sensors. Press **OK** to read the values for each Developer.
3. Examine the ATC values for primary color Developer you are troubleshooting. For a properly operating ATC Sensor, you should look at the values (yellow shown here) similar to these:
   <Tone Up/Down>
   Y: SensWarn=0 Pages=34
   ATC Control=470
   ATC Corr=459
   Ave ATC=472
   ATC Vol=214
4. Record the ATC values and then exit Service Diagnostics.
5. Remove the Toner Cartridge of the color you are troubleshooting.
6. Print 15 A-size pages of 100% Solid Fills of the primary color you are troubleshooting.
7. Turn Off the printer and then power-up the printer in Service Diagnostics mode.
8. Re-run the **Adjustment Calibration: Tone Up/Down** menu item.
9. Examine the ATC values for the color you are testing. As toner is consumed but no fresh toner is augered into the Developer Housing, the toner concentration will fall. In a properly working Developer Housing, the values **Ave ATC** and **ATC Vol** should rise (about 20 points) to reflect this concentration change. (A change of about 30 points should trigger a Replace Toner Cartridge message.) **ATC Control** and **ATC Corr** should remain unchanged.
10. If the ATC values do not change as expected as toner is consumed in the Developer, replace the ATC Sensor.

Note For ATC Sensor errors 12, 13, 14, and 15, be sure to clear the Tech-Rep Faults 09-380 to 09-383 using the Service Diagnostic's **NVRAM Access: Clear Tech Rep Fault**.

Ex. 53 (Xerox Phaser 7700.pdf at p. 142).

Photo Mode

Among other actions, selecting Photo Mode causes the printer to perform a Developer bead agitation cycle between printing each page. This allows the electrical charge applied to the toner in the Developer Housing to be evenly distributed to all the toner. This ensures better, more even, toner transfer to the Accumulator Belt resulting in the colors of the last high-coverage print looking the same as the colors in the first high-coverage print.

Ex. 53 (Xerox Phaser 7700.pdf at p. 131).

340. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by

performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[d]. For example, and without limitation, the Xerox Phaser 7700 performs substantially the same function in substantially the same way and achieves substantially the same result at least because responsive to the sensing step, the Xerox Phaser 7700 determines that the installed one of the plurality of toner development stations corresponds to a toner of a first type, such as Black, and selects a set of process set-points associated with the toner, wherein the set of process set-points include automatic toner calibration sensor values that control toner dispensation and development during a printing process.

341. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

342. Defendant's infringement of the '856 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT X
(Direct Infringement of the '278 Patent pursuant to 35 U.S.C. § 271(a))

343. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

344. Defendant has infringed and continues to infringe one or more claims of the '278 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

345. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

346. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services, including but not limited to have been without the permission, consent, authorization or license of MASA.

347. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Color 800/100 Press.

348. Claim 1 of the '278 Patent is recited below:

> 1[a] Digital printer or copier machine for the single-sided or double-sided printing of a substrate using at least one toner,
>
> 1[b] with at least one fixing device for fixing the toner onto the substrate, whereby the fixing device has at least one heating device for fusing the toner, and
>
> 1[c] and with at least one transport device, in order to supply the substrate to the heating device, in order to supply the substrate to the heating device, to guide it past the heating device and/or to further transport it from the heating device,
>
> 1[d] whereby the transport device has at least one suction belt that has a number of through passage openings and that can be impinged with a vacuum, characterized in that the suction belt is constructed as a mesh having stays forming through-passage openings,
>
> 1[e] the entire cross-section flow-through area of said through-passage openings being markedly greater than the entire area of said stays between said through-passage openings.

349. As one example, Xerox 800/1000 meets the limitations of claim 1 of the '278 Patent for at least the reasons described below.

350. Claim limitation 1[a] is satisfied because Xerox 800/1000 color press is a digital printer or copier machine that can print single-sided or double-sided images on a substrate (e.g., paper), using at least one toner.

351. As shown below, Xerox 800/1000 color press is a digital (e.g., networked) printer that can print in color, such as black, cyan, magenta, yellow, or black and white. Xerox 800/1000 color press includes several toners in upper left door 1a and upper right door 1b and uses at least one toner for printing.

The Xerox 800/1000 Color Press is a full color/black and white network printer that operates at a speed of 80/100 prints per minute.

The following illustration shows a basic configuration of the digital press:

1. Print engine - left side

a. Upper left door: containing dry ink/toner cartridges
b. Upper right door: containing dry ink/toner cartridges
c. Left front door
d. Right front door
e. Trays 1 and 2; additional feeding accessories available

2. Print engine - right side

a. Left front door
b. Right front door

3. User Interface (UI)
4. Optional Offset Catch Tray (OCT); additional optional finishing accessories available

Ex. 54 (color_800 user manual.pdf at p. 13).

352. Xerox 800/1000 color press includes different types of toners, such as black, cyan, magenta, yellow, and clear, installed in Xerox 800/1000 color press as shown below.

The following items are consumables for this machine. It is recommended that you have a supply of these items available to eliminate downtime when they need to be replaced.

Supply Item	Supply Unit Shipped with machine/Reorder Quantity	Approximate Print Yield/Carton (Full Color Prints)
Dry Ink/Toner Cartridge (Black)	1/box	50K
Dry Ink/Toner Cartridge (Cyan)	1/box	55K
Dry Ink/Toner Cartridge (Magenta)	1/box	51K
Dry Ink/Toner Cartridge (Yellow)	1/box	55K
Dry Ink/Toner Cartridge (Clear)	1/box	55K
Dry Ink/Toner Waste Bottle	1	120k
Fuser Web Assembly	1	400K

Note

- Dry Ink/Toner yield projections are based on 7.5 percent area coverage per color (4 colors = 30 percent) at standardized conditions on A4 (8.5 x 11 in.) Xerox Digital Color Xpressions+, 24 lb. (90 g/m^2) and Colotech Plus 90 g/m^2 reference paper. Actual yields vary greatly, depending on color intensity, area coverage, paper stock, and run mode selected.

Ex. 54 (color_800 user manual.pdf at p. 93).

353. As shown below, Xerox 800/1000 color press allows single-sided (e.g., simplex) and double-sided (e.g., duplex) print options.

6. Select **Print Method**, and select **Simplex** or **Duplex** from the menu.

   For Duplex, you can select **head to head** or **head to toe** layout.

Ex. 54 (color_800 user manual.pdf at p. 223).

354. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox 800/1000 color press meets the recited claim language because Xerox 800/1000 color press includes at least one fixing device, such as a fuser, for fixing the toner onto the substrate by fusing the toner onto paper, wherein the fixing device has at least one heating device for fusing the toner.

355. As shown below, Xerox 800/1000 color press includes at least one fixing device, a fuser, that heats up when the printer is powered ON. The fuser includes at least one heating element that warms up the fuser and fixes the toner onto the paper.

- Power on: Press the power switch to the **ON** position to power on the machine.

  A screen message advises of a short wait while the fuser warms up and the machine runs a system check. You can program the machine for a job during this time and the printing process will start automatically when the machine is ready.

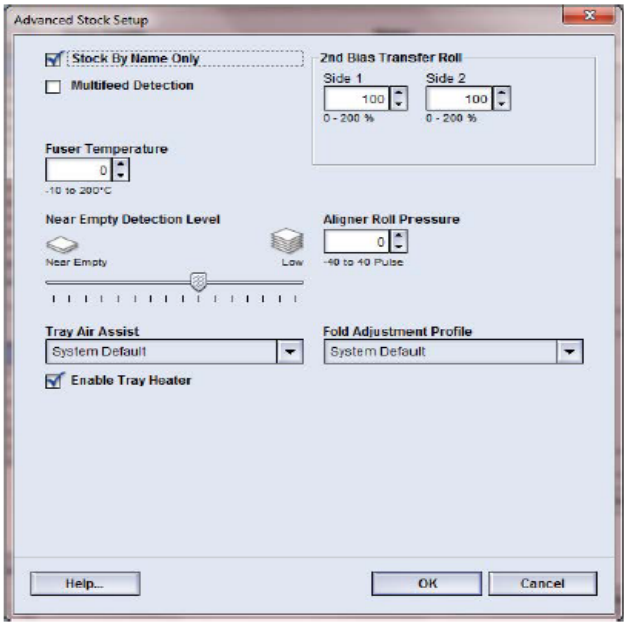
Ex. 54 (color_800 user manual.pdf at p. 19).

356. As another example, Xerox 800/1000 color press can adjust a temperature of the fuser depending upon print job type. The fuser of Xerox 800/1000 color press includes a heating device that enables temperature control of the fuser and causes the toner to fuse with paper.

Fuser Temperature

This option allows the user to adjust the fuser temperature for specific media types.

Adjusting the fuser temperature allows the machine to maintain the highest productivity possible when running mixed media jobs, and thereby allows the fuser belt and related components to be cooled rapidly when switching from heavy-weight paper to lighter-weight paper.



In order to maintain the highest productivity possible when running mixed media jobs, the fuser and its related components need to be cooled rapidly when switching from heavy weight paper to lighter weight paper. The technology of this fuser and its related components provide this rapid heating and cooling, thereby ensuring the highest productivity on printed output, especially when running mixed media jobs.

Under most conditions, the fuser temperature is adjusted automatically by the machine at point of need. On those very rare occasions, however, the user may need to minimally adjust the fuser temperature for specific stock weights or a specific job flow (such as running heavy weight cover stock with lighter weight paper).

The Fuser Temperature option allows the user to set the temperature within a range of -1 degree to +5 degrees Celsius (30.2 - 41.5 degrees Fahrenheit).

Ex. 54 (color_800 user manual.pdf at p. 19).

357. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox 800/1000 color press includes at least one transport device, including rollers and belts, that transport paper to and from the heating device, including the fuser.

358. As shown below, Xerox 800/1000 color press includes an aligner roller and a bias transfer roller that guide paper to the fuser.

- Paper path/paper transportation, including:
  - Aligner Roll Pressure
  - 2nd Bias Transfer Roll

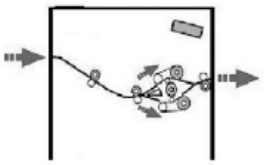
See color_800 user manual.pdf at pp. 62-63.

Second (2nd) bias transfer roll

The second bias transfer roll is where the image is transferred from the belt to the paper. The 2nd Bias Transfer Roll (2nd BTR) option is normally used with special stocks like heavier weight paper, such as 220 gsm and greater, 10 pt, or 12 pt. However there are times when it is also used with lighter weight paper as well. When using either heavier or lighter weight paper, you may want or need to adjust Side 1 for all 1-sided jobs.

Ex. 54 (color_800 user manual.pdf at p. 69).

Paper path



As media enters the Interface Module, it is fed to the Interface Module decurler for paper curl correction. The Interface Module decurler has both upper and lower decurler rolls that apply pressure to the media based upon the following:

- System default
- Manual selections made at the Interface Module control panel

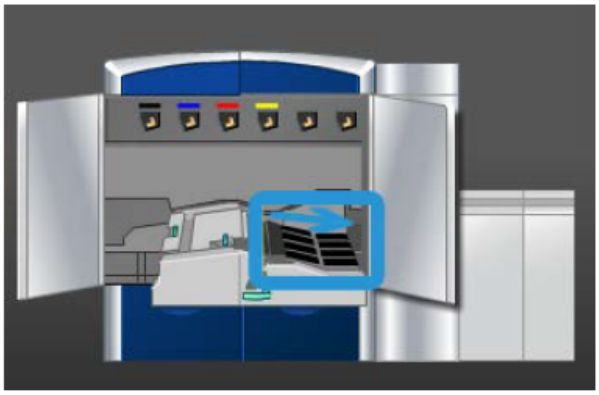
Based on the paper curl (decurl) settings, the Interface Module decurler gate routes the paper to either the up-curl (cupped) path, or the down-curl (bridged) path. The degree of pressure is applied independently to the upward and downward decurler arms.

From the Interface Module decurler, the print media is cooled and routed from the Interface Module to the optional finishing device(s) that is/are connected to your machine.

Ex. 54 (color_800 user manual.pdf at p. 181).

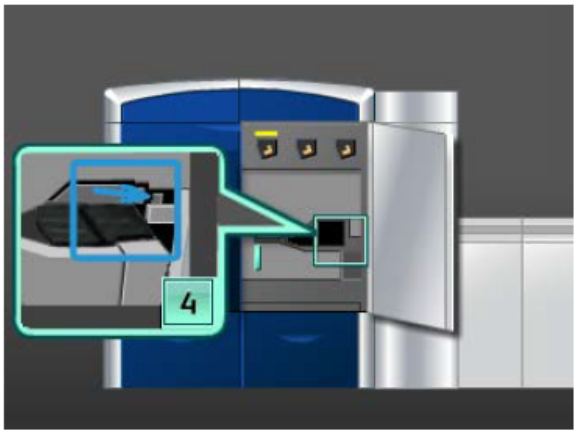
359. As shown below, Xerox 800/1000 color press includes transport devices, such as belts, in several areas, such as area 3, area 4, and area 5. The belts supply the paper to the fuser, guide the paper past the fuser, and further transport the paper from the fuser. The belts in Area 5, are located near the fuser and transport paper to and from the fuser.

6. Using a lint-free cloth, clean the belts in Area 3 by rotating them in the direction that paper travels.



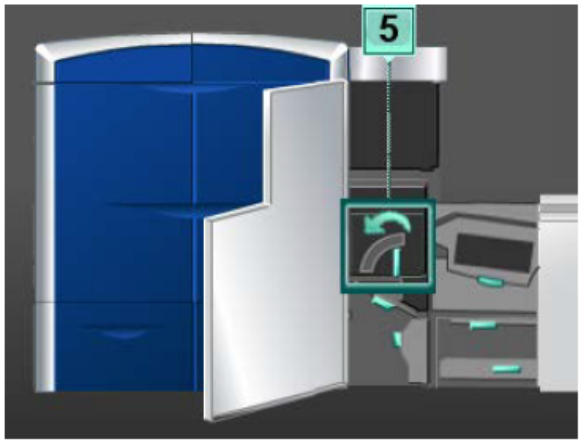
Ex. 54 (color_800 user manual.pdf at p. 81).

8. Using a lint-free cloth, clean the belts in Area 4 by rotating them in the direction that paper travels.



Ex. 54 (color_800 user manual.pdf at p. 82).

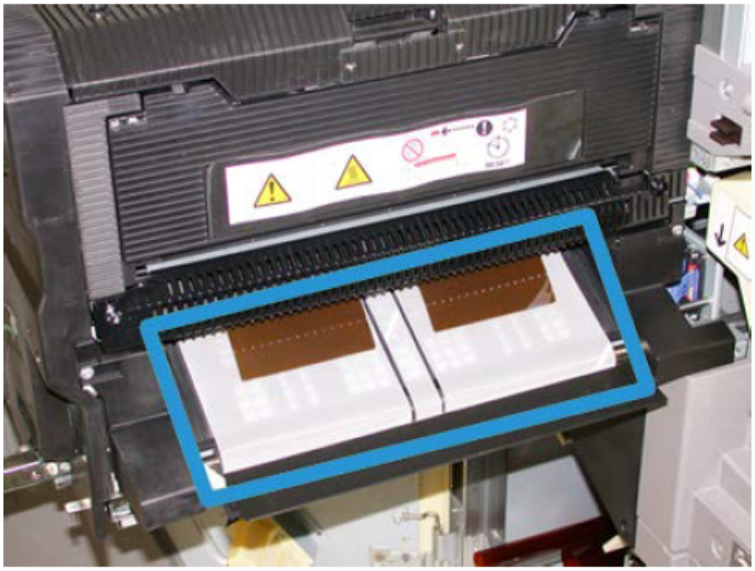
2. Grasp handle **5** and rotate it in the direction of the arrow, and slowly pull out the fuser until it stops.



3. Using a lint-free cloth, clean the belts in Area 5 (left side) by rotating them in the direction that paper travels.

Ex. 54 (color_800 user manual.pdf at p. 84).

4. Using a lint-free cloth, clean the belts in Area 5 (right side) by rotating them in the direction that paper travels.



5. Grasp handle 5 and gently push in the fuser until it stops.
6. Close the left front door (print engine right side).

Ex. 54 (color_800 user manual.pdf at p. 85).

360. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox 800/1000 color press includes a transport device with at least one of the belts including a number of through passage openings, such as holes that can be impinged with a vacuum. The belt is constructed as a mesh having stays forming through-passage openings.

361. As shown below, Xerox 800/1000 color press includes a belt in the left side of Area 5 that includes a number of through passage openings such as multiple holes. The area 5 belt of Xerox 800/100 color press is mesh with through-passage openings.

3. Using a lint-free cloth, clean the belts in Area 5 (left side) by rotating them in the direction that paper travels.

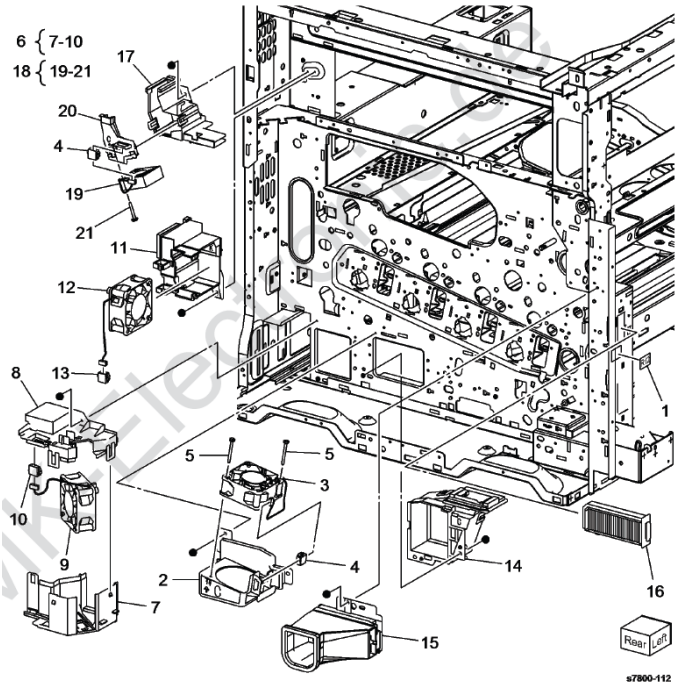
Ex. 54 (color_800 user manual.pdf at p. 84).

362. As another example, Xerox Phaser 7800 discloses a suction filter and a suction duct:

dc135 CRU/HFSI Status and Reset	• Y/M/C/KToner • Fuser • Belt Cleaner • Transfer Roller • Waste Cartridge • Y/M/C/K Imaging Unit • Transfer Belt • Staple Cartridge R1/R2/R3 • Suction Filter • Feed Roller 1/2/3/4/5 • Developer 1/2/3/4 • Punch Waste	Provides read access to each CRU/HFSI and displays the remaining life information. The non-CRUM supply item life counters can be reset: • Fuser • Accumulator Belt • Transfer Roller • Developer • Belt Cleaner • Suction Filter • Feed Rollers

Ex. 48 (Xerox_phaser_7800 service manual and parts list.pdf at p. 142).

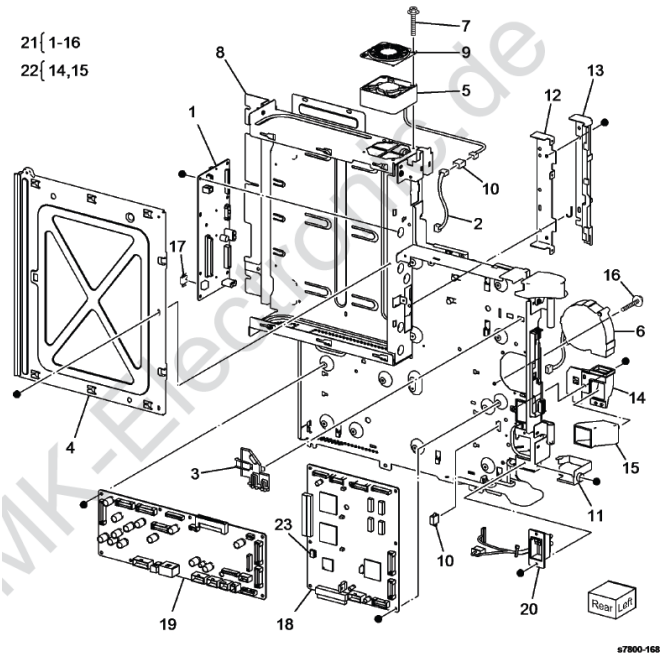
15	–	Suction Duct (Not Spared)
16	108R01037	Suction Filter (REP 4.11)



Ex. 48 (Xerox_phaser_7800 service manual and parts list.pdf at p. 16).

363. As shown below, Xerox Phaser 7800 discloses a suction fan.

6	127K64490	Suction Fan (MOT42-20) (REP 18.4)



Ex. 48 (Xerox_phaser_7800 service manual and parts list.pdf at p. 73).

364. From the above components, Xerox 800/1000 discloses the use of suction ducts, suction filters, and suction fans along with a transfer belt comprising a number of through-passage openings that can be impinged with a vacuum. The suction ducts, suction filters, and suction fans can be used for application of vacuum to the through-passage openings of the transfer belt. This application of vacuum to the transfer belt of Xerox 800/1000 can adhere paper to the transfer belt and enable reliable transport of the paper through the print engine.

365. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox 800/1000 color press meets the recited claim language because the area 5 belt of Xerox 800/1000 color press includes multiple through-passage openings, such as holes, with a total cross-sectional flow-through area of the through-passage openings appearing to be greater than the entire area of stays between the through-passage openings.

366. As shown below, the transfer belt of Area 5 includes a number of through-passage openings that have an entire cross-section flow-through area greater than a remaining area of the belt between the through-passage openings.

3. Using a lint-free cloth, clean the belts in Area 5 (left side) by rotating them in the direction that paper travels.

Ex. 54 (color_800 user manual.pdf at p. 84).

367. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[d]. For example, and without limitation, Xerox 800/1000 color press performs substantially the same function in substantially the same way and achieves substantially the same result at least because the transport device, such as the transfer belt, has a number of through-passage openings that can be impinged with a vacuum and can be constructed as a mesh.

368. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

369. Defendant's infringement of the '278 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XI
(Direct Infringement of the '582 Patent pursuant to 35 U.S.C. § 271(a))

370. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

371. Defendant has infringed and continues to infringe one or more claims of the '582 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

372. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

373. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

374. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox iGen 5 Press.

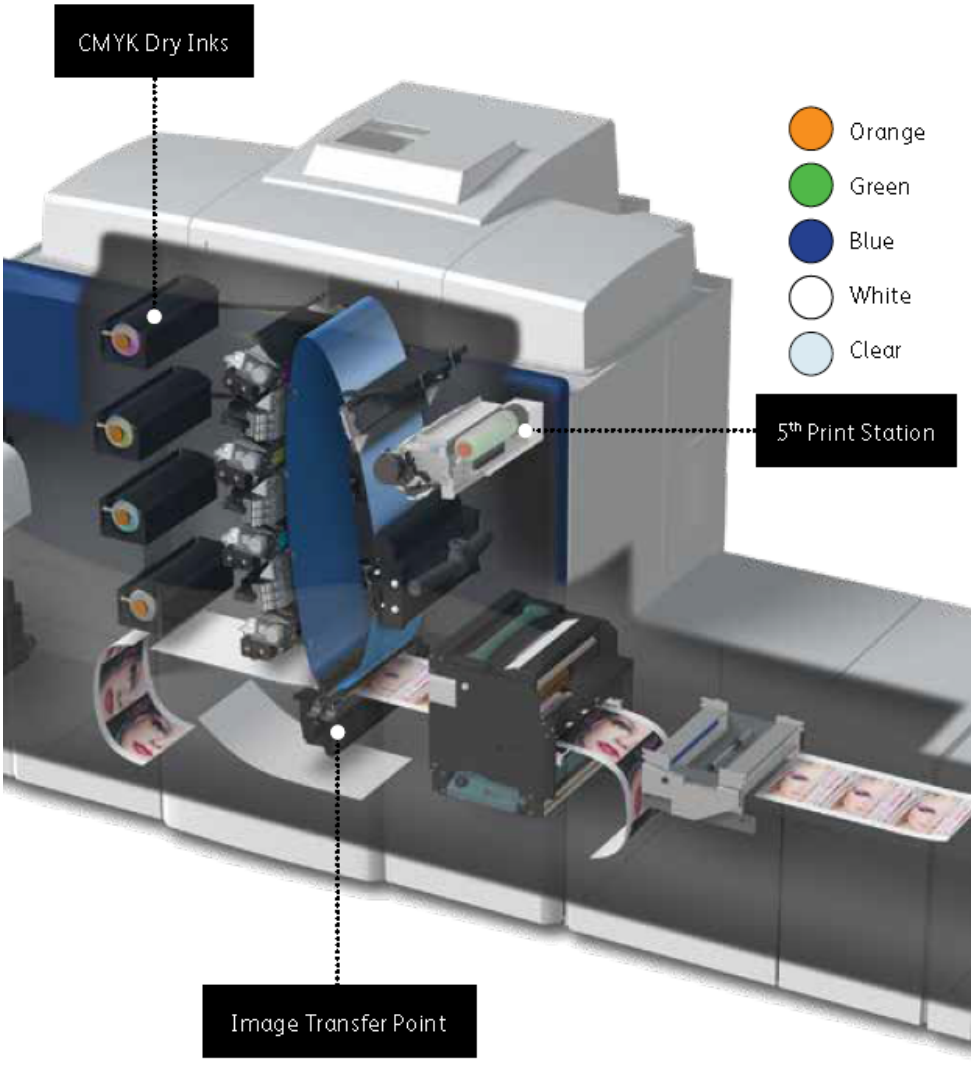
375. Claim 1 of the '582 Patent is recited below:

> A method of printing to form colored images with improved color gamut and enhanced gloss, the method comprising:
>
> 1[a] forming a color print using five or more different color pigments which in combination form at least a pentachrome color image;
>
> 1[b] depositing a clear toner overcoat to the at least pentachrome color image, wherein the clear toner overcoat is formed as a receiver and image dependent inverse mask; and
>
> 1[c] subjecting the clear toner overcoat and the at least pentachrome color image to a gloss enhancing process.

376. As one example, Xerox iGen 5 Press meets the limitations of claim 1 of the '582 Patent for at least the reasons described below.

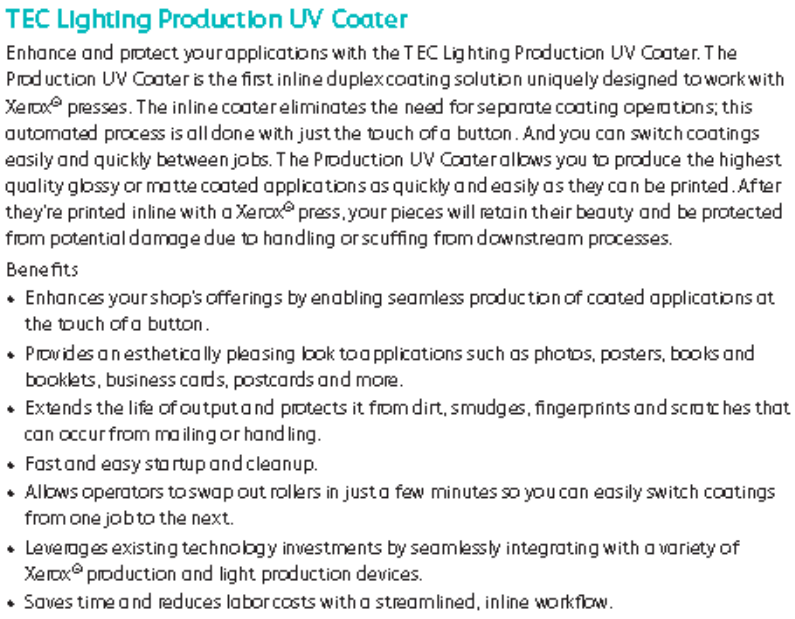
377. In general and as explained below, the limitations of claim 1 are satisfied because Xerox iGen 5 Press system performs a method of printing to form colored images (using five color pigments) with improved color gamut and enhanced gloss.

378. As shown below, Xerox iGen 5 Press forms colored images using the standard CMYK (cyan, magenta, yellow, black) gamut of four colors. A fifth color is provided such as orange, green, blue, or white can supplement the standard CMYK pallet of four colors to improve the press's gamut by adding the fifth color.



Ex. 55 (Brochure - Design and file preparation guidelines at p. 5).

379. As shown below, Xerox iGen 5 Press may be used in conjunction with a UV Coater such as the TEC Lighting Production UV Coater to apply an enhanced gloss to the image with the improved color gamut.



TEC Lighting Production UV Coater

Enhance and protect your applications with the TEC Lighting Production UV Coater. The Production UV Coater is the first inline duplex coating solution uniquely designed to work with Xerox® presses. The inline coater eliminates the need for separate coating operations; this automated process is all done with just the touch of a button. And you can switch coatings easily and quickly between jobs. The Production UV Coater allows you to produce the highest quality glossy or matte coated applications as quickly and easily as they can be printed. After they're printed inline with a Xerox® press, your pieces will retain their beauty and be protected from potential damage due to handling or scuffing from downstream processes.

Benefits

- Enhances your shop's offerings by enabling seamless production of coated applications at the touch of a button.
- Provides an esthetically pleasing look to applications such as photos, posters, books and booklets, business cards, postcards and more.
- Extends the life of output and protects it from dirt, smudges, fingerprints and scratches that can occur from mailing or handling.
- Fast and easy startup and cleanup.
- Allows operators to swap out rollers in just a few minutes so you can easily switch coatings from one job to the next.
- Leverages existing technology investments by seamlessly integrating with a variety of Xerox® production and light production devices.
- Saves time and reduces labor costs with a streamlined, inline workflow.

Ex. 56 (Brochure - Xerox iGen 5 Press Finishing at p. 13).

380. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox iGen 5 Press forms a color print using five or more different color pigments which in combination form at least a pentachrome color image. As shown below, Xerox iGen 5 produces a color image by combining colors from five different toners. For example, Xerox iGen 5 Press combines four pigments such as the CMYK dry inks with a fifth pigment color, such as orange, green, or blue to form a pentachrome color image.

Ex. 57 (PDF of http://xeroxigen5press.freeflowdp.com/xeroxigen5press).

381. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox iGen 5 Press deposits a clear toner overcoat to the at least pentachrome color image, wherein the clear toner overcoat is formed as a receiver and image dependent inverse mask.

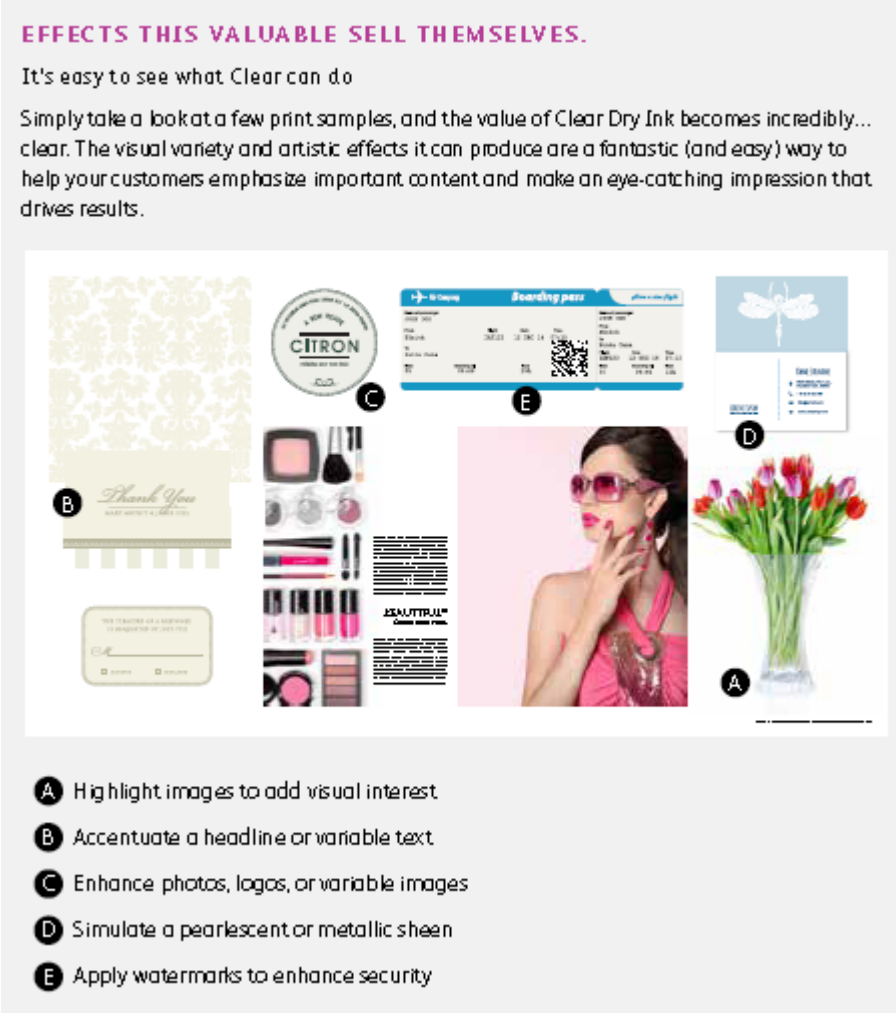
382. As shown below, Xerox iGen 5 Press's clear dry ink of the fifth color may be substituted with a clear dry ink in the fifth print station to deposit a clear toner overcoat on a second pass through the printer after a pentrachrome image has been produced in a first, preceding pass.

MORE POSSIBILITIES –
AND EVEN MORE VALUE.

The Xerox® iGen® 5 has a well-earned reputation for delivering high-quality, high-value digital output — and with the option to run Xerox® Clear Dry Ink in the 5th print station, it can elevate your printing capabilities to a whole new level. The iGen® 5 allows you to use Clear Dry Ink to incorporate a specialty effect for both static and variable page content. Need to highlight an image, draw attention to a headline, or apply a watermark? No problem! The iGen® 5 + Clear Dry Ink makes it easy — and delivers amazing results every time.

Ex. 58 (Brochure – Xerox iGen 5 Press Clear Dry Ink at p. 1).

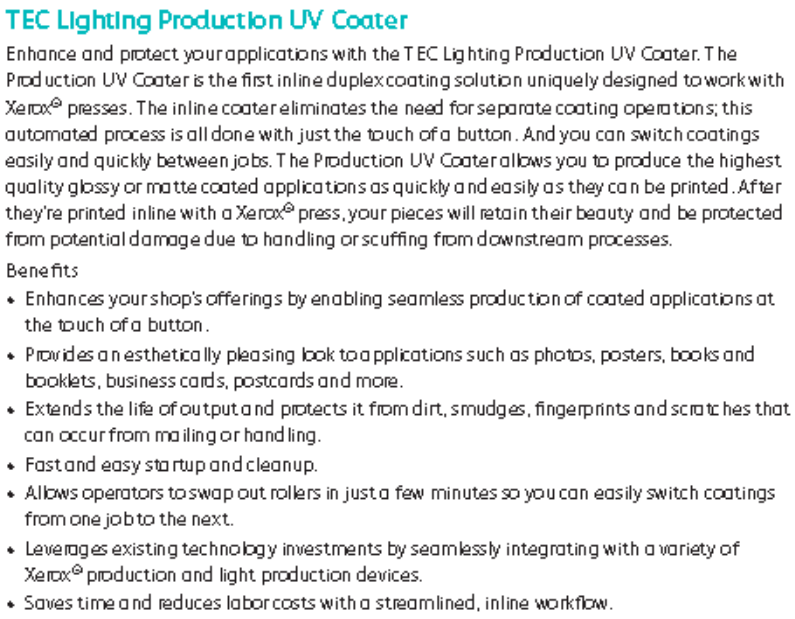
383. As shown below, Xerox iGen 5 Press permits the clear toner overcoat to be formed as a receiver and image dependent inverse mask such as by permitting one to highlight images to add visual interest, accentuate a headline and variable text, enhance photos, logos, or variable images, simulate a pearlescent or metallic sheen, and/or apply watermarks to enhance security with the clear dry ink from which the receiver is formed.



Ex. 58 (Brochure – Xerox iGen 5 Press Clear Dry Ink at p. 2).

384. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox iGen 5 Press subjects the clear toner overcoat and the at least pentachrome color image to a gloss enhancing process.

385. As shown below, the clear toner overcoat and the pentachrome color image is subject to a gloss enhancing process through a system which includes a TEC Lighting Production UV Coater whereby the UV Coater produces the highest quality, glossy coated image.



TEC Lighting Production UV Coater

Enhance and protect your applications with the TEC Lighting Production UV Coater. The Production UV Coater is the first inline duplex coating solution uniquely designed to work with Xerox® presses. The inline coater eliminates the need for separate coating operations; this automated process is all done with just the touch of a button. And you can switch coatings easily and quickly between jobs. The Production UV Coater allows you to produce the highest quality glossy or matte coated applications as quickly and easily as they can be printed. After they're printed inline with a Xerox® press, your pieces will retain their beauty and be protected from potential damage due to handling or scuffing from downstream processes.

Benefits

- Enhances your shop's offerings by enabling seamless production of coated applications at the touch of a button.
- Provides an esthetically pleasing look to applications such as photos, posters, books and booklets, business cards, postcards and more.
- Extends the life of output and protects it from dirt, smudges, fingerprints and scratches that can occur from mailing or handling.
- Fast and easy startup and cleanup.
- Allows operators to swap out rollers in just a few minutes so you can easily switch coatings from one job to the next.
- Leverages existing technology investments by seamlessly integrating with a variety of Xerox® production and light production devices.
- Saves time and reduces labor costs with a streamlined, inline workflow.

Ex. 56 (Brochure - Xerox iGen 5 Press Finishing at p. 13).

386. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim element 1[b]. For example, and without limitation, Xerox iGen 5 Press performs substantially the same function in substantially the same way and achieves substantially the same result at least because it forms at least a pentachrome color image in a plurality of passes; for example, if a White and CMYK (cyan, magenta, yellow, black) colors are to be applied to a sheet with no overlap, White may be applied in a first pass and the CMYK may be applied in a second pass.

387. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

388. Defendant's infringement of the '582 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XII
(Direct Infringement of the '375 Patent pursuant to 35 U.S.C. § 271(a))

389. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

390. Defendant has infringed and continues to infringe one or more claims of the '375 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

391. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

392. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

393. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox ColorQube 9201/9202/9203.

394. Claim 1 of the '375 Patent is recited below:

A printer comprising:

1[a] a marking mechanism for producing an image on media sheets;

1[b] first and second trays adapted to receive media sheets;

1[c] a sheet feeding mechanism with a drive for advancing media sheets past the marking mechanism, said sheet feeding mechanism having a picker to remove media sheets from trays;

1[d] a media load position for each of said first and second trays at which the trays are accessible to an operator for inserting a supply of media sheets;

1[e] a media pick position for each of said first and second trays at which the trays are aligned with the picker; and

1[f] a mechanism adapted to selectively move each of said first and second trays between its media load position and its pick position, said trays being aligned side

by side when both at their pick positions such that the picker can simultaneously remove a sheet from each tray.

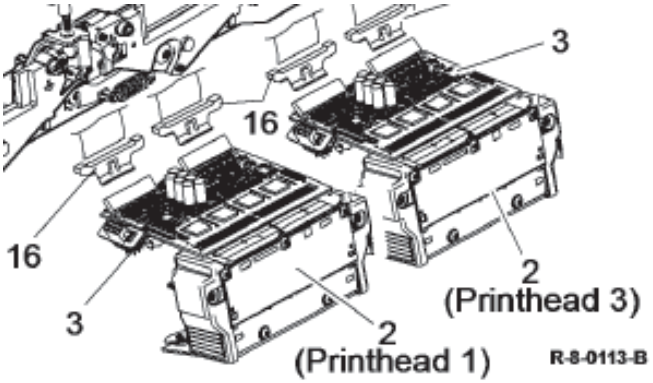
395. As one example, ColorQube 9201 meets the limitations of claim 1 of the '375 Patent for at least the reasons described below.

396. An image of ColorQube 9201 is provided below:

Ex. 59 (ColorQube Printer.pdf).

397. In general and as explained below, the limitations of claim 1 are satisfied because ColorQube 9201 is a printer that selectively moves the printer trays from one position to another to allow an operator to insert a paper supply into the printer and allow the feeder to access the paper supply.

398. Claim limitation 1[a] is satisfied for at least the following reasons. ColorQube 9201 includes a marking unit drive assembly that moves a printhead that is a marking mechanism to produce an image on media sheets, as shown below.



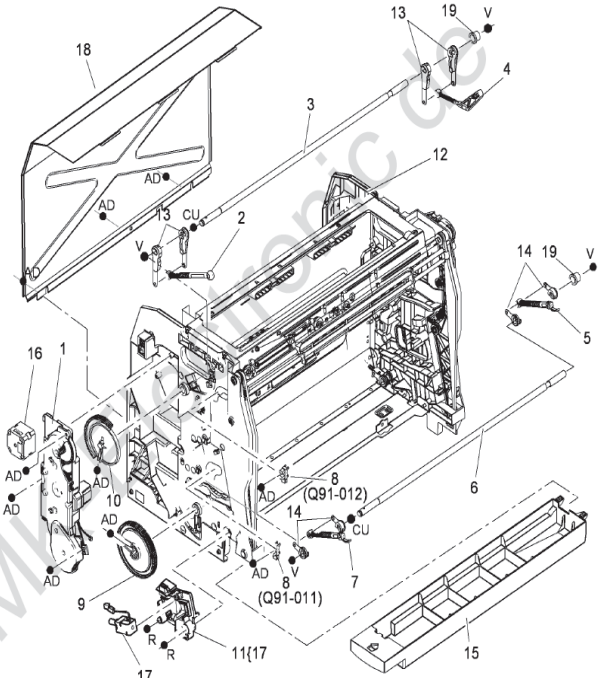
Ex. 60 (CQ9203pdf, p.1391).

399. Additionally, ColorQube 9201 include a marking unit drive assembly which is a marking mechanism for producing an image on media sheets.

PL 91.10 Marking Unit Drive Assembly

Item	Part	Description
1	041K06600	Carriage drive train (REP 91.1)
2	012K06940	Upper front compliant link (REP 91.8)
3	–	Upper carriage drive shaft (Not spared) (REP 91.8)
4	012K06950	Upper rear compliant link (REP 91.8)
5	012K06930	Lower rear compliant link (REP 91.10)
6	–	Lower carriage drive shaft (Not spared) (REP 91.10)
7	012K06920	Lower front compliant link (REP 91.10)
8	130E12970	Lower carriage home sensor (Q91-011)/Upper carriage home sensor (Q91-012)
9	807E29030	Lower carriage drive gear
10	807E29040	Upper carriage drive gear
11	120K03490	Waste tray lock solenoid assembly
12	116K00812	Marking unit enclosure (frame only)
13	011K03140	Upper carriage crank (See NOTE) (REP 91.8)
14	011K03130	Lower carriage crank (See NOTE)
15	050E28780	Waste tray
16	–	Carriage drive motor (MOT 91-031) (P/O PL 91.10 Item 1)
17	–	Waste tray lock solenoid (SOL91-044) (P/O PL 91.10 Item 11)
18	–	Marking unit enclosure cover (Not spared)
19	–	Carriage drive bushing (P/O PL 31.11 Item 23)

NOTE: *If an entire crank (PL 91.10 Item 13 or PL 91.10 Item 14) needs to be replaced then 2 parts need to be ordered.*

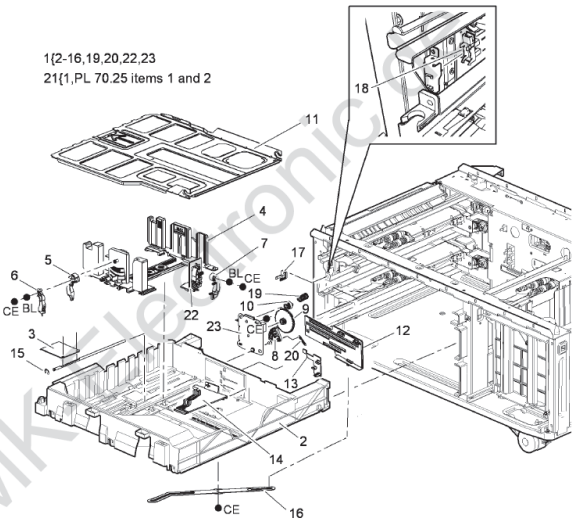


Ex. 60 (CQ9203pdf, p.1388).

400. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, ColorQube includes a first and second tray such as tray 1 and 2 to receive media sheets (e.g., paper).

PL 70.10 Tray 1 and 2 Assembly

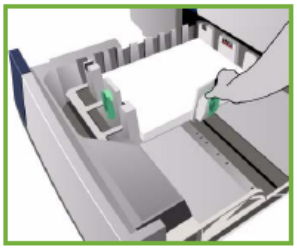
Item	Part	Description
1	–	Tray 1 and 2 tray assembly (P/O PL 70.10 Item 21) (REP 71.1)
2	–	Paper tray (P/O PL 70.10 Item 1)
3	–	Plate arm (P/O PL 70.10 Item 1)
4	–	Paper width guide (P/O PL 70.10 Item 1) (REP 71.2)
5	–	Latch guide right (P/O PL 70.10 Item 1)
6	–	Latch guide left (P/O PL 70.10 Item 1)
7	–	Handle release (P/O PL 70.10 Item 1)
8	–	Gear 60 (P/O PL 70.10 Item 1) (REP 71.3)
9	–	Gear 13/60 (P/O PL 70.10 Item 1) (REP 71.3)
10	–	Gear 13 dog (P/O PL 70.10 Item 1)
11	–	Elevate plate assembly (P/O PL 70.10 Item 1) (REP 71.2)
12	–	Length sensing bracket (P/O PL 70.10 Item 1)
13	–	Width sensing bracket (P/O PL 70.10 Item 1)
14	–	Actuator bracket (P/O PL 70.10 Item 1)
15	–	E-clip (P/O PL 70.10 Item 1)
16	–	Metal link arm (P/O PL 70.10 Item 1)
17	003E77651	Tray location catch
18	130E18220	Lower door interlock sensor (Q01-102)
19	–	Spring (P/O PL 70.10 Item 1)
20	–	Spring (P/O PL 70.10 Item 1)
21	604K55411	Tray 1 & 2 Kit (Contains tray assembly and front cover)
22	–	Paper length guide (P/O PL 70.10 Item 1) (REP 71.2)
23	–	Rear plate (P/O PL 70.10 Item 1)



Ex. 60 (CQ9203.pdf, p.1362).

Load Paper into the Paper Trays

1. Open the Paper Tray and load paper into the tray. Do NOT fill above the Max line.
2. Adjust the guides to hold the paper against the side of the tray.



3. When you close the tray, the *Paper Settings* screen is displayed. Input the size, type and color of the paper you have loaded and touch **Confirm**.

   Note: A paper jam may occur if a tray is opened while it is being used to feed stock. Do not open Tray 1 if Tray 2 is open.

Ex. 61 (CQube_QUG_v10_en.pdf, p.10).

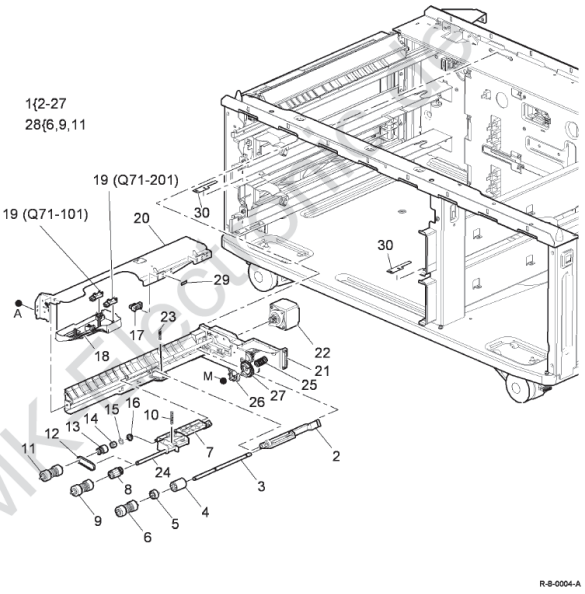
401. Claim limitation 1[c] is satisfied for at least the following reasons. ColorQube 9201 include a paper feed assembly which is a sheet feeding mechanism that includes a drive such as drive belt [12] and feed roll assembly [11] that advance the media sheets past the

marking mechanism, as shown below. The paper feed assembly includes a picker such as a roller for removing media sheets from the tray.

PL 81.25 Tray 1 Paper Feed Assembly

Item	Part	Description
1	059K64454	Feedhead assembly (REP 81.1)
2	–	Retard roll support (P/O PL 81.25 Item 1)
3	–	Retard roll shaft (P/O PL 81.25 Item 1)
4	–	Clutch assembly (P/O PL 81.25 Item 1)
5	–	Coupling (P/O PL 81.25 Item 1)
6	–	Retard roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
7	–	Nudger roll support (P/O PL 81.25 Item 1)
8	–	Nudger pulley (P/O PL 81.25 Item 1)
9	–	Nudger roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
10	809E95240	Spring
11	–	Feed roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
12	–	Drive belt (P/O PL 81.25 Item 1)
13	–	Drive clutch (P/O PL 81.25 Item 1)
14	–	Feed pulley (P/O PL 81.25 Item 1)
15	–	Washer (P/O PL 81.25 Item 1)
16	–	Bearing (P/O PL 81.25 Item 1)
17	130E18220	Stack height sensor (Q71-336)
18	038E41151	Guide
19	130E11610	Tray 1 empty sensor (Q71-201)/ Feed sensor (Q71-101) (REP 81.8)
20	–	Cover (P/O PL 81.25 Item 1)
21	–	Elevator coupling assembly (P/O PL 81.25 Item 1)
22	–	T1 feed/elevator motor (MOT71-002) (P/O PL 81.25 Item 1)
23	–	Spring (P/O PL 81.25 Item 1)
24	–	Nudger roll shaft (P/O PL 81.25 Item 1)
25	–	Spring (P/O PL 81.25 Item 1)
26	–	Dog spacer (P/O PL 81.25 Item 1)
27	–	Gear 31 (P/O PL 81.25 Item 1)
28	–	Feed roll kit (REF: PL 31.11 Item 26)
29	–	Shim (P/O PL 81.25 Item 1)
30	019E74540	Slide pad

NOTE: *To reset the HFSI count, go to dC135.*

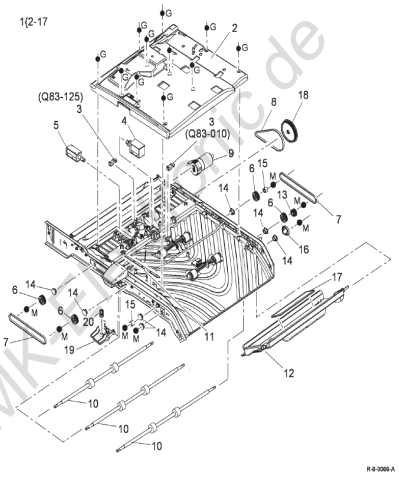


Ex. 60 (CQ9203.pdf, p.1376).

402. Additionally, sheet feeding mechanism has a picker such as the nip takeaway rolls 10 that removes media sheets from trays, as shown below:

PL 82.15 Horizontal Paper Path

Item	Part	Description
1	038K23501	Horizontal paper path assembly (REP 83.1)
2	–	Top cover (P/O PL 82.15 Item 1)
3	130E12950	Duplex sensor (17)(Q83-010)(REP 83.3)/Duplex end sensor (14)(Q83-125)(REP 83.2) (130E11610)
4	121E26510	Nip 'C' release solenoid (SOL82-007) (REP 83.2)
5	121E26500	HPP diverter solenoid (SOL83-004) (REP 83.2)
6	020K20480	Pulley M6 (21T)
7	023E31410	Horizontal transport drive belt front (REP 83.5)
8	023E31490	Drive belt M6
9	127K62291	Horizontal transport motor (M6) (MOT82-003) (REP 83.4)
10	059E10740	Nip R,C and Q takeaway rolls (REP 83.5)
11	–	Horizontal illuminator (Q82-005) (P/O PL 82.15 Item 1)
12	–	Heatshield (P/O PL 82.15 Item 1)
13	807E29170	Heatshield lift gear
14	–	Bearing (Not spared)
15	–	Spacer (Not spared)
16	807E29160	Heatshield sector gear
17	–	Reg/Preheat illuminator PWB (P/O PL 82.15 Item 12)
18	020E53880	Pulley M6 (80T)
19	868E53910	Release latch
20	–	Spring (Not spared)



Ex. 60 (CQ9203.pdf, p.1384).

403. Claim limitation 1[d] is satisfied for at least the following reasons. ColorQube 9201 includes a media load position that makes the tray accessible for an operator to insert a paper supply into the paper tray, as shown below.

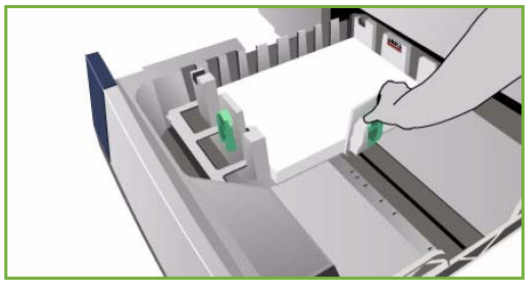
Loading Trays 1 and 2

If Tray 1 or Tray 2 is set as a *Dedicated* tray, the media requested must be loaded in the tray and the settings cannot be adjusted.

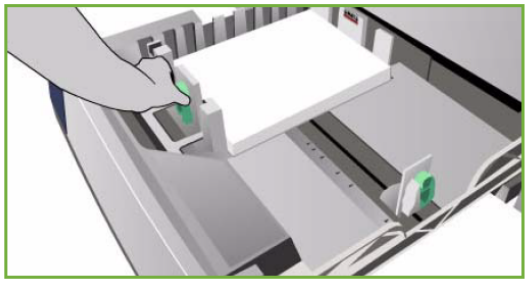
⚠ CAUTION: A problem will occur if a tray is opened while it is being used to feed media. Do not open Tray 1 if Tray 2 is open.

1. Open the tray.
2. Place the media in the tray. Media must be positioned against the left side of the tray.
   - Load pre-printed paper and labels face-up and with the top towards the front of the device.
   - Load hole punched paper with the holes on the right edge.

   Paper must not be loaded above the maximum fill line.



3. Make sure that the paper guides just touch the paper.
   - To position the right side guide, squeeze the clamp mechanism and slide the guide to touch the right edge of the media.
   - To position the rear guide, squeeze the clamp mechanism and slide the guide to touch the rear edge of the media.



4. Close the paper tray.

   The paper settings for the tray are displayed on the touch screen.
5. **Confirm** or change the settings, as required.

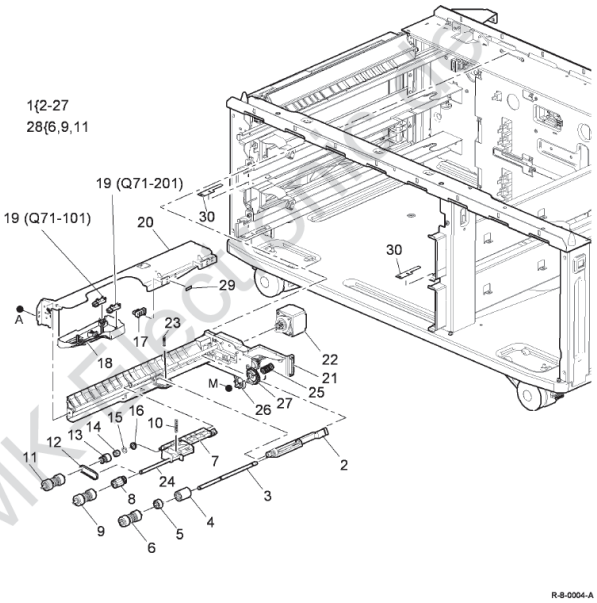
Ex. 62 (colorcube_9201_user-guide.pdf, p. 222).

404. Claim limitation 1[e] is satisfied for at least the following reasons. ColorQube 9201 include a media pick position that aligns the media stack with the picker, as shown below. Each tray is moved into the media pick position by an elevator coupling assembly [21] and feed/elevator motor [22] which align trays with the picker:

PL 81.25 Tray 1 Paper Feed Assembly

Item	Part	Description
1	059K64454	Feedhead assembly (REP 81.1)
2	–	Retard roll support (P/O PL 81.25 Item 1)
3	–	Retard roll shaft (P/O PL 81.25 Item 1)
4	–	Clutch assembly (P/O PL 81.25 Item 1)
5	–	Coupling (P/O PL 81.25 Item 1)
6	–	Retard roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
7	–	Nudger roll support (P/O PL 81.25 Item 1)
8	–	Nudger pulley (P/O PL 81.25 Item 1)
9	–	Nudger roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
10	809E95240	Spring
11	–	Feed roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
12	–	Drive belt (P/O PL 81.25 Item 1)
13	–	Drive clutch (P/O PL 81.25 Item 1)
14	–	Feed pulley (P/O PL 81.25 Item 1)
15	–	Washer (P/O PL 81.25 Item 1)
16	–	Bearing (P/O PL 81.25 Item 1)
17	130E18220	Stack height sensor (Q71-336)
18	038E41151	Guide
19	130E11610	Tray 1 empty sensor (Q71-201)/ Feed sensor (Q71-101) (REP 81.8)
20	–	Cover (P/O PL 81.25 Item 1)
21	–	Elevator coupling assembly (P/O PL 81.25 Item 1)
22	–	T1 feed/elevator motor (MOT71-002) (P/O PL 81.25 Item 1)
23	–	Spring (P/O PL 81.25 Item 1)
24	–	Nudger roll shaft (P/O PL 81.25 Item 1)
25	–	Spring (P/O PL 81.25 Item 1)
26	–	Dog spacer (P/O PL 81.25 Item 1)
27	–	Gear 31 (P/O PL 81.25 Item 1)
28	–	Feed roll kit (REF: PL 31.11 Item 26)
29	–	Shim (P/O PL 81.25 Item 1)
30	019E74540	Slide pad

NOTE: *To reset the HFSI count, go to dC135.*



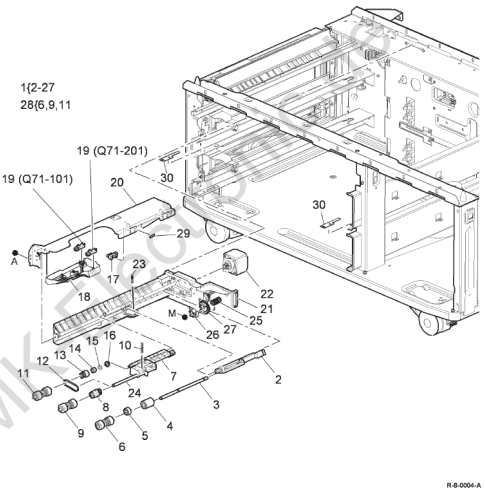
Ex. 60 (CQ9203.pdf, p.1376).

405. Claim limitation 1[f] is satisfied for at least the following reasons. ColorQube 9201 include a mechanism such as the elevator coupling assembly [21] and elevator motor [22] shown below, that selectively move each of a first tray and a second tray in between their media load position and pick positions. The first tray and the second tray are aligned side by side when they are in the media pick position so that the picker can pick paper from both trays simultaneously.

PL 81.25 Tray 1 Paper Feed Assembly

Item	Part	Description
1	059K64454	Feedhead assembly (REP 81.1)
2	–	Retard roll support (P/O PL 81.25 Item 1)
3	–	Retard roll shaft (P/O PL 81.25 Item 1)
4	–	Clutch assembly (P/O PL 81.25 Item 1)
5	–	Coupling (P/O PL 81.25 Item 1)
6	–	Retard roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
7	–	Nudger roll support (P/O PL 81.25 Item 1)
8	–	Nudger pulley (P/O PL 81.25 Item 1)
9	–	Nudger roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
10	809E95240	Spring
11	–	Feed roll assembly (REP 81.4) (P/O PL 81.25 Item 28) (See NOTE)
12	–	Drive belt (P/O PL 81.25 Item 1)
13	–	Drive clutch (P/O PL 81.25 Item 1)
14	–	Feed pulley (P/O PL 81.25 Item 1)
15	–	Washer (P/O PL 81.25 Item 1)
16	–	Bearing (P/O PL 81.25 Item 1)
17	130E18220	Stack height sensor (Q71-336)
18	038E41151	Guide
19	130E11610	Tray 1 empty sensor (Q71-201)/ Feed sensor (Q71-101) (REP 81.8)
20	–	Cover (P/O PL 81.25 Item 1)
21	–	Elevator coupling assembly (P/O PL 81.25 Item 1)
22	–	T1 feed/elevator motor (MOT71-002) (P/O PL 81.25 Item 1)
23	–	Spring (P/O PL 81.25 Item 1)
24	–	Nudger roll shaft (P/O PL 81.25 Item 1)
25	–	Spring (P/O PL 81.25 Item 1)
26	–	Dog spacer (P/O PL 81.25 Item 1)
27	–	Gear 31 (P/O PL 81.25 Item 1)
28	–	Feed roll kit (REF: PL 31.11 Item 26)
29	–	Shim (P/O PL 81.25 Item 1)
30	019E74540	Slide pad

NOTE: *To reset the HFSI count, go to dC135.*



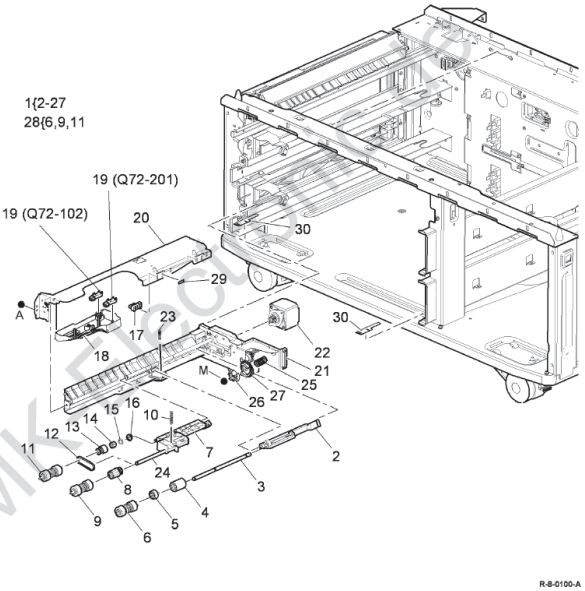
Ex. 60 (CQ9203.pdf, p.1376).

406. Additionally, as shown below, the mechanism for moving trays is connected independently to each tray, to move each tray from the media load position to its pick position such that the picker can remove a sheet from each tray.

PL 81.26 Tray 2 Paper Feed Assembly

Item	Part	Description
1	059K64454	Feedhead assembly (REP 81.1)
2	–	Retard roll support (P/O PL 81.26 Item 1)
3	–	Retard roll shaft (P/O PL 81.26 Item 1)
4	–	Clutch assembly (P/O PL 81.26 Item 1)
5	–	Coupling (P/O PL 81.26 Item 1)
6	–	Retard roll assembly (REP 81.4) (P/O PL 81.26 Item 28) (See NOTE)
7	–	Nudger roll support (P/O PL 81.26 Item 1)
8	–	Nudger pulley (P/O PL 81.26 Item 1)
9	–	Nudger roll assembly (REP 81.4) (P/O PL 81.26 Item 28) (See NOTE)
10	809E95240	Spring
11	–	Feed roll assembly (REP 81.4) (P/O PL 81.26 Item 28) (See NOTE)
12	–	Drive belt (P/O PL 81.26 Item 1)
13	–	Drive clutch (P/O PL 81.26 Item 1)
14	–	Feed pulley (P/O PL 81.26 Item 1)
15	–	Washer (P/O PL 81.26 Item 1)
16	–	Bearing (P/O PL 81.26 Item 1)
17	130E18220	Stack height sensor (Q72-337)
18	038E41151	Guide
19	130E11610	Tray 2 empty sensor (Q72-201)/ Feed sensor (Q72-102) (REP 81.8)
20	–	Cover (P/O PL 81.26 Item 1)
21	–	Elevator coupling assembly (P/O PL 81.26 Item 1)
22	–	T2 feed/elevator motor (MOT72-001) (P/O PL 81.26 Item 1)
23	–	Spring (P/O PL 81.26 Item 1)
24	–	Nudger roll shaft (P/O PL 81.26 Item 1)
25	–	Spring (P/O PL 81.26 Item 1)
26	–	Dog spacer (P/O PL 81.26 Item 1)
27	–	Gear 31 (P/O PL 81.26 Item 1)
28	–	Feed roll kit (REF: PL 31.11 Item 26)
29	–	Shim (P/O PL 81.26 Item 1)
30	019E74540	Slide pad

NOTE: *To reset the HFSI count, go to dC135.*

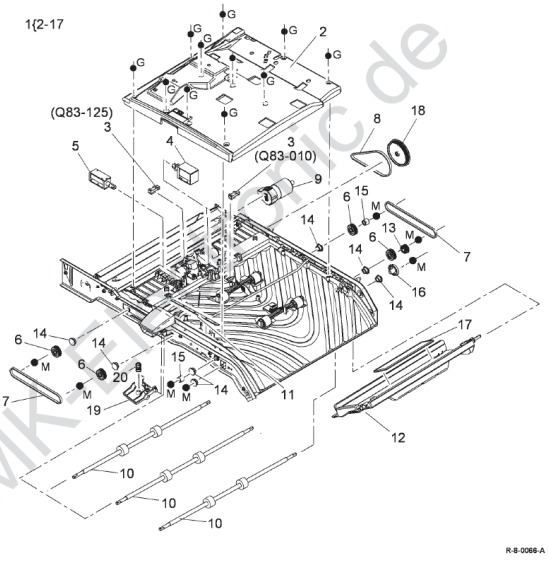


Ex. 60 (CQ9203.pdf, p.1377).

407. Additionally, as shown below, the sheet feeding mechanism has a picker such as nip takeaway rolls 10 to remove media sheets from trays:

PL 82.15 Horizontal Paper Path

Item	Part	Description
1	038K23501	Horizontal paper path assembly (REP 83.1)
2	–	Top cover (P/O PL 82.15 Item 1)
3	130E12950	Duplex sensor (17)(Q83-010)(REP 83.3)/Duplex end sensor (14)(Q83-125)(REP 83.2) (130E11610)
4	121E26510	Nip 'C' release solenoid (SOL82-007) (REP 83.2)
5	121E26500	HPP diverter solenoid (SOL83-004) (REP 83.2)
6	020K20480	Pulley M6 (21T)
7	023E31410	Horizontal transport drive belt front (REP 83.5)
8	023E31490	Drive belt M6
9	127K62291	Horizontal transport motor (M6) (MOT82-003) (REP 83.4)
10	059E10740	Nip R,C and Q takeaway rolls (REP 83.5)
11	–	Horizontal illuminator (Q82-005) (P/O PL 82.15 Item 1)
12	–	Heatshield (P/O PL 82.15 Item 1)
13	807E29170	Heatshield lift gear
14	–	Bearing (Not spared)
15	–	Spacer (Not spared)
16	807E29160	Heatshield sector gear
17	–	Reg/Preheat illuminator PWB (P/O PL 82.15 Item 12)
18	020E53880	Pulley M6 (80T)
19	868E53910	Release latch
20	–	Spring (Not spared)



Ex. 60 (CQ9203.pdf, p.1384).

408. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[f]. For example, ColorQube 9201 performs substantially the same function in substantially the same way and achieves substantially the same result at least because they change the spacing between the paper trays and the picker so that the picker can remove a sheet of paper from the paper supply in the same way and to achieve the same result at the recited claim.

409. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

410. Defendant's infringement of the '375 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XIII
(Direct Infringement of the '425 Patent pursuant to 35 U.S.C. § 271(a))

411. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

412. Defendant has infringed and continues to infringe one or more claims of the '425 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

413. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

414. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

415. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox iGen 5.

416. Claim 1 of the '425 Patent is recited below:

> In a tandem color electrostatographic printer apparatus having five or more color printing stations for applying respective color separation toner images to a receiver member, a method of forming a pentachrome color image comprising:
>
> 1[a] passing a receiver member through the printer apparatus to serially deposit thereon in a single pass at least five different colors which form various combinations of color at different pixel locations to form a pentachrome image thereon;
>
> 1[b] a first fusing step of fusing the pentachrome image by passing the receiver member through a fuser station;
>
> 1[c] passing the receiver member a second time through the printer apparatus, and depositing a clear toner overcoat to the fused pentachrome toner image; and

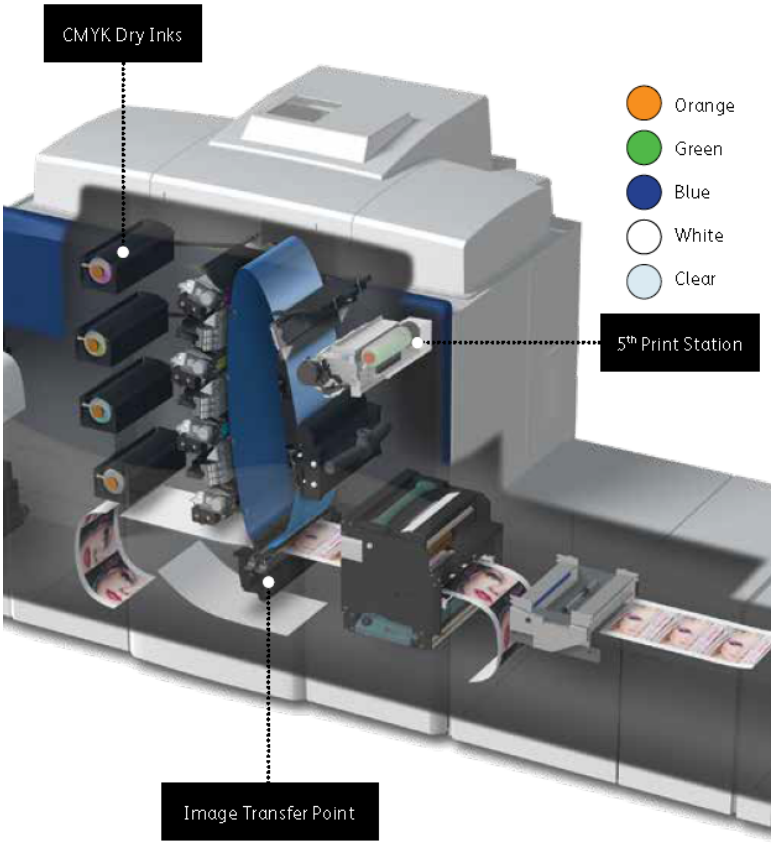
1[d] a second fusing step of passing the receiver member with the clear toner overcoat and fused pentachrome toner image again through the aforementioned fuser station to fix the clear toner overcoat to the receiver member.

417. As one example, the Xerox iGen 5 Press meets the limitations of claim 1 of the '425 Patent for at least the reasons described below.

418. An image of the Xerox iGen 5 Press is provided below:

419. In general and as explained below, the limitations of claim 1 are satisfied for at least the following reasons. As shown below, the Xerox iGen 5 has five dry ink print stations which include four vertically-disposed, tandem stations having the dry inks for the standard CMYK (cyan, magenta, yellow, black) pallet of four colors, and a fifth print station to extend the color gamut with a fifth color of orange, green, blue, or white. The stations of the five colored toners apply a color separation toner image that is received by a receiver member, where the receiver member could be a sheet of paper passing along a path as illustrated to form pentachrome color image.

420. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, the Xerox iGen 5 passes a receiver, such as paper, through the printer apparatus as illustrated to serially deposit thereon in a single pass at least five different colors by the vertically-disposed CMYK dry inks and a fifth dry ink to form a pentachrome image on the paper at the image transfer point in one pass.

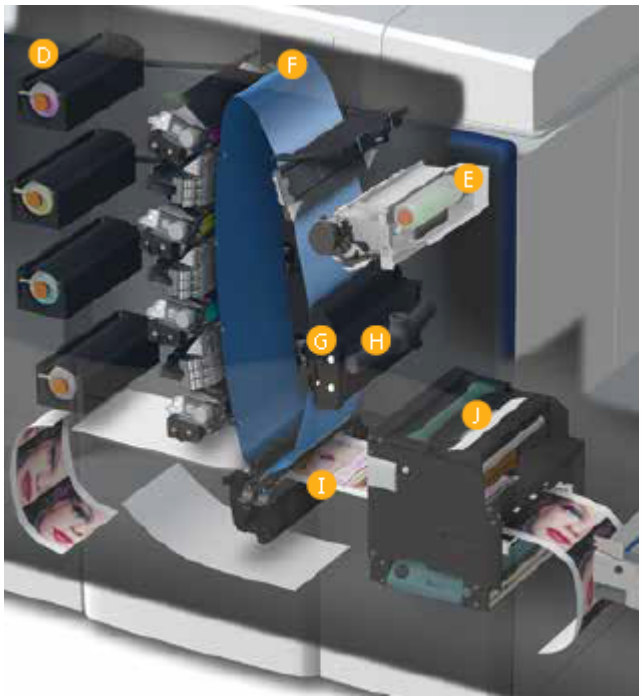


Ex. 55 (Brochure - Design and file preparation guidelines at p. 5).

421. As shown below, the Xerox iGen allows for various combinations of color may be formed at different pixel locations to form a pentrachrome image.

Ex. 63 (Brochure – Xerox iGen 5 Press at p. 9).

422. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, the Xerox Printer includes a fuser station, such as the illustrated fuser (identified below as "J"), for fusing a pentachrome toner image printed on the receiver (such as paper) when the receiver passes by the fuser station such as the fuser.



I

Single-point Transfer
Single-point image transfer to paper with speeds up to 9,000 A4 (150 per minute 3-up on 14.33" x 26", 75 per minute 2-up on 11" x 17") 4/0 impressions per hour.

Acoustic Transfer Assist Option
Sound waves help to embed toner into media, enhancing print quality on rough or textured stocks.

J

Intelligent Fusing
Intelligent fusing adjusts for differences in stock; runs every sheet at rated speed.

Ex. 64 (Specifications – Xerox iGen 5 Press at pp. 2 – 3).

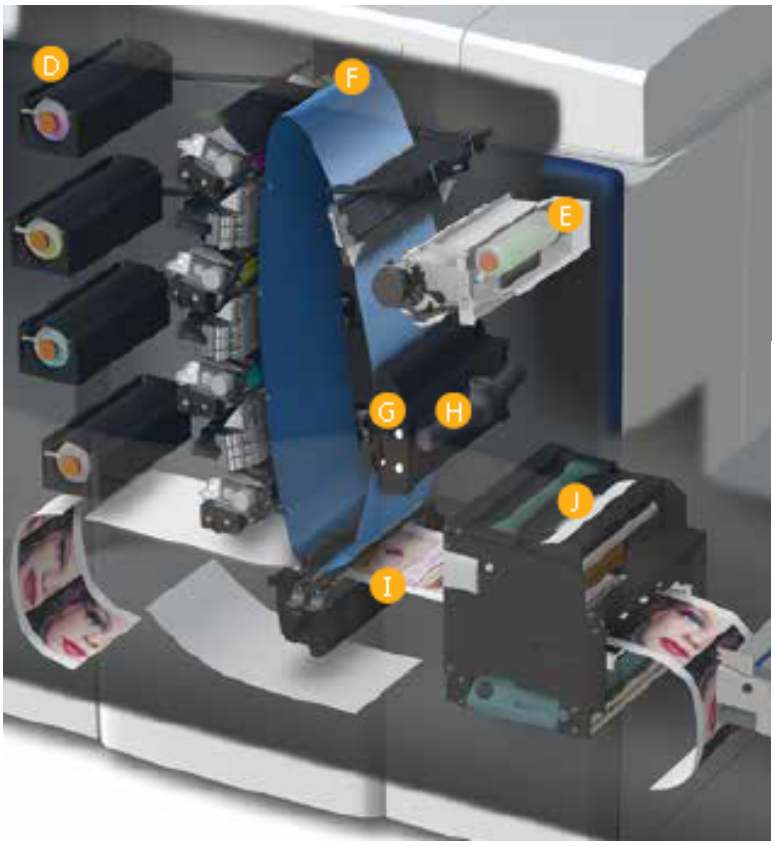
423. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, the Xerox iGen 5 performs a second fusing step of passing the receiver member, such as paper, through for a second pass to receive a deposit of the clear toner overcoat such as the clear dry ink onto the fused pentachrome toner image that was fused in the first pass.

MORE POSSIBILITIES –
AND EVEN MORE VALUE.

The Xerox® iGen® 5 has a well-earned reputation for delivering high-quality, high-value digital output — and with the option to run Xerox® Clear Dry Ink in the 5th print station, it can elevate your printing capabilities to a whole new level. The iGen® 5 allows you to use Clear Dry Ink to incorporate a specialty effect for both static and variable page content. Need to highlight an image, draw attention to a headline, or apply a watermark? No problem! The iGen® 5 + Clear Dry Ink makes it easy — and delivers amazing results every time.

Ex. 58 (Brochure – Xerox iGen 5 Press Clear Dry Ink at p. 1).

424. Claim limitation 1[d] is satisfied for at least the following reasons. As shown below, the Xerox iGen 5 includes a fuser station such as the illustrated fuser (identified below as "J") for fusing the clear toner overcoat of the clear dry ink and fused pentachrome toner image printed on the receiver such as paper when the receiver passes by the fuser station in a second pass.



I

Single-point Transfer
Single-point image transfer to paper with speeds up to 9,000 A4 (150 per minute 3-up on 14.33" x 26", 75 per minute 2-up on 11" x 17") 4/0 impressions per hour.

Acoustic Transfer Assist Option
Sound waves help to embed toner into media, enhancing print quality on rough or textured stocks.

J

Intelligent Fusing
Intelligent fusing adjusts for differences in stock, runs every sheet at rated speed.

Ex. 64 (Specifications – Xerox iGen 5 Press at pp. 2 – 3).

425. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[b]. For example, and without limitation, Xerox iGen 5 performs substantially the same function in substantially the same way and achieves substantially the same result at least because it serially deposits five different colors on a receiver by serially depositing five different colors on an image transfer belt unit.

426. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

427. Defendant's infringement of the '425 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XIV
(Direct Infringement of the '415 Patent pursuant to 35 U.S.C. § 271(a))

428. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

429. Defendant has infringed and continues to infringe one or more claims of the '415 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

430. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

431. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

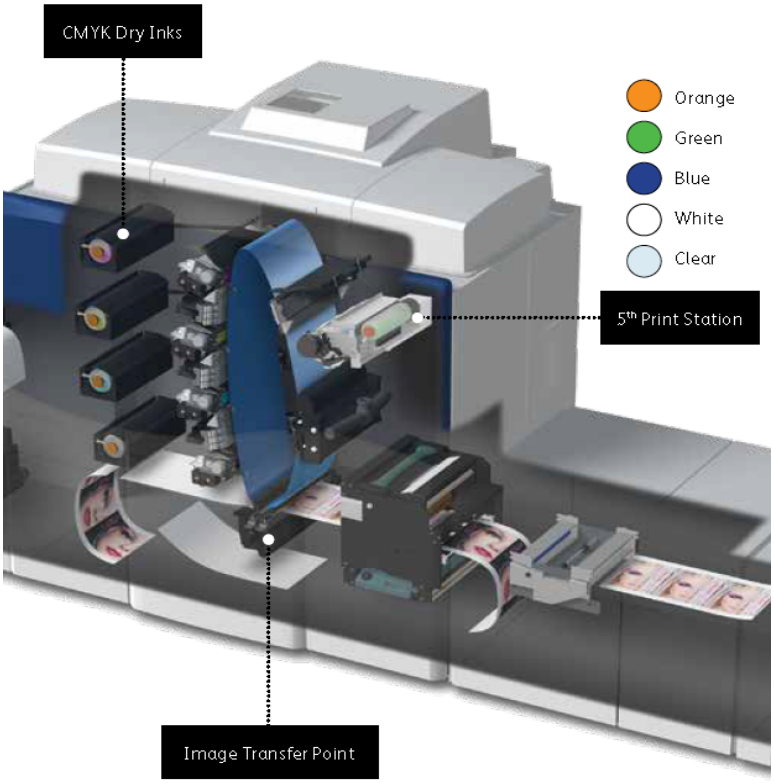
432. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox iGen 5 Press.

433. Claim 1 of the '415 Patent is recited below:

> A system for printing color images comprising:
>
> 1[a] a tandem color electrostatographic printer apparatus having five or more color printing stations for applying respective color separation toner images to a receiver member passing therethrough in a single pass to form a pentachrome color image;
>
> 1[b] a fusing station for fusing the pentachrome image;
>
> 1[c] a clear toner overcoat printing station for applying a clear toner overcoat to the fused pentachrome toner image; and
>
> 1[d] a belt glosser for providing enhanced gloss to the pentachrome color image having a clear overcoat.

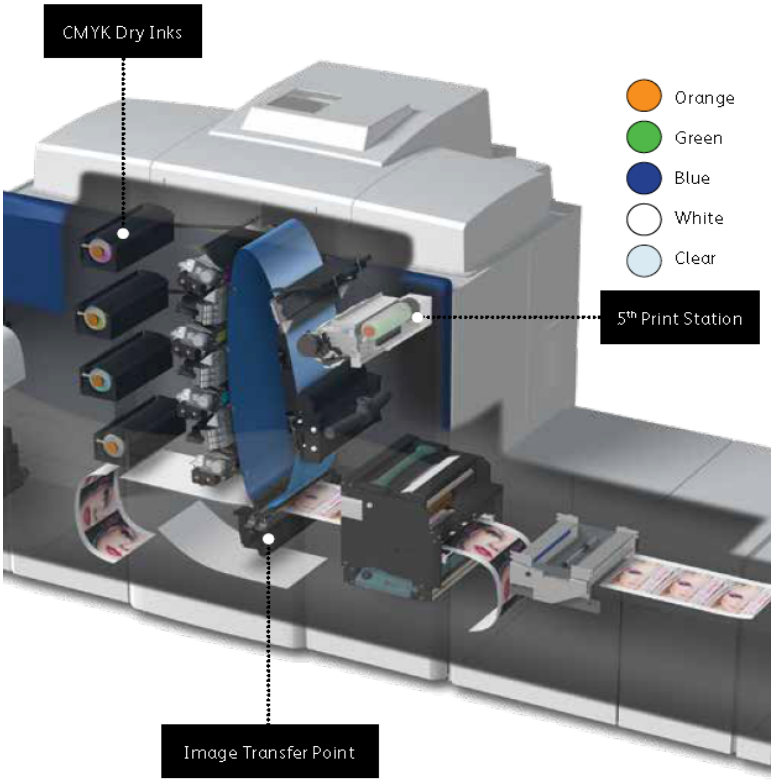
434. As one example, Xerox iGen 5 Press meets the limitations of claim 1 of the '415 Patent for at least the reasons described below.

435. In general and as explained below, the limitations of claim 1 are satisfied because, as shown below, Xerox iGen 5 Press is a system for color printing images using colors such as, for example, the standard CMYK (cyan, magenta, yellow, black) pallet of four colors plus a fifth color such as, for example, orange, green, blue, or white.



Ex. 55 (Brochure – Design and file preparation guidelines at p. 5).

436. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Xerox iGen 5 Press is an electrostatographic printer having five dry ink print stations (color printing stations) as illustrated by four vertically-disposed, tandem stations having the dry inks for the standard CMYK (cyan, magenta, yellow, black) pallet of four colors, and a fifth print station for a fifth dry ink having a color of orange, green, blue, or white.

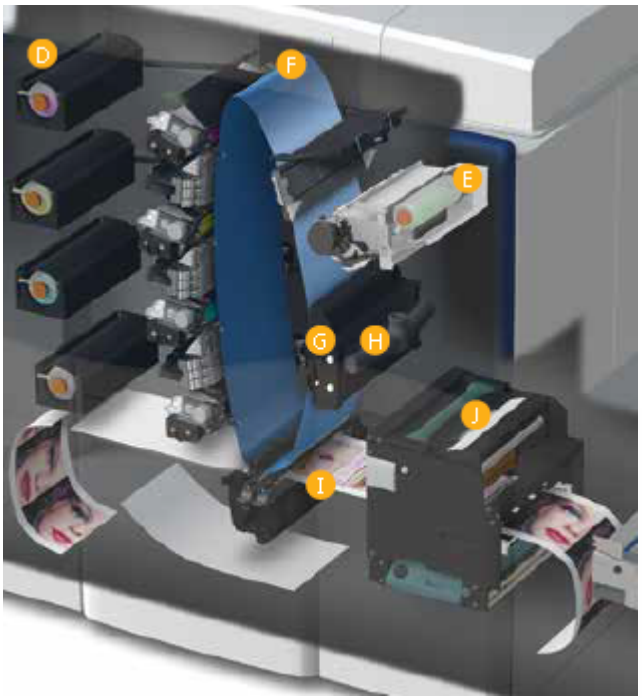


Ex. 55 (Brochure - Design and file preparation guidelines at p. 5).

437. As shown below, the stations of the five colored toners apply respective color separation toner images to a receiver member, such as a sheet of paper, to form a single image with five colors (a pentachrome color image) in a single pass through the printer.

Ex. 57 (PDF of http://xeroxigen5press.freeflowdp.com/xeroxigen5press).

438. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox iGen 5 Press includes a fuser station, such as the illustrated fuser (identified below as "J") for fusing the pentachrome toner image printed on the receiver member (e.g., a sheet of paper) when the receiver passes by the fuser of the fuser station.



I

Single-point Transfer
Single-point image transfer to paper with speeds up to 9,000 A4 (150 per minute 3-up on 14.33" x 26", 75 per minute 2-up on 11" x 17") 4/0 impressions per hour.

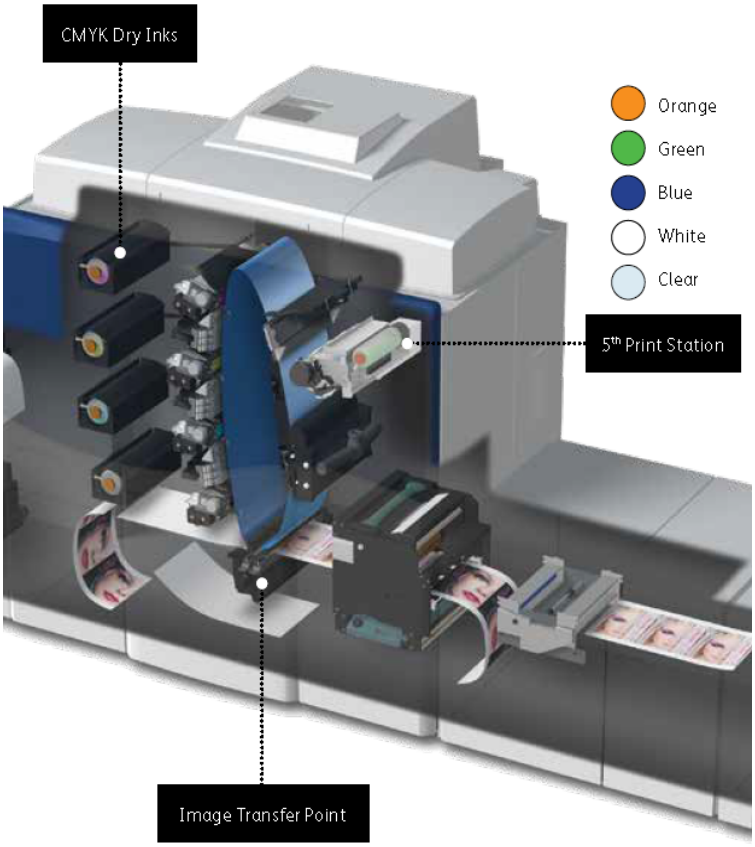
Acoustic Transfer Assist Option
Sound waves help to embed toner into media, enhancing print quality on rough or textured stocks.

J

Intelligent Fusing
Intelligent fusing adjusts for differences in stock; runs every sheet at rated speed.

Ex. 64 (Specifications – Xerox iGen 5 Press at pp. 2 – 3).

439. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Xerox iGen 5 Press may provide a clear toner overcoat station, such as in a fifth printing station, that would be installed with clear dry ink (clear toner overcoat).



Ex. 55 (Brochure - Design and file preparation guidelines at p. 5).

440. As shown below, Xerox iGen 5 Press may apply a clear toner overcoat to the fused pentachrome toner image such as when clear dry ink is employed to highlight an image, draw attention of a headline, or apply a watermark.

MORE POSSIBILITIES – AND EVEN MORE VALUE.

The Xerox® iGen® 5 has a well-earned reputation for delivering high-quality, high-value digital output — and with the option to run Xerox® Clear Dry Ink in the 5th print station, it can elevate your printing capabilities to a whole new level. The iGen® 5 allows you to use Clear Dry Ink to incorporate a specialty effect for both static and variable page content. Need to highlight an image, draw attention to a headline, or apply a watermark? No problem! The iGen® 5 + Clear Dry Ink makes it easy — and delivers amazing results every time.

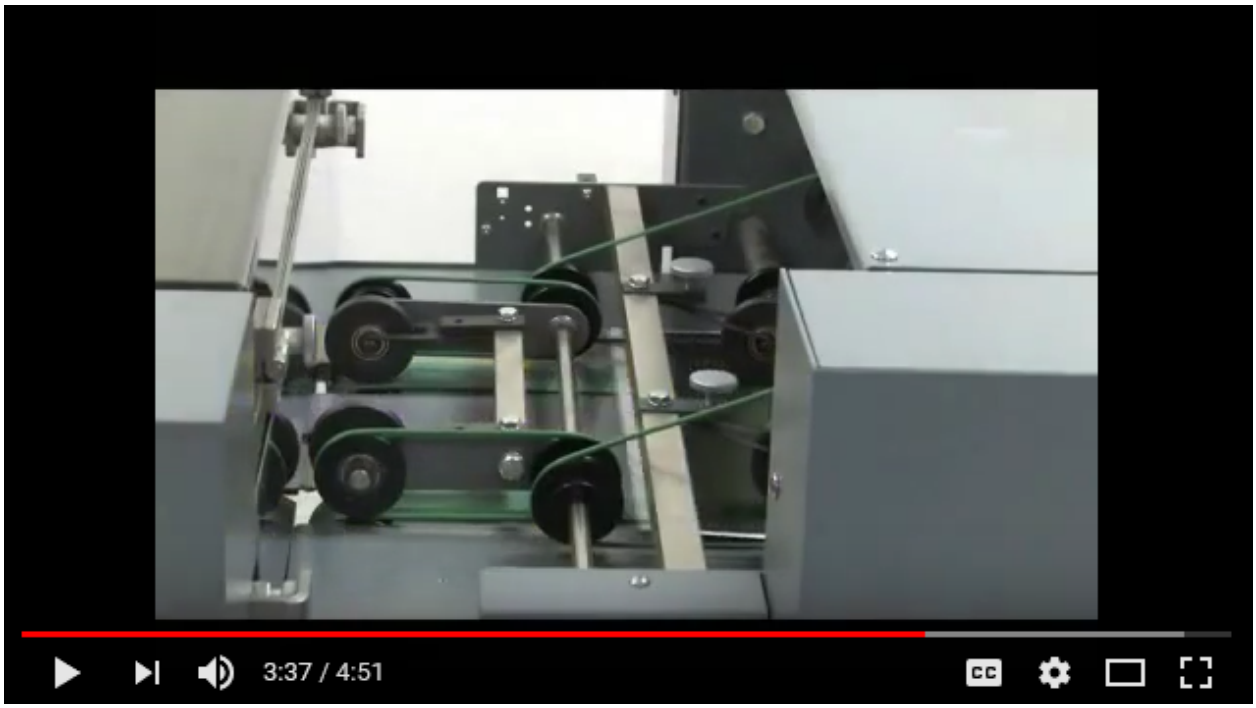
Ex. 58 (Brochure – Xerox iGen 5 Press Clear Dry Ink at p. 1).

441. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox iGen 5 Press comprises a belt glosser for providing enhanced gloss to the pentachrome color image having the clear toner overcoat. As shown below, Xerox iGen 5 Press system includes a Duplo Ultra 145A/205A UV Offline Coater which serves to enhance a pentachrome color image having a clear overcoat with Coating.

Finishing Type	Product	Compatibility		
		Xerox® Color 8250 Production Printer	Xerox® iGen4® Press	Xerox® iGen® 5 Press
Booklets (Saddle-Stitched)	C.P. Bourg® BDF-e Booklet Maker	x	x	x
	C.P. Bourg BM-e Booklet Maker	x	x	x
	Duplo® DBM-5001 Inline Booklet Maker	x	x	x
	Watkiss PowerSquare™ 224	x	x	x
Coating	Duplo Ultra 145A/205A UV Offline Coater	x	x	x
	Epic CTi-635™ Inline Coating System	x	x	x
	TEC Lighting Production UV Coater	x	x	x
	TRESU Pinta Coater	x	x	x
Feeding/Bypass	C.P. Bourg Dual-Mode Sheet Feeder (BSF)	x	x	x
Packaging	Xerox® Automated Packaging Solution		x	x
Perfect Bound	C.P. Bourg 3202 Book Factory	x	x	x
Punch/Lay Flats	GBC® FusionPunch® II	x	x	x
Slit/Cut/Crease	Duplo Slitter/Cutter/Creaser (SCC) Nearline Booklet Maker	x	x	x
	Duplo DC-645 Slitter/Cutter/Creaser	x	x	x
	Duplo DC-745 Slitter/Cutter/Creaser	x	x	x
	Rollem JetSlit	x	x	x
Stack/Bypass	22.5" (572 mm) Stacker	x	x	
	26" (660 mm) Stacker		x	x
	Multigraf PST-52 Stacker	x	x	x
Stitched Sets	C.P. Bourg BDF-e Booklet Maker	x	x	x

Ex. 56 (Brochure – Xerox iGen 5 Press Finishing at p. 2).

442. As shown below, the Duplo 145A UV Coater has a belt glosser such as the belt that is moving within the unit.



Ex. 65 (PDF of https://youtu.be/SrR1drWNcqk?t=217) (Duplo 145A UV Coater video presentation) (showing a moving belt transporting paper within a 8440 Duplo 145A UV Coater at time 3:37 / 4:51)

443. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[c]. For example, and without limitation, Xerox iGen 5 Press performs substantially the same function in substantially the same way and achieves substantially the same result at least because the clear toner overcoat printing station is one of the five color printing stations used to form a pentachrome image, where color toner installed at one of the five stations used to form the pentachrome image in a first pass may be substituted with clear toner that is applied to a fused pentrachrome image during a second pass.

444. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

445. Defendant's infringement of the '415 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XV
(Direct Infringement of the '255 Patent pursuant to 35 U.S.C. § 271(a))

446. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

447. Defendant has infringed and continues to infringe one or more claims of the '255 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

448. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

449. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

450. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 6500 and Xerox WorkCentre 6505 (the "Xerox Phaser 6500").

451. Claim 1 of the '255 Patent is recited below:

> A method to align an electrophotographic printing engines in a plurality of different print assemblies that are each capable of printing on a receiver to form one or more final prints to form an apparatus for digital printing including corrections for crosstrack misregistration comprising:
>
> 1[a] measuring each of the print assemblies to determine the location of a fixed component of the module relative to a receiver path in the x, y and z directions;

1[b] aligning two or more printing engines in an x and y direction by providing alignment features on the printing assemblies that align the assemblies in an x and y direction according to the measurements and that positioning the assemblies within a range of positions along the z direction; and

1[c] aligning a first printing engine to a second printing engine in a cross track direction (z direction) based on a cross track (z direction) position of the receiver as measured by the second engine and the measuring of the printing modules.

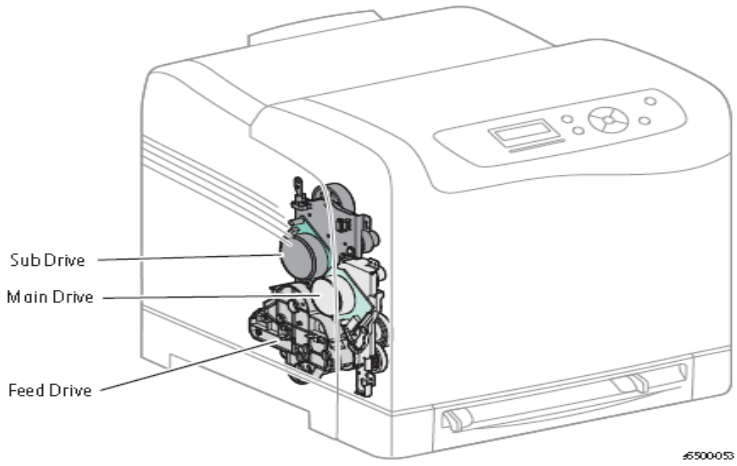
452. As one example, Xerox Phaser 6500 meets the limitations of claim 1 of the '255 Patent for at least the reasons described below.

453. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 6500 include the ability to align electrophotographic print engines, where each engine includes those components needed to produce cyan, magenta, yellow, and black images (these colors indicated by the letters C, M, Y, and K, respectively).

> The Phaser 6500 is a full-color printer and the WorkCentre 6505 is a full-color multifunction printer, both using raster output scanner (ROS) lasers with an electrophotographic four-color CMYK process. The tandem system consists of four color drums (C, M, Y, and K) which creates the toner image.
>
> The WorkCentre 6505 MFP is equipped with a color scanner and with FAX control circuitry. The CCD array in the scanhead creates digital signals that represent documents placed on its platen or fed through its automatic document feeder. These signals are sent to the printer to make copies, to the USB or Ethernet ports for storage as data, or to the FAX control for transmission over telephone lines.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-2 (58)).

454. As shown below, Xerox Phaser 6500 include a plurality of different assemblies such as the Sub Drive Assembly (corresponding to components producing a black image) and the Feed Drive Assembly. (corresponding to components producing cyan, magenta, and yellow images).

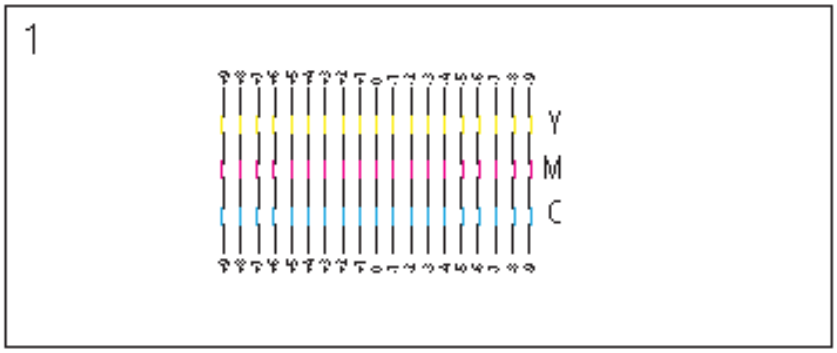


The drive for both the SFP and MFP consists of three assemblies:

- Main Drive Assembly — Drives the Imaging Unit, Transfer Belt, Registration Rollers, and Feeder.
- Sub Drive Assembly — Supplies drive to the Fuser and Cyan, Magenta, and Yellow developers in the Imaging Unit.
- Feed Drive Assembly — Transmits the driving force from the Main and Sub Drive Assemblies to relevant parts. The drive path is changed by the Color Mode Switching Solenoid located on the Feed Drive Assy. To change modes, the solenoid activates, allowing Gear C to engage and rotate Cam C 180 degrees. In Black and White Mode, Cam C displaces Flange D3 to disengage the sections of Gear D3. This prevents rotation of the CMY developers, allowing only the Black Developer to rotate. The Color Mode Switching Sensor detects the presence or absence of the flag on Cam C to report whether the drive path is set for color (flag present) or black and white (flag absent).

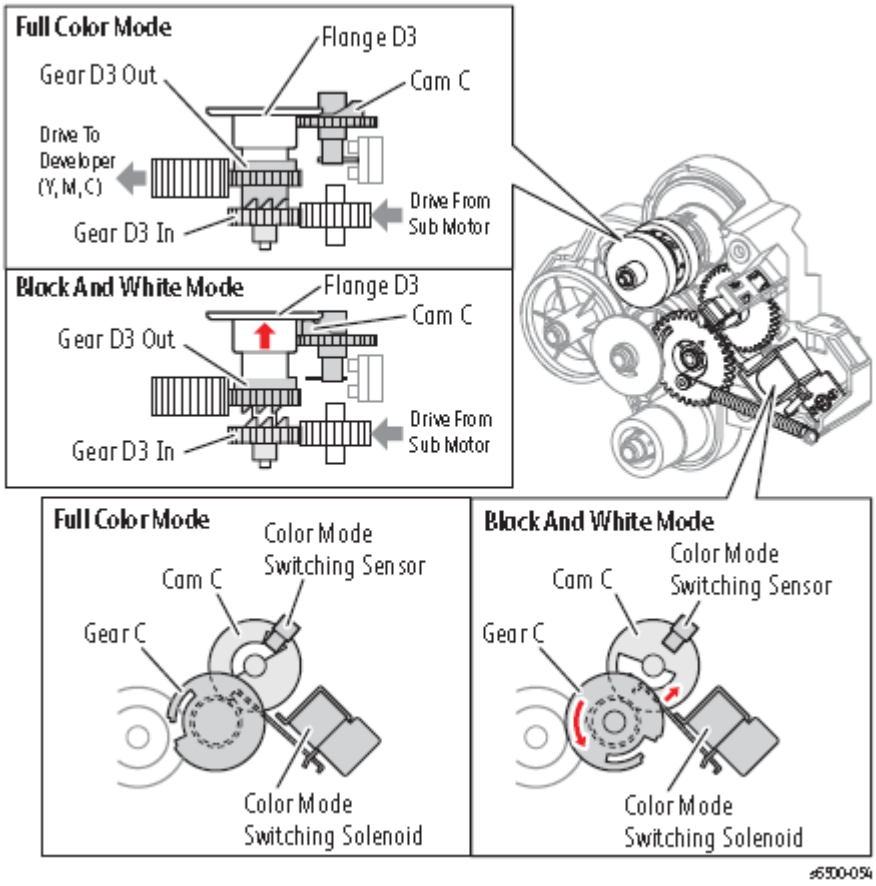
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-36 (92)).

455. As shown below in a Color Registration Correction Chart, each printing engine is capable of printing colors such as black (K), yellow (Y), magenta (M), and cyan (C) on a receiver (such as a sheet of paper) to form an apparatus for digital printing, including corrections of cross track misregistration, where such corrections utilize the Correction Chart that is shown.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 6-3 (435)).

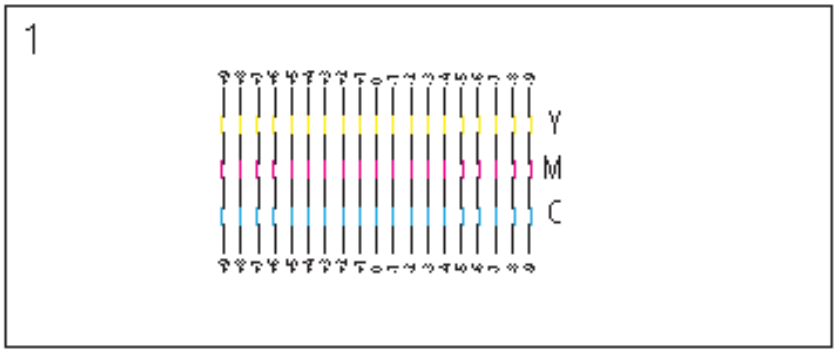
456. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6500 include a color mode switching solenoid, a fixed component within the Feed Drive Assembly. A first tip location corresponds to a full color mode, and a second tip location corresponds to a black and white mode. Both first and second tip locations are known to the Sub Drive and Feed Drive Assemblies.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-37 (93)).

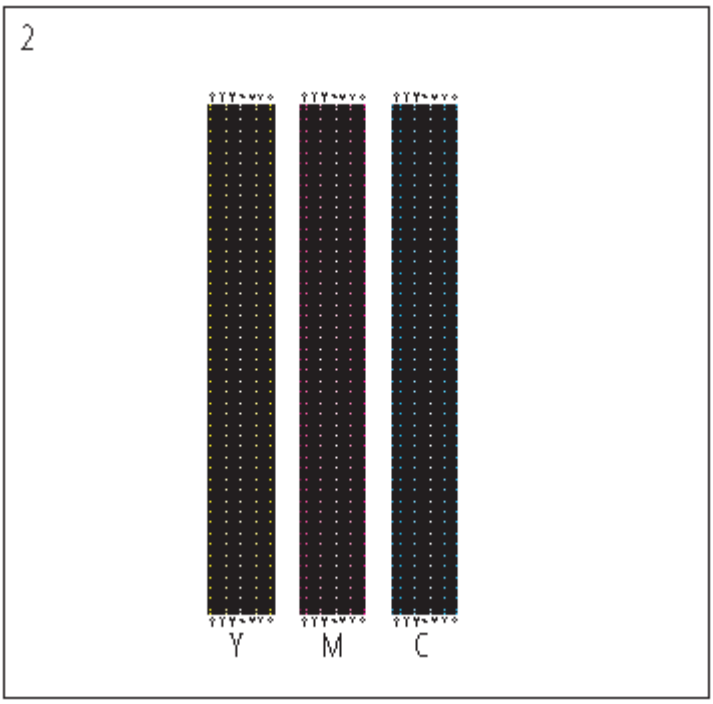
457. As shown below, the Color Registration Correction Chart may be employed as a tool to measure the Sub Drive Assembly and Feed Drive Assembly to determine a location of the solenoid tip (as discussed above) in the x, y, and z directions, where the x and y directions

are the directions occupied by a transfer belt of the printer for carrying paper past toner drums and a fuser, and the z direction is the direction that is perpendicular to the transfer belt. The presence of four colors (black, yellow, magenta, and yellow) on the Color Registration Correction Chart corresponds to a first measurement of the Sub Drive and Feed Drive Assemblies, a measurement that determines the location of the tip of the fixed solenoid to be a first tip location as discussed above. Similarly, the presence of black only on the Color Registration Correction Chart corresponds to a second measurement of the Sub Drive and Feed Drive Assemblies, a measurement that determines the location of the tip of the fixed solenoid to be a second tip location as discussed above.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 6-3 (435)).

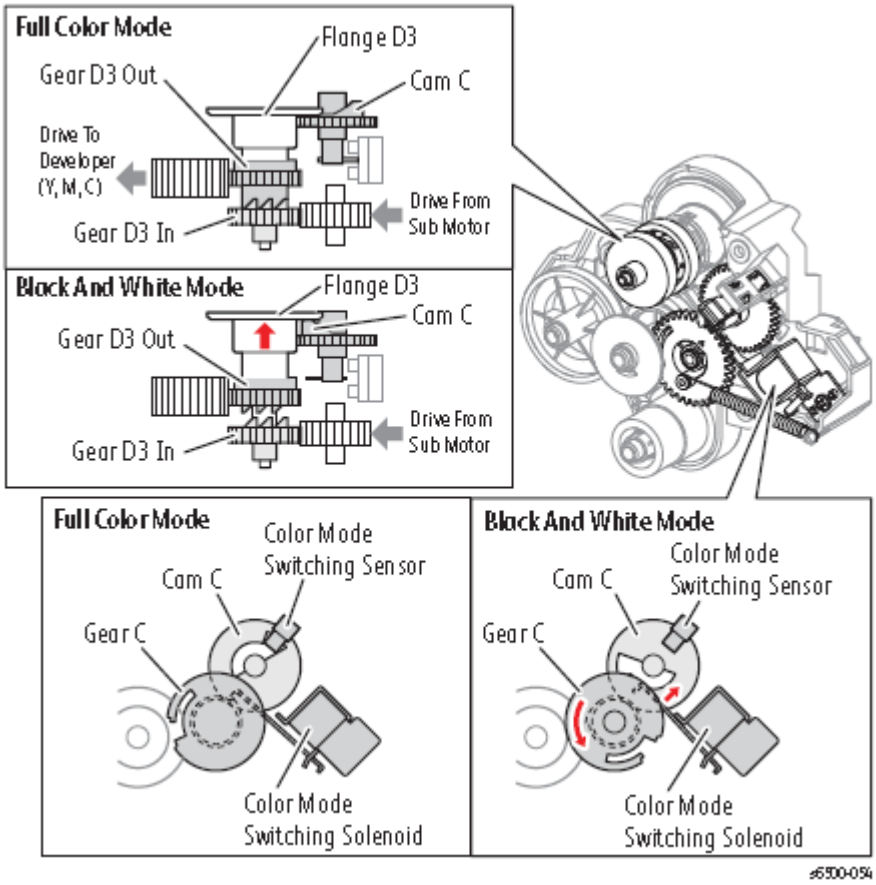
458. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6500 includes print engines which produce yellow, magenta, cyan, and black images aligned in an x and y direction by providing alignment features, such as the yellow, magenta, and cyan lines found within “Y”, “M”, and “C” columns, that align the Sub Drive Assembly and Feed Drive Assembly in the x and y directions according to the measurement of a first tip location of the solenoid.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 6-3 (435)).

459. As shown below, the printing assemblies include a full color mode and a black and white mode. In the full color mode, one position of the Sub Drive Assembly with respect to the Feed Drive Assembly is an "engaged" position where "Gear D3 In" is engaged with "Gear D3 Out" along a z direction. In the black and white mode, a second position of the Sub Drive Assembly with respect to the Feed Drive Assembly is a "disengaged" position where "Gear D3 In" is disengaged with "Gear D3 Out" along the z direction. The alignment features which include yellow, magenta, and cyan lines found within "Y", "M", and "C" columns (as discussed above) are used to indicate that the Sub Drive Assembly with respect to the Feed

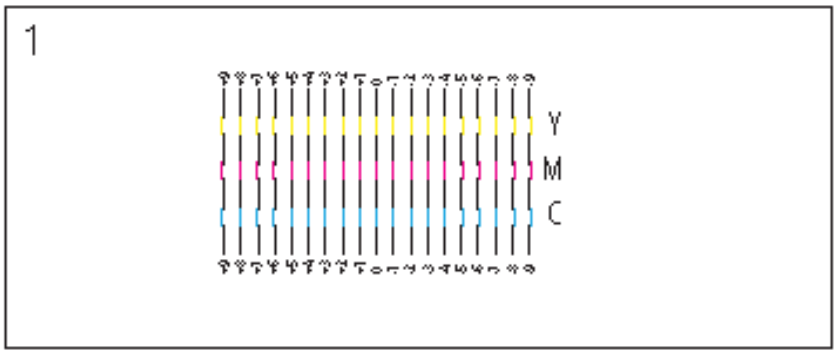
Drive Assembly is in an "engaged" position along the z direction.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-37 (93)).

460. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below in a Color Registration Correction Chart, Xerox Phaser 6500 include first print engines which produce the yellow, magenta, and cyan line segments aligned with a second print engine which produces the black line segments. These line segments embody cross track positions of the paper on which the Correction Chart is printed. Measurements of both the second engine (producing the black line segments) and the printing modules (producing the yellow, magenta, and cyan line segments) are shown in the chart, and alignment of the first printing engine with

the second printing engine is indicated when the yellow, magenta, cyan, and black line segments vertically align with each other in the measurement of the "0" position.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 6-3 (435)).

461. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[b]. For example, and without limitation, Xerox Phaser 6500 perform substantially the same function in substantially the same way and achieves substantially the same result at least because the uneven surface of the cam may be used when measuring each of the print assemblies to its location.

462. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

463. Defendant's infringement of the '255 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XVI
(Direct Infringement of the '795 Patent pursuant to 35 U.S.C. § 271(a))

464. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

465. Defendant has infringed and continues to infringe one or more claims of the '795 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

466. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

467. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

468. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox WorkCentre 5335/5330/5325.

469. Claim 1 of the '795 Patent is recited below:

> A printer comprising:
>
> 1[a] a marking mechanism for producing an image on media;
>
> 1[b] a tray for sheets of image receiver media;
>
> 1[c] a sheet feeding mechanism including a drive for advancing the sheets of image receiver media past the marking mechanism, said sheet feeding mechanism having a picker to remove the sheets of image receiver media from an aligned tray;
>
> 1[d] a media load position at which the tray is accessible to an operator for inserting a supply of the sheets of image receiver media;
>
> 1[e] a media pick position at which the tray is aligned with the picker;
>
> 1[f] a tray moving mechanism adapted to selectively move the tray between the media load position and the media pick position; and
>
> 1[g] a transmission (1) engagable to connect the drive of the sheet feeding mechanism to the tray moving mechanism, whereby the tray is moved between the pick position and the media load position by the drive and

1[h] (2) disengagable to enable advancement of the sheets of image receiver media without movement of the tray.

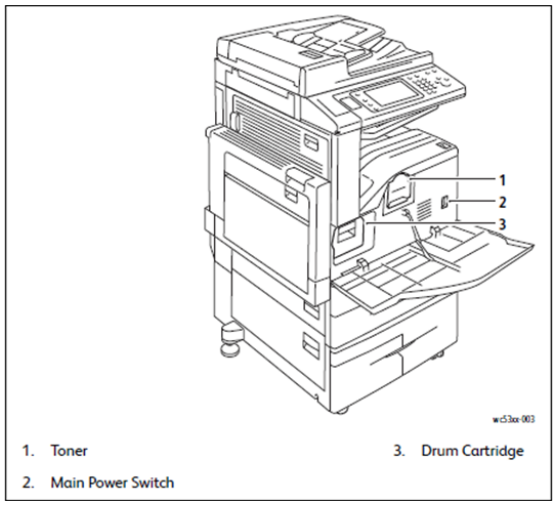
470. As one example, Xerox WorkCentre 5325 meets the limitations of claim 1 of the '375 Patent for at least the following reasons.

471. An image of Xerox WorkCentre 5325 is provided below:

Ex. 29 (Xerox WorkCentre 5325 / 5330 / 5335 User Guide (2011), cover page).

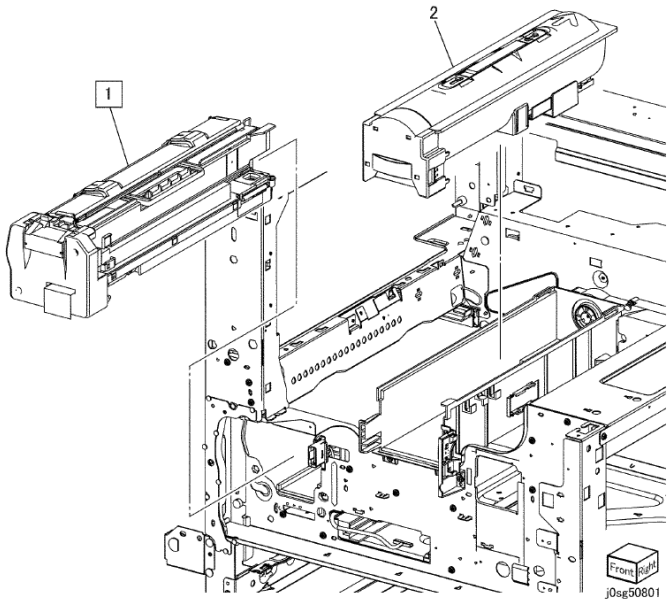
472. In general and as explained below, the limitations of claim 1 are satisfied because Xerox WorkCentre 5325 is a multifunction printer that loads a paper stack into a paper tray and selectively moves the tray from a loading position to a printing position.

473. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Xerox WorkCentre 5325 includes a marking mechanism for producing an image on media by using toner and drum cartridges, a laser optics unit, a fuser unit, and an image transfer belt for producing an image on media.



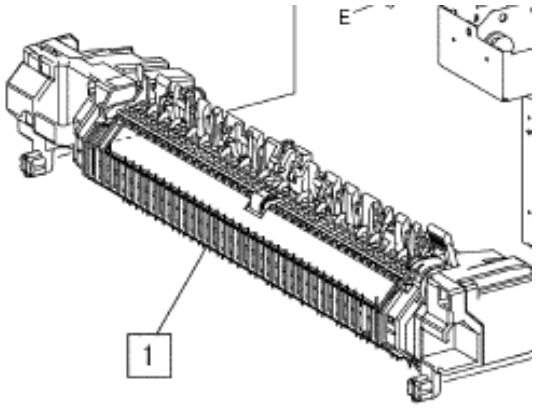
Ex. 29 (Xerox WorkCentre 5325 / 5330 / 5335 User Guide (2011), page 26).

474. Additionally, Xerox WorkCentre 5325 includes toner cartridges [1],[2] which are marking mechanisms for producing an image on media, as shown below:



Ex. 30 (Xerox_WC_5335F_SD, p. 1288).

475. Furthermore, Xerox WorkCentre 5325 includes a marking mechanism such as a Fuser for producing an image on media by using laser optics unit:



PL 7.1 Fusing

Item	Part	Description
1	126K29392	Fuser (120V) (REP 10.3)
–	126K29403	Fuser (220V) (REP 10.3)

Ex. 30 (Xerox_WC_5335F_SD, p. 1287).

476. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox WorkCentre 5325 includes multiple trays for sheets of image receiver media:

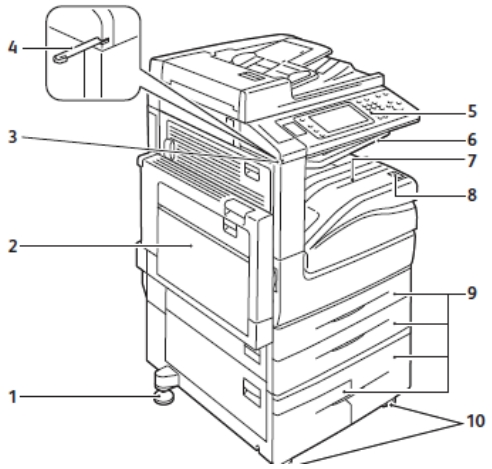
Configurations

The printer is available in two configurations.

Configuration	Description
Two paper trays and stand	Tray 1 and Tray 2 that each hold up to 520 sheets, supporting standard selectable sizes up to A3, 11 x 17 in. Tray 5 (Bypass Tray) that holds up to 50 sheets, supporting custom sizes up to A3, 11 x 17 in.
Two paper trays and Tandem Tray Module (TTM)	Tray 1 and Tray 2 that each hold up to 520 sheets, supporting standard selectable sizes up to A3, 11 x 17 in. Tray 3 that holds up to 870 sheets, supporting standard selectable sizes up to A4, 8.5 x 11 in. Tray 4 that holds up to 1130 sheets, supporting standard selectable sizes up to A4, 8.5 x 11 in. Tray 5 (Bypass Tray) that holds up to 50 sheets, supporting custom sizes up to A3, 11 x 17 in.

Ex. 29 (Xerox WorkCentre® 5325 / 5330 / 5335 User Guide (2011), page 29).

477. As shown below, Xerox WorkCentre 5325 comprises trays for sheets of image receiver media including center upper tray [6], center lower tray [7], trays 1, 2, 3, and 4.



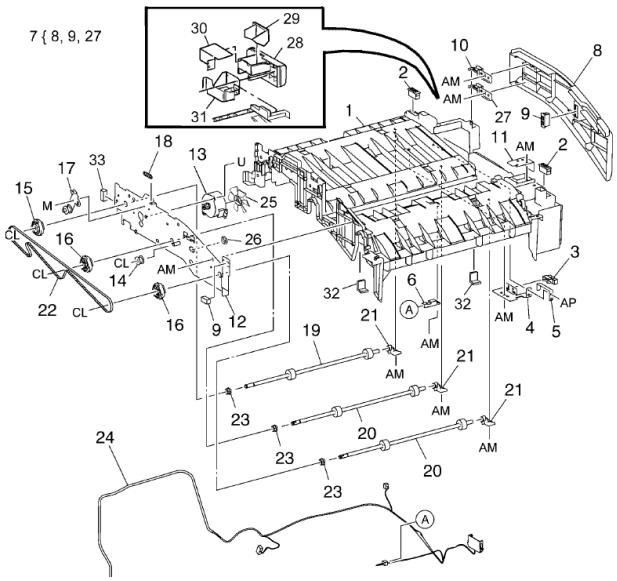
6. Center Upper Tray
7. Center Lower Tray
8. Power Switch
9. Tray 1, 2, 3, 4

Ex. 29 (Xerox WorkCentre® 5325 / 5330 / 5335 User Guide (2011), p. 22).

478. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Xerox WorkCentre 5325 comprises a sheet feeding mechanism including a drive (transport assembly, including transport belt [22] and transport motor [13]) for advancing the sheets of image receiver media past the marking mechanism.

PL 23.4 H - Transport Assembly (4 of 5)

Item	Part	Description
1	–	Lower Chute (P/O PL 23.2 Item 6)
2	–	Magnet (P/O PL 23.2 Item 6)
3	130E81600	H - Transport Open Sensor
4	868E15540	Sensor Bracket
5	809E81720	Actuator
6	930W00211	H - Transport Entrance Sensor
7	848K34192	H - Transport Front Cover Assembly
8	848E43641	H - Transport Front Cover
9	921W41162	Gasket
10	–	Hinge
11	–	Bracket (P/O PL 23.2 Item 6)
12	–	Rear Frame Assembly (P/O PL 23.2 Item 6)
13	127K57622	H - Transport Motor (REP 13.4)
14	020E45330	Tension Pulley
15	020K15720	Pulley (43T)
16	020E45210	Pulley (43T)
17	–	Tension Bracket (P/O PL 23.2 Item 6)
18	809E78950	Spring Tension
19	059K54480	Drive Roll
20	059K55070	Drive Roll
21	013E33140	Bearing
22	423W01154	H - Transport Belt (REP 13.3)
23	413W14660	Sleeve Bearing
24	962K60422	Wire Harness
25	127E85570	Fan Blade
26	016E97311	Pinch Bushing
27	–	Lower Hinge (P/O PL 23.4 Item 7)
28	848E43630	Front Cover
29	848E43651	Switch Cover
30	–	Cover (Not Spared)
31	–	Bracket (Not Spared)
32	004E18112	Pinch Cushion
33	921W41142	Gasket



Ex. 30 (Xerox_WC_5335F_SD, p.1358).

479. Additionally, the transport assembly is a sheet feeding mechanism that includes a drive such as a transport belt for advancing the sheets of paper past the marketing mechanism, as shown below.

REP 13.3 H-Transport Belt (Office Finisher LX)

Parts List on PL 23.4

Removal

1. Switch off the power and disconnect the power cord.
2. Remove the H-Transport Assembly (REP 13.1).
3. Remove the screws (2) on the H-Transport Rear Cover and remove the Cove
4. Loosen the screws (2) on the Tension Bracket (Figure 1).
5. Remove the Belt.

Ex. 30 (Xerox_WC_5335F_SD, p.1198).

480. In another example, Feed [22] and Nudger [23] rollers serve as pickers to remove the sheets of image receiver media from an aligned tray, as shown below.

Ex. 30 (Xerox_WC_5335F_SD, p. 1301).

Ex. 30 (Xerox_WC_5335F_SD, p. 1302).

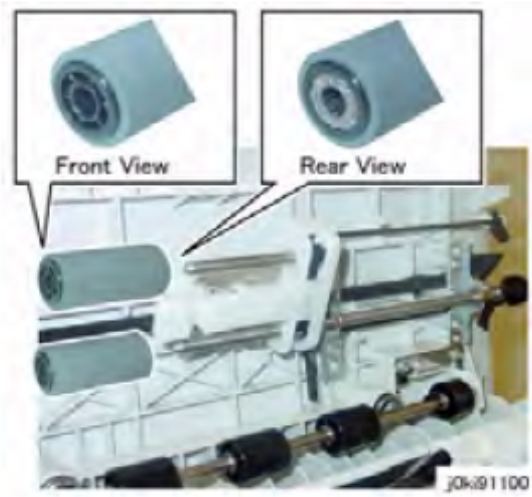
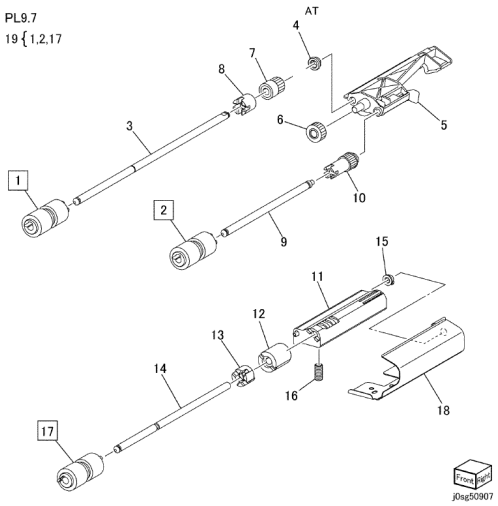


Figure 5 Nudger/Feed Roll Alignment

Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1128).

481. The Xerox WorkCentre 5325 include a feeding mechanism that has a drive for advancing the sheets of image receiver media past the marking mechanism, as shown below:



PL 9.7 Tray 1/2 Feed Roll, Nudger Roll, Retard Roll

Item	Part	Description
1	–	Feed Roll (P/O PL 9.7 Item 19) (REP 8.5)
2	–	Nudger Roll (P/O PL 9.7 Item 19) (REP 8.5)
3	–	Feed Shaft (Not Spared)

Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1296).

482. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox WorkCentre 5325 includes a high capacity feeder (tray 6) that can occupy a paper load position to facilitate operator paper loading, as shown below.

Ex. 29 (Xerox WorkCentre 5325 / 5330 / 5335 User Guide (2011), page 60).

483. As shown below, lift/feed motor [23] moves the tray to the media load position at which the tray is accessible to an operator:

Ex. 30 (Xerox_WC_5335F_SD, p. 1301).

484. Claim limitation 1[e] is satisfied for at least the following reasons. As shown below, the WorkCentre 5325's high capacity feeder (tray 6) has a paper feed position (i.e., when lifted by the lift and feed motor), where the rollers can pick and feed paper from the tray. As shown below, Feed [22] and Nudger [23] rollers are pickers to remove the sheets of image receiver media from the tray.

Ex. 30 (Xerox_WC_5335F_SD, p. 1302).

485. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox WorkCentre 5325 includes a lift and feed motor [23] that is a tray moving mechanism for each tray in the WorkCentre 5325. The life and feed motor selectively moves the tray between a position where the media can be loaded and a position where the media pick can access the paper stack, as shown below.

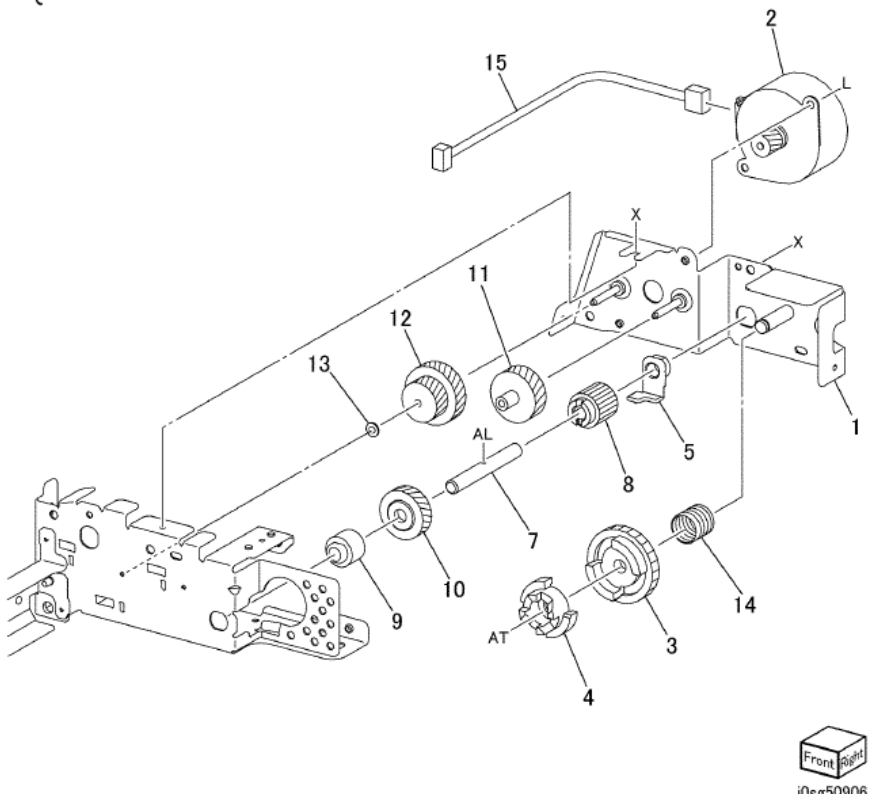
Ex. 30 (Xerox_WC_5335F_SD, p. 1301).

486. As shown below, Xerox WorkCentre 5325 includes several trays, such as "Tray 6", that each include a mechanism for moving the tray from a position where a paper stack can be loaded and a position where the picker can access the paper stack.

Ex. 29 (Xerox WorkCentre® 5325 / 5330 / 5335 User Guide (2011), page 60).

487. Claim limitation 1[g] is satisfied for at least the following reasons. As shown below, Xerox WorkCentre 5325 includes a transmission such as gears [8],[11], and [12] that connects the drive such as the drive belt to the tray moving mechanism (e.g., Lift/Feed motor [2]), so that the tray is moved between the pick position and the load position by the media sheet advancing drive.

PL9.6
6 { 7



PL 9.6 Feeder 1/2 Assembly (2 of 2)

Item	Part	Description
1	–	Drive Bracket Assembly (Not Spared)
2	127K52790	Tray 1/2 Lift/Feed Motor
3	–	Gear (31T) (Not Spared)
4	–	Spacer (Not Spared)
5	–	Shaft Bearing (Not Spared)
6	–	Drive Shaft Assembly (Not Spared) (Includes Item 7)
7	–	Drive Shaft (P/O PL 9.6 Item 6)
8	–	Gear (13T) (Not Spared)
9	005K07130	Oneway Clutch
10	007K97870	Oneway Gear
11	–	Gear (25T) (Not Spared)
12	–	Gear (29T/19T) (Not Spared)
13	–	Washer (Not Spared)
14	–	Spring (Not Spared)
15	–	Wire Harness (Not Spared)

PL9.6
6 { 7

Ex. 30 (Xerox_WC_5335F_SD.pdf; p.1295).

488. As shown below, the drive of the high capacity feeder (tray 6) of the WorkCentre 5325, such as the lift and feed motor, can be engaged (via transmission) so that the tray moves between the paper feed (lifted) position and the paper load (e.g., un-lifted) position.

Ex. 30 (Xerox_WC_5335F_SD, p. 1301).

489. Claim limitation 1[h] is satisfied for at least the following reasons. As shown below, the transmission is disengagable, for example after the lift and feed motor of Xerox WorkCentre 5325 lifts the paper tray into the media pick position, to enable the paper feeder to advance sheets of paper into Xerox WorkCentre 5325 without the tray moving.

Ex. 30 (Xerox_WC_5335F_SD, p. 1301).

490. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation and achieving substantially the same results as claim limitation 1[h]. For example, and without limitation, Xerox WorkCentre 5325 performs substantially the same function in substantially the same way and achieves substantially the same result at least because they comprise a transmission that causes the paper tray to move between a position where the paper can be loaded into the printer and a position where the printer can access the paper and feed the paper into the sheet feeder of the printer.

491. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

492. Defendant's infringement of the '795 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XVII
(Direct Infringement of the '089 Patent pursuant to 35 U.S.C. § 271(a))

493. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

494. Defendant has infringed and continues to infringe one or more claims of the '089 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

495. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

496. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

497. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 6505/6500.

498. Claim 1 of the '089 Patent is recited below:

> A method of printing using an electrophotographic print engine including a single development module that can develop a single toner on a primary imaging member of the single development module and a multi-development module that can develop either one of two toners on a primary imaging member of the multi-development module, the method comprising:
>
> 1[a] determining a combination of toners required to form an image according to a job specification;
>
> 1[b] determining that the combination of toners includes two toners in the multi-development module, developing and transferring first toner separations onto a receiver including a first one of the two toners in a development station of the multi-development module;
>
> 1[c] passing the receiver through the print engine a second time;

1[d] developing and transferring a color separation using the other of the two toners in the multi-development module onto the first toner separations; and

1[e] determining that the identified combination of toners does not include two toners in two development stations in the multi-development module, forming and transferring a first combination of the identified toner separations onto the receiver and diverting the receiver to at least one of an inverter and an exit.

499. As one example, Xerox 6505/6500 meets the limitations of claim 1 of the '089 Patent for at least the reasons described below.

500. In general and as explained below, the limitations of claim 1 are satisfied because Xerox 6505/6500 are laser printers comprising electrophotographic components configured to print full color or black and white images. For black and white printing, Xerox 6505/6500 develop a single toner, Black, on a primary imaging member, such as a drum. For full color printing, Xerox 6505/6500 can develop either one of two toners, such as Cyan and Magenta, on a respective primary imaging member, such as a respective drum corresponding to either one of the two toners. Each toner is located in a corresponding development module.

501. As shown below, Xerox 6505/6500 are laser printers with an electrophotographic printing engine that uses a single toner, such as black for black and white printing, or at least one toner out of two or more toners, including Cyan, Magenta, Yellow, and Black, to develop a color image on the imaging member, such as the respective drum.

Phaser 6500/WorkCentre 6505 Operational Overview

The Phaser 6500 is a full-color printer and the WorkCentre 6505 is a full-color multifunction printer, both using raster output scanner (ROS) lasers with an electrophotographic four-color CMYK process. The tandem system consists of four color drums (C, M, Y, and K) which creates the toner image.

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 58).

502. Shown below is an overview of the electrophotographic printing process used by Xerox 6505/6500 printers. The printing process relies on an imaging unit, in a development

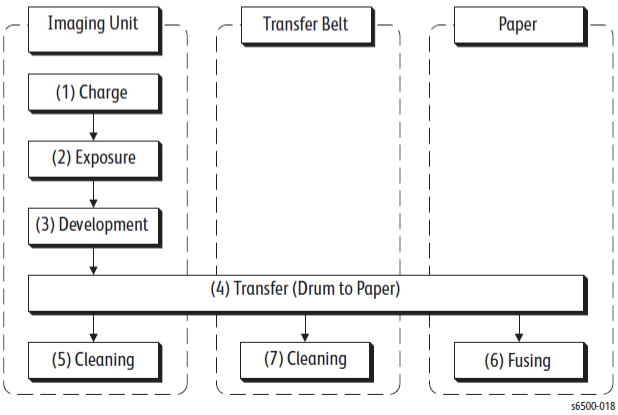
module, for developing toner images on the primary imaging member, such as the charged drum surface, and a transfer belt for transferring the developed toner image, from the drum surfaces onto paper. The development of one or more toners takes place in one or more development modules.

Print Process

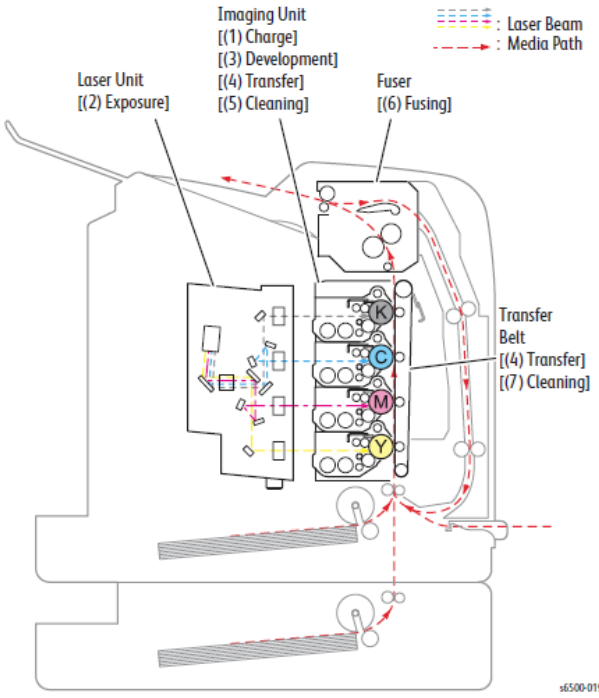
The following block diagram provides the sequence of events for the xerographic process (dashed lines) and the paper flow (solid lines) into and out of the printer.

The print process consists of the following steps:

1. **Charging** – The drum surfaces are charged with electricity.
2. **Exposure** – The drums are exposed to laser beams.
3. **Development** – Image is developed with toner.
4. **Image Transfer** – Four color finished toner image on the drums is transferred onto the paper.
5. **Cleaning** – Excess toner is removed from the drum and BCR.
6. **Fusing** – The Fuser applies toner on to paper using heat and pressure.
7. **Cleaning** – Remaining toner is removed from the belt.



The following diagram shows the location of components involved in the print process for both the SFP and MFP.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at pp. 58-59).

503. As shown below, Xerox 6505/6500 printers may print in color using multiple toners, such as Cyan, Magenta, and Yellow toners, or in black and white (mono color) using a single toner.

Resolution	Color A/A4	Mono A/A4
600 Standard	24/24	24/24
600 Enhanced	24/24	24/24

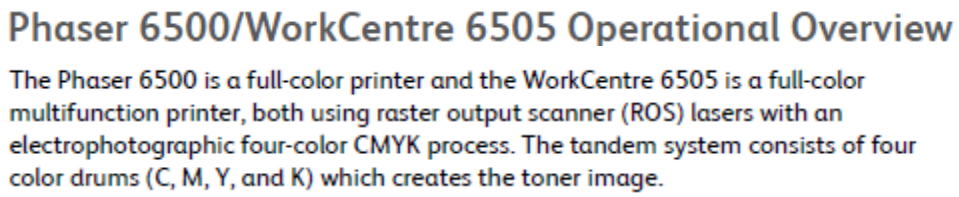
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 48).

504. Xerox 6505/6500 include a single development module that can develop the single Black toner on a Black drum and a multi-development module, or that can develop either one of the Cyan, Magenta, and Yellow toners on an imaging member (e.g., cyan drum, magenta drum and yellow drum) for printing in color.

505. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox 6505/6500 meet the recited claim language because Xerox 6505/6500 are laser printers

comprising electrophotographic components configured to print full color or black and white images. For black and white printing, Xerox 6505/6500 develop a single toner, Black, on a primary imaging member, such as a drum. For full color printing, Xerox 6505/6500 can develop either one of two toners, such as Cyan and Magenta, on a respective primary imaging member, such as a respective drum corresponding to either one of the two toners. Each toner is located in a corresponding development module.

506. As shown below, Xerox 6505/6500 are laser printers with an electrophotographic printing engine that uses a single toner, such as black for black and white printing, or at least one toner out of two or more toners, including Cyan, Magenta, Yellow, and Black, to develop a color image on the imaging member, such as the respective drum.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 58).

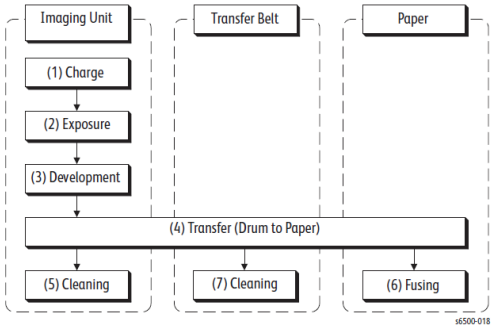
507. Shown below is an overview of the electrophotographic printing process used by Xerox 6505/6500 printers. The printing process relies on an imaging unit, in a development module, for developing toner images on the primary imaging member, such as the charged drum surface, and a transfer belt for transferring the developed toner image, from the drum surfaces onto paper. The development of one or more toners takes place in one or more development modules.

Print Process

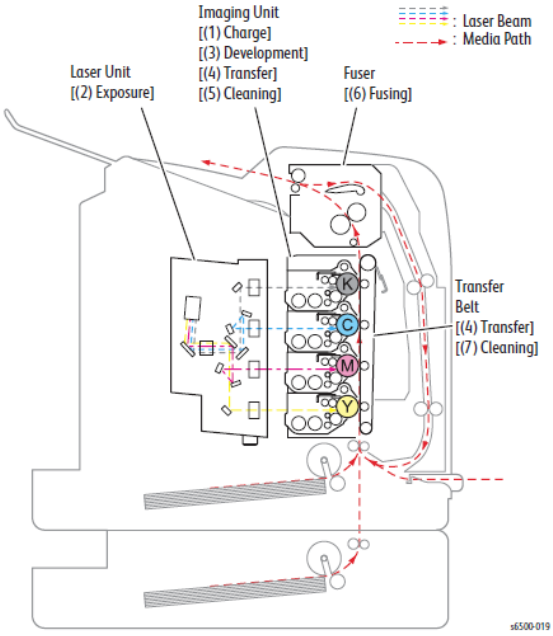
The following block diagram provides the sequence of events for the xerographic process (dashed lines) and the paper flow (solid lines) into and out of the printer.

The print process consists of the following steps:

1. **Charging** – The drum surfaces are charged with electricity.
2. **Exposure** – The drums are exposed to laser beams.
3. **Development** – Image is developed with toner.
4. **Image Transfer** – Four color finished toner image on the drums is transferred onto the paper.
5. **Cleaning** – Excess toner is removed from the drum and BCR.
6. **Fusing** – The Fuser applies toner on to paper using heat and pressure.
7. **Cleaning** – Remaining toner is removed from the belt.



The following diagram shows the location of components involved in the print process for both the SFP and MFP.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at pp. 59-60).

508. As shown below, Xerox 6505/6500 printers may print in color using multiple toners, such as Cyan, Magenta, and Yellow toners, or in black and white (e.g., mono color) using a single toner.

Resolution	Color A/A4	Mono A/A4
600 Standard	24/24	24/24
600 Enhanced	24/24	24/24

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 48.)

509. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox 6505/6500 determine the combination of toners required for completing a job specification, develop the combination of toners and transfer first toner separations, including toner images formed based on the combination of Black, Cyan, Magenta and Yellow toners, onto a receiver, such as a drum, transfer belt, and paper. The combination of toners selected may include a combination of any two toners, such as Cyan and Magenta, from a multi-development module of a development station of Xerox 6505/6500.

510. As shown below, at the development and image transfer stage of the printing process, Xerox 6505/6500 printers develop and transfer toner separations, such as images, onto a receiver, such as paper. The toner images are based on first one of the two toners, such as Cyan and Magenta toners, in the development station of the multi-development module. The development phase of the printing process involves toner development and formation of toner images on charged drum surfaces. The image transfer phase involves formation of toner separations (e.g., layered toner images) via sequential transfer of each toner image (e.g., in order of toner type that is based on an installed sequence of Yellow, Magenta, Cyan and Black toners in the image below) onto an image transfer belt and transfer of the toner separations onto the receiver (e.g., paper).

Development

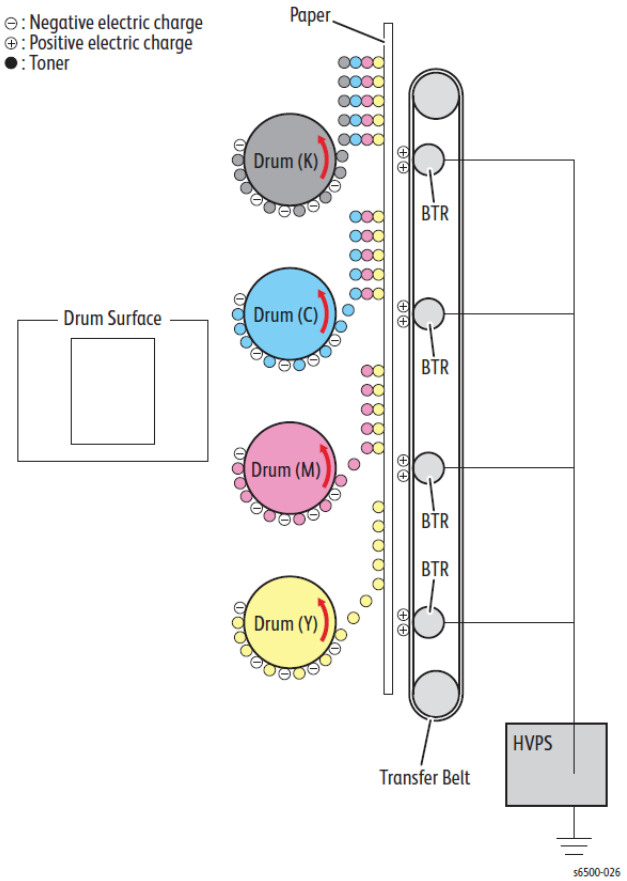
Toner is electrically attached to the invisible electrostatic latent image on the drum surface to form the visible toner image on the drum.

The toner in the Toner Cartridge is agitated by the built-in agitator and fed into the developer. The augers are driven by the toner motors and the developer motor in the Main Drive Assembly. The toner is consumed according to the print count and fed into the developer. This process, called toner dispensation, is controlled by two processes: pixel count dispense control (PCDC) and automatic density control (ADC).

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 63).

Image Transfer

During transfer, latent images formed on the drums are transferred to the media by attraction to the BTR (bias transfer rollers) in the Transfer Belt.The BTR is a metal roller, to which a positive voltage from the HVPS is applied. The BTR positively charges the belt. The toner on the drums moves towards the Transfer Belt due to the attracting force generated between the negative polarity of the toner and the positive charge on the belt. The four color separation images are transferred from the drums in Y, M, C, and K order.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 65).

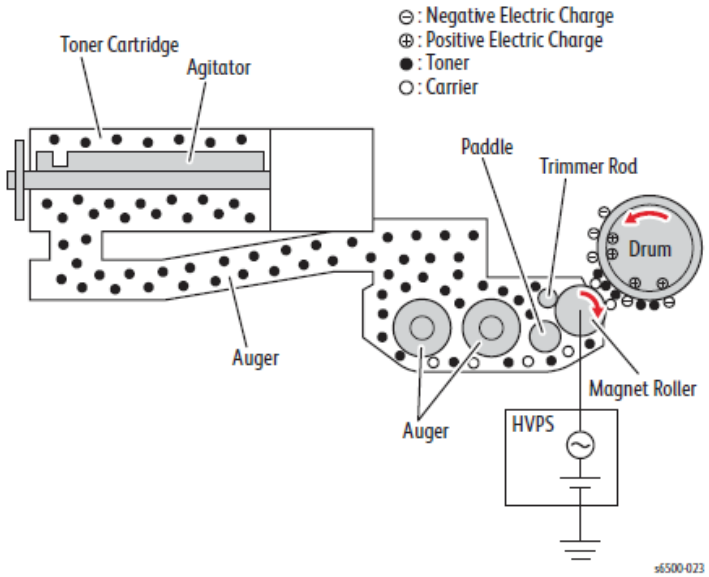
511. As shown below, Xerox 6505/6500 include a development station comprising a development module associated with a toner cartridge, whereby toner is developed from the toner cartridge and transferred onto the charged drum surface to form a first toner image. Xerox 6505/6500 includes at least two toners, such as Cyan, Magenta, Yellow and Black toners, with each toner associated with a respective development station and the combination of toners transferred onto the first toner separation to form a composite color image.

Development

Toner is electrically attached to the invisible electrostatic latent image on the drum surface to form the visible toner image on the drum.

The toner in the Toner Cartridge is agitated by the built-in agitator and fed into the developer. The augers are driven by the toner motors and the developer motor in the Main Drive Assembly. The toner is consumed according to the print count and fed into the developer. This process, called toner dispensation, is controlled by two processes: pixel count dispense control (PCDC) and automatic density control (ADC).

The toner fed into the developer is agitated by the auger, and supplied to the magnet roller. The toner and carrier are charged by friction due to agitation (toner in negative, carrier in positive), and they are attracted electrically. A uniform layer is formed by the trimmer bar as the carrier is attracted to the magnetic roller.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 63).

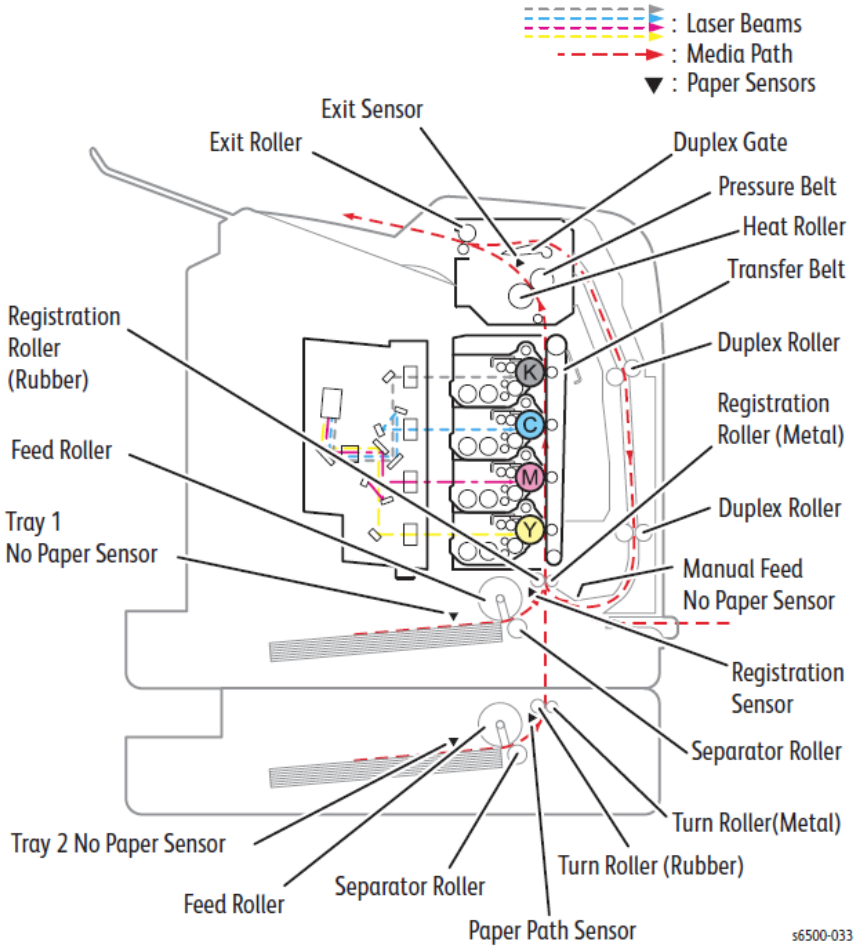
512. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox 6505/6500 meet the recited claim language because they include a duplex gate for passing the

receiver, such as paper, into the print engine a second time and a duplex unit for passing the receiver through the print engine the second time.

513. As shown below, Xerox 6505/6500 uses a duplex gate for redirecting paper after a first pass through the print engine towards duplex rollers for moving the paper through the print engine for the second time.

Media Path Components

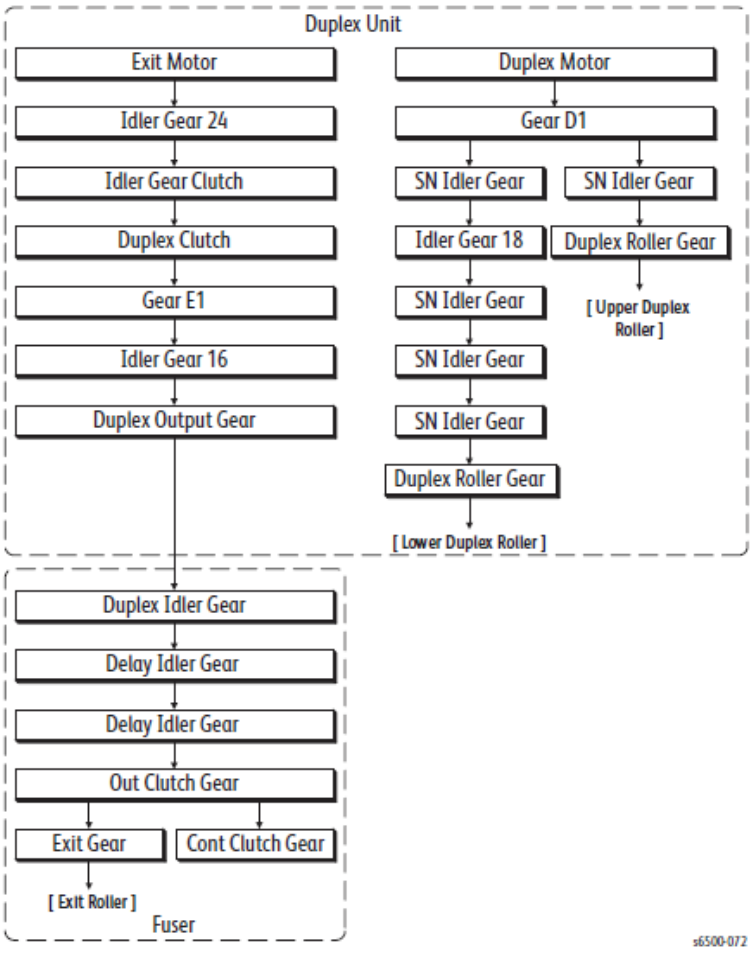
Media path components are shown in the following figure.

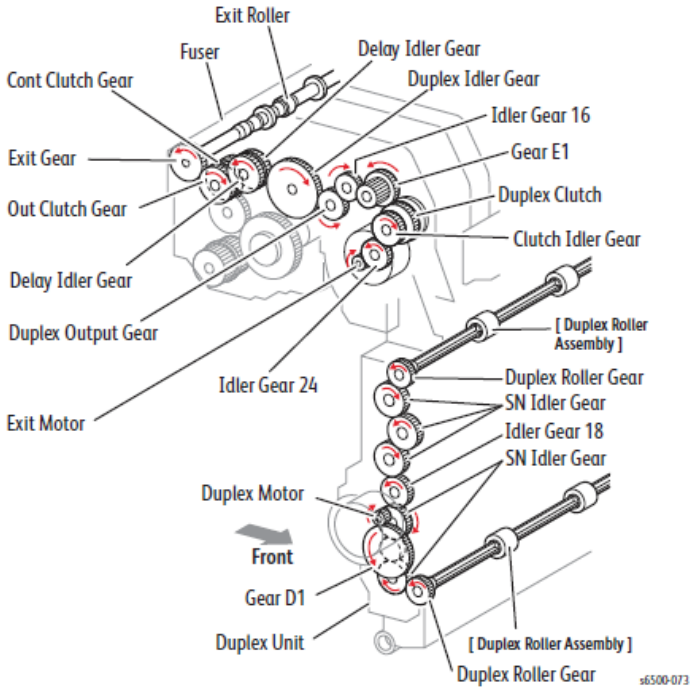


Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 71).

514. As another example, Xerox 6505/6500 include a duplex unit for passing paper through the print engine for the second time.

Duplex Unit

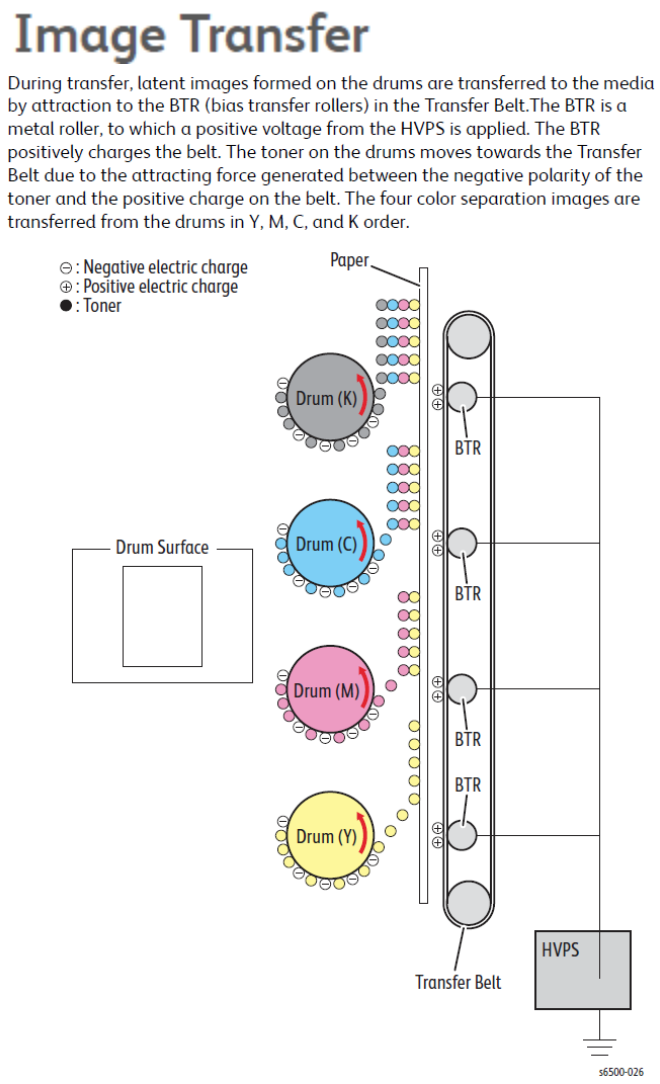

Duplex Unit
Exit Motor
Idler Gear 24
Idler Gear Clutch
Duplex Clutch
Gear E1
Idler Gear 16
Duplex Output Gear
Duplex Motor
Gear D1
SN Idler Gear
Idler Gear 18
SN Idler Gear
SN Idler Gear
Duplex Roller Gear
[Lower Duplex Roller]
SN Idler Gear
Duplex Roller Gear
[Upper Duplex Roller]
Duplex Idler Gear
Delay Idler Gear
Delay Idler Gear
Out Clutch Gear
Exit Gear
Cont Clutch Gear
[Exit Roller]
Fuser
s6500-072



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at pp. 112-113).

515. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox 6505/6500 develop and transfer a color separation, such as the toner image, onto the first toner separation, such as the first toner image, on the transfer belt, during the image transfer phase.

516. As shown below, Xerox 6505/6500 printers develop a toner image, comprising one of the toners C, M, Y, and K, on the corresponding toner drum and transfer the toner image onto the transfer belt. By consecutively building up the toner images on the transfer belt, using the toners in order of Y, M, C, and K, and based on the job specification, Xerox 6505/6500 printers overlay color separation images onto the transfer belt and to the media (e.g., paper).

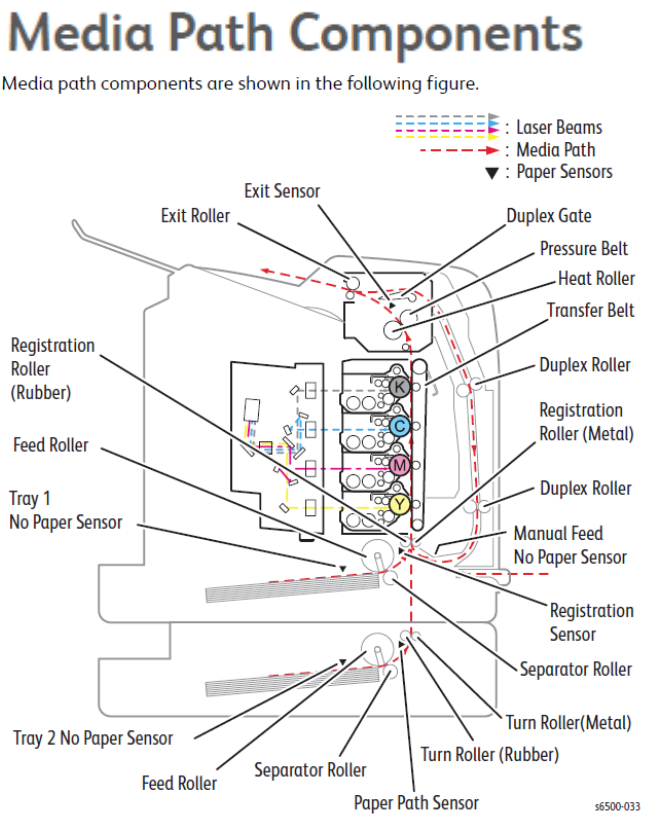


Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 65).

517. Claim limitation 1[e] is satisfied for at least the following reasons. Xerox 6505/6500 can select two toners from available toners for forming and transferring a combination of the selected two toner images onto the receiver, such as paper. Xerox 6505/6500 then divert the paper to at least one inverter, such as a duplex gate and an exit.

518. As shown below, Xerox 6505/6500 select toners from available toners, such as toners C, M, Y, and K, for forming and transferring toner images onto a transfer belt that fuses

the toner images onto a paper. The paper is then transported towards at least one of the duplex gate and an exit.



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 71).

519. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[e]. For example, and without limitation, Xerox 6505/6500 performs substantially the same function in substantially the same way and achieves substantially the same result at least because they determine a combination of toners that may include two out of four toners in the development stations, form and transfer a first combination of the two toner separations onto paper and divert the paper to either an inverter for duplex printing or to an exit.

520. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

521. Defendant's infringement of the '089 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XVIII
(Direct Infringement of the '022 Patent pursuant to 35 U.S.C. § 271(a))

522. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

523. Defendant has infringed and continues to infringe one or more claims of the '022 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

524. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

525. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

526. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 7800 Color Printer (the "Xerox Phaser 7800").

527. Claim 1 of the '022 Patent is recited below:

A printing apparatus comprising:

1[a] a base to support the printing apparatus during operation;

1[b] a wall extending at an angle from the base;

1[c] a print region;

1[d] a media input holder;

1[e] a media advance system for advancing media from the media input holder to the print region for printing on a first side of a sheet of media; and

1[f] a pivotable duplexing unit comprising a duplexing media path for reversing the sheet of media in order to print on a second side of a sheet opposite the first side,

1[g] wherein the pivotable duplexing unit is attached to the wall using a hinge having an axis that is substantially perpendicular to the base, and

1[h] wherein the wall includes a support member of the hinge and the pivotable duplexing unit includes a pin member of the hinge for pivoting relative to the support member of the hinge.

528. As one example, Xerox Phaser 7800 meets the limitations of claim 1 of the '022 Patent for at least the reasons described below.

529. As a general matter and as described below, Xerox Phaser 7800 printing apparatus.

Operational Overview

The Phaser 7800 is a LED Print Head Color printer that is based on the electrophotographic recording principle. It utilizes a tandem system where each of the colors - Yellow, Magenta, Cyan, and Black (Abbr: Y, M, C, K) have its own Drum and Developer. A toner image for each color is formed on the Drum and then transferred to the belt (Intermediate Transfer Unit). The toner image of the 4 colors are overlapped on the belt to form the full color print, which is then transferred and fused onto the paper.

Ex. 66 (Xerox Phaser 7800 Color Printer Service Repair Manual at p. 8-3 (1203)).

530. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800has a base at the bottom which includes a structure into a paper tray 2 (indicated by "2") is inserted/removed. The base provides support for the printing apparatus located above the paper tray 2.

Ex. 73 (Brochure – Xerox Phaser 7800 Color Printer).

531. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800 includes a wall/door (indicated by "A" on the left side of the image below).

Ex. 73 (Brochure – Xerox Phaser 7800 Color Printer).

532. As shown below, the Xerox Phaser 7800 includes the wall/door (shaded portion) forms an angle with the base when opened.

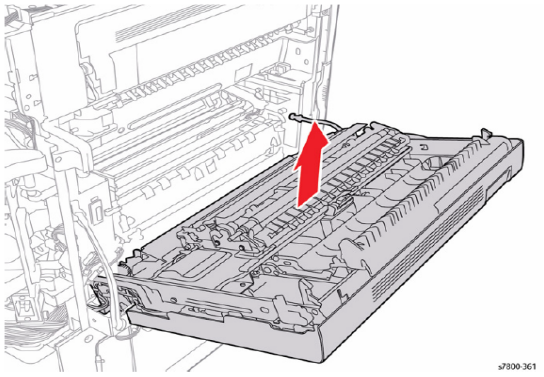
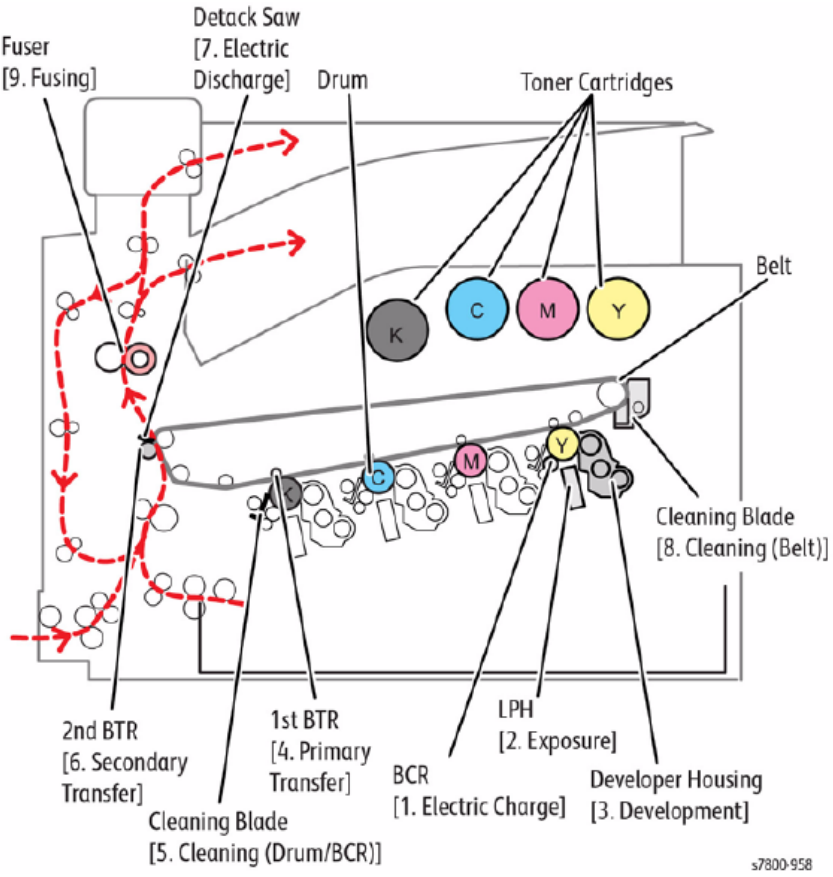


Figure 4 Removing the Left Hand Door A

Ex. 66 (Xerox Phaser 7800 Color Printer Service Repair Manual at p. 4-135 (517)).

533. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800 includes a print region which includes, for example, the second bias transfer roll (2nd BTR, item 6 "Secondary Transfer"), the fuser (item 9 "Fusing"), and the region in between them.



Ex. 66 (Xerox Phaser 7800 Color Printer Service Repair Manual at p. 8-3 (1203)).

534. Claim limitation 1[d] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800 includes a media input holder such as paper tray 2 (indicated by "2") which holds paper.

Ex. 73 (Brochure – Xerox Phaser 7800 Color Printer).

535. Claim limitation 1[e] is satisfied for at least the following reasons.

536. As shown below, Xerox Phaser 7800 has a media advance system such as, for sheets of paper in Tray 2, a Tray 2 Feed/Lift Up Motor and Main Drive Motor. Used in conjunction with one another, a sheet of paper (media) is advanced upward along the red path to the print region (discussed above as the second bias transfer roll, the fuser, and the region in between them), wherein a first side of the sheet of paper is printed upon.

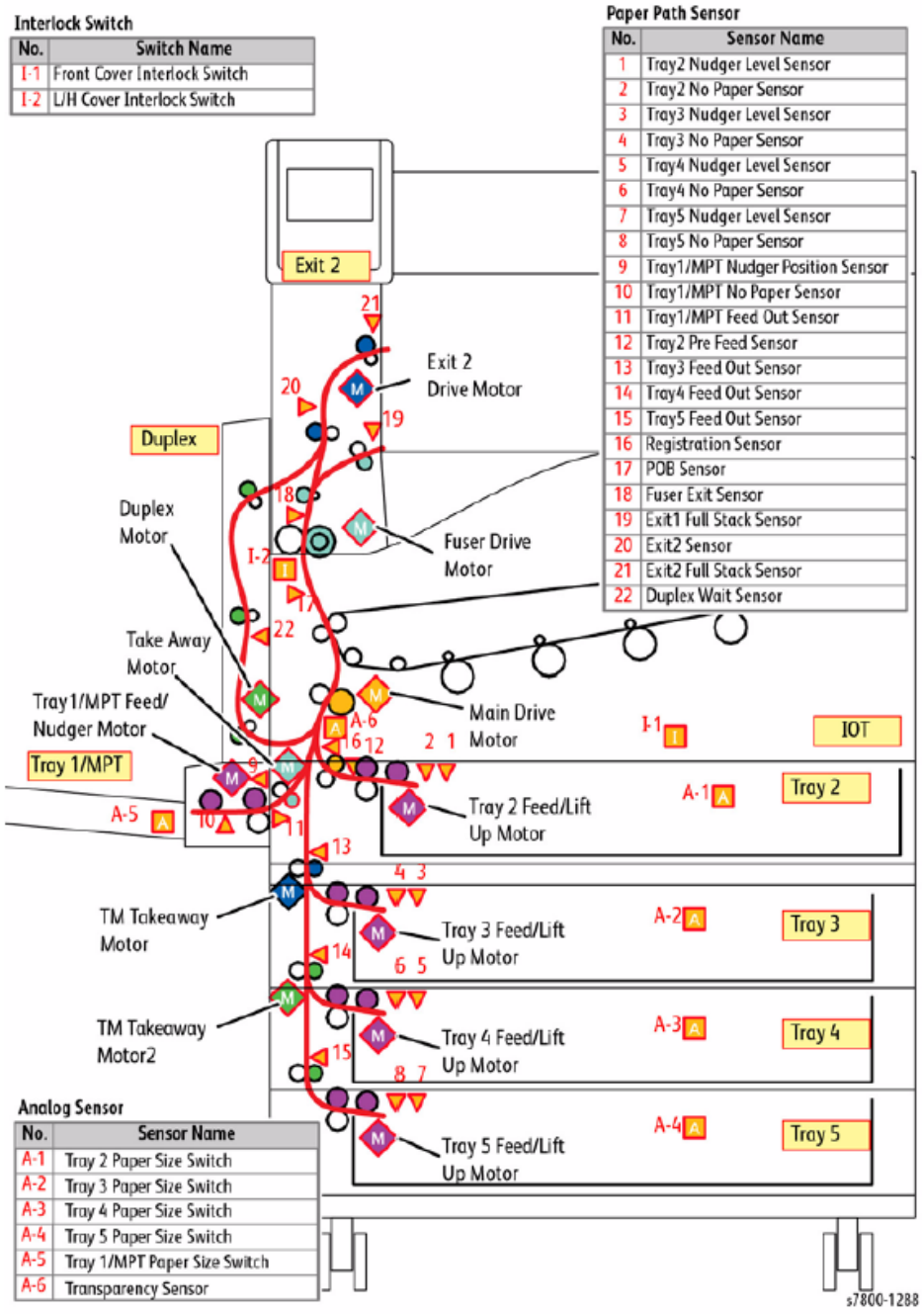


Figure 1 1500-Sheet Feeder (3 Tray Module)

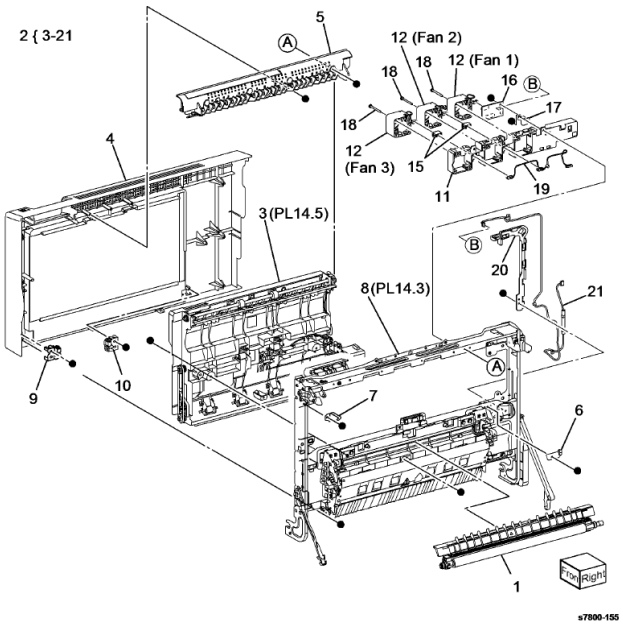
Ex. 66 (Xerox Phaser 7800 Color Printer Service Repair Manual at p. 8-15 (1215)).

537. Claim limitation 1[f] is satisfied for at least the following reasons.

538. As shown below, Xerox Phaser 7800 has a duplexing unit that includes the left hand cover assembly (item 2) of the wall/door (discussed above) and a duplex assembly (item 3). The duplex assembly is pivotable about a hinge made up of the latch (item 9) and the part of the left hand frame assembly (item 8) to which the latch connects.

PL 14.2 Left Hand Cover (2 of 2)

Item	Part	Description
1	108R01053	Transfer Roller (REP 14.2)
2	604K69760	Left Hand Cover Assembly (REP 14.3)
3	–	Duplex Assembly (P/O PL 14.2 Item 2) (REP 14.4)
4	–	Left Hand Cover (P/O PL 14.2 Item 2)
5	–	Chute (P/O PL 14.2 Item 2)
6	–	Fuser Link (P/O PL 14.2 Item 2)
7	–	Block (P/O PL 14.2 Item 2)
8	–	Left Hand Frame Assembly (P/O PL 14.2 Item 2)
9	–	Latch (Front) (P/O PL 14.2 Item 2)
10	–	Latch (Rear) (P/O PL 14.2 Item 2)
11	–	Fan Holder (P/O PL 14.2 Item 2)
12	127K61510	Left Hand Fan 1/Left Hand Fan 2/ Left Hand Fan 3 (REP 14.5)
13	–	Not Used
14	–	Not Used
15	–	Connector (P/O PL 14.2 Item 2)
16	960K50361	Left Hand Fan PWB (REP 14.6)
17	–	Conductor (P/O PL 14.2 Item 2)
18	–	Screw (P/O PL 14.2 Item 2)
19	–	Wire Harness (P/O PL 14.2 Item 2)
20	–	Harness Guide (P/O PL 14.2 Item 2)
21	–	Wire Harness (P/O PL 14.2 Item 2)



Ex. 66 (Xerox Phaser 7800 Service Manual and Parts List at p. 5-60 (60)).

539. As shown below, the duplexing unit of Xerox Phaser 7800 includes the media path such as the duplex media path. The duplexing unit reverses the sheet of media, such as a sheet of paper, travelling along the duplex media path in order to print on a second side of a sheet of paper opposite the first side.

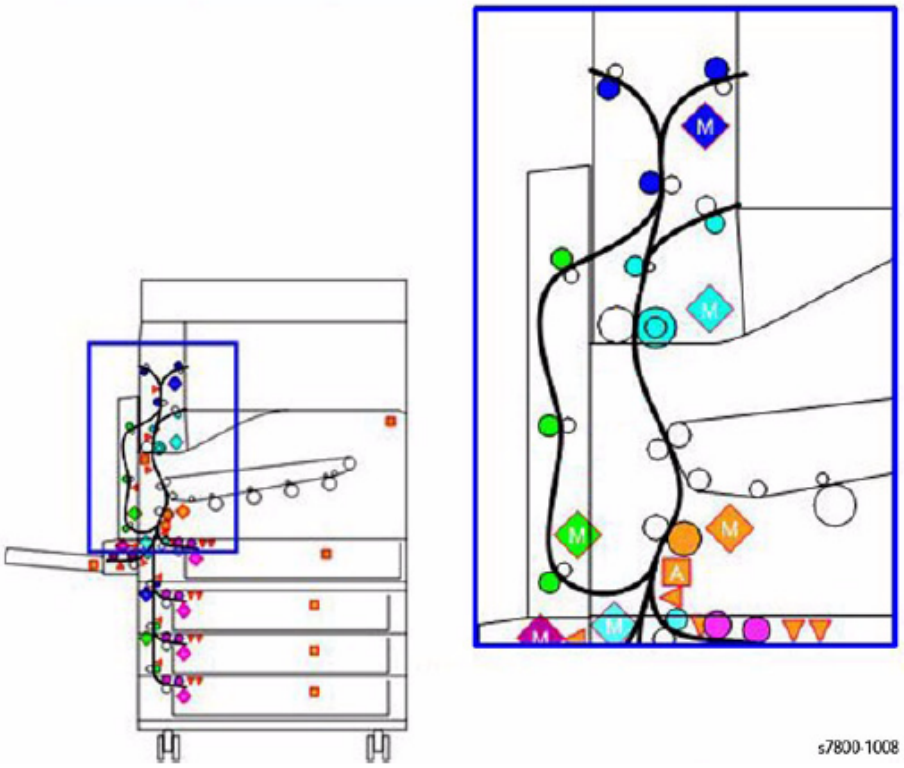
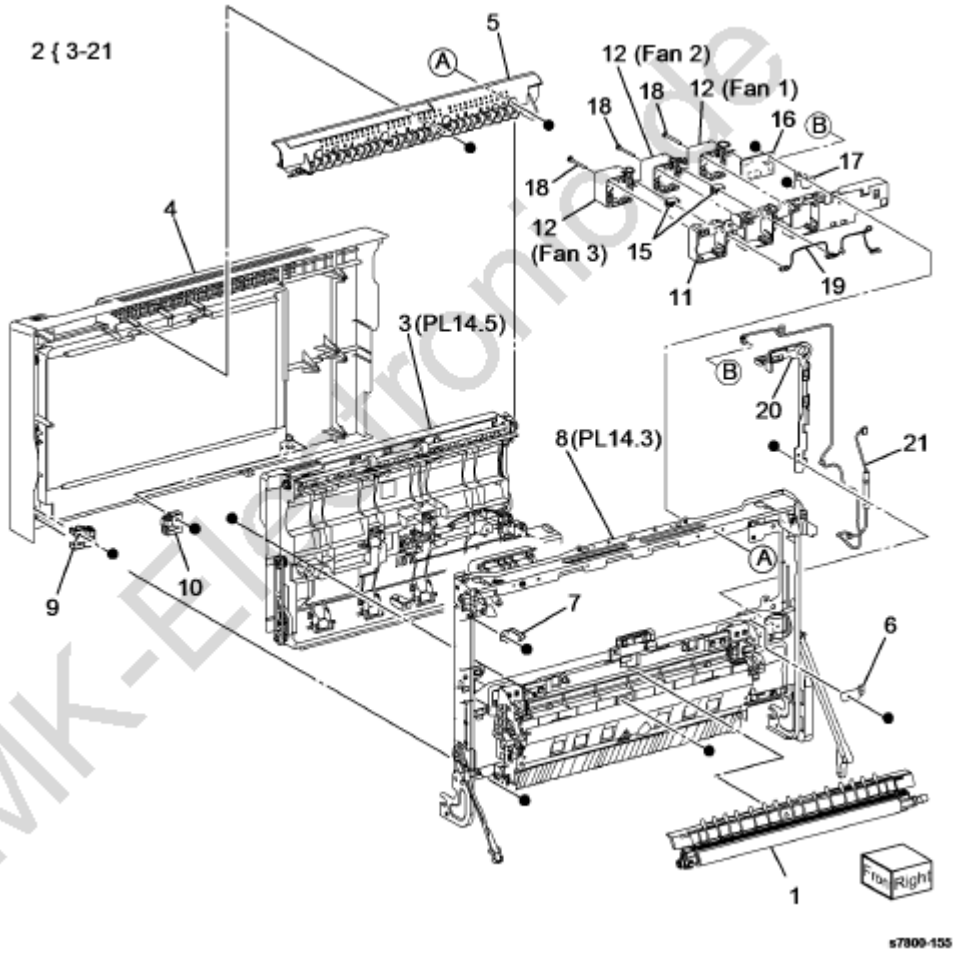


Figure 18 Duplex Media Path

Ex. 66 (Xerox Phaser 7800 Color Printer Service Repair Manual at p. 8-31 (1231)).

540. Claim limitation 1[g] is satisfied for at least the following reasons. As shown below, Xerox Phaser 7800 has a duplexing unit that includes the left hand cover assembly (item 2) and a duplex assembly (item 3) that is pivotable about a hinge made up of the latch (item 9) and the part of the left hand frame assembly (item 8) to which the latch connects. The part of the hinge that is the latch on the left hand frame assembly is substantially perpendicular to the base to which it connects.



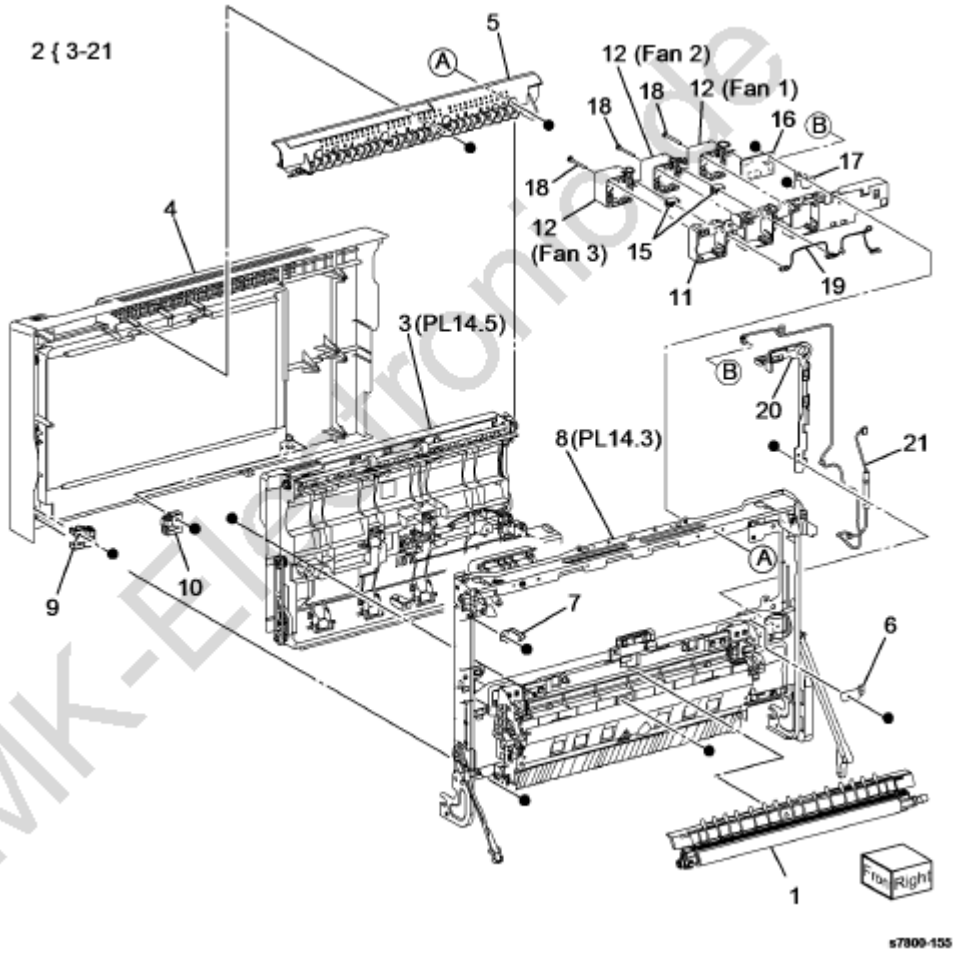
Ex. 66 (Xerox Phaser 7800 Service Manual and Parts List at p. 5-60 (60)).

541. Claim limitation 1[h] is satisfied for at least the following reasons.

542. As shown below, Xerox Phaser 7800 has a wall (item 7) which includes a support member (such as one of the items 6) of the hinge (such as one of the items 18).

Ex. 66 (Xerox Phaser 7800 Service Manual and Parts List at p. 5-49 (49)).

543. As shown below, Xerox Phaser 7800 has a duplexing unit that includes the left hand cover assembly (item 2) and a duplux assembly (item 3) that is pivotable about a hinge made up of the latch (item 9) and the part of the left hand frame assembly (item 8) to which the latch connects. This duplexing unit includes a pin member (one of items 6) of the hinge for pivoting relative to the support member of the hinge.



Ex. 66 (Xerox Phaser 7800 Service Manual and Parts List at p. 5-60 (60)).

544. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[b]. For example, and without limitation, Xerox Phaser 7800 performs substantially the same function in substantially the same way and achieves substantially the same result at least because the base to support the printing apparatus during operation could be the structure into which trays 2 and 3 are housed.

545. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

546. Defendant's infringement of the '022 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XIX
(Direct Infringement of the '113 Patent pursuant to 35 U.S.C. § 271(a))

547. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

548. Defendant has infringed and continues to infringe one or more claims of the '113 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

549. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

550. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

551. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Brenva HD Production Inkjet Press.

552. Claim 1 of the '113 Patent is recited below:

A multifunction printer comprising:

1[a]. a printing apparatus including: a printer chassis having a media input region, a printing region, and a media support element;

1[b]. a carriage configured to move a printhead in a carriage scan direction along the printing region; and

1[c]. a plurality of rollers configured to transport a recording medium from the media input region, across the media support element and to the printing region; and

1[d]. a scanning apparatus having a transparent platen for supporting a document to be scanned in order to convert an image into digitized data, the scanning apparatus including a base that is affixed to the printer chassis, wherein the base of the scanning apparatus comprises a guide for guiding the recording medium through the media transport path toward the printing region;

1[e]. wherein the plurality of rollers include a feed roller

1[f]. the multifunction printer further comprising a biasing member configured to form a nip against the feed roller, wherein the biasing member is affixed to the base of the scanning apparatus.

553. As one example, Xerox Brenva HD Production Inkjet Press (the "Xerox Brenva Inkjet Press") meets the limitations of claim 1 of the '113 Patent for at least the reasons described below.

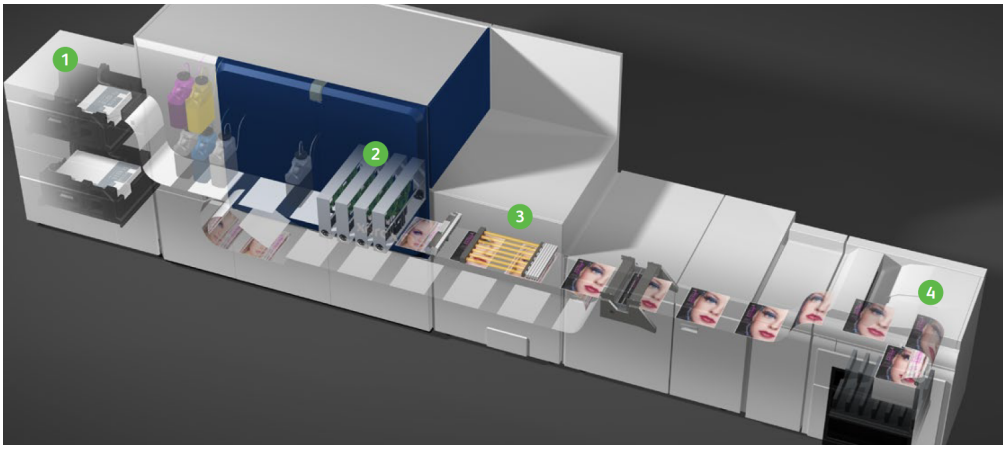
554. An image of Xerox Brenva Inkjet Press is provided below.

Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 8).

555. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Brenva Inkjet Press is a multifunction printer comprising a printer and a scanner.

556. Claim limitation 1[a] is satisfied for at least the following reasons. Xerox Brenva Inkjet Press comprises a printing apparatus including a printer chassis having a media input region, a printing region, and a media support element.

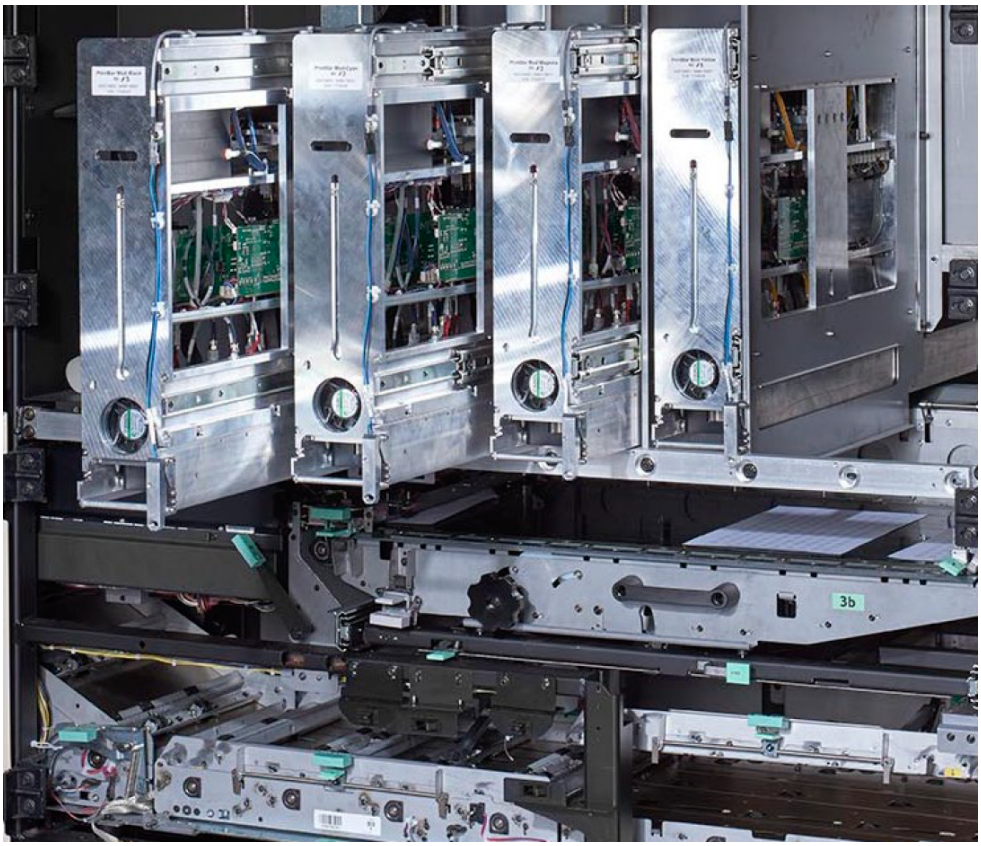
557. As shown below, Xerox Brenva Inkjet Press comprises a printing apparatus, including a printer chassis having a media input region (item 1), a printing region (item 2), and a media support element (item 4).



Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 6).

558. Claim limitation 1[b] is satisfied for at least the following reasons. Xerox Brenva Inkjet Press comprises a carriage configured to move a print head in a carriage scan direction along the printing region.

559. As shown below, Xerox Brenva Inkjet Press includes four carriages (each being a metal rectangular frame).



Ex. 68 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 5).

560. As shown below, each of the carriages of Xerox Brenva Inkjet Press is configured to move a print head in a scan direction along the printing region, such as when printing or when the "integrated full-width scanner enables automated print head adjustments[.]"

2

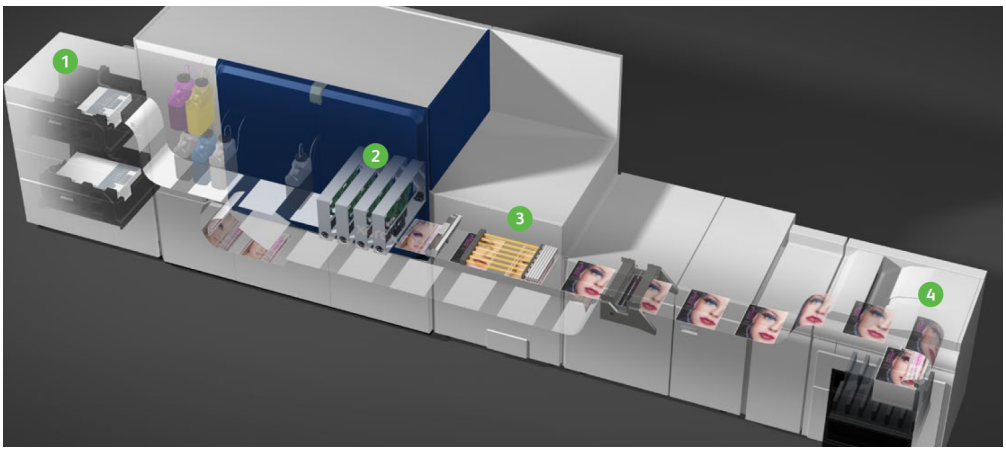
Print Heads and Inks

State-of-the-art inkjet print heads deliver four different drop sizes through 7,870 nozzles per color to produce prints with a 600 x 600 dpi. The integrated full-width scanner enables automated print head

adjustments, missing jet correction and image-on-paper registration. Operators can make image quality improvements for special jobs such as Edge Enhancement, Trapping, and Black Overprint. At all times automated checks and preventative measures keep the press in a ready state and operational.

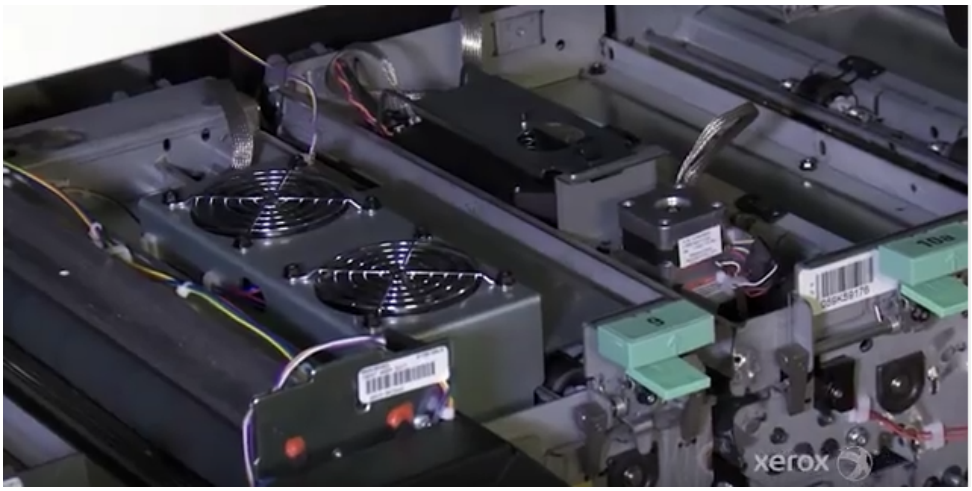
Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 6).

561. Claim limitation 1[c] is satisfied for at least the following reasons. Xerox Brenva Inkjet Press comprises a plurality of rollers configured to transport a recording medium from the media input region, across the media support element and to the printing region. As shown below, Xerox Brenva Inkjet Press transports a recording medium from the media input region, across the media support element and to the printing region (in between items 1 and 2).



Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 6).

562. As shown below in a single video frame of a video, Xerox Brenva Inkjet Press employs rollers to transport the recording medium.



Ex. 68 (PDF of https://youtu.be/jZn4gWI0lc8?t=112) (Comprehensive Overview of Xerox Brenva HD Production Inkjet Press video presentation) (showing an employment of rollers at time 1:52 / 4:20).

563. Claim limitation 1[d] is satisfied for at least the following reasons. Xerox Brenva Inkjet Press comprises a scanning apparatus having a transparent platen for supporting a document to be scanned in order to convert an image into digitized data, the scanning apparatus including a base that is affixed to the printer chassis.

564. As shown below, Xerox Brenva Inkjet Press includes a scanning apparatus having a transparent platen for supporting a document to be scanned, such as a scan bar being emphasized by the presenter. As observed below, the scan bar includes a base that is affixed to the printer's chassis.

Ex. 69 (PDF of https://youtu.be/TxeBaiT26TI?t=252) (Technical Overview: Inkjet Meets Cut-Sheet with Xerox Brenva video presentation) (emphasizing a scan bar at time 4:12 / 8:36)).

565. As shown below, Xerox Brenva Inkjet Press includes a scanner apparatus with a base and a guide for guiding a document through the device to allow for conversion of an image into digitized data with its "Integrated Imaging Module (IIM)" so that, for example, the image is scanned and quality control adjustments may be made.

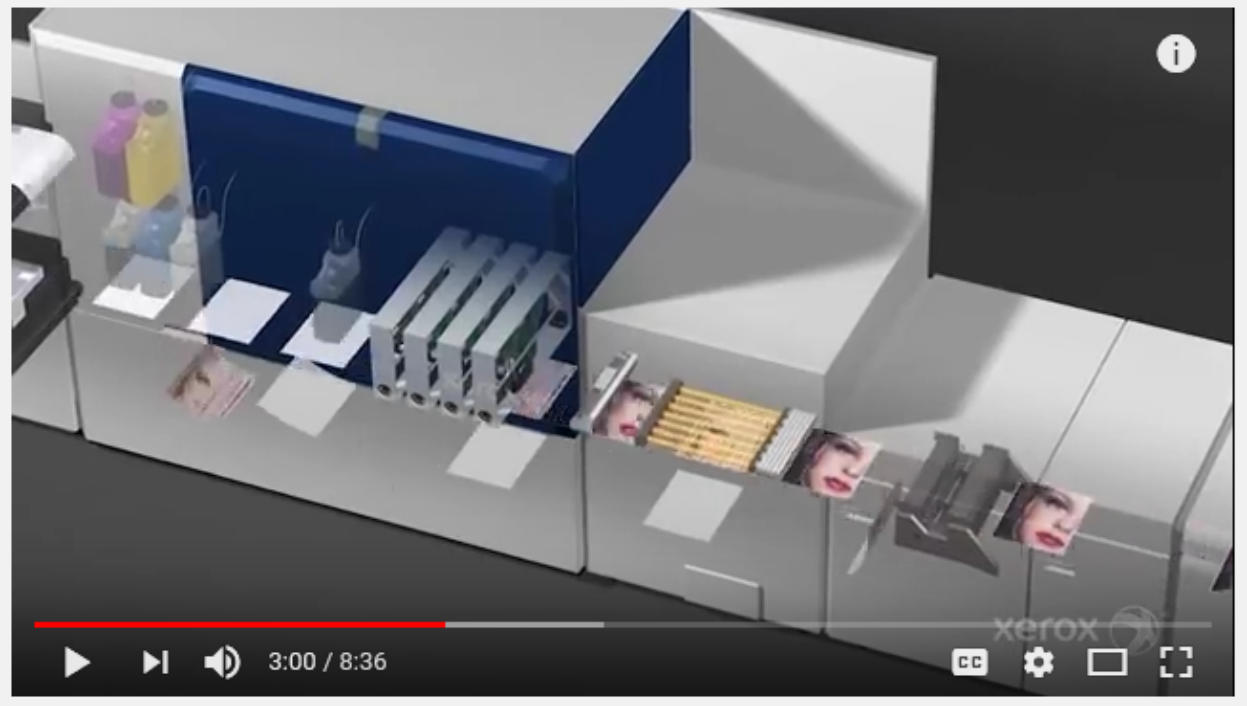
Integrated Imaging Module (IIM) to automate the most critical tasks.

The IIM sits within the paper path to scan images to provide quality control on all jobs. These quality control adjustments can be manually initiated by operators, and occur automatically for continuous, on-going control during printing including:

- Dynamic Print Head Adjustments to keep each of the 12 Print Heads exactly square with the direction of the paper, and aligned where ink meets the paper.
- Automatic Missing Jet Correction to continuously check and correct any jets not firing correctly. Surrounding jets compensate for any defective ones. Missing jets are then fixed during a routine Print Head Purge.

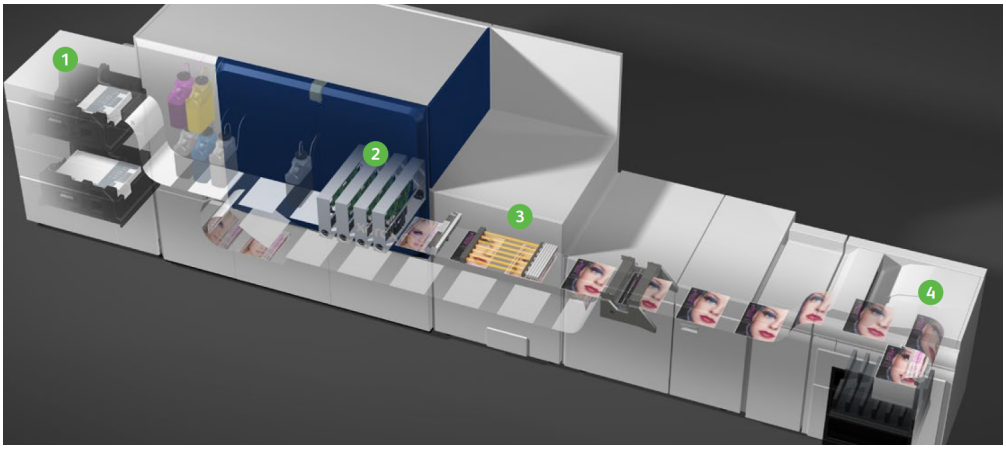
Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 5).

566. As shown below, Xerox Brenva Inkjet Press includes a scanner apparatus with a scan bar and a sensing system to ensure the paper is guided correctly prior to entering the printing region based on feedback provided by the scan bar.



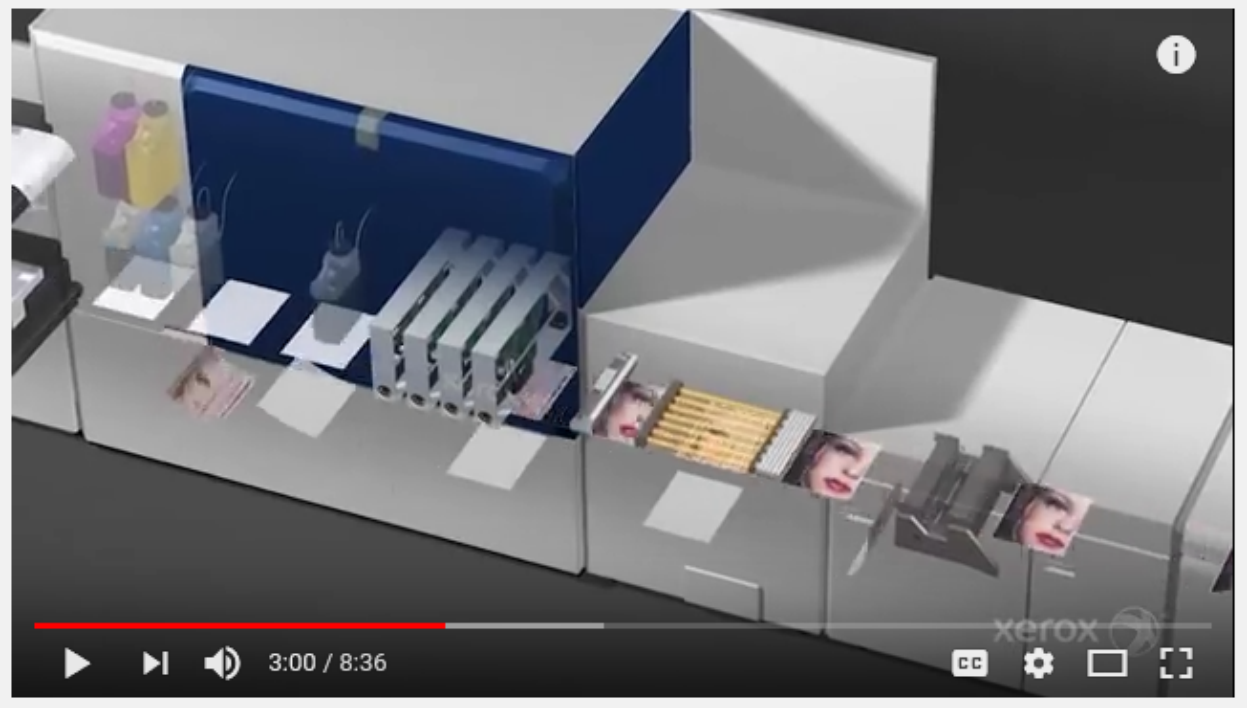
Ex. 70 (PDF of https://youtu.be/TxeBaiT26TI?t=180) (Technical Overview: Inkjet Meets Cut-Sheet with Xerox Brenva video presentation) (discussing a sensing system to make sure the paper is being tracked correctly at time 3:00 / 8:36).

567. Claim limitation 1[e] is satisfied for at least the following reasons. The plurality of rollers within Xerox Brenva Inkjet Press includes a feed roller. As shown below, Xerox Brenva Inkjet Press includes a plurality of rollers, which includes a feed roller that is located below the toner bottles (such as the bottles colored in magenta, yellow, and cyan) and in between item 1 and item 2.



Ex. 67 (Brochure – Xerox Brenva HD Production Inkjet Press at p. 6).

568. Claim limitation 1[f] is satisfied for at least the following reasons. Xerox Brenva Inkjet Press comprises a biasing member configured to form a nip against the feed roller, wherein the biasing member is affixed to the base of the scanning apparatus. As shown below, Xerox Brenva Inkjet Press includes a biasing member, such as a sensing system, to ensure the paper tracks or is guided correctly prior to entering the printing region which, in conjunction with the feed roller, form a nip where the rolling part and the stationary part converge. The biasing member is communicatively affixed to the scanning apparatus which includes the scan bar.



Ex. 70 (PDF of https://youtu.be/TxeBaiT26TI?t=180) (Technical Overview: Inkjet Meets Cut-Sheet with Xerox Brenva video presentation) (discussing a sensing system to make sure the paper is being tracked correctly with input from the scan bar at time 3:00 / 8:36).

569. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[a]. For example, and without limitation, Xerox Brenva Inkjet Press performs substantially the same function in substantially the same way and achieves substantially the same result at least because the plurality of rollers may be configured to transport a recording medium from the media input region, across the printing region, and to the media support element.

570. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

571. Defendant's infringement of the '113 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT XX
(Direct Infringement of the '239 Patent pursuant to 35 U.S.C. § 271(a))

572. MASA repeats, realleges, and incorporates by reference, as if fully set forth herein, the allegations of the preceding paragraphs, as set forth above.

573. Defendant has infringed and continues to infringe one or more claims of the '239 Patent, including at least claim 1, in violation of 35 U.S.C. § 271(a).

574. Defendant's infringement is based upon literal infringement or infringement under the doctrine of equivalents, or both.

575. Defendant's acts of making, using, importing, selling, and/or offering for sale infringing products and services have been without the permission, consent, authorization or license of MASA.

576. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Xerox Phaser 6500 and Work Centre 6505 (the "Xerox Phaser 6500").

577. Claim 1 of the '239 Patent is recited below:

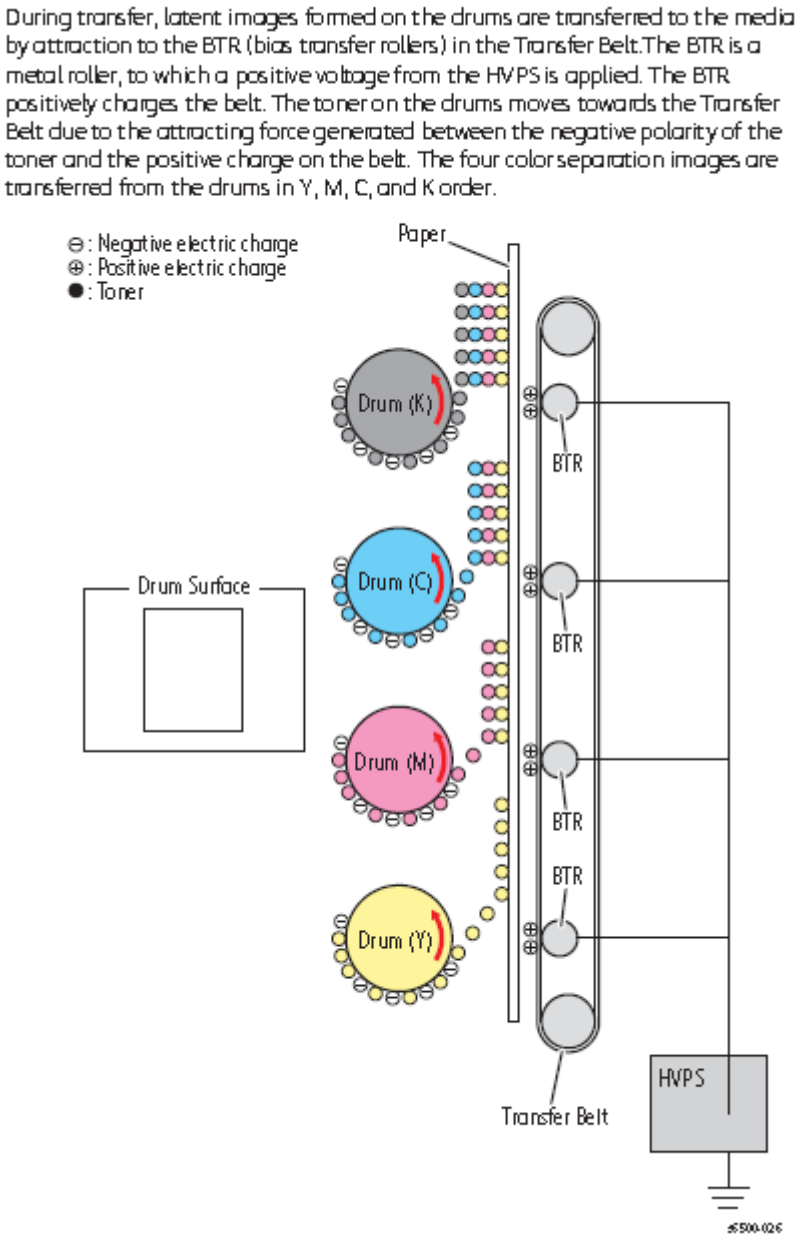
> A device for moving a plurality of pressure rollers relative to respective counter rollers in a printing machine, said device comprising:
>
> 1[a] a plurality of movably supported pressure roller carriers, each supporting respectively one pressure roller, said pressure roller carriers being movable between a contact position and a non-contact position,
>
> 1[b] with each of said pressure roller carriers being biased via a biasing unit in a direction of the contact position; and

1[c] at least one actuation element connecting at least two pressure roller carriers to a shared actuation device, wherein the pressure roller carriers are adapted to automatically move to the non-contact position when the actuation device is in its non-energy mode.

578. As one example, Xerox Phaser 6500 meets the limitations of claim 1 of the '239 Patent for at least the reasons described below.

579. In general and as explained below, the limitations of claim 1 are satisfied because Xerox Phaser 6500 are printing machines having a plurality of drums such as "Drum C," "Drum

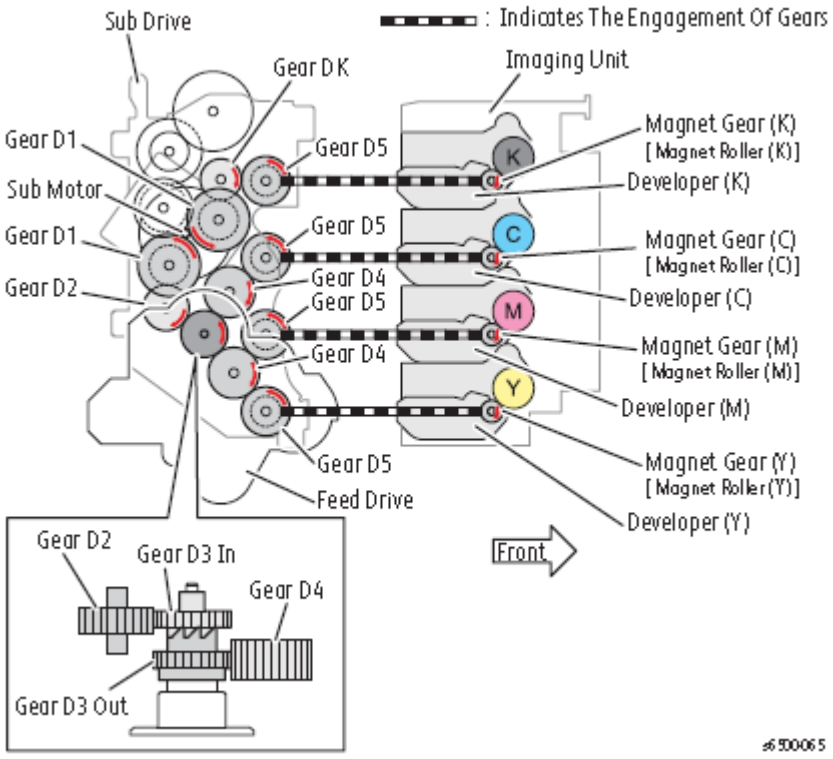
M," and "Drum Y," and respective counter rollers, each of which is a "BTR" (referring to Bias



Transfer Rollers).

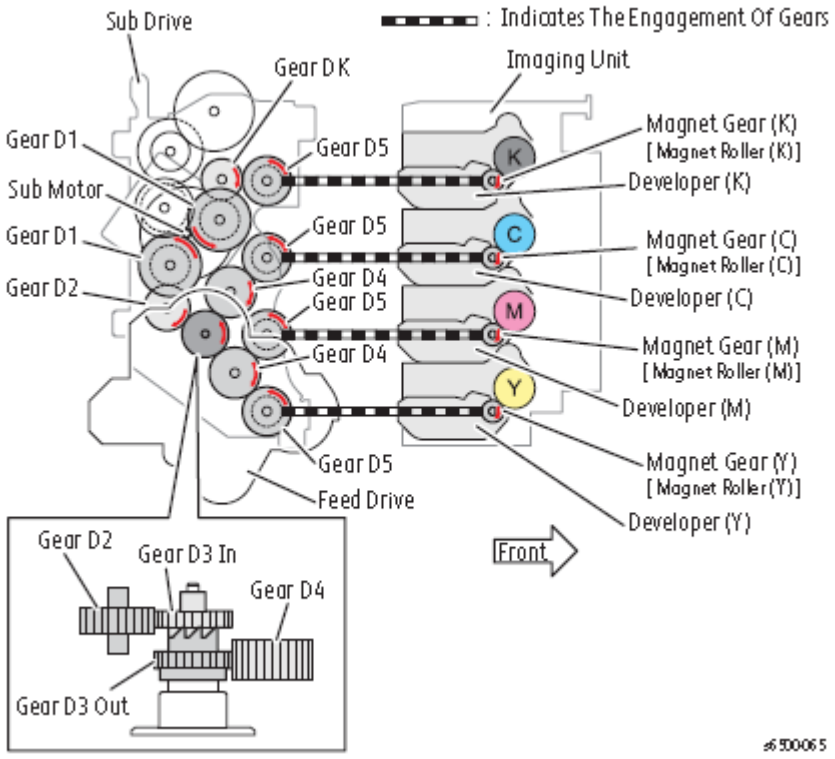
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-9 (65)).

580. As shown below, each of the plurality of drums (labeled "C," "M," and "Y") has a relative pressure roller such as "Magnetic Roller (C)," "Magnetic Roller (M)," "Magnetic Roller (Y)," respectively, each of which is relative to the respective counter rollers identified by "BTR" in the preceding paragraph.



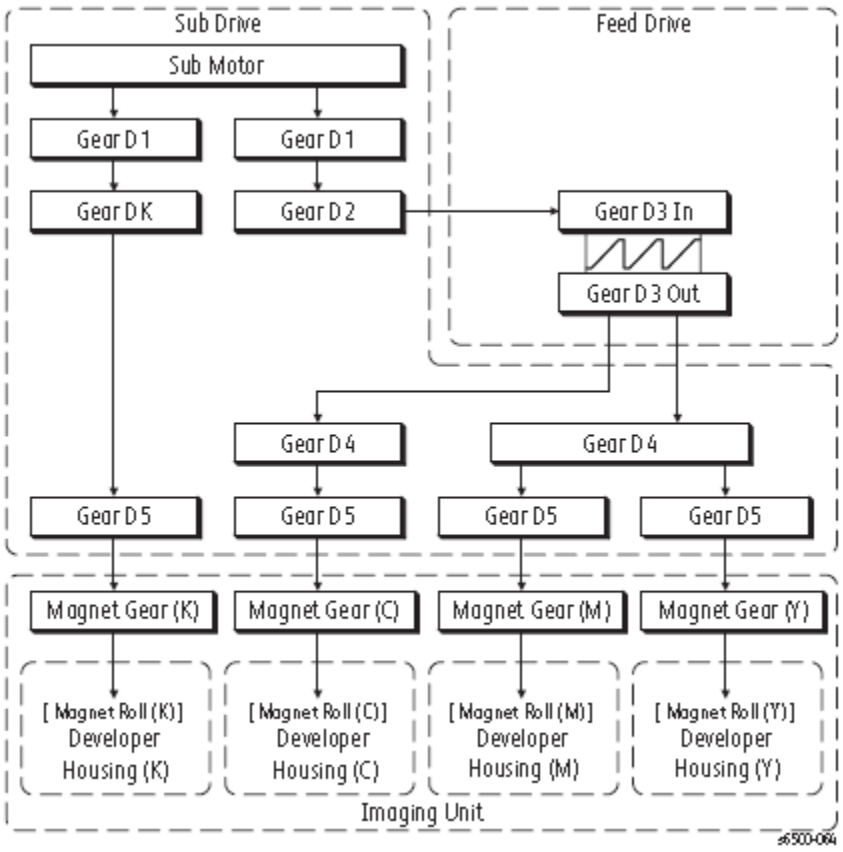
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-52 (108)).

581. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6500 include a plurality of movably supported pressure roller carriers such as "Developer C," "Developer M," and "Developer Y," each supporting respectively one pressure roller such as "Magnet Roller (C)," "Magnet Roller (M)," and "Magnet Roller (Y)" and movable (i.e., rotatable) between a contact position when being driven by a "Feed Drive" and a non-contact position when not being driven.



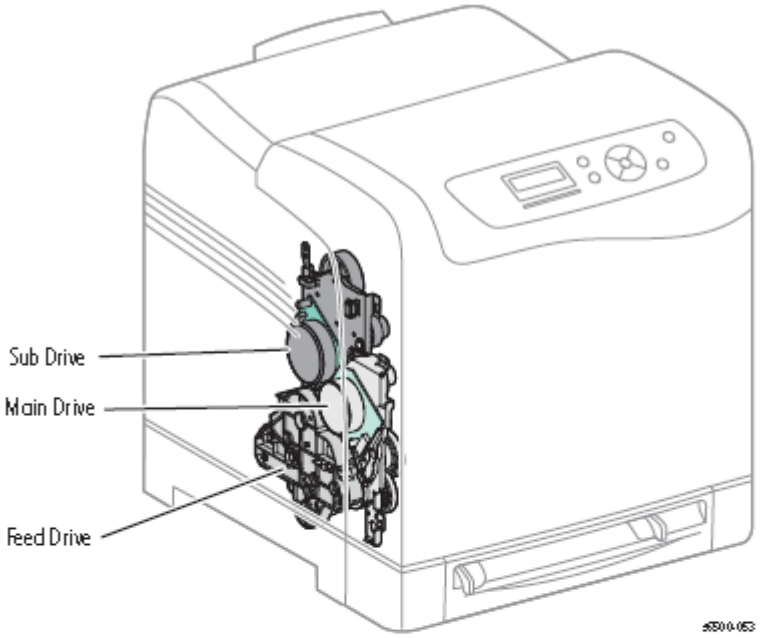
Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-52 (108)).

582. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6500 include pressure roller carriers being biased via a biasing unit in a direction of the contact position. These pressure roller carriers, which also include "Developer Housing (C)," "Developer Housing (M)," and "Developer Housing (Y)," are being biased via biasing units comprised of Magnetic Gear (K) connected to its "Gear 5," Magnetic Gear (C) connected to its "Gear 5," Magnetic Gear (M) connected to its "Gear 5," Magnetic Gear (Y) connected to its "Gear 5," respectively, all in a direction of its respective Developer's contact position in which the developer rotates when being driven by the "FeedDrive."



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-52 (108)).

583. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Xerox Phaser 6500 include an actuating element, such as the "Color Mode Switching Solenoid" having engage/disengage modes (i.e., energy/non-energy modes) corresponding to respective color/black and white selections, which which causes at least two pressure rollers carriers, such as the "CMY developers" to connect to a shared actuation device, such as the "Feed Drive Assy."

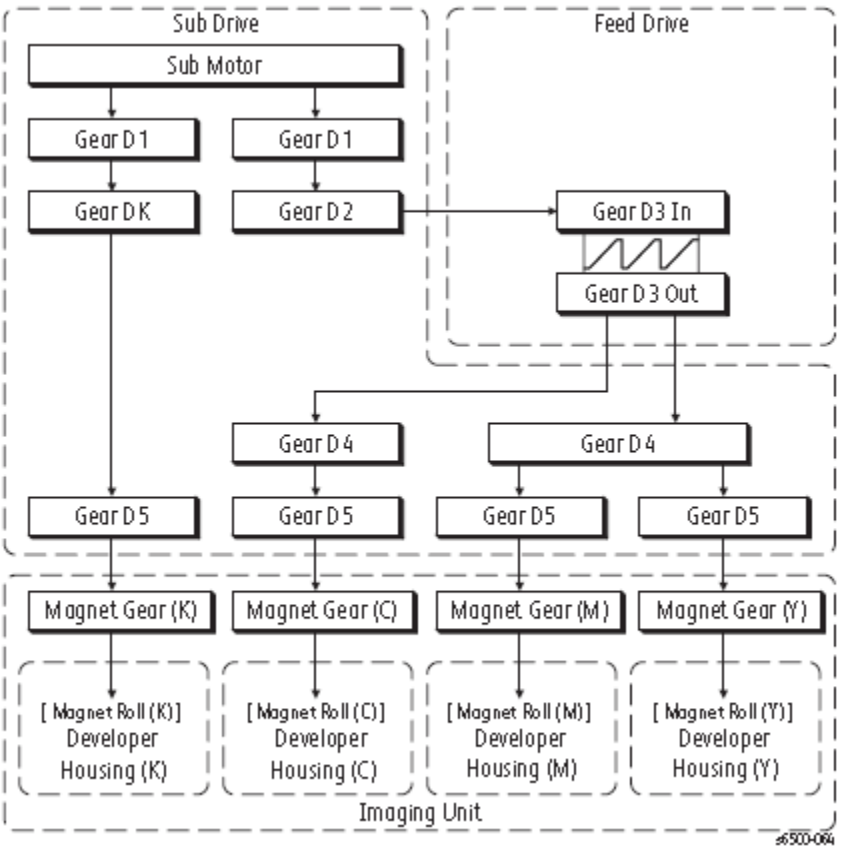


The drive for both the SFP and MFP consists of three assemblies:

- Main Drive Assembly — Drives the Imaging Unit, Transfer Belt, Registration Rollers, and Feeder.
- Sub Drive Assembly — Supplies drive to the Fuser and Cyan, Magenta, and Yellow developers in the Imaging Unit.
- Feed Drive Assembly — Transmits the driving force from the Main and Sub Drive Assemblies to relevant parts. The drive path is changed by the Color Mode Switching Solenoid located on the Feed Drive Assy. To change modes, the solenoid activates, allowing Gear C to engage and rotate Cam C 180 degrees. In Black and White Mode, Cam C displaces Flange D3 to disengage the sections of Gear D3. This prevents rotation of the CMY developers, allowing only the Black Developer to rotate. The Color Mode Switching Sensor detects the presence or absence of the flag on Cam C to report whether the drive path is set for color (flag present) or black and white (flag absent).

Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-36 (92)).

584. As shown below, when the solenoid moves to a non-energy energy mode upon black and white being selected, the at least two pressure roller carriers, such as developers CMY being housed respectively in "Developer Housing (C)," "Developer Housing (M)," and "Developer Housing (Y)," are adapted to automatically move to their non-contact positions (i.e., developers do not rotate) when the actuation device of the "Feed Drive Assy" is in its non-energy mode where "Gear D3 Out" is disengaged with "Gear D3 In."



Ex. 49 (Xerox Phaser 6500 - Work Centre 6505 Service Manual at p. 2-52 (108)).

585. Xerox also infringes under the doctrine of equivalents because it meets at least, and by way of example, the following claim limitation(s) of representative Claim 1 by performing substantially the same function as this limitation, performing this function in substantially the same way as this limitation, and achieving substantially the same results as claim limitation 1[b]. For example, and without limitation, Xerox Phaser 6500 performs substantially the same function in substantially the same way and achieves substantially the same result at least because each one pressure roller could be movable to a contact position from a non-contact position.

586. As a result of Defendant's unlawful activities, MASA has suffered and will continue to suffer irreparable harm for which there is no adequate remedy at law. Accordingly, MASA is entitled to preliminary and/or permanent injunctive relief.

587. Defendant's infringement of the '239 Patent has injured and continues to injure MASA in an amount to be proven at trial.

PRAYER FOR RELIEF

WHEREFORE, MASA prays for judgment and relief as follows:

A. An entry of judgment holding Defendant has infringed and is infringing United States Patent Nos. 6,203,005, 6,305,684, 6,411,314, 6,462,756, 6,509,974, 6,718,285, 6,724,998, 6,799,005, 6,909,856, 6,993,278, 7,502,582, 7,658,375, 7,720,425, 8,005,415, 8,019,255, 8,220,795, 8,554,089, 8,591,022, 8,634,113, and 8,805,239;

B. A preliminary and permanent injunction against Defendant and its respective officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents and all others acting in active concert therewith from infringing United States Patent Nos. 6,203,005, 6,305,684, 6,411,314, 6,462,756, 6,509,974, 6,718,285, 6,724,998, 6,799,005, 6,909,856, 6,993,278, 7,502,582, 7,658,375, 7,720,425, 8,005,415, 8,019,255, 8,220,795, 8,554,089, 8,591,022, 8,634,113, and 8,805,239 and for all further and proper injunctive relief pursuant to 35 U.S.C. § 283;

C. An award to MASA of such damages as it shall prove at trial against Defendant that are adequate to fully compensate MASA for Defendant's infringement of United States Patent Nos. 6,203,005, 6,305,684, 6,411,314, 6,462,756, 6,509,974, 6,718,285, 6,724,998, 6,799,005, 6,909,856, 6,993,278, 7,502,582, 7,658,375, 7,720,425, 8,005,415, 8,019,255, 8,220,795, 8,554,089, 8,591,022, 8,634,113, and 8,805,239, said damages to be no less than a

reasonable royalty;

D. A finding that this case is "exceptional" and an award to MASA of its costs and reasonable attorney's fees, as provided by 35 U.S.C. § 285;

E. An accounting of all infringing sales and revenues, together with post judgment interest and prejudgment interest from the first date of infringement of United States Patent Nos. 6,203,005, 6,305,684, 6,411,314, 6,462,756, 6,509,974, 6,718,285, 6,724,998, 6,799,005, 6,909,856, 6,993,278, 7,502,582, 7,658,375, 7,720,425, 8,005,415, 8,019,255, 8,220,795, 8,554,089, 8,591,022, 8,634,113, and 8,805,239; and

F. Such further and other relief as the Court may deem proper and just.

DEMAND FOR JURY TRIAL

MASA demands a jury trial on all issues so triable.

Dated: April 20, 2018

Respectfully submitted,

By: /s/ Daniel Fischer

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Certificate of Service

I hereby certify that counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on this 20th day of April, 2018.

/s/ Daniel J. Fischer