

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

MIDWEST ATHLETICS AND SPORTS
ALLIANCE LLC

Plaintiff,

v.

RICOH USA, INC.

Defendant.

Case No.:

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL REQUESTED

Plaintiff Midwest Athletics and Sports Alliance LLC (“MASA”) files this Complaint for Patent Infringement and Jury Demand against Defendant Ricoh USA, Inc. (“Defendant” or “Ricoh”) 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. Ricoh is an American corporation that sells document solutions and services, and document technology products.

4. Ricoh is an Ohio corporation, with its principal place of business at 70 Valley Stream Parkway, Malvern, Pennsylvania.

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. 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).

THE PATENTS-IN-SUIT

8. MASA owns the following United States Patents: 7,502,582, 7,720,425, and 8,005,415 (collectively referred to as the "Pentachrome Patents").

9. On March 10, 2009, U.S. Patent No. 7,502,582 ("the '582 Patent") (Ex. A), 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 A and is incorporated by reference herein.

10. All rights, title, and interest in the '582 Patent have been assigned to MASA, who is the sole owner of the '582 Patent. On April 18, 2019, MASA and Commercial Copy Innovations LLC executed an assignment confirming MASA's ownership of U.S. Patent Nos.

7,236,734 and 7,340,208, which are referenced in terminal disclaimers contained in the file history of the '582 Patent.

11. 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.

12. On May 18, 2010, U.S. Patent No. 7,720,425 ("the '425 Patent") (Ex. B), 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 B and is incorporated by reference herein.

13. All rights, title, and interest in the '425 Patent have been assigned to MASA, who is the sole owner of the '425 Patent. On April 18, 2019, MASA and Commercial Copy Innovations LLC executed an assignment confirming MASA's ownership of U.S. Patent Nos. 7,236,734 and 7,340,208, which are referenced in terminal disclaimers contained in the file history of the '425 Patent.

14. 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.

15. On Aug. 23, 2011, U.S. Patent No. 8,005,415 ("the '415 Patent") (Ex. C), 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 C and is incorporated by reference herein.

16. All rights, title, and interest in the '415 Patent have been assigned to MASA, who is the sole owner of the '415 Patent. On April 18, 2019, MASA and Commercial Copy Innovations LLC executed an assignment confirming MASA's ownership of U.S. Patent Nos. 7,236,734 and 7,340,208, which are referenced in terminal disclaimers contained in the file history of the '415 Patent.

THE ACCUSED PRODUCTS

17. Ricoh 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 "Ricoh Office Equipment").

18. The Ricoh Office Equipment includes a variety of printer models, including those referred to as Ricoh Pro C7100x and Ricoh Pro C7110x (the "Pentachrome Accused Products").

19. A depiction of a Pro printer is provided below:



Ex. D (PDF of [https://www.ricoh-usa.com/-](https://www.ricoh-usa.com/-/media/ricoh/common/pdfs/brochures/proc7100.pdf?tm=20171205T170018Z)

[/media/ricoh/common/pdfs/brochures/proc7100.pdf?tm=20171205T170018Z](https://www.ricoh-usa.com/-/media/ricoh/common/pdfs/brochures/proc7100.pdf?tm=20171205T170018Z)).

20. The Pentachrome Accused Products use one or more of the Pentachrome Patents.

COUNT I

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

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

22. 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).

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

24. 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.

25. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Ricoh Pro C7100x/ C7110x.

26. 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.

27. As one example of how the '582 Accused Products infringe at least claim 1, Ricoh Pro C7100X meets the limitations of claim 1 of the '582 Patent for at least the reasons described below.

28. An image of Ricoh Pro C7100X is provided below:



Ex. D (Brochure - RICOH Pro C7100-C7100X Series).

29. As a general matter and as explained below, the limitations of claim 1 are satisfied. Ricoh Pro 7100X is a printer that is part of a production color system that improves the color gamut of the standard CMYK (cyan, magenta, yellow, black) pallet of four colors by

including a fifth color station which combines colors such as white, neon yellow, and neon pink by the addition of a fifth color.



Change the game with Ricoh's 5th Color Station

Want to achieve a more high-end look, or entice more customers in creative fields? No matter what your goal, Ricoh's white, clear, neon yellow and neon pink toners give you the competitive advantage you need to produce eye-catching work that commands premium prices.

Ex. E (PDF of <https://www.ricoh-usa.com/en/products/commercial-industrial-printing/cutsheet/pro-c7100-c7100x-series>)

30. The Ricoh Pro C7100X also includes a Duplo Ultra 300A UV Coater for purposes of improving color images by adding enhanced gloss, as shown below.

Home / Solutions / Finishing / UV Coaters

UV Coaters

Click on a finisher below to learn more about its capabilities.

Sort by: View Per Page:

Duplo Ultra 300A UV Coater

Duplo Ultra 200A UV Coater

Duplo Ultra 100A UV Coater

Ex. F (PDF of <http://www.ricohbusinessbooster.com/solutions/finishing/uv-coaters/>).



Duplo Ultra 300A UV Coater

Hardware Information

The Ultra 300A UV Coater provide the ideal UV coating solution for any digital print environment. Heavy duty yet simple to use, the Ultra 300A applies a high quality gloss, satin, or matte finish to a wide range of offset and digitally printed applications, adding richness to colors while protecting them from scratches and scuffs.

With a coating speed of up to 148 feet (45 meters) per minute, the Ultra 300A can accommodate the output speed from most digital devices and process a variety of paper sizes, from 8.5" x 11" up to 20" x 28", up to 350 gsm. For near-line feeding, the Ultra 300A is available with the high capacity SF-200 Suction Feeder.

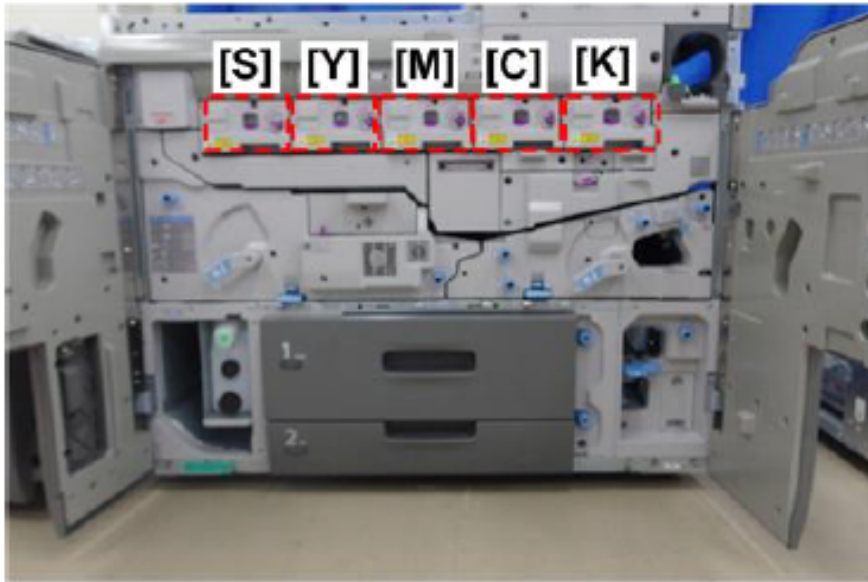
Features

- High speeds up to 148 feet (45 meters) per minute
- Adds gloss, matte, or satin coating
- Infrared Heating System
- UV Coating Low Detection Sensor
- Intelligent Control System for easy operation
- Infrared Heating System helps cure difficult stock
- Auto Gap prevents excess coating from smearing to backside of print

Ex. G (PDF of <http://www.ricohbusinessbooster.com/solution/solutions/finishing/uv-coaters/duplo-ultra-300a-uv-coater/>).

31. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Ricoh Pro 7100X forms color prints using five color pigments such as the four toners for the standard CMYK pallet of four colors (shown below in a right-to-left, horizontal series of black (K), cyan (C), magenta (M), and yellow (Y) toners), and a fifth toner (identified with the label "S").

- There are five PCUs (SYMCK).



d194d4341

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 891 (893)).

32. Ricoh Pro C7100X uses a fifth station (identified with the label “S” below) to form at least a pentachrome color image such as an image which includes a fifth color, such as neon yellow or neon pink.



Change the game with Ricoh's 5th Color Station

Want to achieve a more high-end look, or entice more customers in creative fields? No matter what your goal, Ricoh's white, clear, neon yellow and neon pink toners give you the competitive advantage you need to produce eye-catching work that commands premium prices.

Ex. E (PDF of <https://www.ricoh-usa.com/en/products/commercial-industrial-printing/cutsheet/pro-c7100-c7100x-series>).

33. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, the fifth station of Ricoh Pro C7100X deposits a clear toner overcoat on a paper during a

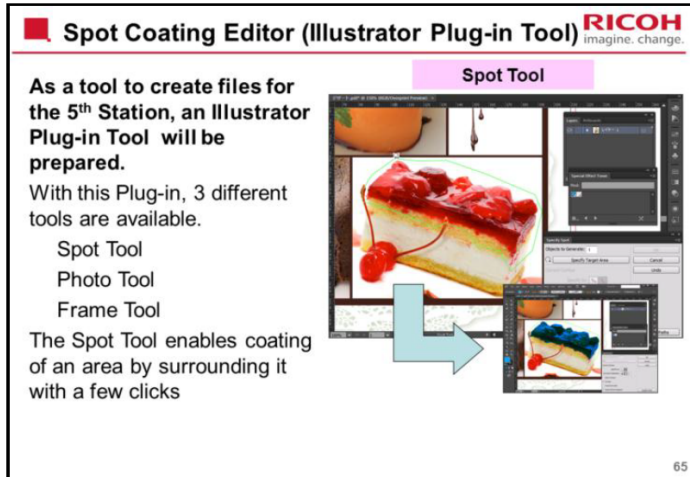
second pass of a sheet of paper onto which a fused pentachrome image was created during a first pass through the printer.

Tips and Best Practices

1. To achieve optimal image quality and system reliability, settings in the Media Library may need to be adjusted. If you should need assistance contact your local technical support.
2. Creative usage of White and Clear Toners may require more than one pass through the printer. To do so, the media must be physically moved from the output tray back to the input tray, observing proper direction and side placement.
3. One or two layers of White Toner may be applied, with the second layer providing additional opacity and/or brightness.
4. Clear Toner should be applied in a single layer only. Additional layers will not create a 3D effect, but may cause visible yellowing.
5. Clear Toner may be applied inline with CMYK as a single pass. Applying Clear Toner in two passes, with CMYK first and Clear second, may cause a slightly different gloss effect, but may also affect the CMYK color accuracy.
6. Clear and White Toners are sold by the cartridge. Printing with either White or Clear only, does not result in a click-charge.
7. An appropriate Media Catalog entry should be used for all printing of non-white media when using Clear or White Toner. Parameters in the Media Catalog will optimize settings for black, colored, transparent, silver and other non-standard media. Printing without appropriate parameter setup may result in printing errors, such as double feeds and Media jams.
8. If White and CMYK are to be applied to a sheet with no overlap, a single pass may be used. If the CMYK overlaps the White in any areas, two passes must be used, with White being applied in the first pass and the CMYK applied in the second pass.
9. A single file may not contain both a Clear channel and a White channel. If both Clear and White channels are included, the toner type not currently loaded in the machine will be printed in an alternate visible color and cannot be turned off.
10. Setting Adobe Acrobat Preferences to 'Always' Use Overprint Preview is important when printing the 5th Color. This will display the color channel as defined in the PDF and should be reviewed / validated before the print is run.

Ex. I (PDF of <http://www.ricohbusinessbooster.com/resource-annex/5th-color-experience/5th-color-video-tutorials/>).

34. As shown below, after the pentachrome color image is fused to paper in the first pass discussed above, one may highlight selected images or specific text with the clear toner overcoat from which the receiver is formed to add an image dependent inverse mask (as shown by spot tool creating an inverse image). For example, using a spot tool of an illustrator plug-in tool, a spot coating editor enables an area selectable with a few click of a mouse to be coated, as shown below.



Ex. J (RICOH Technical Training Leo-C1/P1 D194/D195/D203/D204 M195/M196/M207/M208 at slide 65).

35. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Ricoh Pro C7100X includes a system for subjecting the clear overcoat and the at least a pentachrome color image to a Duplo Ultra 300A UV Coater to add a gloss coating.



Home / Solutions / Finishing / UV Coaters

UV Coaters

Click on a finisher below to learn more about its capabilities.

Sort by: View Per Page:

[Duplo Ultra 300A UV Coater](#)

[Duplo Ultra 200A UV Coater](#)

[Duplo Ultra 100A UV Coater](#)

Ex. F (PDF of <http://www.ricohbusinessbooster.com/solutions/finishing/uv-coaters/>).



Duplo Ultra 300A UV Coater

Hardware Information

The Ultra 300A UV Coater provide the ideal UV coating solution for any digital print environment. Heavy duty yet simple to use, the Ultra 300A applies a high quality gloss, satin, or matte finish to a wide range of offset and digitally printed applications, adding richness to colors while protecting them from scratches and scuffs.

With a coating speed of up to 148 feet (45 meters) per minute, the Ultra 300A can accommodate the output speed from most digital devices and process a variety of paper sizes, from 8.5" x 11" up to 20" x 28", up to 350 gsm. For near-line feeding, the Ultra 300A is available with the high capacity SF-200 Suction Feeder.

Features

- High speeds up to 148 feet (45 meters) per minute
- Adds gloss, matte, or satin coating
- Infrared Heating System
- UV Coating Low Detection Sensor
- Intelligent Control System for easy operation
- Infrared Heating System helps cure difficult stock
- Auto Gap prevents excess coating from smearing to backside of print

Ex. G (PDF of <http://www.ricohbusinessbooster.com/solution/solutions/finishing/uv-coaters/duplo-ultra-300a-uv-coater/>).

36. Ricoh 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, Ricoh Pro C7100X perform 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.

37. 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.

38. Defendant's infringement of the '582 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT II

(Direct Infringement of the '425 Patent pursuant to 35 U.S.C. § 271(a))

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

40. 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).

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

42. 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.

43. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Ricoh Pro C7100x/ C7110x.

44. 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.

45. As one example of how the '425 Accused Products infringe at least claim 1, Ricoh Pro C7100X meets the limitations of claim 1 of the '425 Patent for at least the reasons described below.

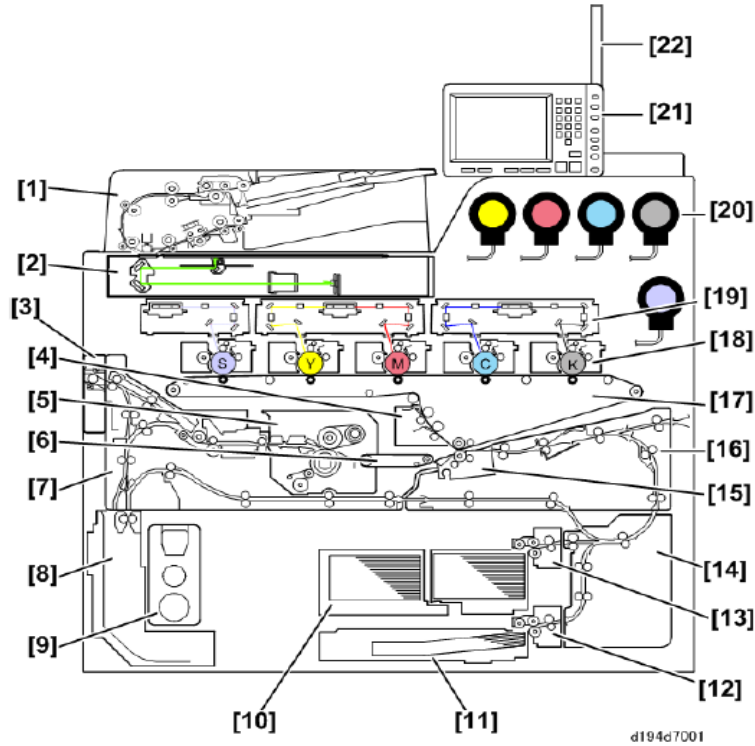
46. An image of Ricoh Pro C7100X is provided below:



Ex. D (Brochure - RICOH Pro C7100-C7100X Series).

47. As a general matter and as described below, the limitations of claim 1 are satisfied because Ricoh Pro C7100X is a printer apparatuses. Ricoh Pro C7100X has five dry ink print stations indicative of electrostatographic printers that include five horizontally-disposed, tandem print stations having four toners for the standard CMYK pallet of four colors (shown below in a right-to-left, horizontal series of black (K), cyan (C), magenta (M), and yellow (Y) toners), and a fifth toner (identified with the label "S"). The stations of the CMYKS

colored toners apply a respective color separation toner image that is received by a receiver member, where the receiver member is a sheet of paper passing along a path (shown as the dark path below the five stations) to form a pentachrome color image.



| No. | Item | No. | Item |
|-----|--------------------------------|-----|--------------|
| 1 | ADF (D194/D195/D203/D204 only) | 12 | PFU (Tray 2) |

| No. | Item | No. | Item |
|-----|---|-----|----------------------------------|
| 2 | Scanner Unit (D194/D195/D203/D204 only) | 13 | PFU (Tray 1) |
| 3 | Decurl Unit (option) | 14 | Vertical Transport Unit |
| 4 | ITB Cleaning Unit | 15 | Paper Transfer Roller (PTR) Unit |
| 5 | Fuser Unit | 16 | Right Drawer |
| 6 | Paper Transport Belt (PTB) Unit | 17 | ITB Unit |
| 7 | Left Drawer | 18 | PCDUs |
| 8 | Duplex/Purge | 19 | Laser Units |
| 9 | Used Toner Bottle | 20 | Toner Bank |
| 10 | Tray 1 (Tandem Tray) | 21 | Operation Panel |
| 11 | Tray 2 (Universal Tray) | 22 | Attention Light |

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 63-64 (65-66)).

48. Ricoh Pro C7100x includes a fifth color of the fifth toner (identified with the label “S” above) that could include one of the colors of white, clear, neon yellow, and neon pink.



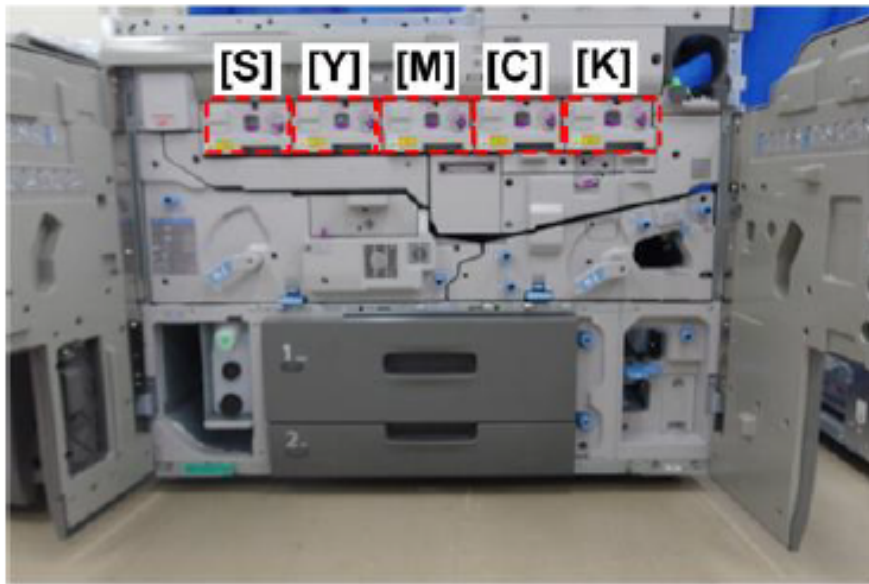
Change the game with Ricoh's 5th Color Station

Want to achieve a more high-end look, or entice more customers in creative fields? No matter what your goal, Ricoh's white, clear, neon yellow and neon pink toners give you the competitive advantage you need to produce eye-catching work that commands premium prices.

Ex. E (PDF of <https://www.ricoh-usa.com/en/products/commercial-industrial-printing/cutsheet/pro-c7100-c7100x-series>).

49. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Ricoh Pro 7100X passes a receiver member such as a sheet of paper that through the printer along a path (shown as the dark path) below the five horizontally-disposed, serial print stations labeled “S”, “Y”, “M”, “C”, and “K” in a single pass.

- There are five PCUUs (SYMCK).



d194d4341

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 891 (893)).

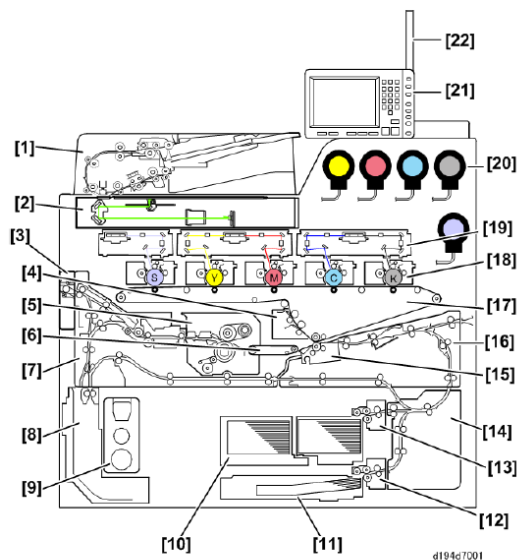
50. Additionally, Ricoh Pro C7100x allows for various combinations of color that are formed at different pixel locations to form a pentachrome image.



Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 164 (166)).

51. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, the Ricoh Pro 7100X provides that the sheet of paper upon which there is a pentachrome

toner image is passed to a fusing station such as a fuser unit (item 5 below) for fusing the image to the sheet as it passes through the printer.



| No. | Item | No. | Item |
|-----|--------------------------------|-----|--------------|
| 1 | ADF (D194/D195/D203/D204 only) | 12 | PFU (Tray 2) |

| No. | Item | No. | Item |
|-----|---|-----|----------------------------------|
| 2 | Scanner Unit (D194/D195/D203/D204 only) | 13 | PFU (Tray 1) |
| 3 | Decurl Unit (option) | 14 | Vertical Transport Unit |
| 4 | ITB Cleaning Unit | 15 | Paper Transfer Roller (PTR) Unit |
| 5 | Fuser Unit | 16 | Right Drawer |
| 6 | Paper Transport Belt (PTB) Unit | 17 | ITB Unit |
| 7 | Left Drawer | 18 | PCDUs |
| 8 | Duplex/Purge | 19 | Laser Units |
| 9 | Used Toner Bottle | 20 | Toner Bank |
| 10 | Tray 1 (Tandem Tray) | 21 | Operation Panel |
| 11 | Tray 2 (Universal Tray) | 22 | Attention Light |

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at pp. 63-64 (65-66)).

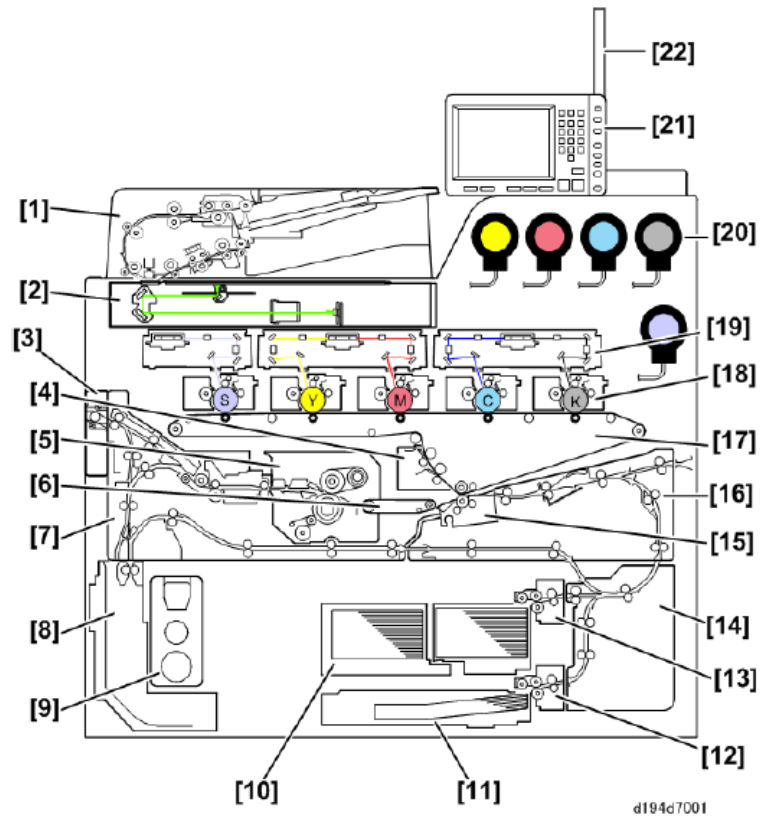
52. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Ricoh Pro 7100X includes a fifth station that deposits on more than one pass, such as on a second pass, a clear toner overcoat on the received member, such as a sheet of paper, after clear toner is inserted into the fifth station.

Tips and Best Practices

1. To achieve optimal image quality and system reliability, settings in the Media Library may need to be adjusted. If you should need assistance contact your local technical support.
2. Creative usage of White and Clear Toners may require more than one pass through the printer. To do so, the media must be physically moved from the output tray back to the input tray, observing proper direction and side placement.
3. One or two layers of White Toner may be applied, with the second layer providing additional opacity and/or brightness.
4. Clear Toner should be applied in a single layer only. Additional layers will not create a 3D effect, but may cause visible yellowing.
5. Clear Toner may be applied inline with CMYK as a single pass. Applying Clear Toner in two passes, with CMYK first and Clear second, may cause a slightly different gloss effect, but may also affect the CMYK color accuracy.
6. Clear and White Toners are sold by the cartridge. Printing with either White or Clear only, does not result in a click-charge.
7. An appropriate Media Catalog entry should be used for all printing of non-white media when using Clear or White Toner. Parameters in the Media Catalog will optimize settings for black, colored, transparent, silver and other non-standard media. Printing without appropriate parameter setup may result in printing errors, such as double feeds and Media jams.
8. If White and CMYK are to be applied to a sheet with no overlap, a single pass may be used. If the CMYK overlaps the White in any areas, two passes must be used, with White being applied in the first pass and the CMYK applied in the second pass.
9. A single file may not contain both a Clear channel and a White channel. If both Clear and White channels are included, the toner type not currently loaded in the machine will be printed in an alternate visible color and cannot be turned off.
10. Setting Adobe Acrobat Preferences to 'Always' Use Overprint Preview is important when printing the 5th Color. This will display the color channel as defined in the PDF and should be reviewed / validated before the print is run.

Ex. I (PDF of <http://www.ricohbusinessbooster.com/resource-annex/5th-color-experience/5th-color-video-tutorials/>).

53. Claim limitation 1[d] is satisfied for at least the following reasons. As shown below, the Ricoh Pro C7100X permits a sheet of paper, upon which there is clear toner deposited onto a fused pentachrome toner image, to be passed to the fusing station such as a fuser unit (item 5 below) for fusing the clear toner to the fused pentachrome toner image.



| No. | Item | No. | Item |
|-----|--------------------------------|-----|--------------|
| 1 | ADF (D194/D195/D203/D204 only) | 12 | PFU (Tray 2) |

| No. | Item | No. | Item |
|-----|---|-----|----------------------------------|
| 2 | Scanner Unit (D194/D195/D203/D204 only) | 13 | PFU (Tray 1) |
| 3 | Decurl Unit (option) | 14 | Vertical Transport Unit |
| 4 | ITB Cleaning Unit | 15 | Paper Transfer Roller (PTR) Unit |
| 5 | Fuser Unit | 16 | Right Drawer |
| 6 | Paper Transport Belt (PTB) Unit | 17 | ITB Unit |
| 7 | Left Drawer | 18 | PCDUs |
| 8 | Duplex/Purge | 19 | Laser Units |
| 9 | Used Toner Bottle | 20 | Toner Bank |
| 10 | Tray 1 (Tandem Tray) | 21 | Operation Panel |
| 11 | Tray 2 (Universal Tray) | 22 | Attention Light |

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at pp. 63-64 (65-66)).

54. Ricoh 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, Ricoh Pro C7100X perform 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.

55. 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.

56. Defendant's infringement of the '425 Patent has injured and continues to injure MASA in an amount to be proven at trial.

COUNT III

(Direct Infringement of the '415 Patent pursuant to 35 U.S.C. § 271(a))

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

58. 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).

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

60. 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.

61. Defendant's infringement includes the manufacture, use, sale, importation and/or offer for sale of Defendant's products and services, such as Ricoh Pro C7100x/ C7110x.

62. 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.

63. As one example of how the '415 Accused Products infringe at least claim 1, Ricoh Pro C7100x meets the limitations of claim 1 of the '415 Patent for at least the reasons described below.

64. An image of Ricoh Pro C7100x is provided below:

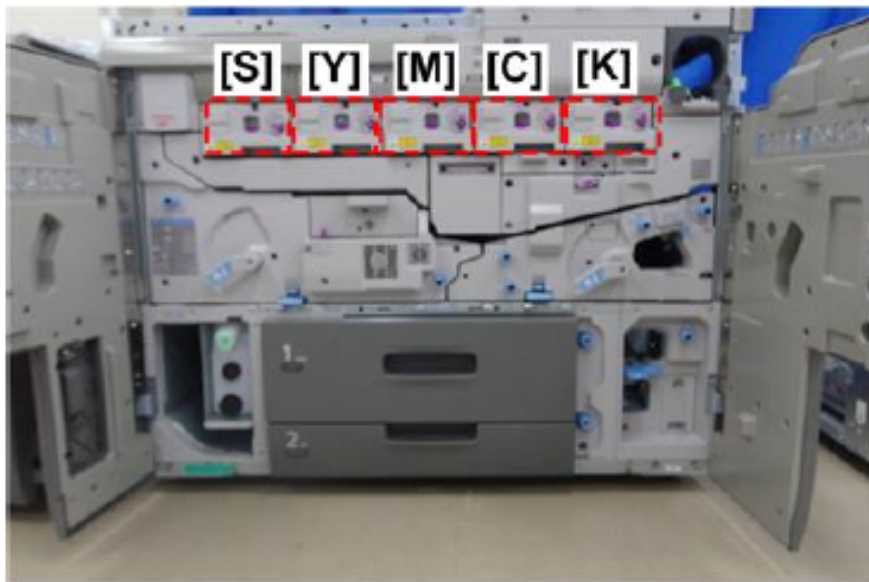


Ex. D (Brochure - RICOH Pro C7100-C7100X Series).

65. As a general matter and as described below, the limitations of claim 1 are satisfied because Ricoh Pro C7100x is a system for printing color images in that they are production color system which includes a printer.

66. Claim limitation 1[a] is satisfied for at least the following reasons. As shown below, Ricoh Pro C7100x has five dry ink print stations (labeled “S”, “Y”, “M”, “C”, and “K”) indicative of an electrostatographic printer apparatuses that have five horizontally-disposed, tandem print stations having four toners for the standard CMYK pallet of four colors (shown below in a right-to-left, horizontal series of black (K), cyan (C), magenta (M), and yellow (Y) toners), and a fifth toner (identified with the label “S”). Each station of the CMYKS colored toners applies 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 (shown as the dark path below the five stations) to form a pentachrome color image.

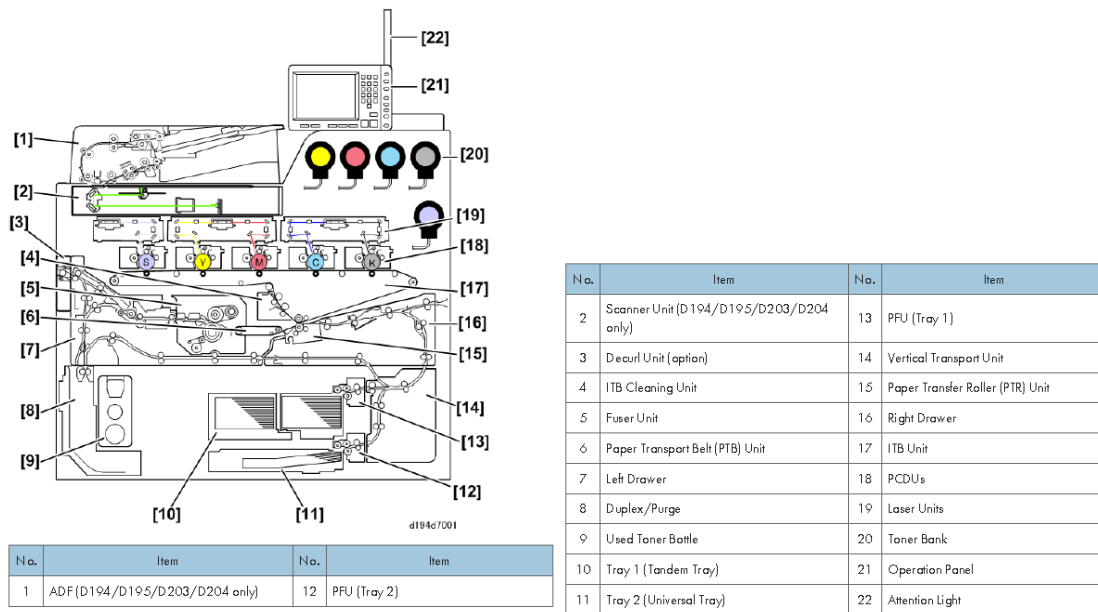
- There are five PCDUs (SYMCK).



d194d4341

Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 891 (893)).

67. Claim limitation 1[b] is satisfied for at least the following reasons. As shown below, Ricoh Pro C7100x includes a fuser unit (item 5) (a fusing station) that fuses a pentachrome image printed on paper at the toner image transfer area after the paper has made a first pass through the printer.



Ex. H (Pro C7100, Pro C7110 Series Field Service Manual at p. 63 (65)).

68. Claim limitation 1[c] is satisfied for at least the following reasons. As shown below, Ricoh Pro C7100x includes a receiver with a fused pentachrome toner image comprised of CMYK and white toner colors that may be physically removed after a first pass through the printer. After replacing the white toner for clear toner in the fifth station, the receiver may be placed into position for a second pass where the clear toner is applied as an overcoat onto the fused pentachrome toner image. Ricoh Pro C7100x has a fifth station that may provide a clear toner overcoat with clear toner being inserted into the fifth station.

Tips and Best Practices

1. To achieve optimal image quality and system reliability, settings in the Media Library may need to be adjusted. If you should need assistance contact your local technical support.
2. Creative usage of White and Clear Toners may require more than one pass through the printer. To do so, the media must be physically moved from the output tray back to the input tray, observing proper direction and side placement.
3. One or two layers of White Toner may be applied, with the second layer providing additional opacity and/or brightness.
4. Clear Toner should be applied in a single layer only. Additional layers will not create a 3D effect, but may cause visible yellowing.
5. Clear Toner may be applied inline with CMYK as a single pass. Applying Clear Toner in two passes, with CMYK first and Clear second, may cause a slightly different gloss effect, but may also affect the CMYK color accuracy.
6. Clear and White Toners are sold by the cartridge. Printing with either White or Clear only, does not result in a click-charge.
7. An appropriate Media Catalog entry should be used for all printing of non-white media when using Clear or White Toner. Parameters in the Media Catalog will optimize settings for black, colored, transparent, silver and other non-standard media. Printing without appropriate parameter setup may result in printing errors, such as double feeds and Media jams.
8. If White and CMYK are to be applied to a sheet with no overlap, a single pass may be used. If the CMYK overlaps the White in any areas, two passes must be used, with White being applied in the first pass and the CMYK applied in the second pass.
9. A single file may not contain both a Clear channel and a White channel. If both Clear and White channels are included, the toner type not currently loaded in the machine will be printed in an alternate visible color and cannot be turned off.
10. Setting Adobe Acrobat Preferences to 'Always' Use Overprint Preview is important when printing the 5th Color. This will display the color channel as defined in the PDF and should be reviewed / validated before the print is run.

Ex. I (PDF of <http://www.riohbusinessbooster.com/resource-annex/5th-color-experience/5th-color-video-tutorials/>).



Change the game with Ricoh's 5th Color Station

Want to achieve a more high-end look, or entice more customers in creative fields? No matter what your goal, Ricoh's white, clear, neon yellow and neon pink toners give you the competitive advantage you need to produce eye-catching work that commands premium prices.

Ex. E (PDF of <https://www.rioh-usa.com/en/products/commercial-industrial-printing/cutsheet/pro-c7100-c7100x-series>).

69. Claim limitation 1[d] is satisfied for at least the following reasons. Ricoh Pro C7100x includes a Duplo Ultra 300A UV Coater, as shown below, that has a belt glosser such as the belt that is moving within the unit. The Duplo Ultra 300A UV Coater can also add an enhanced gloss toner, such as the gloss toner of a gloss coating.



Ex. K (PDF of <https://youtu.be/2LgAsSfcVbM?t=72>).

Home / Solutions / Finishing / UV Coaters

UV Coaters

Click on a finisher below to learn more about its capabilities.

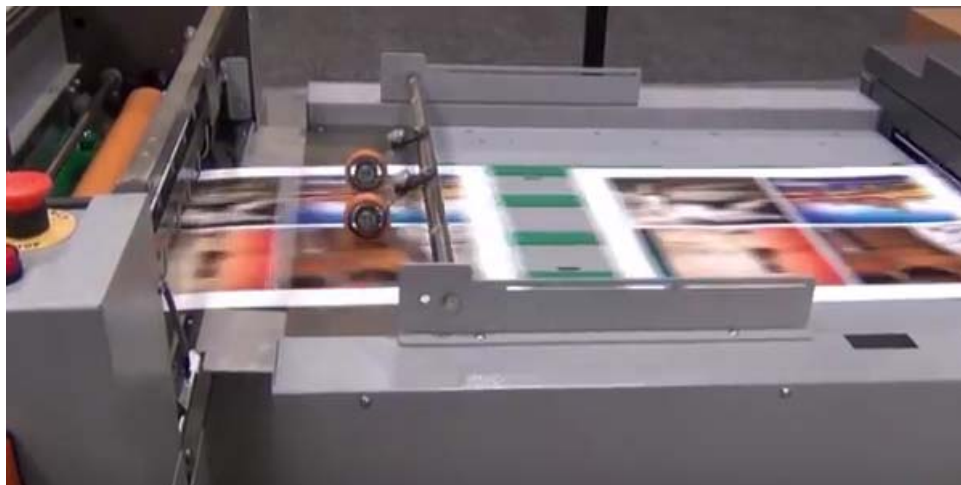
Sort by: View Per Page:

Duplo Ultra 300A UV Coater

Duplo Ultra 200A UV Coater

Duplo Ultra 100A UV Coater

Ex. F (PDF of <http://www.riohbusinessbooster.com/solutions/finishing/uv-coaters/>).



Ex. L (PDF of Duplo Ultra 300Ai High Speed UV Coater video presentation (*see* <https://youtu.be/2LgAsSfcVbM?t=21>) (showing a moving belt transporting paper within a Duplo Ultra 300Ai UV Coater at time 0:21 / 1:43)).



Duplo Ultra 300A UV Coater

Hardware Information

The Ultra 300A UV Coater provide the ideal UV coating solution for any digital print environment. Heavy duty yet simple to use, the Ultra 300A applies a high quality gloss, satin, or matte finish to a wide range of offset and digitally printed applications, adding richness to colors while protecting them from scratches and scuffs.

With a coating speed of up to 148 feet (45 meters) per minute, the Ultra 300A can accommodate the output speed from most digital devices and process a variety of paper sizes, from 8.5" x 11" up to 20" x 28", up to 350 gsm. For near-line feeding, the Ultra 300A is available with the high capacity SF-200 Suction Feeder.

Features

- High speeds up to 148 feet (45 meters) per minute
- Adds gloss, matte, or satin coating
- Infrared Heating System
- UV Coating Low Detection Sensor
- Intelligent Control System for easy operation
- Infrared Heating System helps cure difficult stock
- Auto Gap prevents excess coating from smearing to backside of print

Ex. G (<http://www.riohbusinessbooster.com/solution/solutions/finishing/uv-coaters/duplo-ultra-300a-uv-coater/>).

70. Ricoh 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 limitations 1[c]. For example, and without limitation, Ricoh Pro C7100X perform 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 pentachrome image during a second pass.

71. 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.

72. Defendant's infringement of the '415 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 7,502,582, 7,720,425, and 8,005,415;

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. 7,502,582 , 7,720,425, and 8,005,415 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. 7,502,582 , 7,720,425, and 8,005,415, 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. 7,502,582 , 7,720,425, and 8,005,415; 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: July 30, 2019

BAZELON LESS FELDMAN PC
Richard L. Bazelon
Lisa A. Barton
One South Broad Street, Suite 1500
Philadelphia, PA 19107
Telephone: (215) 568-1155
Facsimile: (215) 568-9319
rbazelon@bazless.com
lbarton@bazless.com

Respectfully submitted,

By:


Paul J. Andre

KRAMER LEVIN NAFTALIS
& FRANKEL LLP
Paul J. Andre
Lisa Kobialka (*pro hac vice* forthcoming)
James Hannah (*pro hac vice* forthcoming)
990 Marsh Road
Menlo Park, CA 94025
Telephone: (650) 752-1700
Facsimile: (650) 752-1800
pandre@kramerlevin.com
lkobialka@kramerlevin.com
jhannah@kramerlevin.com

Mark A. Baghdassarian (*pro hac vice*
forthcoming)
Cristina Martinez (*pro hac vice* forthcoming)
1177 Avenue of the Americas
New York, NY 10001
Tel: 212.715.9100
Fax: 212.715.8000
mbaghdassarian@kramerlevin.com
cmartinez@kramerlevin.com

*Counsel for Plaintiff Midwest Athletics and
Sports Alliance LLC*