

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

DIVERSIFIED OBSERVATION LLC)	
)	
Plaintiff,)	
)	Civil Action No. _____
v.)	
)	JURY TRIAL DEMANDED
HP INC.,)	
)	
Defendant.)	
_____)	

COMPLAINT

For its Complaint, Plaintiff Diversified Observation LLC (“Plaintiff” or “Diversified Observation”), by and through the undersigned counsel, alleges as to the activities of Defendant HP Inc. (“Defendant” or “HP”), as follows:

THE PARTIES

1. Diversified Observation is a Texas company with a place of business located at 5068 W. Plano Pkwy, Suite 300, Plano, Texas 75093.
2. HP is a Delaware corporation with a place of business at 1501 Page Mill Road, Palo Alto, California 94304.

JURISDICTION AND VENUE

3. This action arises under the Patent Act, 35 U.S.C. §§ 271 *et seq.*
4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.
5. HP has purposefully availed itself of the rights and benefits of Delaware law by engaging in systematic and continuous contacts with the state of Delaware, including by selling computers, printers, scanners, and other electronic products in Delaware, directly or through affiliates, and by continuously and systematically placing goods into the stream of commerce for distribution throughout Delaware. HP also derives substantial revenue from the sale of those

products in Delaware. HP also regularly conducts and solicits business within the State of Delaware.

6. HP has brought suit under the Patent Laws of the United States in the United States District Court for the District of Delaware, e.g., *Hewlett-Packard Company v. Acceleron, LLC*, 1:07-cv-00650-SLR (D. Del. Oct. 17, 2007), and HP has admitted that jurisdiction lies in this District and has defended against allegations of infringement of the Patent Laws of the United States in this District, e.g., *Enhanced Audio Systems, LLC v. HP Inc.*, 1:17-cv-00007-JFB-SRF (D. Del. Jan. 3, 2017).

7. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b) at least because HP is incorporated in Delaware.

THE PATENTS-IN-SUIT

8. On June 15, 1999, the United States Patent and Trademark Office (“USPTO”) duly and lawfully issued United States Patent No. 5,913,072 (the “’072 Patent”), entitled “Image Processing System in which Image Processing Programs Stored in a Personal Computer Are Selectively Executed through User Interface of a Scanner.” The ’072 Patent expired on April 8, 2017. A true and correct copy of the ’072 Patent is attached hereto as Exhibit A.

9. On December 7, 1999, the USPTO duly and lawfully issued United States Patent No. 5,997,199 (the “’199 Patent”), entitled “Paper Feeding Module of a Color Picture Printer.” A true and correct copy of the ’199 Patent is attached hereto as Exhibit B.

10. On September 10, 2002, the USPTO duly and lawfully issued United States Patent No. 6,449,397 (the “’397 Patent”), entitled “Image Processing System for Scanning a Rectangular Document.” A true and correct copy of the ’397 Patent is attached hereto as Exhibit C.

11. Diversified Observation is the assignee and owner of all right, title, and interest in and to the '072, '199, and '397 Patents, including the right to assert all claims arising under the Patents including the right to any remedies for infringement.

COUNT I – INFRINGEMENT OF UNITED STATES PATENT NO. 5,913,072

12. Diversified Observation repeats and realleges the allegations of the above paragraphs as if fully set forth herein.

13. Without license or authorization, and in violation of 35 U.S.C. § 271(a), HP infringed during the life of at least Claim 1 of the '072 Patent, which expired on April 8, 2017, by making, using, importing, offering for sale, or selling image processing systems including, but not limited to, the HP M426.

14. Claim 1 of the '072 Patent reads:

1. An image processing system comprising:

(1) a personal computer having a memory for storing programs and a processor for executing programs stored in the memory;

(2) a scanner connected to the computer comprising:

(a) a scanning circuit for scanning a document to generate image signals,

(b) a user interface containing a display device for displaying message signals and an input circuit having a plurality of selection keys for generating selection signals according to user inputs, and

(c) a control circuit for transmitting the image signals generated by the scanning circuit and the selection signals generated by the input circuit to the

computer, and for transmitting message signals generated by the computer to the display device; and

(3) a plurality of image processing programs stored in the memory for processing the image signals generated by the scanning circuit; and

(4) a scanner control program stored in the memory for:

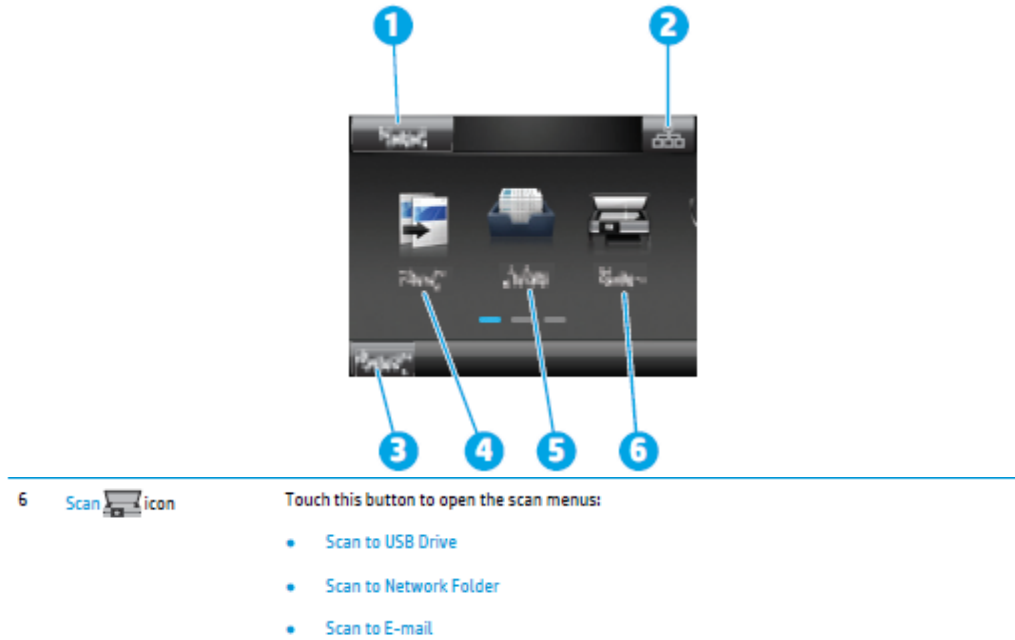
(a) controlling operations of the scanner,

(b) transmitting a message signal to the display device through the control circuit, said message signal containing one selection instruction about selecting one of the image processing programs to process the image signals generated by the scanning circuit, and

(c) activating one of the image processing programs to process the image signals according to a selection signal received from the scanner which is generated by a user according to the message signal displayed by the scanner control program.

Exh. A at 4:22-53 (numbers and letters (1)–(4)(c) in original).

15. HP sells a number of image processing systems. These systems include the HP M426. The HP M426 includes the functionality to scan a document and send a scanned image to a personal computer via the HP Embedded Web Server, as shown in the images below.





HP M426 User Guide (“User Guide”) at p. 5 (available at <http://h10032.www1.hp.com/ctg/Manual/c04683498> (last accessed Oct. 5, 2017)).

Method two: Set up the Scan to Network Folder feature via the HP Embedded Web Server (Windows)


- [Step one: Access the HP Embedded Web Server \(EWS\)](#)
- [Step two: Configure the Scan to Network Folder feature](#)

Step one: Access the HP Embedded Web Server (EWS)

1. From the Home screen on the printer control panel, touch the Network  button or the Wireless  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

 <https://10.10.XXXXX/>

If the Web browser displays a **There is a problem with this website's security certificate** message when attempting to open the EWS, click **Continue to this website (not recommended)**.

 **NOTE:** Choosing **Continue to this website (not recommended)** will not harm the computer while navigating within the EWS for the HP printer.

Id. at p. 65.

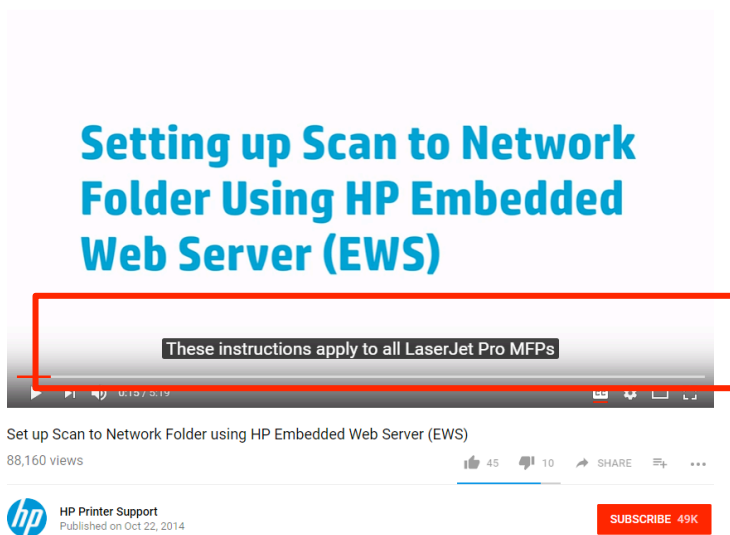
Method two: Set up the Scan to Email feature via the HP Embedded Web Server (Windows)

- [Step one: Access the HP Embedded Web Server \(EWS\)](#)

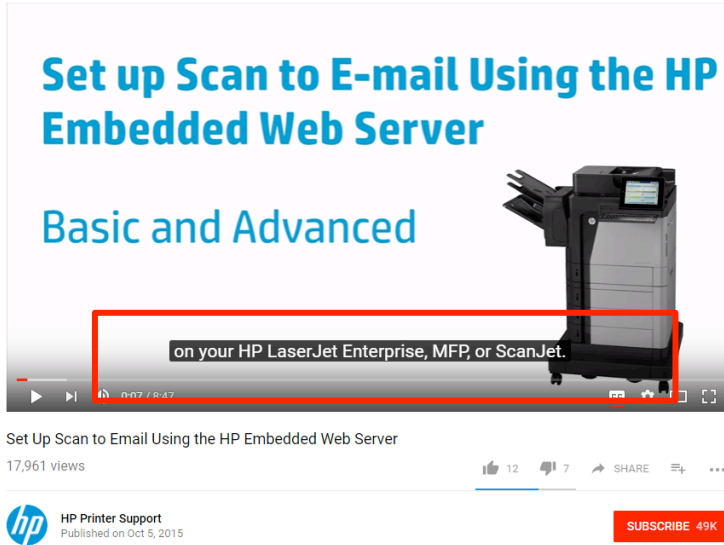
Id. at pp. 71–72.

16. To support this functionality, HP includes the “HP Embedded Web Server” software as part of selling the HP M426, as illustrated above.

17. On information and belief, HP uses the HP M426 along with the software installed on a computer in testing and/or demonstrating the HP M426. On information and belief, HP conducted extensive testing of the HP M426, along with the HP Scan software, prior to releasing the HP M426 for sale. Tutorials on how to use the HP Embedded Web Server can be found in the HP M426 User Guide available at <http://h10032.www1.hp.com/ctg/Manual/c04683498> (last accessed Oct. 5, 2017). HP has also posted tutorial videos on YouTube, as illustrated in the images below:



<https://www.youtube.com/watch?v=PnKjedhrbOs> (last accessed October 4, 2017) (emphasis added).



<https://www.youtube.com/watch?v=rT4BZbgl7ZM> (last accessed October 4, 2017) (emphasis added).

18. The image processing system includes a personal computer having a memory for storing programs and a processor for executing programs stored in the memory. *See* HP M426 Spec Sheet (“Spec Sheet”), at p. 4 (available at <http://www8.hp.com/h20195/v2/GetPDF.aspx/4AA6-1074EEP.pdf> (last accessed Oct. 5, 2017)).



19. The personal computer is any host computer that supports a web browser operable to communicate with the HP Embedded Web Server.


20. HP sells the HP M426 along with instructions (and includes the HP Embedded Web Server) for use with a personal computer, as illustrated in the images below:

Method two: Set up the Scan to Network Folder feature via the HP Embedded Web Server (Windows)


- [Step one: Access the HP Embedded Web Server \(EWS\)](#)
- [Step two: Configure the Scan to Network Folder feature](#)

Step one: Access the HP Embedded Web Server (EWS)

1. From the Home screen on the printer control panel, touch the Network  button or the Wireless  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the Enter key on the computer keyboard. The EWS opens.

 <https://10.10.XX.XX/>

If the Web browser displays a **There is a problem with this website's security certificate** message when attempting to open the EWS, click **Continue to this website (not recommended)**.

 **NOTE:** Choosing **Continue to this website (not recommended)** will not harm the computer while navigating within the EWS for the HP printer.

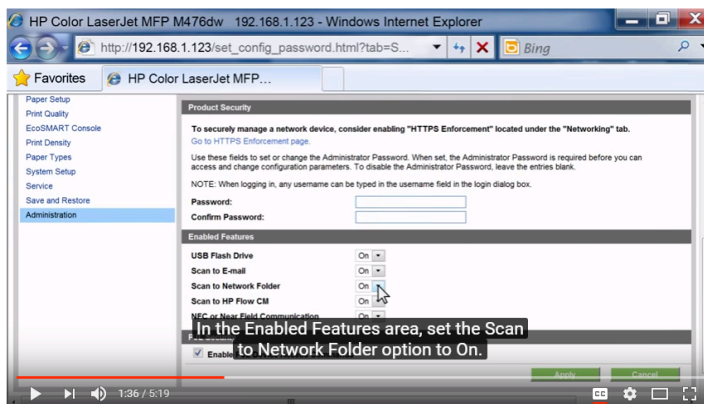
User Guide at p. 60.

Method two: Set up the Scan to Email feature via the HP Embedded Web Server (Windows)

- [Step one: Access the HP Embedded Web Server \(EWS\)](#)

Id. at pp. 71-72.

21. The HP Embedded Web Server communicates with a web browser installed on a personal computer, as illustrated in the images below:



Set up Scan to Network Folder using HP Embedded Web Server (EWS)

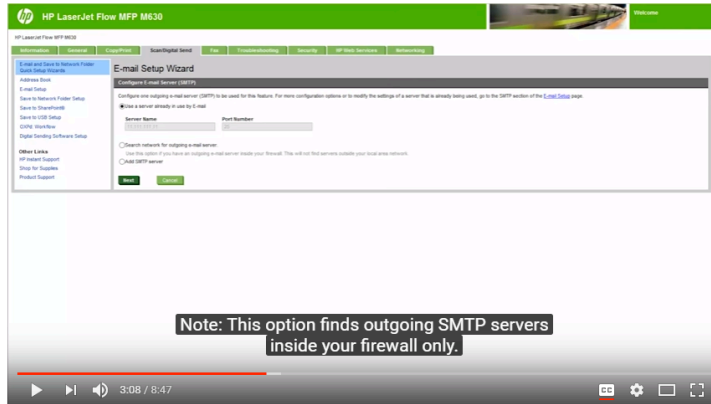
88,160 views

45 10 SHARE ...



SUBSCRIBE 49K

<https://www.youtube.com/watch?v=PnKjedhrbOs>.



Set Up Scan to Email Using the HP Embedded Web Server
 17,961 views
 HP Printer Support
 Published on Oct 5, 2015
 SUBSCRIBE 49K

<https://www.youtube.com/watch?v=rT4BZbgl7ZM>.

22. Based at least on the above videos, HP uses the HP M426 in connection with the HP Embedded Web Server in testing and demonstrating the HP M426.

23. The personal computer includes a memory. HP specified that a personal computer to be used with the HP M426, include a memory (e.g., at least 1 GB RAM, at least 400 MB available hard disk space) for storing programs and a processor (e.g., at least a 1 GHz processor) for executing programs stored in the memory. *See* Spec Sheet at p. 4.

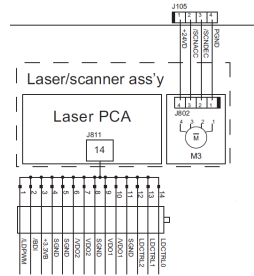
24. The personal computer includes a processor. HP specified that a personal computer to be used with the HP M426 include a memory (e.g., at least 1 GB RAM, at least 400 MB available hard disk space) for storing programs and a processor (e.g., at least a 1 GHz processor) for executing programs stored in the memory. *See id.*.

25. The image processing system includes a scanner, the HP M426, as illustrated in the image below:

Scan	
Scan type/technology	Type: Flatbed, ADF; Technology: Contact Image Sensor (CIS)
Scan speed ¹	Normal, A4: Up to 26 ppm/47 ipm (b&w), up to 21 ppm/30 ipm (colour)
Scan resolution	Enhanced: Up to 1200 x 1200 dpi; Hardware: Up to 1200 x 1200 dpi; Optical: Up to 1200 x 1200 dpi

Id. at p. 4.

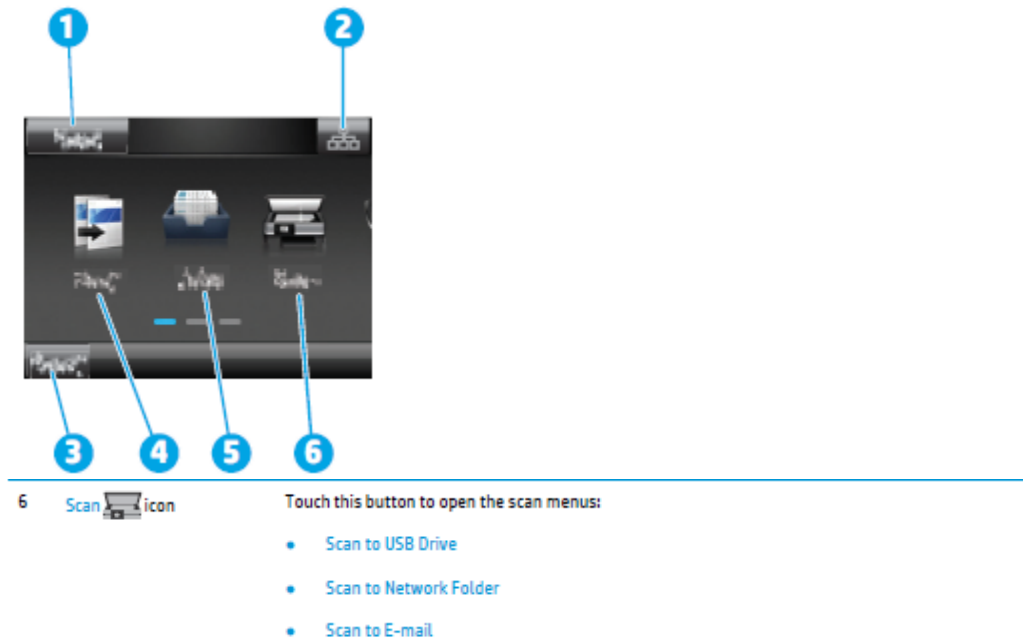
26. The HP M426 includes a scanning circuit for scanning a document and generating image signals, as illustrated in the image below:



HP M426 Troubleshooting Manual (“Troubleshooting Manual”) at p. 61 (available at <https://www.manualslib.com/manual/1105850/Hp-Laserjet-Pro-M402d.html?page=79#manual>. (last accessed Oct. 5, 2017)).

27. The HP M426 includes a user interface containing a display device (e.g., the Control Panel) for displaying message signals (e.g., Scan to Network Folder and Scan to Email options) and an input circuit (e.g., a touch screen) having a plurality of selection keys for generating selection signals according to user inputs.

28. The HP M426 user interface includes a display device (e.g., the Control panel), as illustrated in the images below:



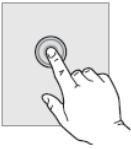
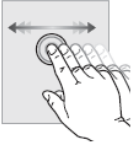
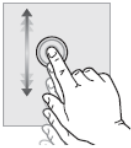
HP M426 User Guide, at p. 5 available at <http://h10032.www1.hp.com/ctg/Manual/c04683498> (last accessed Oct. 5, 2017).

29. The Control Panel displays multiple message signals. These message signals include the various options shown in the image above. Among these options are the "Scan to Network Folder" and "Scan to E-mail" options.

30. The Control Panel includes an input circuit (e.g., a touch screen) having a plurality of selection keys for generating selection signals according to user inputs.

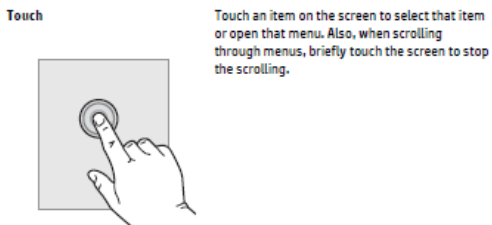
31. The Control Panel of the HP M426 includes a touch screen, as illustrated in the images below:

Use the following actions to use the printer touchscreen control panel.

Action	Description	Example
<p>Touch</p> 	<p>Touch an item on the screen to select that item or open that menu. Also, when scrolling through menus, briefly touch the screen to stop the scrolling.</p>	<p>Touch the Setup icon to open the Setup menu.</p>
<p>Swipe</p> 	<p>Touch the screen and then move the finger horizontally to scroll the screen sideways.</p>	<p>Swipe the Home screen to access the Setup icon.</p>
<p>Scroll</p> 	<p>Touch the screen, and then, without lifting the finger, move the finger vertically to move the screen.</p>	<p>Scroll through the Setup menu.</p>

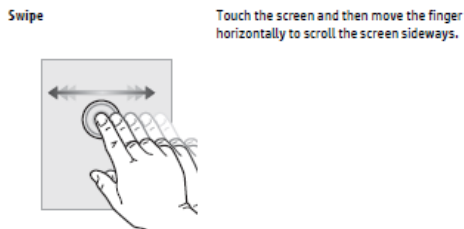
HP M426 User Guide at p. 6 (available at <http://h10032.www1.hp.com/ctg/Manual/c04683498> (last accessed Oct. 5, 2017)).

32. The touch screen has a plurality of selection keys (e.g., regions on the touch screen where a user can touch various icons), as illustrated in the images below.

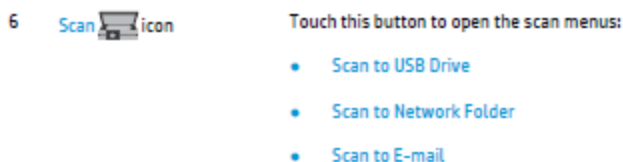


Id. at p. 6.

33. The selection keys generate selection signals according to user inputs, as illustrated in the images below.



Id.



Id. at p. 5.

34. The HP M426 includes: a control circuit (e.g., the "formatter") for: transmitting to the computer the image signals generated by the scanning circuit and the selection signals generated by the input circuit, and transmitting to the display device message signals generated by the computer to the display device.

35. The HP M426 includes a control circuit (e.g., the "formatter" of the HP M426).

36. The formatter transmits signals to the computer: "The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer." Troubleshooting Manual at p. 3.

37. The formatter transmits image signals generated by the scanning circuit, as illustrated in the image below.

Basic operation

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

- Engine-control system
- Laser/scanner system
- Image-formation system
- Pickup, feed, and delivery system
- Accessory (optional paper feeder)

Id. at p. 3.

38. The formatter transmits selection signals generated by the input circuit, as illustrated in the images below.

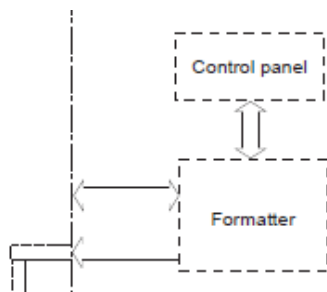
Basic operation

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

- Engine-control system
- Laser/scanner system
- Image-formation system
- Pickup, feed, and delivery system
- Accessory (optional paper feeder)

Id. at p. 3.



Id. at p. 6.

39. The formatter transmits signals to the display device, as illustrated in the images below.

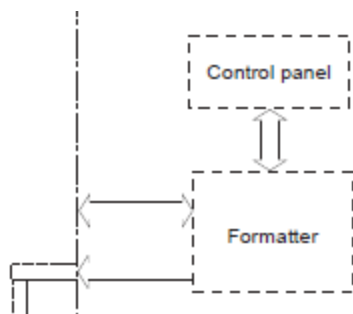
Basic operation

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

- Engine-control system
- Laser/scanner system
- Image-formation system
- Pickup, feed, and delivery system
- Accessory (optional paper feeder)

Id. at p. 3.





Id. at p. 6.

40. The HP M426 specifies the installation of a plurality of image processing programs (e.g., a file server for managing a file saved to a network folder, an email client for attaching a file to an email, etc.) stored in the computer memory in the host computer for processing the image signals generated by the scanning circuit, as illustrated in the images below:

Scan to a network folder

Use the printer control panel to scan a document and save it to a folder on the network.


 **NOTE:** In order to use this feature, the printer must be connected to a network and the Scan to Network Folder feature must be configured by using the Scan to Network Folder Setup Wizard (Windows) or the HP Embedded Web Server.



1. Load the document on the scanner glass according to the indicators on the printer.
2. From the Home screen on the printer control panel, touch the **Scan**  icon.
3. Touch the **Scan to Network Folder** item.
4. In the list of network folders, select the folder to which you want to save the document.
5. The control panel screen displays the scan settings.
 - If you want to change any of the settings, touch the **Settings** button, and then change the settings.
 - If the settings are correct, go to the next step.
6. Touch the **Scan** button to start the scan job.

User Guide at p. 69.

Scan to email

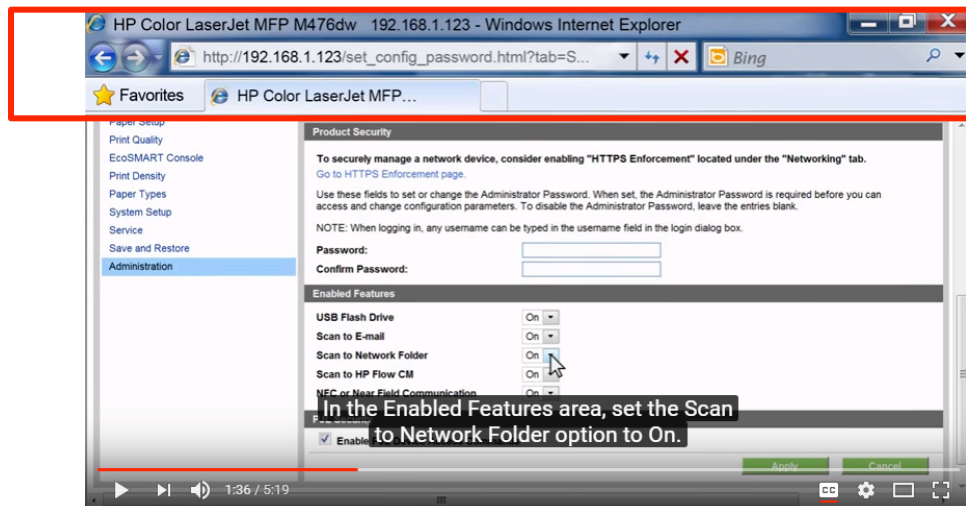
Use the printer control panel to scan a file directly to an email address. The scanned file is sent to the address as an email message attachment.

 **NOTE:** In order to use this feature, the printer must be connected to a network and the Scan to Email feature must be configured by using the Scan to Email Setup Wizard (Windows) or the HP Embedded Web Server.

1. Load the document on the scanner glass according to the indicators on the printer.
 2. From the Home screen on the printer control panel, touch the **Scan**  icon.
 3. Touch **Scan to E-mail**.
 4. Touch **Send an E-mail**.
 5. Select the **From** address that you want to use. This is also known as an "outgoing email profile."
-  **NOTE:** If the PIN feature has been set up, enter the PIN and touch the **OK** button. However, a PIN is not required to use this feature.
6. Touch the **To** button and pick the address or group to which you want to send the file. Touch the **Done** button when finished.
 - To send the message to a different address, touch the **New** again and enter the email address.
 7. Touch the **Subject** button if you would like to add a subject line
 8. Touch the **Next** button.
 9. The control panel screen displays the scan settings.
 - If you want to change any of the settings, touch the **Settings** button, and then change the settings.
 - If the settings are correct, go to the next step.
 10. Touch the **Scan** button to start the scan job.

Id. at p. 79.

41. The personal computer has stored in memory a web browser (illustrated below) operable to communicate with the HP Embedded Web Server (e.g., a scanner control program), as illustrated in the image below:



Set up Scan to Network Folder using HP Embedded Web Server (EWS)

88,160 views

45 likes 10 comments SHARE

HP Printer Support
Published on Oct 22, 2014

SUBSCRIBE 49K

<https://www.youtube.com/watch?v=PnKjedhrbOs> (red rectangle added).

42. HP sells the M426 along with instructions (and includes the HP Embedded Web Server) for use with a personal computer, as illustrated in the images below:

Method two: Set up the Scan to Network Folder feature via the HP Embedded Web Server (Windows)

- [Step one: Access the HP Embedded Web Server \(EWS\)](#)
- [Step two: Configure the Scan to Network Folder feature](#)

Step one: Access the HP Embedded Web Server (EWS)

1. From the Home screen on the printer control panel, touch the Network button or the Wireless button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

<https://10.10.XXXX/>

If the Web browser displays a **There is a problem with this website's security certificate** message when attempting to open the EWS, click **Continue to this website (not recommended)**.

NOTE: Choosing **Continue to this website (not recommended)** will not harm the computer while navigating within the EWS for the HP printer.

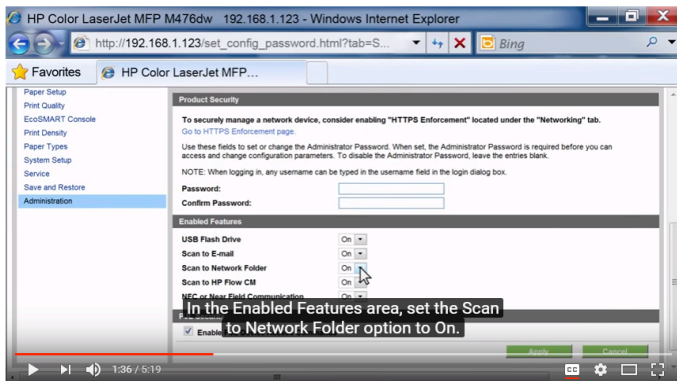
User Guide at p. 60.

Method two: Set up the Scan to Email feature via the HP Embedded Web Server (Windows)

- [Step one: Access the HP Embedded Web Server \(EWS\)](#)

Id. at pp. 71-72.

43. The HP Embedded Web Server communicates with a web browser installed on a personal computer, as illustrated in the images below:



Set up Scan to Network Folder using HP Embedded Web Server (EWS)

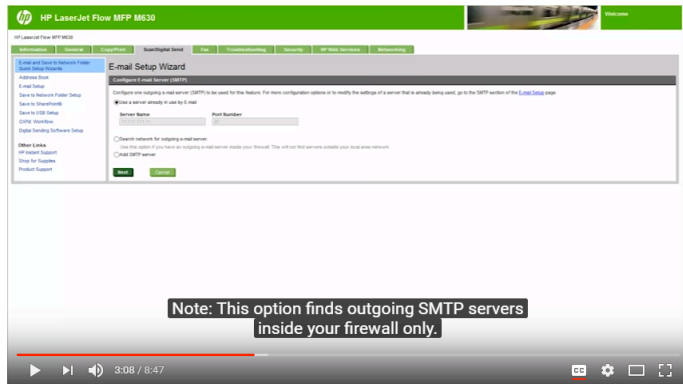
88,160 views

45 10 SHARE

HP Printer Support
Published on Oct 22, 2014

SUBSCRIBE 49K

<https://www.youtube.com/watch?v=PnKjedhrbOs>.



Set Up Scan to Email Using the HP Embedded Web Server

17,961 views

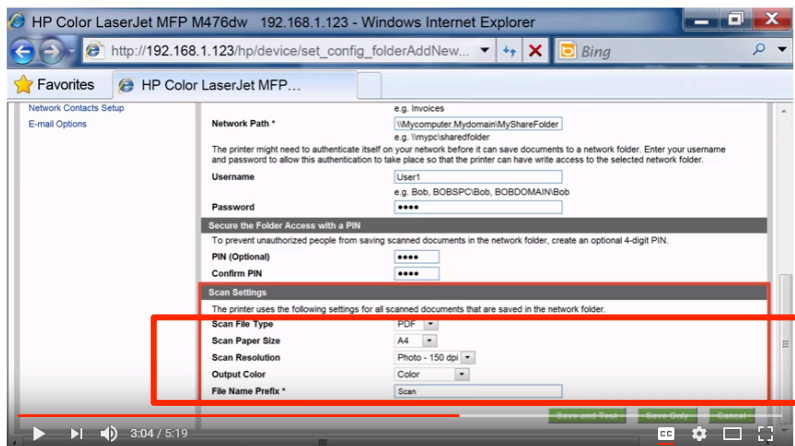
12 7 SHARE

HP Printer Support
Published on Oct 5, 2015

SUBSCRIBE 49K

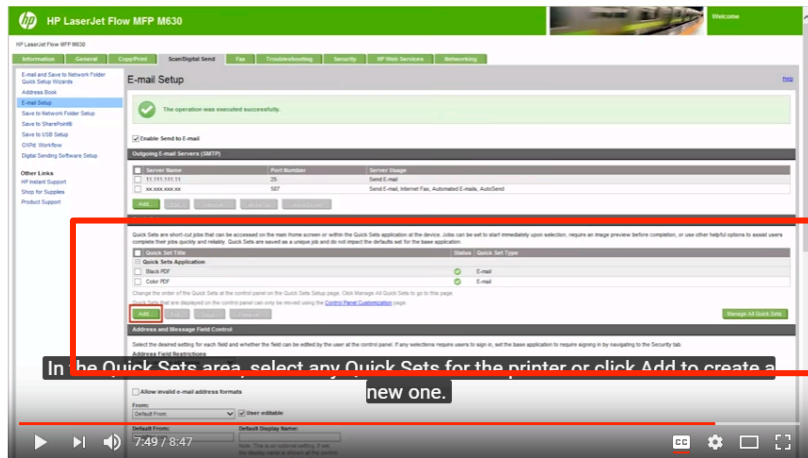
<https://www.youtube.com/watch?v=rT4BZbg17ZM>.

44. The web browser, in communication with the HP Embedded Web Server, is operable to control operations of the scanner (e.g., Scan Resolution and Output Color, Email Quick Sets, etc. outlined in red below), as illustrated in the images below:



Set up Scan to Network Folder using HP Embedded Web Server (EWS)
88,160 views
HP Printer Support
Published on Oct 22, 2014
SUBSCRIBE 49K

<https://www.youtube.com/watch?v=PnKjedhrbOs> (red rectangle added for clarity).





Set Up Scan to Email Using the HP Embedded Web Server
17,961 views
HP Printer Support
Published on Oct 5, 2015
SUBSCRIBE 49K


<https://www.youtube.com/watch?v=rT4BZbg17ZM> (red rectangle added for clarity).

45. The web browser, in communication with the HP Embedded Web Server, transmits message signals to the display device. These messages include a selection instruction (e.g., configuration information for the Scan to Network Folder and/or Scan to Email functions) about selecting the appropriate image processing program (e.g., the Network Folder file system manager and/or email client).


46. To set up the Scan to Network Folder function, the web browser on the personal computer communicates with the HP Embedded Web Server (at the scanner) to establish configuration information, as illustrated in the image below:

Step one: Access the HP Embedded Web Server (EWS)

1. From the Home screen on the printer control panel, touch the Network  button or the Wireless  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

 <https://10.10.XX.XXX/>

If the Web browser displays a **There is a problem with this website's security certificate** message when attempting to open the EWS, click **Continue to this website (not recommended)**.

 **NOTE:** Choosing **Continue to this website (not recommended)** will not harm the computer while navigating within the EWS for the HP printer.



Step two: Configure the Scan to Network Folder feature


1. Click the **System** tab.
2. On the left navigation pane, click the **Administration** link.
3. In the Enabled Features area, set the **Scan to Network Folder** option to **On**.
4. Click the **Scan** tab.
5. On the left navigation pane, make sure that the **Network Folder Setup** link is highlighted. the **Scan to Network Folder** page should be displayed.
6. On the **Network Folder Configuration** page, click the **New** button.
7. In the **Network Folder Information** area, complete the following fields:
 - a. In the **Display Name** field, enter the name to display for the folder.
 - b. In the **Network Path** field, enter the network path to the folder.
 - c. In the **Username** field, enter the user name needed to access the folder on the network.
 - d. In the **Password** field, enter the password needed to access the folder on the network.

User Guide at p. 65 (red rectangle added for clarity).


47. To set up the Scan to Email function, the web browser on the personal computer communicates with the HP Embedded Web Server to establish configuration information, as illustrated in the image below:

Step one: Access the HP Embedded Web Server (EWS)

1. From the Home screen on the printer control panel, touch the Network  button or the Wireless  button to display the IP address or host name.
2. Open a Web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the **Enter** key on the computer keyboard. The EWS opens.

 <https://10.10.XX.XXX/>

If the Web browser displays a **There is a problem with this website's security certificate** message when attempting to open the EWS, click **Continue to this website (not recommended)**.

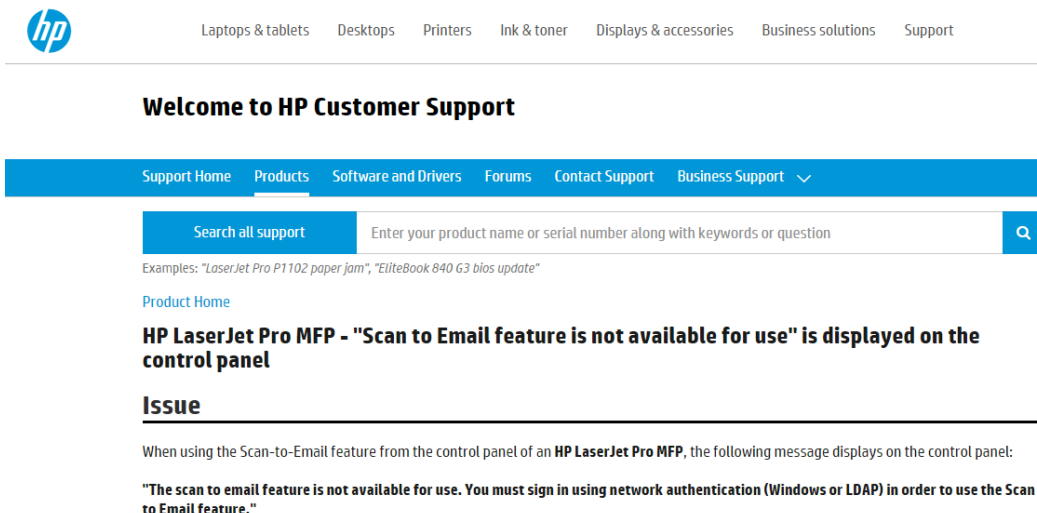
 **NOTE:** Choosing **Continue to this website (not recommended)** will not harm the computer while navigating within the EWS for the HP printer.

Step two: Configure the Scan to E-mail feature

1. Click the **System** tab.
2. On the left navigation pane, click the **Administration** link.
3. In the Enabled Features area, set the **Scan to Email** option to **On**.
4. Click the **Scan** tab.
5. On the left navigation pane, click the **Outgoing E-mail Profiles** link.
6. On the **Outgoing E-mail Profiles** page, click the **New** button.
7. In the **E-mail Address** area, complete the following fields:
 - a. In the **Your E-mail Address** field, enter the sender's email address for the new outgoing email profile.
 - b. In the **Display Name** field, enter the sender's name. This is the name that will display on the printer control panel.
8. In the **SMTP Server Settings** area, complete the following fields:

Id. at p. 72 (red rectangle added for clarity).

48. This configuration information enables the selection of one of the imaging processing program (e.g., the Network Folder file system manager, email client, etc.) at the display device (e.g., the Control Panel). For example, the display device will display error codes if the function is not properly enabled, as illustrated in the image below:



The screenshot shows the HP Customer Support website. At the top, there is a navigation bar with the HP logo and links for Laptops & tablets, Desktops, Printers, Ink & toner, Displays & accessories, Business solutions, and Support. Below this is a blue banner with the text "Welcome to HP Customer Support". Underneath the banner is a navigation menu with links for Support Home, Products, Software and Drivers, Forums, Contact Support, and Business Support. A search bar is present with the text "Search all support" and a search icon. Below the search bar, there is a search result for the issue "HP LaserJet Pro MFP - 'Scan to Email feature is not available for use' is displayed on the control panel". The issue is categorized as "Issue" and includes a description: "When using the Scan-to-Email feature from the control panel of an HP LaserJet Pro MFP, the following message displays on the control panel: 'The scan to email feature is not available for use. You must sign in using network authentication (Windows or LDAP) in order to use the Scan to Email feature.'"

<https://support.hp.com/us-en/product/hp-laserjet-pro-mfp-m426-m427-series/7458649/document/c04035784> (last accessed October 4, 2017).

49. Communication to the Control Panel is handled through the formatter: “The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer,” as illustrated in the image below:

Basic operation

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

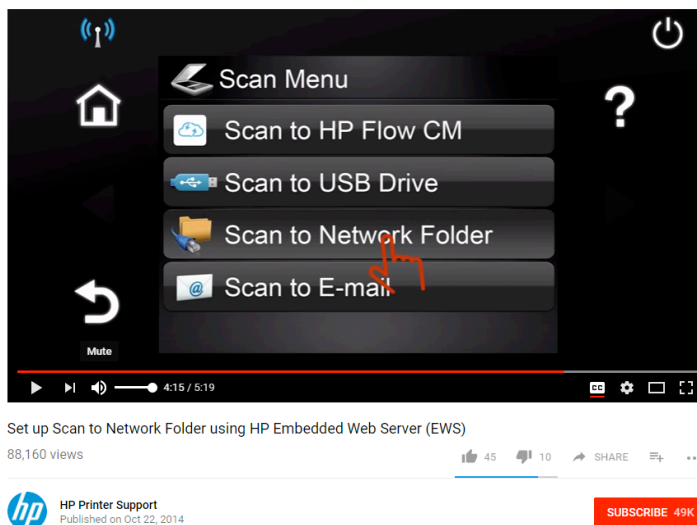
- Engine-control system
- Laser/scanner system
- Image-formation system
- Pickup, feed, and delivery system
- Accessory (optional paper feeder)

Troubleshooting Manual at p. 3.

50. The scanner control program (e.g., web browser in communication with the HP Embedded Web Server) is operable to activate (e.g., via a user name and password) one of the image processing programs (e.g., the Network Folder file system manager, email client, etc.) according to a selection signal received from the scanner.

51. The web browser in communication with the HP Embedded Web Server enables the Scan to Network Folder and Scan to Email functions, as detailed above. A user generates a

selection signal by selecting, at the Control Panel, the Scan to Network Folder or Scan to Email Function, as illustrated in the image below.



<https://www.youtube.com/watch?v=PnKjedhrbOs>.

52. The selection of the Scan to Network Folder or Scan to Email Function begins the scan process. When scanning to a Network Folder or Email and authentication, the scanner will communicate information along with the image signals, as illustrated in the image below:

Cannot connect to the email server

- Make sure the SMTP or LDAP server name is correct. Check this setting with your system administrator or Internet Service Provider.
- If the printer cannot establish a secure connection to the SMTP or LDAP server, try without the secure connection or try a different server or port. Check this setting with your system administrator or Internet Service Provider.
- If the SMTP or LDAP server requires authentication, make sure a valid user name and password are used.
- If the SMTP or LDAP server uses an authentication method that is not supported, try a different server. Check this setting with your system administrator or Internet Service Provider.

Troubleshooting Manual at p. 169 (red rectangle added for clarity).

53. The user name and password are transmitted to the scanner by the web browser in communication with the HP Embedded Web Server, as illustrated in the images below:

7. In the **Network Folder Information** area, complete the following fields:
 - a. In the **Display Name** field, enter the name to display for the folder.
 - b. In the **Network Path** field, enter the network path to the folder.
 - c. In the **Username** field, enter the user name needed to access the folder on the network.
 - d. In the **Password** field, enter the password needed to access the folder on the network.

User Guide at p. 65.

9. If the SMTP server requires authentication to send an email, complete the following fields in the **SMTP Authentication** area:
 - a. Select the **SMTP server requires authentication for outgoing e-mail messages** check box.
 - b. In the **SMTP User ID** field, enter the user ID for the SMTP server.
 - c. In the **SMTP Password** field, enter the password for the SMTP server.

Id. at p. 73.

54. The image processing programs (e.g., the Network Folder file system manager, email client, etc.) cannot be activated without this authentication information, as illustrated in the image below:

Cannot connect to the email server

- Make sure the SMTP or LDAP server name is correct. Check this setting with your system administrator or Internet Service Provider.
- If the printer cannot establish a secure connection to the SMTP or LDAP server, try without the secure connection or try a different server or port. Check this setting with your system administrator or Internet Service Provider.
- If the SMTP or LDAP server requires authentication, make sure a valid user name and password are used.
- If the SMTP or LDAP server uses an authentication method that is not supported, try a different server. Check this setting with your system administrator or Internet Service Provider.

Troubleshooting Guide at p. 169 (red rectangle added for clarity).

55. As shown above, each element of Claim 1 of the '072 Patent is found in HP's image processing system including the HP M426.

56. Diversified Observation is entitled to recover from HP the damages sustained by Diversified Observation as result of HP's infringement of at least Claim 1 of the '072 Patent in

an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. §284.

COUNT II – INFRINGEMENT OF UNITED STATES PATENT NO. 5,997,199

57. Diversified Observation repeats and realleges the allegations of the above paragraphs as if fully set forth herein.

58. Without license or authorization, and in violation of 35 U.S.C. § 271(a), HP infringed and continues to infringe at least Claim 1 of the '199 Patent by making, using, importing, offering for sale, or selling systems for a paper feeding module of a color picture printer for driving a paper back and forth through a printing module of the printer for printing including but not limited to, the HP M426.

59. Claim 1 of the '199 Patent reads:

1. A paper feeding module of a color picture printer for driving a paper back and forth through a printing module of the printer for printing, the printer comprising a housing, the printing module being installed inside the housing for printing the paper, the paper feeding module comprising:

a first roller horizontally oriented and rotatably installed inside the housing;

a second roller having a revolving axle and at least two cylindrical sleeves fixed on the revolving axle for clamping the paper with the first roller wherein the second roller is moveable in a vertical direction above the first roller inside the housing, and is rotatably in contact with the first roller when printing; and

an elastic device installed between the second roller and the housing comprising a plurality of elastic arms, each having a free end in contact with two

ends of the revolving axle of the second roller and the portion of the revolving axle between each adjacent pair of sleeves for uniformly depressing the revolving axle of the second roller so that each sleeve of the second roller is in even and tight contact with the first roller so as to clamp the paper.

Exh. B at 3:25 to 4:13.

60. The HP M426 includes a housing. The printing module is installed inside the housing for printing on paper:

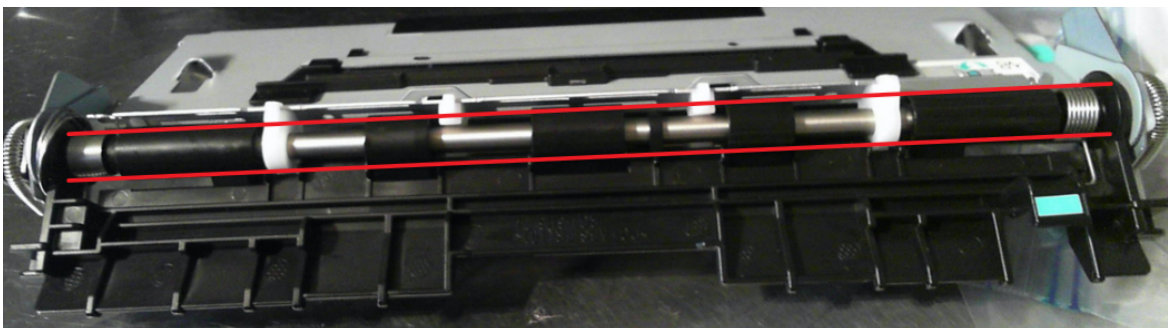


See, e.g., <https://support.hp.com/za-en/product/hp-laserjet-pro-mfp-m426-m427-f-series/7458650/model/7458659/manuals>.

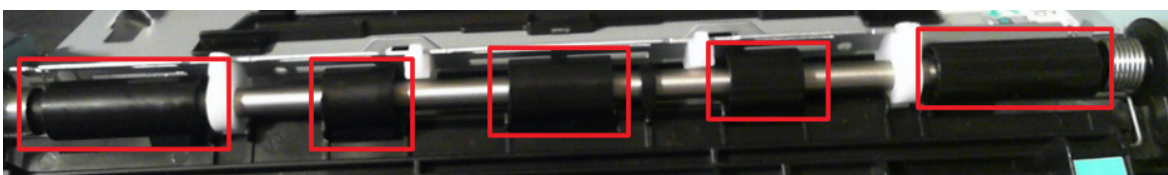
61. The HP M426 includes a first roller horizontally oriented and rotatably installed inside the housing, as shown below (red lines added for demarcation):



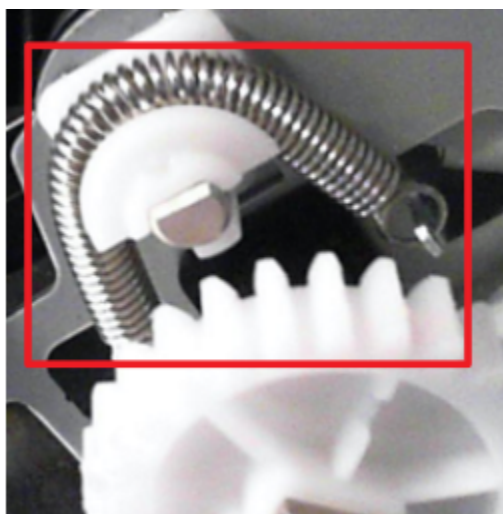
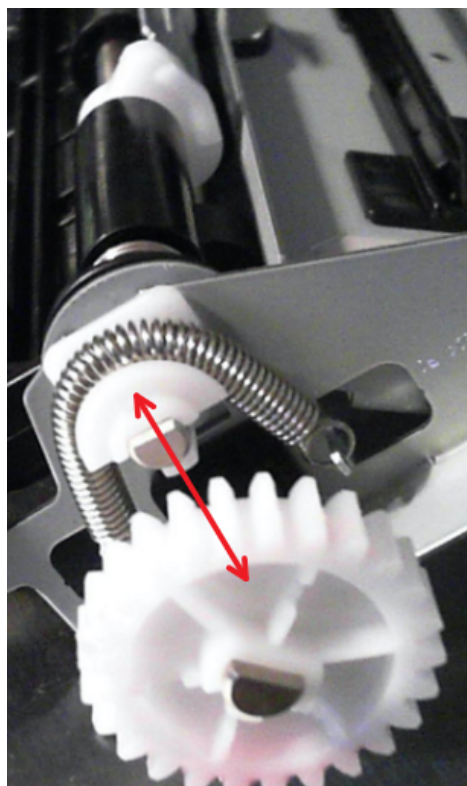
62. The HP M426 includes a second roller that has a revolving axle and multiple cylindrical sleeves fixed on the revolving axle for clamping the paper with the first roller (red lines added for demarcation):



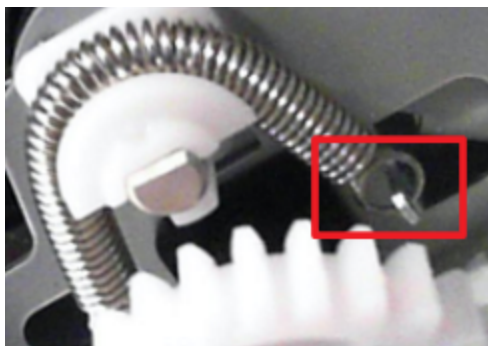
63. The HP M426 has a second roller that is moveable in a vertical direction above the first roller inside the housing and is rotatably in contact with the first roller when printing (red rectangles added for demarcation):



64. The HP M426 includes an elastic device (see the red arrow and rectangle added for demarcation to the image below) installed between the second roller and the housing comprising a plurality of elastic arms:



65. In the HP M426, the free ends of the arms are in contact with the revolving axle of the second roller for uniformly depressing the revolving axle of the second roller so that each sleeve of the second roller is in even and tight contact with the first roller to clamp paper, as shown below (red rectangle added for clarity):



66. HP supplied and supplies instructions and software for the HP M426. *See* <https://support.hp.com/us-en/> (last accessed Oct. 2, 2017).

67. As shown above, the HP M426 includes every element of Claim 1 of the '199 Patent.

68. Diversified Observation is entitled to recover from HP the damages sustained by Diversified Observation as a result of HP's infringement of at least Claim 1 of the '199 Patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. §284.

COUNT III – INFRINGEMENT OF UNITED STATES PATENT NO. 6,449,397

69. Diversified Observation repeats and realleges the allegations of the above paragraphs as if fully set forth herein.

70. Without license or authorization, and in violation of 35 U.S.C. § 271(a), HP infringed and continues to infringe at least Claim 1 of the '397 Patent by making, using, importing, offering for sale, or selling image processing systems including but not limited to the HP M426.

71. Claim 1 of the '397 Patent reads:

1. An image processing system comprising:

a scanner comprising a scanning module for scanning a rectangular document and generating corresponding image signals, the rectangular document

comprising four right angles, the image signals comprising a document image of the document in it; and

a computer connected to the scanner comprising:

a memory for storing programs and files;

a processor for executing the programs stored in the memory;

a scanner control program stored in the memory for controlling operations of the scanner and storing the image signals generated by the scanner into a main image file; and

an image processing program stored in the memory for detecting a tilting angle of the document image in the main image file over which the document image is tilted about the tilting angle from an upright position and also angle variation of at least one right angle of the document image, and for correcting the document image to generate a rectangular and upright document image of the document according to the tilting angle and the angle variation of the document image.

Exh. C at 3:39 to 4:22.

72. HP sells a number of scanners, including the HP M426. Along with these scanners, HP includes instructions (including software) for using the scanners in an image processing system. Additionally, on information and belief, HP uses the HP M426 along with the software installed on a computer in testing and demonstrating the HP M426, as illustrated by the image below:



See <http://store.hp.com/us/en/pdp/hp-laserjet-pro-mfp-m426fdw> (last accessed Oct. 4, 2017).

73. The HP M426 includes a scanning module for scanning a rectangular document and generating corresponding image signals, the rectangular document comprising four right angles, the image signals comprising a document image of the document in it. The rectangular document comprises four right angles. The image signals comprise a document image of the document.

74. The HP M426 includes a scanner, as illustrated by the image below:

Scan by using the HP Scan software (Windows)

Use the HP Scan software to initiate scanning from software on your computer. You can save the scanned image as a file or send it to another software application.

1. Load the document in the document feeder or on the scanner glass according to the indicators on the printer.
2. From the computer, click **Start**, and then click **Programs** (or **All Programs** in Windows XP).
3. Click **HP**, and then select your printer.
4. Click **HP Scan**, select a scanning shortcut, and then adjust the settings if necessary.
5. Click **Scan**.

User Guide at p. 60.

75. The HP M426 includes a scanning module. The scanning module includes the hardware in the HP M426 that scans the documents. This includes the contact image sensor (“CIS”) in the HP M426, as illustrated by the image below.

Scan Type / Technology

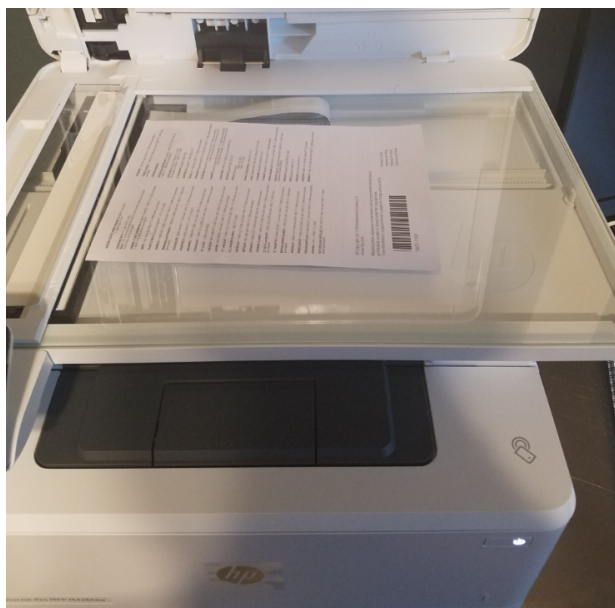
Flatbed, ADF / Contact Image Sensor (CIS)

HP M426 Datasheet (“Datasheet”) at p. 4 (available at <http://www8.hp.com/h20195/v2/GetPDF.aspx/4AA6-1074EEP.pdf> (last accessed Oct. 5, 2017)).

76. The scanning module scans a rectangular document, as illustrated by the images below.

Scan Size	ADF: 8.5 x 14 in Maximum; 4 x 6 in Minimum; Flatbed: 11.7 x 8.5 in
------------------	--

Id..



77. Once the HP M426 scans the rectangular document, it generates corresponding image signals, as illustrated by the image below.

Scan Type / Technology	Flatbed, ADF / Contact Image Sensor (CIS)
-------------------------------	---

HP M426 Spec Sheet, at p. 4 available at <http://www8.hp.com/h20195/v2/GetPDF.aspx/4AA6-1074EEP.pdf>. (last accessed Oct. 5, 2017).

78. The HP M426 specifies a computer connected to the scanner, as illustrated by the image below. *See* Spec Sheet at p. 4.

79. The HP M426 specifies 1GB of RAM for 32-bit operating systems and 2GB of RAM for 64-bit operating systems. *Id.*

80. The HP M426 specifies a 1GHZ processor. *Id.*

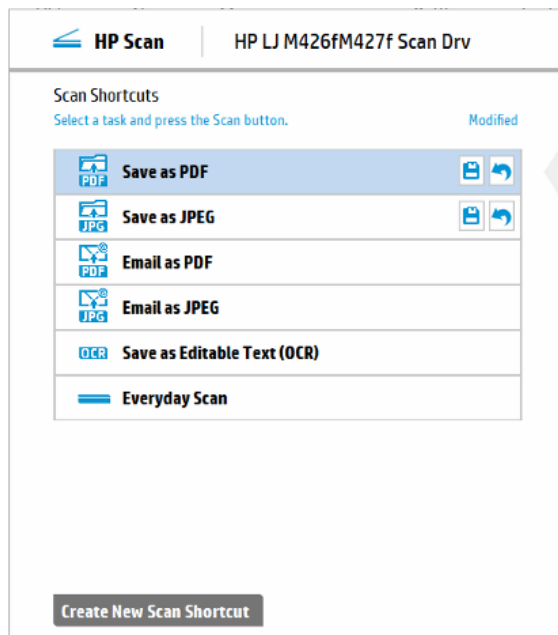
81. The HP M426 is configured to operate using a scanner control program (e.g., HP Scan) stored in the memory for controlling operations of the scanner and storing the image signals generated by the scanner into a main image file, as illustrated by the images below:

Scan by using the HP Scan software (Windows)

Use the HP Scan software to initiate scanning from software on your computer. You can save the scanned image as a file or send it to another software application.

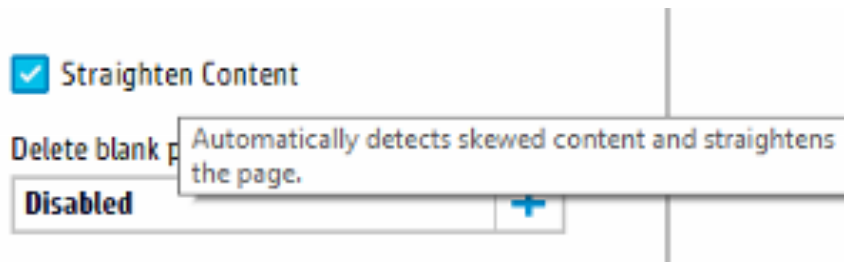
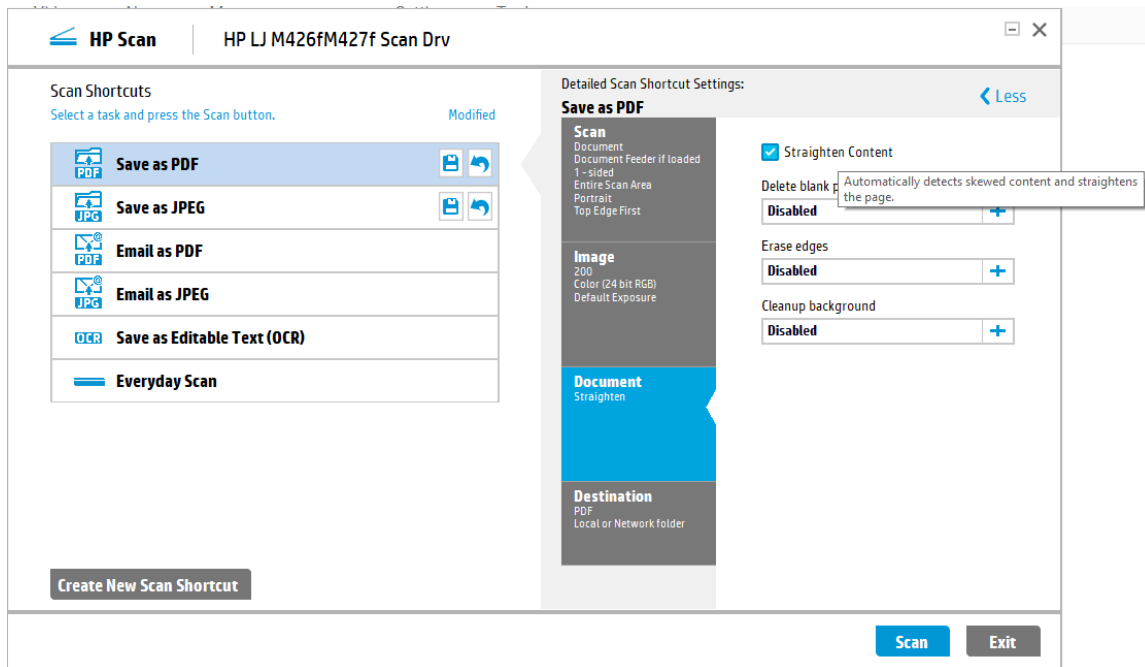
1. Load the document in the document feeder or on the scanner glass according to the indicators on the printer.
2. From the computer, click **Start**, and then click **Programs** (or **All Programs** in Windows XP).
3. Click **HP**, and then select your printer.
4. Click **HP Scan**, select a scanning shortcut, and then adjust the settings if necessary.
5. Click **Scan**.

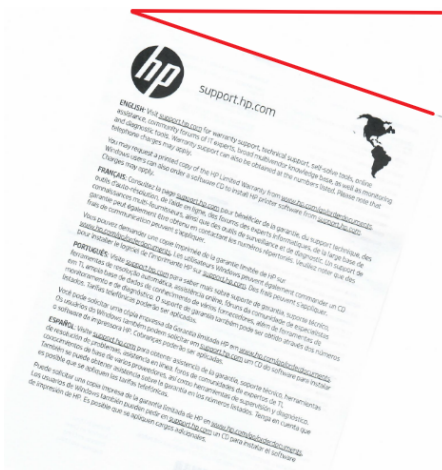
User Guide at p. 60.



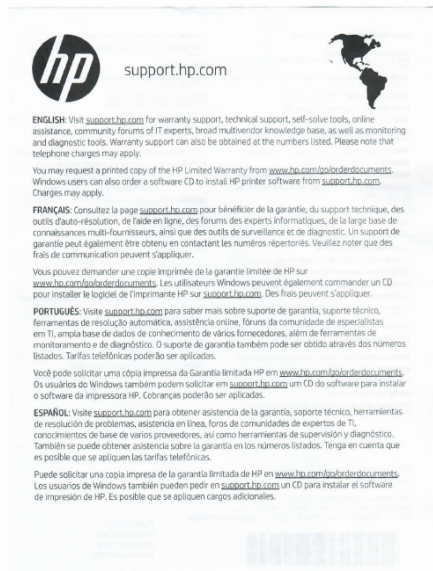
82. The HP Scan software controlling the HP M426 includes an image processing program stored in memory for detecting a tilting angle of the document image in the main image file over which the document image is tilted about the tilting angle form an upright position and

also angle variation of at least one right angle of the document image. The image processing program is operable to correct the document image to generate a rectangular and upright document image of the document according to the tilting angle and the angle variation of the document image, as illustrated in the images below:





(Without tilting angle correction)



(With tilting angle correction)

83. As shown, the HP M426 includes every element of Claim 1 of the '397 Patent.

84. Diversified Observation is entitled to recover from HP the damages sustained by Diversified Observation as result of HP's infringement of at least Claim 1 of the '397 Patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. §284.

JURY DEMAND

Diversified Observation hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Diversified Observation requests that this Court enter judgment against HP as follows:

- A. An adjudication that HP has infringed the '072, '199, and '397 Patents;
- B. An award of damages to be paid by HP adequate to compensate Diversified Observation for HP's past infringement of the '072 Patent, including interest, costs, expenses, and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- C. An award of damages to be paid by HP adequate to compensate Diversified Observation for HP's past infringement of the '199 and '397 Patents and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses, and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- D. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Diversified Observation's reasonable attorneys' fees; and
- E. An award to Diversified Observation of such further relief at law or in equity as the Court deems just and proper.

Dated: October 7, 2017

STAMOULIS & WEINBLATT LLC

/s/Stamatios Stamoulis

Stamatios Stamoulis #4606
Richard C. Weinblatt #5080
Two Fox Point Centre
6 Denny Road, Suite 307
Wilmington, DE 19809
Telephone: (302) 999-1540
stamoulis@swdelaw.com
weinblatt@swdelaw.com

Jeffrey G. Toler (Pro Hac Vice motion to be filed)
Craig S. Jepson (Pro Hac Vice motion to be filed)
Benjamin R. Johnson (Pro Hac Vice motion to be filed)

TOLER LAW GROUP, PC
8500 Bluffstone Cove
Suite A201
Austin, TX 78759
Telephone: (512) 327-5515
jtoler@tlgiplaw.com
cjepson@tlgiplaw.com
bjohnson@tlgiplaw.com

Attorneys for Plaintiff
Diversified Observation LLC