UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF FLORIDA MIAMI DIVISION

K.Mizra LLC,

Plaintiff,

Case No. 1:21-cv-20299-JEM

v.

JURY TRIAL DEMANDED

Lexmark International, Inc.,

Defendant.

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Pursuant to Fed. R. Civ. P. 15(a)(1), Plaintiff K.Mizra LLC ("Plaintiff" or "K.Mizra"), for its First Amended Complaint with Jury Demand for Patent Infringement against Defendant Lexmark International, Inc. ("Defendant" or "Lexmark"), alleges, based on its own knowledge as to itself and its own actions and based on information and belief as to all other matters, as follows:

I. <u>INTRODUCTION</u>

A. <u>Sharp and Its Innovations</u>

1. Sharp Corporation ("Sharp") is a Japanese multinational company that has for more than a century conceived, designed, manufactured and sold, first in Japan and then worldwide, various innovative products. Indeed, the company was founded in 1912 in Tokyo and takes its name from one of its founder's first inventions, the Ever-Sharp mechanical pencil. Sharp currently employs more than 50,000 people worldwide and has been inventing the future in numerous existing and emerging product categories for decades.

2. For more than sixty years now, Sharp has been heavily involved in the electronics products business, developing the first Japanese-produced televisions in 1953 and its Mobile Communications Division created the world's first camera phone in 2000. Sharp also was then

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investing heavily in its document product and solutions division, earning high praise and prestigious awards from various industry publications and insiders for innovations in printer, copier, and facsimile technologies it was developing and introducing to the market. Indeed, many of these innovations changed these product categories forever and helped to establish multifunction printers, i.e., all-in-one copier, printing, faxing and scanning devices ("MFPs"), as a mainstay of the modern office. These products take many forms, with one such Sharp device being shown below:



3. Sharp's MFPs were precision engineered to make device setup easier and faster than previously available and to provide easy-to-use, efficient and effective multi-level document production and assembly functionality to the modern and typical office worker. Sharp's integrated

product design and engineering approach to developing these state-of-the-art MFP's resulted in providing those office workers increased workflow efficiency, exceptional image quality and an industry standard ease of product operation, control, management, and maintenance, helping to take its customer's business to the next level of productivity and performance.

4. Given its culture of innovation and recognizing that its industry changing concepts often were emulated by "Johnny-come-lately" competitors, Sharp took pains to document and protect its various MFP-focused inventions. These took the form of, among other things, filing and prosecuting to issuance many patents covering various aspects of the technologies it had developed and incorporated over time into its various MFP products. These patents were issued in many countries, including the United States, Germany and Japan. As is too often the case, though, these protections were not self-policing in the MFP industry, with many of Sharp's competitors having taken its patented technologies for themselves and incorporating them into their commercial MFP offerings, but without providing Sharp the economic credit deserved for its many, many efforts and advancements. This case concerns just such a situation.

B. Lexmark and Its Relevant History

5. Lexmark was formed in 1991 to succeed IBM Information Products Corporation, the printer, typewriter, and keyboard operations of IBM. It was listed on the New York Stock Exchange in November 1995 and remained public until November 2016, when it was acquired by a consortium of investors led by Apex Technology Co., LTD. ("Apex") and PAG Asia Capital ("PAG"). Lexmark globally distributes a wide array of MFP products (one being shown below), with offices throughout North and South America, Asia, Africa, and Europe and having as of July 2018, approximately 9,000 employees worldwide.



6. Lexmark investor Apex is one of the world's largest manufacturers and solution providers of aftermarket imaging supplies and toner cartridges that only entered the industry in 2000. It is headquartered in Zhuhai, Guangdong, China, and Zhuhai Seine Technology Co., Ltd. ("Seine"), also headquartered in China, is Apex's largest shareholder and controls Pantum Electronics Co., Ltd., China's first printer and printing solutions provider. Lexmark investor PAG is one of Asia's largest private alternative asset management platforms founded in 2002 and with \$16 billion currently under management.

C. <u>The Prior Sharp/Lexmark Relationship</u>

7. Sharp first notified Lexmark that it believed Lexmark was infringing on several of its MFP patents in September 2012. No response to that communication was received, with Lexmark following up with a letter in June 2013. Lexmark responded to these written infringement allegations by letter in January 2014 and then a series of in-person meetings were held. These meetings occurred in June 2014 and January 2015 in the United States These meetings were attended by high-ranking Sharp employees who traveled to the United States specifically to meet with high-ranking Lexmark employees for the purpose of concluding a license with Lexmark.

8. Negotiations ensued throughout 2015, with further in-person meetings happening in the United States in September and November 2015, and in February 2016 making serious progress toward a licensing agreement. Lexmark announced in April 2016 that it planned to be acquired, but continued with the Sharp licensing negotiations, agreeing to attend a facilitated meeting in the United States later in 2016. That meeting occurred in October 2016 and was attended by various high-ranking Sharp officials who again traveled from Japan to attend the meeting, which seemed to lead to a mutual understanding and a license agreement. Lexmark was, however, formally acquired in November 2016 and, though Sharp continued to try and amicably resolve the matter and finalize a licensing agreement, through the rest of 2016, all of 2017 and into 2018, Lexmark just completely disengaged from the process.

D. K.Mizra and This Action

9. K.Mizra is a patent licensing company run by experienced management. The company focuses on high value, high quality patents with a global reach and owns patent portfolios originating with a wide array of inventors, including portfolios developed by well-known multinationals such as IBM, Panasonic and ZTE and from research institutes such as National

Chiao Tung University and Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek (Netherlands Organization for Applied Scientific Research). By focusing on high quality patents, K.Mizra provides a secondary market for inventors to recoup their research and development investments and to continue their innovations. K.Mizra offers licenses to its patents on reasonable terms and in this way plays a part in the development of the technologies that make all our lives better.

10. Sharp recently transferred its MFP-focused patents to K.Mizra, which now brings this action to enforce these valid and subsisting United States patent rights and to hopefully convince Lexmark to finally regularize its past and continuing willful infringement of the acquired Sharp MFP worldwide patent portfolio, of which it and its Chinese investors have been well aware and callously ignoring for years.

II. <u>PARTIES</u>

 Plaintiff is a limited liability company organized and existing under the laws of the State of Delaware and maintains a business address at 777 Brickell Avenue, #500-96031, Miami, Florida 33131.

12. Defendant is a corporation organized and existing under the laws of the State of Delaware, and upon information and belief, maintains its principal place of business at 740 West New Circle Road, Lexington, Kentucky 40511.

III. JURISDICTION AND VENUE

13. This is an action for patent infringement under the patent laws of the United States, namely, 35 U.S.C. §§ 101 *et seq.*, 271, 281, and 284, among others. This Court has original subject matter jurisdiction over this dispute pursuant to 28 U.S.C. §§ 1331 and 1338(a).

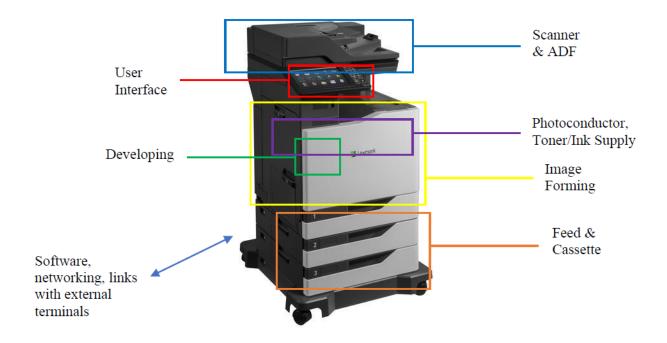
14. This Court has personal jurisdiction over Lexmark for at least the following reasons: (1) Lexmark has imported, manufactured, used, offered for sale, and/or sold in Florida, and within this District, printer/copier/scanner products that infringe the Asserted Patents (defined collectively as the nine (9) patents discussed below); (2) Lexmark maintains permanent offices in Florida; (3) Lexmark maintains sales representatives in Florida; (4) Lexmark is registered with the Florida Department of State to do business in Florida; (5) Lexmark has a registered agent in Florida, at CT Corporation System, 1200 South Pine Island Road, Plantation, Florida 33324; (6) upon information and belief, Lexmark has paid and continues to pay taxes in Florida; and (7) Lexmark has a website directed to customers in Florida from which customers can contact Lexmark to purchase printer/copier/scanner products that infringe the Asserted Patents at issue in this lawsuit.

15. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because Lexmark has a regular and established place of business in this District located at 804 Douglas Road, Coral Gables, Florida 33134, and has committed acts of infringement in this District. Lexmark's acts of infringement in this District include but are not limited to its importation, manufacture, use, offer for sale, and/or sale of printer/copier/scanner products that infringe the Asserted Patents.

IV. FACTUAL ALLEGATIONS UNDERLYING ALL CLAIMS

16. Sharp's diverse suite of inventions relating to MFPs fall into the following categories: 1) user interfaces; 2) scanners and automatic document feeders ("ADF"); 3) photoconductor, toner, and ink cartridges; 4) software and networking links with external terminals; 5) image formation; 6) image developing; and 7) feed and cassette mechanisms (herein referred to respectively as "Categories 1, 2, 3, 4, 5, 6 or 7"). A representative picture of a Lexmark

MFP product model CX825dte, with the location of these technology categories being shown, is provided:



17. Lexmark currently markets its printers and MFPs as falling into two categories, either "Small and Medium Business" or "Enterprise and Large Business." Lexmark currently offers for sale on its website over 30 product models that are characterized as falling into the former Small & Medium Business solutions printers and MFPs. Lexmark currently offers for sale on its website over 40 different product series that are characterized as falling into the latter Enterprise & Large solutions printers and MFPs. Lexmark has imported, manufactured, used, offered for sale, and sold discontinued and heritage models of these types of machines as well. Lexmark also imports, manufactures, uses, sells, and offers for sale new toner cartridges and exchange toner cartridges for its printers and MFPs. Upon information and belief, at least one or more of these product models and their toner cartridges and replacements and/or discontinued or heritage product

models infringe at least one claim of each of the Asserted Patents, as discussed in more detail below (collectively, the "Accused Products").

A. <u>The Asserted Patents</u>

1. <u>U.S. Patent 7,064,874</u>

18. On June 20, 2006, the USPTO duly and legally issued U.S. Patent No. 7,064,874 ("the '874 Patent") entitled "Both-Side Document Reading Apparatus and Both-Side Document Reading Method" to Sharp. Sharp assigned the '874 Patent to K.Mizra, and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '874 Patent is attached hereto as Exhibit A and incorporated herein, in its entirety, by reference.

19. The '874 Patent falls under technology Category 2, and discloses a both-side reading apparatus used, for example, in scanners, copiers, printers, facsimiles or the like, and a both-side document reading method. In one aspect of the systems and methods disclosed in the patent, an amount of the illumination light applied to the surfaces of a document is held constant until the reading operation at both the main and back surfaces of the document has been completed. This allows both sides of a document to be read under constant reading conditions and prevents errors or artifacts that occur from variable illumination or opposing light sources. Claim 18 of the '874 Patent addresses these concepts and states:

An image forming apparatus comprising a both-side document reading apparatus, the both-side document reading apparatus comprising:

a first reading portion, provided with a first light source, for reading one side surface of a document by emitting light toward the one side surface of the document by the first light source; and

a second reading portion, provided with a second light source, for reading another side surface of the document by emitting light toward the other side surface of the document by the second light source, wherein the first and second reading portions are arranged so that a reading region of the one side surface by the first reading portion is arranged on an upstream side from a reading region of the other side surface by the second reading portion in a document transport direction, and

wherein the first light source is turned off after the document has passed through the reading region of the second reading portion.

20. Multiple Lexmark MFPs meet all limitations of Claim 18 of the '874 Patent. For

example, Lexmark MFP model CX860de is an image forming apparatus, *i.e.*, printer, that contains

a both-side document reader capable of duplex scanning:



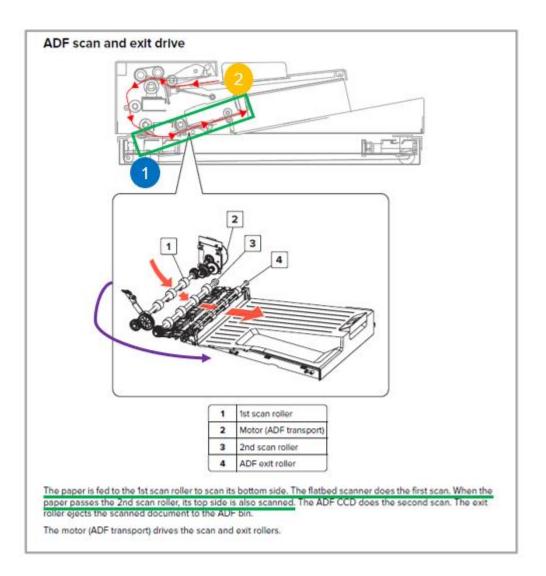
Speedy scanning: Capture paper-based information quickly into your digital workflow or network applications. The CX860 has a faster scanner than most light production 11x17/A3 digital copiers at up to 120 sides per minute in <u>duplex</u> <u>scan mode</u> and up to 60 pages per minute in simplex scan mode. <u>It uses single-pass</u> <u>duplex scan technology to scan both</u> <u>sides of a page simultaneously.</u> This speed, in combination with the powerful processor ensures that information is available when your users need it, so their processes are not slowed down or interrupted.

Lexmark CX860 Series

21. The CX860de printer contains a flatbed scanner that contains the claimed first reading portion and first light source. The scanner lamp of the CX860de printer illuminates the downward-facing side of a document by emitting light onto that document that is read by a CCDM. The claimed second reading portion of the CX860de is housed in the automated document feeder ("ADF"). Within the ADF (*see* below), an ADF CCDM contains a second light source, a lamp, that emits light onto the other, upward-facing side of the document to read that surface.



22. As shown below, the CX860de printer is designed such that sheets of paper to be duplex scanned are placed in the ADF tray from which they are fed by rollers into the ADF. By design, during duplex scanning, the document is transported in a single direction by the rollers—from the ADF tray, the document page is moved past the surface of the flatbed scanner and then up into the ADF and past the ADF CCDM before being ejected into the ADF bin when scanning is complete. In this document page flow, the document is first scanned in a region above the flatbed scanner, where the downward-facing side of the document is read. This first region is upstream of a separate region where the other, upward-facing side of the document is read.



23. Thus, the document passes downstream as it travels from the ADF tray, through the first and then second reading regions, and into the ADF bin, with each side scanned sequentially. After the scanning is complete, the scanner lamp of the CX860de turns off automatically.

24. Lexmark has been on actual notice of the '874 Patent and its infringement thereof prior to a mediation process that occurred years ago and that is discussed in more detail below. Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other Lexmark MFPs, and by at least teaching installers and users how to use the MFPs through at least its Lexmark manuals, support webpages, and its "Lexmark How-to Videos" on YouTube, Lexmark has actively encouraged others to infringe the '874 Patent. (*See* Exhibit B.)

2. <u>U.S. Patent 7,449,274</u>

25. On November 11, 2008, the USPTO duly and legally issued U.S. Patent No. 7,449,274 ("the '274 Patent") entitled "Toner for Electrostatic Image Development and Image Forming Method Using the Same" to Sharp. Sharp assigned the '274 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '274 Patent is attached hereto as Exhibit C and incorporated herein, in its entirety, by reference.

26. The '274 Patent falls under technology Category 3 and is directed towards a composition of toner where certain percentages of the toner particles fall within or outside of specified sizes, and the toner also includes an additive. The '274 Patent toner composition has been shown to outperform other previously known toner compositions in a number of ways. Claim 1 of the '274 Patent states:

A toner for electrostatic image development, comprising toner particles in which not more than 13 percent by number of the toner particles have a particle diameter of smaller than 4 μ m, not less than 20 percent by number of the toner particles have a particle diameter of 4 μ m to 6 μ m, not more than 2.0 percent by volume of the toner particles have a particle diameter of 16 μ m or greater, wherein the toner particles have a volume average diameter of 4 μ m to 9 μ m and at least an external additive is added to the toner particles.

27. Lexmark has made, used, sold, offered for sale, and/or imported toner cartridges that infringe at least Claim 1 of the '274 Patent. An exemplary infringing toner cartridge is the Lexmark X651A11A toner cartridge, shown below:



28. The Lexmark X651A11A toner cartridge contains toner for electrostatic image development using a Lexmark printer or copier. An independent third-party analysis of the contents of the Lexmark X651A11A toner cartridge revealed toner particles in which at most 100 -93.5 = 6.5 percent by number of the particles within the cartridge have a particle diameter smaller than 4 µm, and at least 93.5 percent by number of the toner particles have a particle diameter of 4 µm or greater, as shown in the below chart:

Particle Diameter µm	OEM Lexmar _S CAA 1817_14.#m4 Number >	Number %>	Volume µm³ >	Volume % >
1	76098	100	14.80e6	100
2	76098	100	14.80e6	100
3	73310	96.3	14.77e6	99.8
4	71132	93.5	14.72e6	99.5
5	62472	82.1	14.27e6	96.4
6	45071	59.2	12.74e6	86.1
8	17887	23.5	7921786	53.5
10	3807	5.00	2789749	18.9
12	480.8	0.63	639698	4.32
15	30.03	0.039	143558	0.97
17	7	0.0092	96138	0.65
20	4	0.0053	87523	0.59
25	4	0.0053	87523	0.59

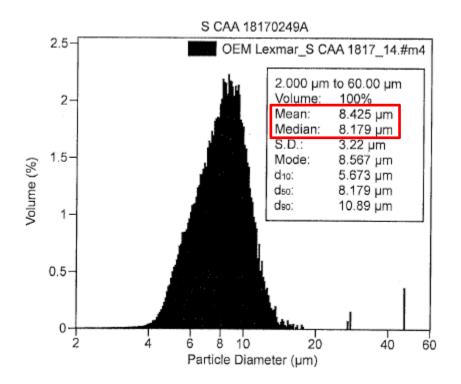
29. The analysis further confirmed that the Lexmark X651A11A toner cartridge comprises toner particles in which at least 93.5 - 59.2 = 34.3 percent by number of toner particles, with these particles having a diameter of 4 µm to 6 µm, as shown in the below chart:

Particle Diameter µm	OEM Lexmar _S CAA 1817_14.#m4 Number >	Number %>	Volume µm ³ >	Volume % >
1	76098	100	14.80e6	100
2	76098	100	14.80e6	100
3	73310	96.3	14.77e6	99.8
4	71132	. 93.5	14.72e6	99.5
5	62472	82.1	14.27e6	96.4
6	45071	59.2	12.74e6	86.1
8	17887	23.5	7921786	53.5
10	3807	5.00	2789749	18.9
12	480.8	0.63	639698	4.32
15	30.03	0.039	143558	0.97
17	7	0.0092	96138	0.65
20	4	0.0053	87523	0.59
25	4	0.0053	87523	0.59

30. The analysis further confirmed that the Lexmark X651A11A cartridge comprises toner particles in which at most 0.97 percent by volume of the toner particles have a particle diameter of 15 μ m or greater, as shown in the below chart:

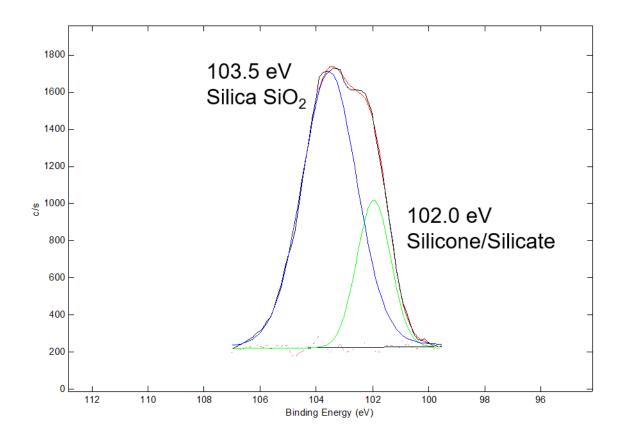
Particle Diameter µm	OEM Lexmar _S CAA 1817_14.#m4 Number >	Number %>	Volume µm³ >	Volume % >
1	76098	100	14.80e6	100
2	76098	100	14.80e6	100
3	73310	96.3	14.77e6	99.8
4	71132	93.5	14.72e6	99.5
5	62472	82.1	14.27e6	96.4
6	45071	59.2	12.74e6	86.1
8	17887	23.5	7921786	53.5
10	3807	5.00	2789749	18.9
12	480.8	0.63	639698	4 32
15	30.03	0.039	143558	0.97
17	7	0.0092	96138	0.65
20	4	0.0053	87523	0.59
25	4	0.0053	87523	0.59

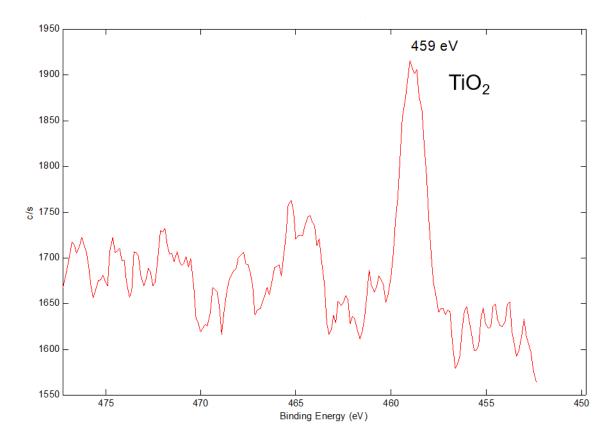
31. The analysis further confirmed that the Lexmark X651A11A cartridge comprises toner particles having a volume mean diameter of 8.425 μ m and a volume median diameter of 8.178 μ m, as the below graph confirms:



32. Finally, analysis confirmed that the Lexmark X651A11A cartridge comprises toner in which an external additive comprising SiO_2 (silica) and TiO_2 (titanium oxide) is added to the

toner particles. Specifically, the toner includes silica and titanium dioxide particles, which are identified as additives in the specification of the '274 Patent, as shown in the following analysis graphs:

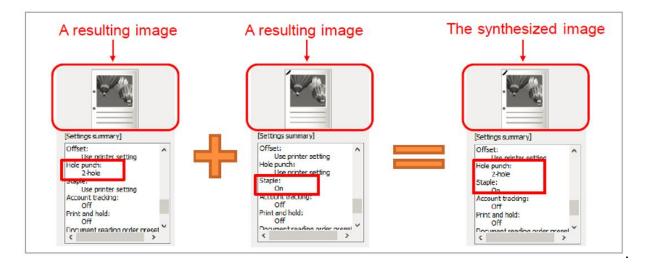




33. Lexmark has been on actual notice of the '274 Patent and its infringement thereof prior to a mediation process that occurred years ago and that is discussed in more detail below. Through the marketing, advertising, sale, and offer for sale of infringing toner cartridges, Lexmark has actively encouraged others to infringe the '274 Patent by at least using the infringing toner cartridges. (*See* Exhibit D.)

3. <u>U.S. Patent 7,568,170</u>

34. On July 28, 2009, the USPTO duly and legally issued U.S. Patent No. 7,568,170 ("the '170 Patent") entitled "Data Processing Setting Apparatus, Data Processing Setting Method, Data Processing Setting Program, and Computer Readable Recording Medium Recording the Program" to Sharp. Sharp assigned the '170 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '170 Patent is attached hereto as Exhibit E and incorporated herein, in its entirety, by reference. 35. The '170 Patent falls into technology Categories 1 and 5 and is directed to the user interface of a data setting device, such as Lexmark devices, wherein the interface allows the user to select a desired function from a plurality of information processing functions and shows an image display preview displaying the chosen functionality of the plurality of possible functions. For example, in a printing preference interface, a user may select from several possible functions for the printer to staple and punch the print job. The interface will then display in a separate area of the screen an image previewing the selected functions:



36. Claim 1 of the '170 Patent addresses at least some of these concepts and states:

A data processing setting apparatus comprising:

display control section for displaying plural kinds of function information on a setting screen image for setting a data processing, each of the plural kinds of function information indicating a function of the data processing and being able to be identified by the function;

function setting [section]¹ for (i) selecting the function corresponding to the function information selected, in response to an input instruction, from plural pieces of function information among the plural kinds of function information, the plural pieces of function information being displayed on the setting screen image, and (ii) setting the selected function;

¹ As corrected by the July 28, 2009 Certificate of Correction, which reads "Column 38, in Claim 1, line 48: the word 'means' should read --section--." (*See* Exhibit E, p. 62.)

set information display processing section for displaying set information in a region of the setting screen image, not in a region in which the plural kinds of function information are displayed by said display control section, the set information corresponding to the function set by said function setting section and indicating that the function has already been set; and

resulting image display processing section for displaying a resulting image in a region of the setting screen image, not in the region in which the plural kinds of function information are displayed by said display control section or in the region in which the set information is displayed by said set information display processing section, the resulting image showing a result of the data processing using the function set by said function setting section;

wherein, when said function setting section sets a plurality of functions, said resulting image display processing section synthesizes a plurality of resulting images corresponding to the plurality of functions, and displays the synthesized image.

37. Lexmark has made, used, sold, offered for sale, and/or imported MFPs that include,

use, and run the Universal Print Driver, which infringes at least Claim 1 the '170 Patent.

38. The Universal Print Driver is sold with and used by several exemplary Lexmark

MFPs that provide data processing functionality:

What is the Universal Print Driver?

The Lexmark Universal Print Driver (UPD) is a one-driver standard solution for printers. Instead of using a separate driver for each printer, you can install the Lexmark UPD for use with a variety of both mono and color laser printers and multi-function devices.

Device compatibility					
The Lexmark Universal Print Drivers are compatible with the following devices:					
Color Multifunction Printe	Color Multifunction Printers				
PCL 5PCL XLPSemulationemulationemulationDevice modeldriverdriver					
CX310 Series ² (CX310dn, CX310n, CX317dn)	\checkmark	\checkmark	\checkmark		
CX410 Series ² (CX410de, CX410e, CX417de)	\checkmark	\checkmark	\checkmark		
CX510 Series ² (CX510de, CX517de)	\checkmark	\checkmark	\checkmark		
CX725 Series (CX725de, CX725dhe, CX725dthe)	\checkmark	\checkmark	\checkmark		

39. When the Print Driver is accessed, it displays a setting screen image that includes a plurality of function information. Examples of function information include, but are not limited to, Layout, Paper/Finishing, Quality, etc. Each of these functions includes option information for applying function settings:

ayout Paper/Finishing Quality Watermark Overlays Copies Number of copies:	Print and Hold Other Options Document Reading Order Preset ① Left to right ① Right to left	
Collate	Page Layouts Normal Multiple pages per side (N-Up)	[Settings summary]
Page Orientation	Pages per side:	Duplex: A Cine-sided Layout: Normal print Multiple input options: Off
Rotate 180° Print on Both Sides (Duplex) Print on one side only	O Booklet Edit Settings	Resizing: None Overlays: Off Watermark:
Long edge Short edge	Poster Size of poster: 2 x 2 (4 pages)	Print Settings Loed settings: (None) V
	Edit Settings	Save Manage Settings

40. Each of the plural kinds of function information indicates a different function of the data processing and is identified by the function. For instance, there is a "Layout" tab on the setting screen image that identifies and determines the organizational attributes of a print job, such as page orientation or "print on both sides":

ne Layout tab	Lexmark
rganizational attributes of a print job. Ie only in some printer models and in some print drivers.	Universal Print Driver
Description	Technical White Paper Revision 15
 The following settings determine the number of copies to be printed and how the copies are organized: Number of Copies Collate—The order in which pages are printed when printing multiple copies of a print job. For example, if you are printing two copies of a five-page print job, then the collated output is 1, 2, 3, 4, 5, 5, 1, 2, 3, 4, 5. The non-collated output is 1, 1, 2, 2, 3, 3, 4, 4, 5. 5. If the installed printer memory is insufficient to collate the output, then the collated output is generated for all pages that are stored in the printer memory. For example, the output can be 1, 2, 3, 1, 2, 3, 4, 5. Reverse page order—Depending on your printer model, the pages of a print job are printed in reverse order so that in the finished output, the last page appears on top. If you want the output back in normal page order, then manually reverse the pages. 	Comment- Function information: Layout
 The following settings determine the alignment of the paper or form when it is printed: Portrait—The orientation is vertical, where the page is taller than it is wide. Landscape—The orientation is horizontal, where the page is wider than it is tall. Rotate 180°—The page image is rotated to 180 degrees. This setting can be used with other orientation settings. If this setting is selected, then the "Long edge" and "Short edge" settings specify which edge of the printed document is used as the binding edge. The following settings determine how long before the printer prints on the opposite side of a page: 	
	breactional attributes of a print job. le only in some printer models and in some print drivers. Description The following settings determine the number of copies to be printed and how the copies are organized: • Number of Copies • Collate—The order in which pages are printed when printing multiple copies of a print job. For example, if you are printing two copies of a five-page print job, then the collated output is 1, 2, 3, 4, 5, 1, 2, 3, 4, 5. The non-collated output is 1, 1, 2, 2, 3, 3, 4, 4, 5, 5. If the installed printer memory is insufficient to collate the output, then the collated output is generated for all pages that are stored in the printer memory. For example, the output can be 1, 2, 3, 1, 2, 3, 4, 5, 5. • Reverse page order—Depending on your printer model, the pages of a print job are printed in reverse order so that in the finished output, the last page appears on top. If you want the output back in normal page order, then manually reverse the pages. The following settings determine the alignment of the paper or form when it is printed: • Portrait—The orientation is vertical, where the page is taller than it is wide. • Landscape—The orientation is horizontal, where the page is wider than it is tall. • Rotate 180°—The page image is rotated to 180 degrees. This setting can be used with other orientation settings. If this setting is selected, then the "Long edge" and "Short edge" settings specify which edge of the printed document is used as the binding edge. The following settings determine how long before the printer prints on

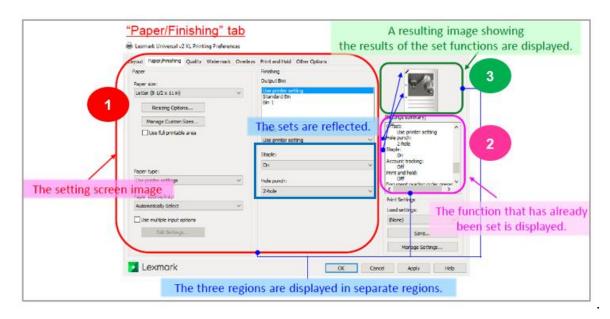
41. Multiple function settings can then be applied across the function information provided on the setting screen image. For example, a user can print a document with two holes and a staple under the Paper/Finishing function information, as shown below:

Simple giff			
Task Decement Longits at	Print Im Lexmark Universal v2 XL Printing Preferences	×1 ×	
	Larout Paper Statement Quality Watermark Overlar Paper Paper Paper Soc: Letter (N 1/2)a Paper soc: Differ paper sace with different orientation: Off Paper type: Up informating Paper type: Letter (N 1/2)a Paper soc: Off Paper soc: Differ paper sace with different orientation: Off Paper type: Letter (N 1/2)a Difference of the social	Serter.	
	Page Setup	 K Canoli Help	
► ►I ◄) 0:39 / 0:52			

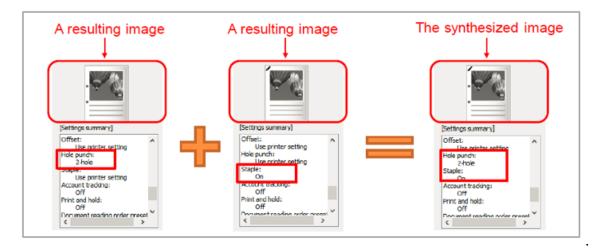
42. The function settings then applied under Paper/Finishing are: Staple: On; Hole punch: 2 hole:

	🖶 Lexmark Universal v2 XL Printing Preferences		
	Layout Paper, Finishing Quality Watermark Overlay	rs Print and Hold Other Options	
	Paper Paper size: Letter (8 1/2 x 11 in) ~ Resizing Options	Finishing Dutput Bin: <u>Use printer setting</u> Standard Bin Bin 1	
//he	n the items in the pull-of	Use printer setting	[Settings summary]
	Paper source/tray: Automatically Select Use multiple input options Edit Settings	Use printer setting V Use printer setting 2-hole 3-hole 4-hole Off	Print Settings Load settings (flore) V Seve

43. The setting screen image also consists of three distinct regions: 1) a function information region (where settings are manually applied); 2) a set information display region (that displays the settings selected in the function information region); and 3) a resulting image region (that displays a representative document image graphically indicating the applied settings), as shown below:



44. Based on the function settings, a synthesized resulting image is displayed that pictorially indicates the selected settings. The final resulting image showcases a staple indicator and a two-hole indicator on the graphical document icon:



45. Lexmark has been on actual notice of the '170 Patent, and its infringement thereof, at least as early as the filing and service of K.Mizra's Complaint (DE 1). Through the marketing, advertising, sale, and offer for sale of the infringing Universal Print Driver and Lexmark MFPs that run it, and by at least teaching installers and users how to use the various options in its Print Driver at least through its Lexmark manuals, support webpages, its Lexmark Universal Print Driver White Paper, and "Lexmark How-to Videos" on YouTube, Lexmark has actively encouraged others to infringe the '170 Patent by at least using the infringing Print Driver. (*See* Exhibit F.)

4. <u>U.S. Patent 7,570,400</u>

46. On August 4, 2009, the USPTO duly and legally issued U.S. Patent No. 7,570,400 ("the '400 Patent") entitled "Document Reading Device" to Sharp. Sharp assigned the '400 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '400 Patent is attached hereto as Exhibit G and incorporated herein, in its entirety, by reference.

47. The '400 Patent falls into technology Category 2 and claims inventions over automatic document feeders included with printer devices and is directed to an arrangement where there is a movable member on the bottom side of the document feeder that pivots perpendicular to the paper transport path and covers a portion of the paper transport path. The movable member allows access to the transport path to remove jammed paper. The bottom side of the feeder also contains a flexible sheet to hold paper onto the copying surface. This flexible sheet is anchored away from the pivot point of the movable member to avoid creasing the flexible sheet over time. Claim 1 of the '400 Patent is directed to at least some of these concepts and states:

A document reading device configured to read an image of an original document placed on a document platen, comprising:

a document tray for an original document to be stacked thereon;

an output tray for receiving the original document that is output after an image thereof is read;

a document transport path on which the original document is transported, the original transport path leading from the document tray through an image reading area to the output tray;

a movable member that serves as part of a bottom surface of the document reading device, the movable member being supported pivotably around a pivot axis that is perpendicular to a document transport direction on the document transport path, and the movable member having a free end and a pivotal end; and

a document holder that includes a flexible sheet, the document holder being positioned so as to extend over the whole length and breadth of the document platen,

wherein the movable member is pivotable from a position to cover a portion of the document transport path to a position to expose the portion toward the document platen, and

wherein the document holder is fixed at portions other than a portion that is positioned immediately below the pivot axis, to the bottom surface of the document reading device.

48. Multiple Lexmark MFPs meet all limitations of the Claim 1 of the '400 patent. For

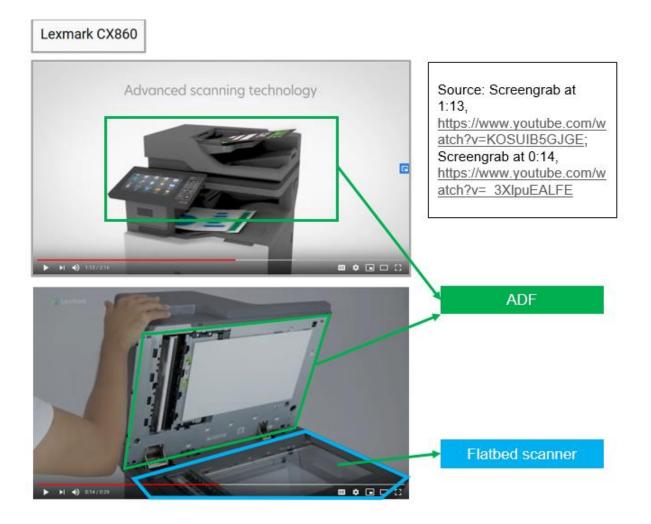
example, the Lexmark MFP model CX860de is a document reading device, i.e., scanner,

configured to read images of documents. The CX860de contains a flatbed scanner with the

claimed document platen, *i.e.* flatbed scanner, where an original document can be placed. The

CX860de also contains an ADF with a tray where original documents can be stacked to be scanned,

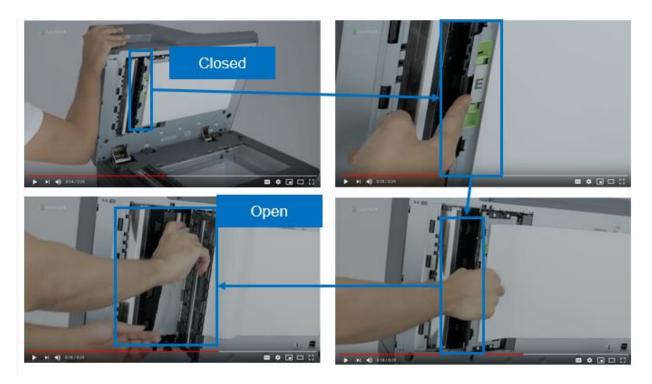
as shown below:



49. The ADF also has an ADF bin that receives the original documents output after scanning. The CX860de pulls documents to be scanned along a set path by a series of rollers from the ADF tray, through an area where they are read by the ADF CCDM and output to the ADF bin, all as disclosed and claimed by the '400 Patent.

50. The ADF of the CX860de printer also contains a movable ADF bottom door at its base, opposite the flatbed scanner platen. That door is attached pivotably to the ADF by a hinge along its side next to the ADF bin and perpendicular to the flow of documents. The other end of the ADF bottom door moves freely and can swing open exposing the usually hidden rollers located along the document transport path and that flow over the ADF bottom door.

51. On the bottom of the CX860de's ADF, there is a flexible white sheet of material that acts to hold documents in place on the flatbed scanner and acts as a neutral background for document reading. The document-holding sheet is attached to the flat bottom surface of the ADF and the base of the ADF bottom door at a number of fixed points. These fixed points are not immediately below the pivot axis of the ADF bottom door as claimed.



52. Lexmark has been on actual notice of the '400 Patent and its infringement thereof prior to a mediation process that occurred years ago and that is discussed in more detail below. Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other MFPs, and by at least teaching installers and users how to use the MFPs through at least its Lexmark manuals, support webpages, and "Lexmark How-to Videos" on YouTube, Lexmark has actively encouraged others to infringe the '400 Patent. (*See* Exhibit H.)

5. <u>U.S. Patent 7,840,165</u>

53. On November 23, 2010, the USPTO duly and legally issued U.S. Patent No. 7,840,165 ("the '165 Patent") entitled "Toner Replenishing Apparatus, Image Forming Apparatus, and Color Image Forming Apparatus" to Sharp. Sharp assigned the '165 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '165 Patent is attached hereto as Exhibit I and incorporated herein, in its entirety, by reference.

54. The '165 Patent falls into technology Categories 3 and 6 and is directed to a toner replenishing apparatus that allows for easy removal of toner containers, and in turn allows for downsizing of the printer/copier. The patent describes a toner replenishing apparatus that includes a displacement mechanism for displacing the toner replenishing containers from a position where the toner replenishing containers are held by a container holding member. Claim 9 of the '165 Patent is directed to at least some of these concepts and states:

A color image forming apparatus comprising:

a plurality of image bearing members on each of which is to be formed a latent image;

a plurality of latent-image forming sections each for forming a latent image on the image bearing member;

a plurality of developing devices each for developing the latent image formed on the image bearing member with use of toner, the toners used for the respective developing devices being of different colors from each other;

a plurality of toner replenishing containers each for accommodating toner to be replenished to a developing device corresponding thereto;

a container holding member for holding the plurality of toner replenishing containers in a detachable manner; and

a plurality of displacement mechanisms each for displacing the corresponding toner replenishing container from a position where the corresponding toner replenishing container is held by the container holding member; and

a plurality of shutter sections for opening and closing toner replenishing ports which are formed in the toner replenishing containers for replenishing toner to the developing device,

wherein the shutter sections bring the toner replenishing ports into a closed state in conjunction with the displacement of the toner replenishing containers by the displacement mechanisms.

55. Lexmark has made, used, sold, offered for sale, and/or imported MFPs that include

a container holding member for holding multiple toner cartridges in a detachable manner and that

infringe at least Claim 9 the '165 Patent.

56. For example, the Lexmark CX725 series is a color image forming apparatus:



CX725 Series

Exceptional color

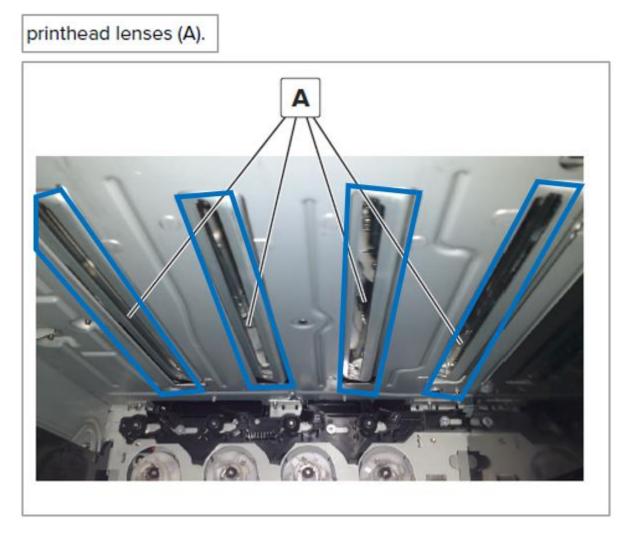
Professional color features including ultra-sharp 4800 Color Quality, PANTONE® calibration and Lexmark Color Replacement work with Unison Toner to deliver precision matching of critical hues.

What model is best for you?					
Choose from the features to find available models that target your needs.					
Model	Input Capacity (standard/maximum)	Print / Copy Speed	Included Extras		
CX725DE	650/2,300	50 ppm			
CX725DHE	650/2,300	50 ppm	Hard Disk		
CX725DTHE	1,200/2,300	50 ppm	Hard drive + Extra tray		

57. The Lexmark CX725 printer includes an imaging kit that houses multiple image bearing members, along with toner cartridges (replenishing containers) housed on the container holder in a detachable manner:

<image>

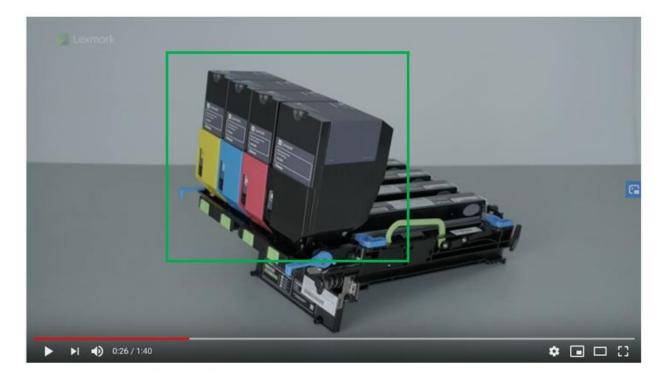
58. The Lexmark CX725 imaging kit houses a plurality of latent-image forming sections (printhead lenses A) each for forming a latent image on the image bearing member:

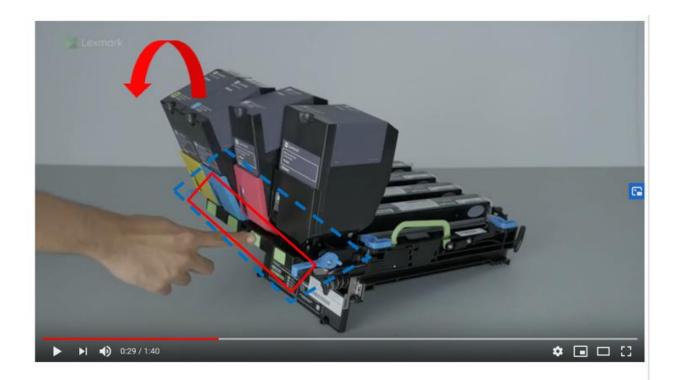


59. The Lexmark CX725 series imaging kit also has a plurality of developing devices each for developing the latent image formed on the image bearing member with the use of toner, the toners used for the respective developing devices being of different colors from each other:



60. The Lexmark CX725 series imaging kit includes multiple colored toner cartridges (replenishing containers) that are housed on a container holding member in a detachable manner. There is a press button for each cartridge which, when depressed, frees the cartridge:

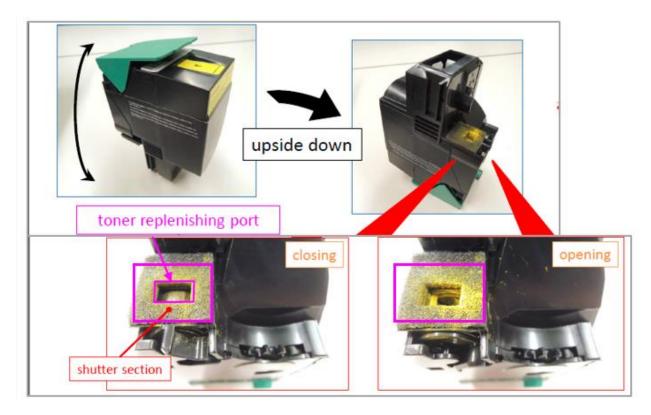




61. The imaging kit also contains multiple shutter sections for opening and closing toner cartridge (replenishing container) ports:



62. Independent third-party testing has confirmed that there are a plurality of shutter sections for opening and closing toner replenishing ports that are formed in the toner replenishing containers. Those ports allow toner to replenish the toner housed in the developing device. The shutter sections also can bring the toner replenishing ports into a closed state in conjunction with the displacement of the toner replenishing containers by the displacement mechanisms, as shown below:



63. Lexmark has been on actual notice of the '165 Patent and its infringement thereof prior to a mediation process that occurred years ago and that is discussed in more detail below. Through the marketing, advertising, sale, and offer for sale of the infringing CX725 series and other MFPs, and by at least teaching installers and users how to replace the imaging units on the CX725 and other MFPs through at least its Lexmark manuals, support webpages, and "Lexmark How-to Videos" on YouTube, Lexmark has actively encouraged others to infringe the '165 Patent. (*See* Exhibit J.)

6. <u>U.S. Patent 7,852,504</u>

64. On December 14, 2010, the USPTO duly and legally issued U.S. Patent No. 7,852,504 ("the '504 Patent") entitled "Image Forming Device, Print Job Transmission Device, Data Management Device, Program, Storage Medium and Method for Supplying Print Sheet" to Sharp. Sharp assigned the '504 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '504 Patent is attached hereto as Exhibit K and incorporated herein, in its entirety, by reference.

65. The '504 Patent falls into technology Category 7 and is directed to printers and copiers with multiple paper sheet options. The '504 Patent discloses paper specification preference conditions and indicators and the selection of a paper tray in accordance with selected print condition priorities. Claim 1 of the '504 Patent is directed to at least some of these concepts and states:

An image forming device, comprising:

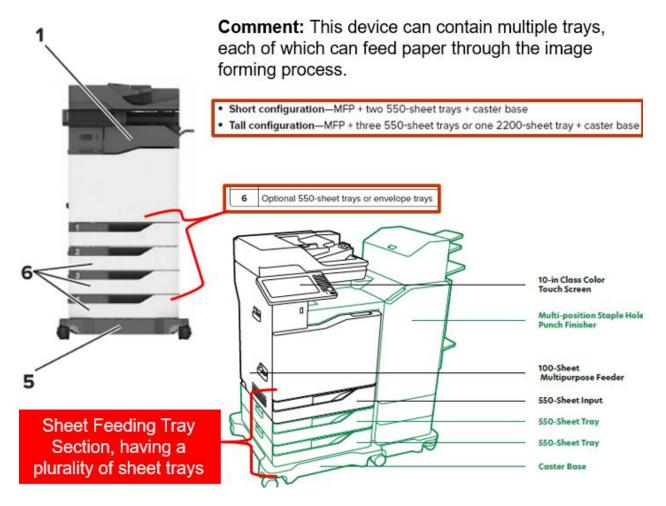
a transmission/reception section which functions as an interface to a network;

a control section for generating a tray selection signal in accordance with a print job inputted to the transmission/ reception section, said print job including a print condition indicative of a condition for printing; and

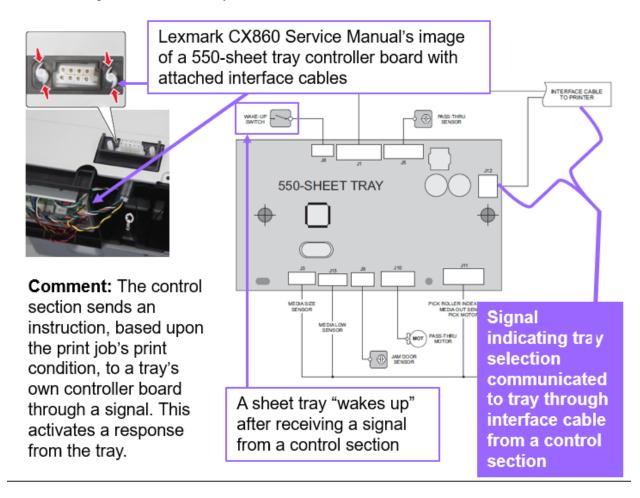
a sheet feeding tray section, having a plurality of sheet trays capable of storing sheets of different types therein, which supplies a sheet from one of the sheet trays that has been selected in accordance with the tray selection signal transmitted from the control section, wherein said control section includes:

an operation control section for extracting the print condition from the print job and for obtaining an order table, indicative of a priority based on the print condition that has been extracted, from setting information, indicative of a sheet type priority indicating a type of paper corresponding to the print condition, wherein the order table specifies one of the sheet trays; and

a tray selection section for generating the tray selection signal for selecting one of the sheet trays, in accordance with the order table transmitted from the operation control section. 66. Multiple Lexmark MFPs meet all limitations of Claim 1 of the '504 Patent. For example, the Lexmark MFP product model CX860de is an image forming device capable of executing print jobs received over a network. The CX860de has a series of internal or attached sheet trays that can feed paper of various sizes and characteristics based on the settings of a print job received over a connected network. By using these trays, Lexmark CX860de supports printing on multiple sheet types and sizes, as the following describes:



67. The specific sheet tray that is triggered to feed a sheet of paper for printing is based on the characteristics of an assigned print job. In general, the printer prioritizes the print settings received from a host device, then relies upon the Print Driver settings to accomplish desired printing functions. The Lexmark CX860de also contains print preferences within its own print settings, which can be configured by the user. These preferences form a hierarchical table of print preferences used to select the appropriate sheet based on the available sheets and the conditions extracted from the received print job. Lexmark CX860de's print table determines the prioritized sheet and sends a signal to the corresponding tray to feed the appropriate sheet paper for printing. Upon receipt of the tray selection signal, the tray responsive to the paper specifications commences a sheet-feeding action. In this way, the CX860de functions as claimed, as shown below:



68. Lexmark has been on actual notice of the '504 Patent, and its infringement thereof, at least as early as the filing and service of K.Mizra's Complaint (DE 1). Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other MFPs, Lexmark has

actively encouraged others to infringe the '504 Patent by at least through the Lexmark manuals and support webpages. (*See* Exhibit L.)

7. <u>U.S. Patent 8,274,711</u>

69. On September 25, 2012, the USPTO duly and legally issued U.S. Patent No. 8,274,711 ("the '711 Patent") entitled "Document Reading Apparatus Capable of Sequentially Reading Documents Stacked on an Automatic Document Feeder and a Document Set on a Platen" to Sharp. Sharp assigned the '711 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '711 Patent is attached hereto as Exhibit M and incorporated herein, in its entirety, by reference.

70. The '711 Patent falls under technology Category 2 and is directed towards a document reading apparatus having an ADF and a flatbed scanner, or platen, on which documents can be loaded for scanning or copying. The '711 Patent discloses improvements over prior art ADF designs by enabling a user to load documents onto both an ADF and a flatbed scanner and then sequentially scan/copy each document without manually loading or unloading documents during the scanning process. In other words, documents can be placed on the ADF and the flatbed scanner can be combined into a single document.

71. Claim 1 of the '711 Patent is directed to at least some of these concepts and states:

A document reading apparatus, comprising:

an automatic document feeder for automatically conveying at least one document;

a first document table for holding the at least one document to be delivered to the automatic document feeder;

a first document detector for detecting the at least one document on the first document table;

a second document table on which another document is set so as to be read;

a second document detector for detecting the another document set on the second document table;

a first image reader for reading the at least one and the another documents; and

a second image reader arranged inside a document feed path of the automatic document feeder for reading an underside of the at least one document being conveyed by the automatic document feeder,

wherein when existence of the at least one and the another documents on the first and second document tables is detected from both the first and second document detectors, the at least one and the another documents set on the first and second document tables are permitted to be read.

72. Lexmark has made, used, sold, offered for sale, and/or imported devices that

infringe at least Claim 1 of the '711 Patent. An exemplary infringing device is the Lexmark

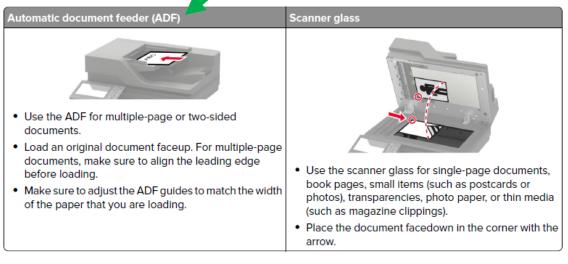
CX860de MFP.

73. Lexmark's CX860de is a document reading apparatus that comprises an ADF for

automatically conveying at least one document:



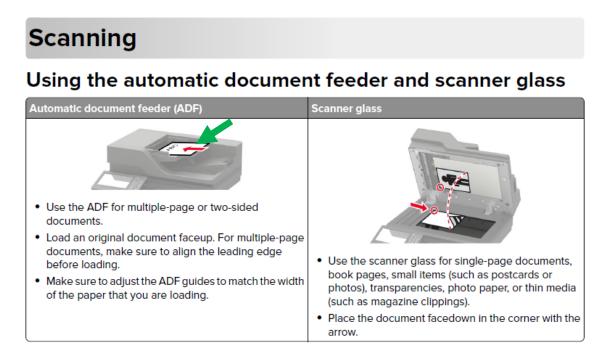
Using the automatic **do**cument feeder and scanner glass



74. Lexmark's CX860de also comprises a first document table for holding the at least

one document to be delivered to the automatic document feeder and the ADF includes a paper tray

for inputting documents to be scanned:



75. The printer also has a first document detector for detecting at least one document

on the first document table and provides a notification when a document is loaded onto the ADF,

indicating a detector:

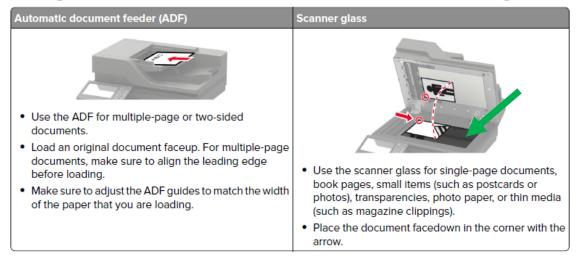
ADF Loaded Beep	Enable a sound when loading paper into the ADF.
Off	
On*	

76. Lexmark's CX860de printer also comprises a second document table on which

another document can be set and read and is the glass on the scanner:

Scanning

Using the automatic document feeder and scanner glass



77. The Lexmark CX860de printer also has a second document detector for detecting another document set on the second document table and can be configured to automatically detect the size of a document on the scanner glass and automatically select the appropriate paper tray for printing of the document on the scanner, as the following confirms:

Tray Configuration	Set the tray to sense automatically the paper size loaded into
Size Sensing	it.
Tray [x] Sensing	
Off	
On*	

If this feature is not selected, the user interface will prompt a user to select the paper size.



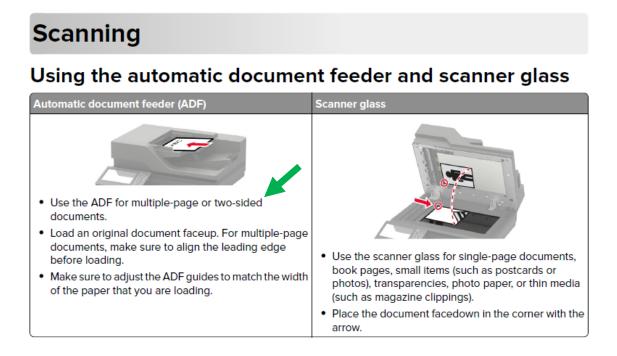
Either way, though, the Lexmark CX860de printer must include a detector for detecting documents on the scanner glass.

78. Lexmark's CX860de printer also comprises a first image reader for reading documents placed on the ADF and on the scanner glass, as the below confirms:

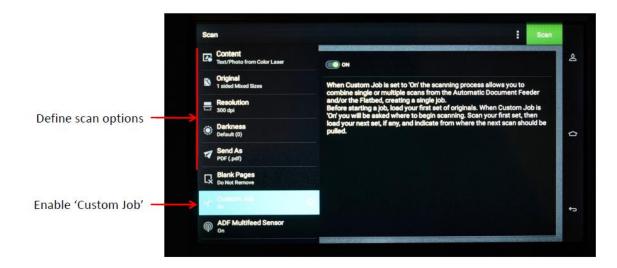
Scanning Using the automatic document feeder and scanner glass Automatic document feeder (ADF) Scanner glass Use the ADF for multiple-page or two-sided documents. · Load an original document faceup. For multiple-page documents, make sure to align the leading edge Use the scanner glass for single-page documents, before loading. book pages, small items (such as postcards or Make sure to adjust the ADF guides to match the width photos), transparencies, photo paper, or thin media of the paper that you are loading. (such as magazine clippings). Place the document facedown in the corner with the arrow

79. The Lexmark CX860de printer further has a second image reader arranged inside a document feed path of the ADF for reading an underside of the at least one document being conveyed by the ADF. The ADF includes a second image reader configured to read the opposite

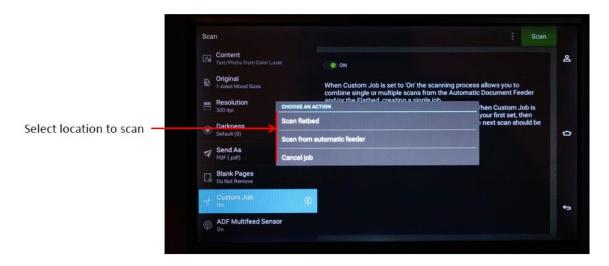
side of the document placed in the ADF as the document passes through the ADF, as the below also confirms:



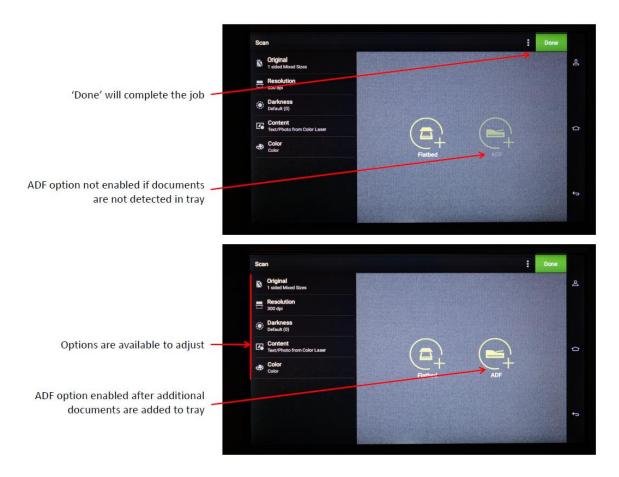
80. When the existence of documents on the first and second document tables is detected by both the first and second document detectors, the at least one and other documents set on the first and second document tables are permitted to be read. The Lexmark CX860de printer can then scan a document from the ADF and the flatbed scanner into a single document, with a sequential reading function being initiated by enabling the "Custom Job" function, as shown below:



81. Scan options such as original document size, color, and quality are then able to be selected. After a job is initiated, a user is prompted to select either the flatbed scanner or ADF tray to begin the scanning process (provided documents are detected in the ADF tray):



82. After the initially specified scan is complete, the user is prompted to produce an additional scan, or finish the job. The user may produce additional scans from either the ADF tray, provided it is refilled with at least one additional document, or the flatbed scanner, as shown below:



83. Finishing the job compiles all sheets that have been scanned sequentially into a single document, and then processes the output (print, email, save to USB, etc.).

84. Lexmark has been on actual notice of the '711 Patent, and its infringement thereof, at least as early as the filing and service of K.Mizra's Complaint (DE 1). Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other MFPs, Lexmark has actively encouraged others to infringe the '711 Patent by at least through the product service manual. (*See* Exhibit N.)

8. <u>U.S. Patent 9,769,342</u>

85. On September 19, 2017, the USPTO duly and legally issued U.S. Patent No. 9,769,342 ("the '342 Patent") entitled "Electric Apparatus" to Sharp. Sharp assigned the '342 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of

the USPTO Assignment database. A copy of the '342 Patent is attached hereto as Exhibit O and incorporated herein, in its entirety, by reference.

86. The '342 Patent falls into technology Category 1 and is directed to an electric apparatus, such as numerous of Lexmark's MFPs, that have a control panel user interface that can exist in both active and power save states. The '342 Patent discloses a device and method that "wakes" the electrical device from a power save state if the device is in hibernation or sleep mode or initiates some user function if the device is already in its operational state. For example, a "go" button is disclosed as being on a printer's user interface and can either initiate a printing job if the printer is in an operational state, or wake up the machine if it is in a power save mode.

87. Claim 1 of the '342 Patent is directed to at least some of these concepts and states:

An electric equipment including a reception unit configured to receive an instruction relating to functions of the electric equipment by an operation of a user and having operation states of a power conserving state in which power required for performing the functions thereof is limited and a normal state in which the power is not limited, the electric equipment comprising:

a signal output unit configured to output signals of different levels depending on the operation state when the reception unit receives the instruction from the user; and

a control signal unit configured to selectively output a return signal relating to a return to the normal state or an execution signal relating to an execution of a function corresponding to the instruction received by the reception unit, based on the signal output from the signal output unit.

88. Multiple Lexmark MFPs meet all limitations of the Claim 1 of the '342 Patent. For

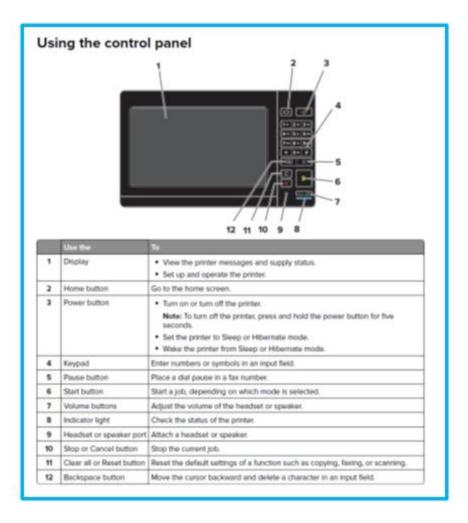
example, the Lexmark MFP model CX860de is an electronic device having a control panel capable

of receiving instructions related to functions of the MFP and has both power conservation and

normal power operating states. The control panel has a plurality of physical buttons through which

it may receive instructions:





89. When the unit is in a low power state – such as sleep or hibernate – depressing any of these buttons returns the unit to the normal operating power state. However, when the unit is in the normal operating state, depressing these buttons has various function execution purposes, such as initiating a print or scanning job, navigating to different screens, changing backlighting, or stopping a function, as explained below:

Sleep Mode

This product is designed with an energy-saving mode called *Sleep Mode*. The Sleep Mode saves energy by lowering power consumption during extended periods of inactivity. The Sleep Mode is automatically engaged after this product is not used for a specified period of time, called the *Sleep Mode Timeout*.

Factory default Sleep Mode Timeout for this product (in minutes):

Hibernate Mode

This product is designed with an ultra-low power operating mode called *Hibernate mode*. When operating in Hibernate Mode, all other systems and devices are powered down safely.

The Hibernate mode can be entered in any of the following methods:

- Using the Hibernate Timeout
- Using the Schedule Power modes

Factory default Hibernate Timeout for this product in all countries or regions

3 days

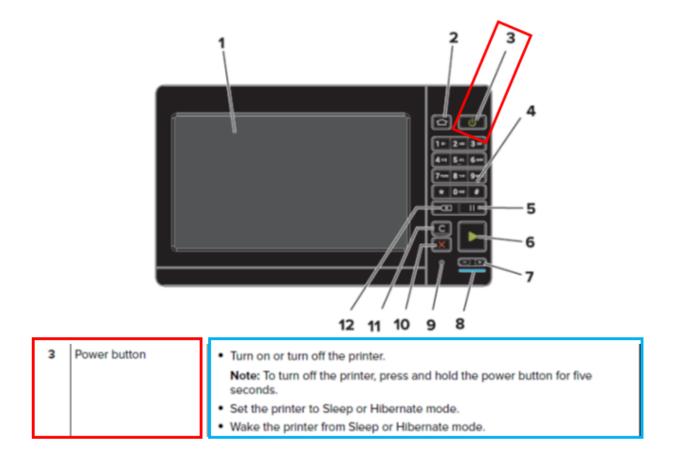
1

The amount of time the printer waits after a job is printed before it enters Hibernate mode can be modified between one hour and one month.

Understanding the status of the power button and indicator light

Indicator light	Printer status
Off	The printer is off or in Hibernate mode.
Blue	The printer is ready or processing data.
Red	The printer requires user intervention.
Power button light	Printer status
Power button light Off	Printer status The printer is off, ready, or processing data.

90. For example, the picture below shows the control panel, with the red box identifying the "Power button," and the blue box showing the function of the button depending on the power state of the unit – if in sleep or hibernate mode, the unit is "woken," but if in operation mode, the unit is powered down.



91. Lexmark has been on actual notice of the '342 Patent, and its infringement thereof, at least as early as the filing and service of K.Mizra's Complaint (DE 1). Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other MFPs, Lexmark has actively encouraged others to infringe the '342 Patent by at least through the Lexmark manuals and support webpages. (*See* Exhibit P.)

9. <u>U.S. Patent 10,018,938</u>

92. On July 10, 2018, the USPTO duly and legally issued U.S. Patent No. 10,018,938 ("the '938 Patent") entitled "Network System Comprising Customer Replaceable Unit" to Sharp. Sharp assigned the '938 Patent to K.Mizra and that Assignment is recorded beginning at Reel/Frame No. 054223/0499 of the USPTO Assignment database. A copy of the '938 Patent is attached hereto as Exhibit Q and incorporated herein, in its entirety, by reference.

93. The '938 Patent falls into technology Category 4 and is directed to a server connected to a networked multifunction printer having a consumable replaceable unit, such as a toner cartridge. When the server obtains operation information from the printer, it can determine the remaining level of toner in the printer, and can send toner reorder information when the remaining toner reaches a set threshold.

94. Claim 1 of the '938 Patent is directed to at least some of these concepts and states:

A server comprising:

an accumulation portion configured to accumulate an operation performance for calculating an amount of remaining toner held in a toner supply container of a developing device attached to an image forming apparatus;

a calculation portion configured to calculate the amount of remaining toner held in the toner supply container based on the operation performance accumulated by the accumulation portion;

a determination portion configured to determine whether the amount of remaining toner reaches a threshold; and

a sending portion configured to send order information when it is determined that the amount of remaining toner reaches the threshold.

95. Lexmark's servers in combination with compatible Lexmark MFPs meet all

limitations of Claim 1 of the '938 Patent. For example, Lexmark's Proactive Consumables

Management ("PCM") service allows Lexmark to monitor its customers' supplies of toner in their

Lexmark MFPs and automatically initiate replenishment orders, as shown below:

Put the Internet of Things to work for you

The Lexmark Global IoT System harnesses the power of the Internet of Things (IoT) for your benefit. Lexmark printers and multifunction products (MFPs) are loaded with sensors that continuously monitor device performance. We analyze the performance data for usage trends, waste, security risks and more to help you eliminate burden on your IT team.



Smart MFP ecosystem

Bridge paper and digital—unstructured and structured—information with devices and connections that drive your business forward.

In an ecosystem, things work in concert to ensure efficient processes. In the business environment, people, technology and information also form an ecosystem, where information exists in both structured and unstructured forms. And the center of this ecosystem is the smart MFP, the connection point between digital and printed information

The Lexmark smart MFP ecosystem brings together the hardware, software, tools and services to help drive your business forward.

Excerpts from a Lexmark Support page:

This article serves as a guide to gathering necessary information before opening an escalation item for Lexmark Printer Management Agent (LPMA) for Managed Print Services (MPS) issues.

Requirement	Relevance	
	To verify missing data in the Lexmark Data Collection Manager (LDCM) when data is not collected	
	ate the function and whethe o LDCM web server. Additio	

Comment: The Lexmark Data Collection Manager is a server that connects to Lexmark devices such as the CX860.

Note: It will indicate the function and whether the data is successfully sent to LDCM web server. Additionally, if **MPS logging** is set to "**ALL**", an **XML** file will appear in the folder and should contain printer information (if printer communication is working).

96. To enable PCM, the Lexmark Data Collection Manager ("LDCM") collects information from Lexmark's MFPs, such as the Lexmark CX860de, about device usage and supplies and exchanges such information over a network with Lexmark's data warehouse:

Replenishment order authorization

Lexmark performs rule-based order authorization prior to routing the order for fulfillment. Successful order fulfillment should meet the following requirements:

- The printer is connected to the network.
- The printer is returning up-to-date meters or page counts to Lexmark.
- 30% of the toner has been consumed since it last placed an order.
- 97. The Lexmark CX860de is an image forming device that, using toner, executes print

jobs through an image forming apparatus and has a controller board that manages internal

operations. Recording toner usage through the device's sensor and control, the CX860de collects

and reports up-to-date metrics and page counts to the LDCM as the information accumulates. The

LDCM receives data about the CX860de's operation and calculates the amount of remaining toner

supply. The LDCM is then able to determine when the amount of remaining toner reaches a

threshold at which resupply will become necessary:

Lexmark Proactive Consumables Management

Lexmark's **Proactive Consumables Management** (PCM) takes care of supplies replenishment for your printers.

PCM, using LDCM, detects printer toner low or empty alerts, returns this information to Lexmark, and a replenishment order is processed.

98. When a device's supply level reaches that threshold, it triggers the LDCM to submit a replenishment order to Lexmark. The technology necessary for Lexmark's PCM service to occur – the accumulation and calculation of usage data, and the server's ability to initiate the proper workflow in response to this data – is disclosed in and claimed by at least Claim 1 of the '938 Patent. 99. Lexmark has been on actual notice of the '938 Patent, and its infringement thereof, at least as early as the filing and service of K.Mizra's Complaint (DE 1). Through the marketing, advertising, sale, and offer for sale of the infringing CX860 series and other MFPs, Lexmark has actively encouraged others to infringe the '938 Patent by at least through the Lexmark service manuals and support webpages. (*See* Exhibit R.)

B. <u>Lexmark's Mediation with Sharp</u>

100. As early as September 2012, Sharp notified Lexmark of its infringement of several of its various patents, including the '874, '274, '400 and '165 Patents. On multiple occasions from 2013 through 2016, representatives of Sharp traveled to the United States to discuss, negotiate, and resolve these infringement issues in-person with Lexmark, including participating in detailed technical discussions of infringement and validity. In 2016, Lexmark agreed to resolve the issues of infringement, validity, and damages through mediation. Upon information and belief, that process proceeded, and a mediation was conducted, but the infringement issues did not resolve. Rather, Lexmark simply continued with the conduct Sharp accused constituted infringement of those Patents. Lexmark's infringement of at least the '874, '274, '400 and '165 Patents is thus knowing, willful, and exceptional under 35 U.S.C. §§ 284-285.

V. <u>FIRST CLAIM FOR RELIEF</u> (Count I – Patent Infringement of U.S. Patent No. 7,064,874)

101. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 24 and 100 as if fully set forth herein.

102. The '874 Patent includes 18 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

103. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 18 of the '874 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '874 Patent Preliminary Claim Chart, attached as Exhibit B and incorporated herein by reference.

104. Lexmark is thus liable for direct infringement of the '874 Patent pursuant to 35 U.S.C. § 271(a).

105. Lexmark has had actual knowledge of the '874 Patent at least as early as the notice provided to it by Sharp in September 2012. Lexmark knew that the Accused Products infringed the '874 Patent. Lexmark's infringement of the '874 Patent was willful and in wanton disregard for K.Mizra's patent rights.

106. Lexmark has since at least then indirectly infringed the '874 Patent within the United States by inducement under 35 U.S.C. § 271(b). By failing to cease making and using the Accused Products at least as of the date of Lexmark's knowledge of the '874 Patent, Lexmark has knowingly and intentionally induced users of the Accused Products to directly infringe one or more claims of the '874 Patent, inter alia, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Products in an infringing manner, including the use of the Accused Products in manners described in Exhibit B, which are expressly incorporated herein; and (2) touting these infringing uses of the Accused Products. Examples are the Lexmark CX860 Service Manual and Lexmark's posted YouTube videos, which details how to use the Accused Products in an infringing manner.

107. Lexmark's acts of infringement have occurred within this District and elsewhere throughout the United States. Based upon the facts and circumstances alleged herein, Lexmark's infringement of the '874 Patent was and is being committed willfully.

108. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

109. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

VI. <u>SECOND CLAIM FOR RELIEF</u> (Count II – Patent Infringement of U.S. Patent No. 7,449,274)

110. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17, 25 - 33, and 100 as if fully set forth herein.

111. The '274 Patent includes 7 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

112. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '274 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the X651A11A Toner Cartridge as shown in the '274 Patent Preliminary Claim Chart, attached as Exhibit D and incorporated herein by reference.

113. Lexmark is thus liable for direct infringement of the '274 Patent pursuant to 35U.S.C. § 271(a).

114. Lexmark has had actual knowledge of the '274 Patent at least as early as the notice provided to it by Sharp in September 2012. Lexmark knew that the Accused Products infringed

the '274 Patent. Lexmark's infringement of the '274 Patent was willful and in wanton disregard for K.Mizra's patent rights.

115. Lexmark has since at least then indirectly infringed the '274 Patent within the United States by inducement under 35 U.S.C. § 271(b). By failing to cease making and using the Accused Products at least as of the date of Lexmark's knowledge of the '274 Patent, Lexmark has knowingly and intentionally induced users of the Accused Products to directly infringe one or more claims of the '274 Patent, inter alia, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Products in an infringing manner, including the use of the Accused Products in manners described in Exhibit D, which are expressly incorporated herein; and (2) touting these infringing uses of the Accused Products.

116. Based upon the facts and circumstances alleged herein, Lexmark's infringement of the '274 Patent was and is being committed willfully.

117. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

118. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

VII. <u>THIRD CLAIM FOR RELIEF</u> (Count III – Patent Infringement of U.S. Patent No. 7,568,170)

119. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17 and 34 - 45 as if fully set forth herein.

120. The '170 Patent includes 14 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

121. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '170 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products that run the Print Driver in the United States, as shown in the '170 Patent Preliminary Claim Chart, attached as Exhibit F and incorporated herein by reference.

122. Lexmark is thus liable for direct infringement of the '170 Patent pursuant to 35 U.S.C. § 271(a).

123. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

124. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

VIII. <u>FOURTH CLAIM FOR RELIEF</u> (Count IV – Patent Infringement of U.S. Patent No. 7,570,400)

125. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17, 46 - 52, and 100 as if fully set forth herein.

126. The '400 Patent includes 4 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

127. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '400 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '400 Patent Preliminary Claim Chart, attached as Exhibit H and incorporated herein by reference.

128. Lexmark is thus liable for direct infringement of the '400 Patent pursuant to 35 U.S.C. § 271(a).

129. Lexmark has had actual knowledge of the '400 Patent at least as early as the notice provided to it by Sharp in September 2012. Lexmark knew that the Accused Products infringed the '400 Patent. Lexmark's infringement of the '400 Patent was willful and in wanton disregard for K.Mizra's patent rights.

130. Lexmark has since at least then indirectly infringed the '400 Patent within the United States by inducement under 35 U.S.C. § 271(b). By failing to cease making and using the Accused Products at least as of the date of Lexmark's knowledge of the '400 Patent, Lexmark has knowingly and intentionally induced users of the Accused Products to directly infringe one or more claims of the '400 Patent, inter alia, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Products in an infringing manner, including the use of the Accused Products in manners described in Exhibit H, which are expressly incorporated herein; and (2) touting these infringing uses of the Accused Products. Examples are the Lexmark CX860 Service Manual and Lexmark's posted YouTube videos, which details how to use the Accused Products in an infringing manner.

131. Based upon the facts and circumstances alleged herein, Lexmark's infringement of the '400 Patent was and is being committed willfully.

132. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

133. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

IX. <u>FIFTH CLAIM FOR RELIEF</u> (Count V – Patent Infringement of U.S. Patent No. 7,840,165)

134. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17, 53 - 63, and 100 as if fully set forth herein.

135. The '165 Patent includes 9 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

136. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 9 of the '165 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX725 series and replacement toner cartridges as shown in the '165 Patent Preliminary Claim Chart, attached as Exhibit J and incorporated herein by reference.

137. Lexmark is thus liable for direct infringement of the '165 Patent pursuant to 35U.S.C. § 271(a).

138. Lexmark has had actual knowledge of the '165 Patent at least as early as the notice provided to it by Sharp in September 2012. Lexmark knew that the Accused Products infringed the '165 Patent. Lexmark's infringement of the '165 Patent was willful and in wanton disregard for K.Mizra's patent rights.

139. Lexmark has since at least then indirectly infringed the '165 Patent within the United States by inducement under 35 U.S.C. § 271(b). By failing to cease making and using the Accused Products at least as of the date of Lexmark's knowledge of the '165 Patent, Lexmark has knowingly and intentionally induced users of the Accused Products to directly infringe one or more claims of the '165 Patent, inter alia, by: (1) providing instructions or information, for example on its publicly available website, to explain how to use the Accused Products in an infringing

manner, including the use of the Accused Products in manners described in Exhibit J, which are expressly incorporated herein; and (2) touting these infringing uses of the Accused Products. Examples are the Lexmark CX725 Service Manual and Lexmark's posted YouTube videos, which details how to use the Accused Products in an infringing manner.

140. Based upon the facts and circumstances alleged herein, Lexmark's infringement of the '165 Patent was and is being committed willfully.

141. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

142. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

X. <u>SIXTH CLAIM FOR RELIEF</u> (Count VI – Patent Infringement of U.S. Patent No. 7,852,504)

143. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17 and 64 - 68 as if fully set forth herein.

144. The '504 Patent includes 21 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

145. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '504 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '504 Patent Preliminary Claim Chart, attached as Exhibit L and incorporated herein by reference.

146. Lexmark is thus liable for direct infringement of the '504 Patent pursuant to 35 U.S.C. § 271(a).

147. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

148. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

XI. <u>SEVENTH CLAIM FOR RELIEF</u> (Count VII – Patent Infringement of U.S. Patent No. 8,274,711)

149. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17 and 69 - 84 as if fully set forth herein.

150. The '711 Patent includes 12 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

151. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '711 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '711 Patent Preliminary Claim Chart, attached as Exhibit N and incorporated herein by reference.

152. Lexmark is thus liable for direct infringement of the '711 Patent pursuant to 35 U.S.C. § 271(a).

153. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

154. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

XII. <u>EIGHTH CLAIM FOR RELIEF</u> (Count VIII – Patent Infringement of U.S. Patent No. 9,769,342)

155. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17 and 85 - 91 as if fully set forth herein.

156. The '342 Patent includes 3 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

157. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '342 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '342 Patent Preliminary Claim Chart, attached as Exhibit P and incorporated herein by reference.

158. Lexmark is thus liable for direct infringement of the '342 Patent pursuant to 35 U.S.C. § 271(a).

159. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

160. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. § 283.

XIII. <u>NINTH CLAIM FOR RELIEF</u> (Count IX – Patent Infringement of U.S. Patent No. 10,018,938)

161. Plaintiff repeats and re-alleges the allegations above in Paragraphs 1 - 17 and 92 - 99 as if fully set forth herein.

162. The '938 Patent includes 4 claims. Lexmark directly infringes one or more of these claims without authority of Plaintiff by importing, manufacturing, using, offering for sale, and selling products and systems, including without limitation, the Accused Products.

163. More specifically and without limitation, Lexmark has been and is directly infringing, either literally or under the doctrine of equivalents, at least Claim 1 of the '938 Patent by importing, manufacturing, using, offering for sale, and selling the Accused Products, including but not limited to the CX860 series as shown in the '938 Patent Preliminary Claim Chart, attached as Exhibit R and incorporated herein by reference.

164. Lexmark is thus liable for direct infringement of the '938 Patent pursuant to 35 U.S.C. § 271(a).

165. Lexmark is liable to Plaintiff in an amount that adequately compensates it for Lexmark's infringement in an amount that is not less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

166. Plaintiff has been damaged and will suffer additional damages and irreparable harm unless Lexmark is enjoined from further infringement under 35 U.S.C. §283.

XIV. PRAYER FOR RELIEF

K.Mizra requests that the Court find in its favor and against Lexmark, and that the Court grant K.Mizra the following relief:

A. Judgment that one or more claims of the Asserted Patents have been infringed, either literally and/or under the doctrine of equivalents, by Lexmark;

B. Declaring that the Asserted Patents are valid and enforceable;

C. Ordering that Lexmark, its officers, directors, agents, servants, employees, privies, representatives, attorneys, parent and subsidiary corporations or other related entities, successors, assigns, licensees, retail distributors, and all persons in active concert or participation with any of them, be preliminary and permanently enjoined from further acts of infringement of the Asserted Patents;

D. Awarding damages in an amount to be proven at trial, but in no event less than a reasonable royalty, for Lexmark's infringement;

E. Judgment that Lexmark account for and pay to K.Mizra all damages to, including a reasonable royalty, and costs incurred by K.Mizra because of Lexmark's infringing activities and other conduct complained of herein, including an award of all increased damages to which K.Mizra is entitled under 35 U.S.C. § 284;

F. Declaring this an exceptional case and awarding K.Mizra its attorneys' fees and costs in accordance with 35 U.S.C. § 285;

G. Pre-judgment and post-judgment interest on the damages caused to K.Mizra by reason of Lexmark's infringing activities and other conduct complained of herein; and

H. Such other and further relief as the Court may deem just and proper under the circumstances.

XV. <u>DEMAND FOR JURY TRIAL</u>

K.Mizra requests a trial by jury pursuant to Fed. R. Civ. P. 38. Dated: March 2, 2021.

Respectfully submitted,

/s/ Robert R. Brunelli

Robert R. Brunelli (Admitted pro hac vice) Patricia Y. Ho (Admitted pro hac vice) Matthew C. Holohan (Admitted pro hac vice) Matthew C. Miller (Admitted pro hac vice) Paul Sung Cha (Admitted pro hac vice) SHERIDAN ROSS P.C. 1560 Broadway, Suite 1200 Denver, CO 80202 Telephone: (303) 863-9700 Facsimile: (303) 863-0223 rbrunelli@sheridanross.com pho@sheridanross.com mholohan@sheridanross.com mmiller@sheridanross.com pscha@sheridanross.com litigation@sheridanross.com Taylor F. Ford Florida Bar No.: 0041008 Robyn M. Kramer Florida Bar No.: 0118300 Dustin Mauser-Claassen Florida Bar No.: 0119289 KING, BLACKWELL, ZEHNDER & WERMUTH, P.A. 25 E. Pine St. P.O. Box 1631 Orlando, FL 32802-1631 Telephone: (407) 422-2472 Facsimile: (407) 648-0161 tford@kbzwlaw.com rkramer@kbzwlaw.com dmauser@kbzwlaw.com

Counsel for Plaintiff K.Mizra LLC

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that, on March 2, 2021, I electronically filed the foregoing with the Clerk of the Court by using the CM/ECF system, which will send a notice of electronic filing to all counsel of record who are deemed to have consented to electronic service.

<u>/s/ Taylor F. Ford</u> Taylor F. Ford Florida Bar No. 0041008

Counsel for Plaintiff K.Mizra LLC