

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

MAXELL, LTD.,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. _____
)	
BLACKBERRY CORPORATION and)	JURY TRIAL DEMANDED
BLACKBERRY LTD.,)	
)	
Defendants.)	
)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Maxell, Ltd. (“Maxell”), by and through its undersigned counsel, files this complaint under 35 U.S.C. § 271 for Patent Infringement against Defendants BlackBerry Corporation and BlackBerry Ltd. (collectively, “Defendants”) and further alleges as follows, upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters.

OVERVIEW

1. This is an action for patent infringement brought by Maxell. Founded in 1961 as Maxell Electric Industrial Co., Ltd., Maxell is a leading global manufacturer of information storage media products, including magnetic tapes, optical discs, and battery products such as lithium ion rechargeable micro batteries and alkaline dry batteries, and the company has over 50 years of experience producing industry-leading recordable media and energy products for both the consumer and the professional markets.

2. Maxell has built an international reputation for excellence and reliability, for pioneering the power supplies and digital recording for today's mobile and multi-media devices, and leading the electronics industry in the fields of storage media and batteries.

3. Since being one of the first companies to develop alkaline batteries and Blu Ray camcorder discs, Maxell has always assured its customers of industry leading product innovation and is one of the world's foremost suppliers of memory, power, audio, and visual goods.

4. As set forth below, in 2009 Hitachi, Ltd. assigned intellectual property, including the patents in this case, to Hitachi Consumer Electronics Co., Ltd. Then, in 2013, Hitachi Consumer Electronics Co., Ltd. assigned the intellectual property, including the patents in this case, to Hitachi Maxell, Ltd., which later assigned the patents to Maxell as a result of a reorganization and name change. This was an effort to align its intellectual property with the licensing, business development, and research and development efforts of Maxell, including in the mobile and mobile-media device market (Hitachi, Ltd., Hitachi Consumer Electronics Co., Ltd., and Hitachi Maxell, Ltd. are referred to herein collectively as "Hitachi"). Maxell continues to sell products in the mobile device market including wireless charging solutions, wireless flash drives, multimedia players, storage devices, and headphones. Maxell also maintains intellectual property related to televisions, tablets, digital cameras, and mobile phones. As a mobile technology developer and industry leader, and due to its historical and continuous investment in research and development, Maxell owns a portfolio of patents related to such technologies and actively enforces its patents through licensing and/or litigation. Maxell is forced to bring this action against Defendants as a result of Defendants' knowing and ongoing infringement of Maxell's patents.

PARTIES

5. Plaintiff Maxell, Ltd. is a Japanese corporation with a registered place of business at 1 Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun, Kyoto, Japan.

6. On information and belief, Defendant BlackBerry Ltd. is a Canadian company with a principal place of business at 2200 University Ave. E Waterloo, ON, Canada N2K 0A7.

7. On information and belief, Defendant BlackBerry Corporation is a Delaware corporation with a principal place of business located at 6700 Koll Center Parkway, #200, Pleasanton, California 94566.

8. On information and belief, Defendant BlackBerry Corporation is in the business of providing information and communications technology solutions. Specifically, BlackBerry Corporation provides wireless telecommunications equipment, including smart phones, tablets, and mobile phones.

NATURE OF THE ACTION, JURISDICTION, AND VENUE

9. Maxell brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271 et seq.

10. This Court has subject matter jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States.

11. The Court has personal jurisdiction over the Defendants because (1) Maxell's claims arise in whole or in part from Defendants' conduct in Delaware; (2) BlackBerry Corporation is organized under the laws of Delaware, maintains continuous and systematic

contacts within the state of Delaware, and has filed suits against other parties in this jurisdiction; (3) Defendants have committed a tortuous act causing injury within the state of Delaware, namely, one or more acts of patent infringement as alleged herein; and (4) Defendants are subject to personal jurisdiction under the provisions of the Delaware Long Arm Statute, Del. Code. Ann. Tit. 3 § 3104, by virtue of the fact that, upon information and belief, Defendants have availed themselves of the privilege of conducting and soliciting business within this State, including engaging in at least some of the infringing acts alleged herein through the sales and marketing of infringing products in this State. The allegations and claims set forth in this action arise out of Defendants' infringing activities in this State, as well as by others acting as Defendants' agents and/or representatives, such that it would be reasonable for this Court to exercise jurisdiction consistent with the principles underlying the U.S. Constitution, and would not offend traditional notions of fair play and substantial justice.

12. Upon further information and belief, Defendants have also established minimum contacts with this District and regularly transact and do business within this District, including advertising, promoting and selling products over the internet, through intermediaries, representatives and/or agents located within this District, that infringe Maxell's patents, which products are then sold, packaged, and shipped directly to citizens residing within this State and this District. Upon further information and belief, Defendants have purposefully directed activities at citizens of this State and located within this District.

13. On information and belief, Defendants have purposefully and voluntarily placed their products into the stream of commerce with the expectation that they will be purchased and used by customers located in the State of Delaware and the District of Delaware. On information

and belief, Defendants' customers in the District of Delaware have purchased and used and continue to purchase and use Defendants' products.

14. Venue in the District of Delaware is proper pursuant to 28 U.S.C. §§ 1391 and 1400 because BlackBerry Corporation and/or its agent resides or may be found in this District, and BlackBerry Ltd. is not a resident of the United States and may, therefore, be sued in any judicial district.

COUNT 1- INFRINGEMENT OF U.S. PATENT NO. 6,580,999

15. Maxell incorporates paragraphs 1-14 above by reference.

16. U.S. Patent No. 6,580,999 (the "999 Patent," attached hereto as Exhibit A) duly issued on June 17, 2003, and is entitled *Portable Terminal With the Function of Walking Navigation*.

17. Maxell is the owner by assignment of the '999 Patent and possesses all rights of recovery under the '999 Patent, including the exclusive right to recover for past and future infringement.

18. On May 4, 2017, Hitachi contacted Mr. Mark Kokes, the Senior Vice President of Blackberry, to engage in discussions regarding the potential licensing of Hitachi's patents, including the '999 Patent.

19. Defendants have directly infringed one or more claims of the '999 Patent in this judicial district and elsewhere in the United States, including at least claims 1-6 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale

and/or selling their telecommunications technology, including by way of example a product known as the Bold.

20. The Bold is a portable terminal that has GPS functionality and the function of walking navigation through one or more GPS mapping applications such as the AT&T Navigator, the VZ Navigator App, and the Sprint Scout App. The mapping app on the Bold shows the present place of the Bold by denoting a dot or arrow on a map and includes direction information denoting an orientation of the Bold including, for example, a compass and/or gyroscope. For example, an arrow is used to indicate the direction of travel. The Bold also includes one or more components for obtaining the location of another portable terminal over a network, *e.g.*, WiFi or cellular. For example, through one of the mapping applications, the user can share his/her destination address or current location to a second user. The mapping applications also provide route guidance information as walking navigation from the present place to the location of another portable terminal with distance information between the locations.

21. The foregoing features and capabilities of the Bold, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claims 1-6 of the '999 Patent, under 35 U.S.C. § 271(a).

22. On information and belief, Defendants further infringe the '999 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Bold (collectively, "the '999 Accused Products"). The '999 Accused Products include, by way of examples, BlackBerry Z10, KeyOne, Bold 9930, Classic, Q10, Bold 9650,

Z30, Curve 8330, Tour 9630, PRIV, Curve 9630, Torch 9860, Bold 9900, Bold 9810, Pearl 9100, Curve 3G 9300, Bold 9800, Bold 9700, Curve, Curve 8320, Bold, 8820, 8800, Curve 8310, Passport, Leap, Classic Blackberry, Pearl, Torch 9810, Style 9670. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Bold. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '999 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

23. Defendants have indirectly infringed at least claims 1-6 of the '999 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '999 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '999 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides, such as those for the Bold located at the following website: http://help.blackberry.com/en/blackberry-bold-9650/6.0/user-guide-pdf/userguide_series_13.pdf. Defendants are thereby liable for infringement of the '999 Patent pursuant to 35 U.S.C. § 271(b).

24. Defendants have indirectly infringed at least claims 1-6 of the '999 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '999 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to

be especially made or especially adapted for use in infringement of the '999 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

25. For example, the '999 Accused Products include GPS mapping applications. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such applications are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '999 Patent pursuant to 35 U.S.C. § 271(c).

26. Defendants have been on notice of the '999 Patent since at least the invitation for negotiations sent by Hitachi on May 4, 2017, and at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claims 1-6 of the '999 Patent.

27. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '999 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least May 4, 2017, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '999 Patent, and that the '999 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '999 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that

their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '999 Patent.

28. Maxell has been damaged by Defendants' infringement of the '999 Patent.

COUNT 2- INFRINGEMENT OF U.S. PATENT NO. 8,170,394

29. Maxell incorporates paragraphs 1-28 above by reference.

30. U.S. Patent No. 8,170,394 (the "394 Patent," attached hereto as Exhibit B) duly issued on May 1, 2012, and is entitled *Multimedia Player Displaying Operation Panel Depending on Contents*.

31. Maxell is the owner by assignment of the '394 Patent and possesses all rights of recovery under the '394 Patent, including the exclusive right to recover for past and future infringement.

32. Defendants have directly infringed one or more claims of the '394 Patent in this judicial district and elsewhere in the United States, including at least claims 2, 4, 5, and 7 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling their telecommunications technology, including by way of example a product known as the DTEK60.

33. The DTEK60 is an apparatus that reproduces video and music. The DTEK60 incorporates electronic components and/or a processor programmed to receive 4G LTE and/or WiFi signals inputted at an antenna and extracting digital content, programmed to receive content stored in the memory, and record video inputted via a camera. The DTEK60 includes electronic components and/or a processor programmed to reproduce digital content received in

one or more multimedia messaging protocols and programmed to reproduce video content received by network communication components or retrieved from the memory. The DTEK60 includes electronic components and/or processor programmed to output a reproduced MMS, audio file, and/or video to a display or to speakers.

34. The DTEK60 displays digital content being outputted together with a display of a linear content operation panel allowing user-instruction regarding linear reproduction functions of the reproduced digital content. The DTEK60 also displays the outputted digital content together with a display of an interactive content operation panel allowing user-instruction of interactive functions outside of the digital content reproducing apparatus. The linear content operation panel and the interactive content operation panel for the DTEK60 are distinct panels from each other and no disabling of buttons is required to generate them. Only one of the linear content operation panel or the interactive content operation panel is displayed at a time with the outputted digital content together in one screen. The DTEK60 includes a processor programmed to control the display of the graphical user interface, for example by providing GU Interfaces corresponding to linear content and interactive content.

35. The foregoing features and capabilities of the DTEK60, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claims 2, 4, 5, and 7 of the '394 Patent, under 35 U.S.C. § 271(a).

36. On information and belief, Defendants further infringe the '394 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the DTEK60 (collectively, "the '394 Accused Products"). The '394 Accused

Products include, by way of examples, DTEK50, KeyOne, PRIV, Q10, Q20, Classic SQC100-4, Bold Touch 9930, Q5, Torch 9810, Z30, Z10, Curve 3G 9300, Curve 9360, Leap, Passport, and Classic. These additional products each include all necessary hardware and operating systems and work as described above with respect to the DTEK60. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '394 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

37. Defendants have indirectly infringed at least claims 2, 4, 5, and 7 of the '394 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '394 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '394 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides, such as those for the DTEK60 located at the following website: <http://help.blackberry.com/en/dtek60/current/user-guide-pdf/DTEK60-6.0-User-Guide-en.pdf>. Defendants are thereby liable for infringement of the '394 Patent pursuant to 35 U.S.C. § 271(b).

38. Defendants have indirectly infringed at least claims 2, 4, 5, and 7 of the '394 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '394 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '394

Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

39. For example, the '394 Accused Products include linear and interactive content operation control panels. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not staple articles or commodities of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '394 Patent pursuant to 35 U.S.C. § 271(c).

40. Defendants have been on notice of the '394 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claims 2, 4, 5, and 7 of the '394 Patent.

41. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '394 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '394 Patent, and that the '394 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '394 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '394 Patent.

42. Maxell has been damaged by Defendants' infringement of the '394 Patent.

COUNT 3- INFRINGEMENT OF U.S. PATENT NO. 6,973,334

43. Maxell incorporates paragraphs 1-42 above by reference.

44. U.S. Patent No. 6,973,334 (the "334 Patent," attached hereto as Exhibit C) duly issued on December 6, 2005, and is entitled *Cellular Telephone*.

45. Maxell is the owner by assignment of the '334 Patent and possesses all rights of recovery under the '334 Patent, including the exclusive right to recover for past and future infringement.

46. Defendants have directly infringed one or more claims of the '334 Patent in this judicial district and elsewhere in the United States, including at least claims 1 and 4 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling their telecommunications technology, including by way of example a product known as the PRIV.

47. The PRIV is a cellular telephone used in a CDMA system, such as WCDMA, TD-SCDMA, and CDMA 1x.

48. The PRIV has at least one antenna for receiving signals from and transmitting signals to cell-site stations, such as a base station. The PRIV supports and implements at least the UMTS (universal mobile telecommunications service) standards and relevant technical specifications promulgated by the 3GPP. For example, the PRIV's antenna receives a first communication signal (such as data signals transmitted on a downlink channel) and a transmitting power control signal (such as a TPC transmitted on a downlink channel) from a cell-

site station (such as a base station), as evidenced by the 3GPP Standards. The PRIV also has an antenna that transmits a second communication signal (such as data on an uplink channel) to the cell-site station (base station), as demonstrated by the 3GPP Specifications.

49. According to the 3GPP standards, the PRIV has a duplexer and an encoder/decoder connected to the antenna. The PRIV has a receiver connected to the antenna through the duplexer in accordance with 3GPP technical specifications. The receiver is configured to derive and output a power control signal from the transmitting power control signal (TPC) sent from the cell-site station, as required by the 3GPP standards.

50. The PRIV has an acoustic transducer in accordance with the 3GPP standards. The PRIV also has a transmitter connected to the encoder/decoder and to the antenna through the duplexer, a controller connected to the receiver and the transmitter, and a power amplifier. The controller includes a central processing unit and a memory and controls the transmitter.

51. The foregoing features and capabilities of the PRIV, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claims 1 and 4 of the '334 Patent, under 35 U.S.C. § 271(a).

52. On information and belief, Defendants further infringe the '334 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the PRIV (collectively, "the '334 Accused Products"). The '334 Accused Products include, by way of examples, Z10 Bold 9930, Classic, Q10, Bold 9650, Bold 9700, Z30 Curve 8330, Curve 9320, Tour 9630, KeyOne, Curve 3G, Z30, 8530, Q5, Z30, Torch 9800, Torch 9850, Torch 9860, Bold 9000, Torch 2 9810, Porsche Design P'9981, and Torch 9850.

These additional products each include all necessary hardware and operating systems and work as described above with respect to the PRIV. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '334 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

53. Defendants have indirectly infringed at least claims 1 and 4 of the '334 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '334 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '334 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides, such as those for the PRIV located at the following website: <https://help.blackberry.com/en/priv/current/user-guide-pdf/PRIV-6.0-User-Guide-en.pdf>.

Defendants are thereby liable for infringement of the '334 Patent pursuant to 35 U.S.C. § 271(b).

54. Defendants have indirectly infringed at least claims 1 and 4 of the '334 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '334 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '334 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

55. For example, the '334 Accused Products include a component to effectuate power control functionality. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '334 Patent pursuant to 35 U.S.C. § 271(c).

56. Defendants have been on notice of the '334 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claims 1 and 4 of the '334 Patent.

57. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '334 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '334 Patent, and that the '334 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '334 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '334 Patent.

58. Maxell has been damaged by Defendants' infringement of the '334 Patent.

COUNT 4- INFRINGEMENT OF U.S. PATENT NO. 7,199,821

59. Maxell incorporates paragraphs 1-58 above by reference.

60. U.S. Patent No. 7,199,821 (the “’821 Patent,” attached hereto as Exhibit D) duly issued on April 3, 2007, and is entitled *Imaging Apparatus and Method for Controlling White Balance*.

61. Maxell is the owner by assignment of the ’821 Patent and possesses all rights of recovery under the ’821 Patent, including the exclusive right to recover for past and future infringement.

62. Defendants have directly infringed one or more claims of the ’821 Patent in this judicial district and elsewhere in the United States, including at least claim 7, literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling their telecommunications technology, including by way of example a product known as the DTEK60.

63. The DTEK60 is an image processing apparatus with a display that displays images that are picked up by an image pick up device and processed by an image processor. The image pickup device is a 21 megapixel auto-focus camera sensor. The 21 megapixel auto-focus camera sensor is an optical system used to pick up an image of an object. The DTEK60 has a white balance circuit that ensures that white objects in images picked up by the image sensor appear white. The DTEK60 also includes a circuit and/or processor for detecting object distance, detecting a zoom value, and detecting object brightness. For example, the DTEK60 has autofocus functions, brightness measurement functions, zooming functions, and white balance functionalities. The DTEK60 controls white balance in an image based on these distance, zoom,

and brightness values. The DTEK60 also has a circuit for setting a threshold on the basis of object brightness and distance and comparing the distance outputted from the object distance detecting circuit with the threshold value. The DTEK60 also includes a circuit for obtaining control information for the white balance, including, for example, the white balance mode or amount.

64. The foregoing features and capabilities of the DTEK60, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 7 of the '821 Patent, under 35 U.S.C. § 271(a).

65. On information and belief, Defendants further infringe the '821 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the DTEK60 (collectively, "the '821 Accused Products"). The '821 Accused Products include, by way of examples, the DTEK50, KeyOne, PRIV, Q10, Q20, Classic SQC100-4, Bold Touch 9930, Q5, Torch 9810, Z30, Z10, Curve 3G 9300, Curve 9360, Leap, Passport, and Classic. These additional products each include all necessary hardware and operating systems and work as described above with respect to the DTEK60. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '821 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

66. Defendants have indirectly infringed at least claim 7 of the '821 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '821 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '821 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through instructions available on their website, such as those for the DTEK60 located at the following website: <http://help.blackberry.com/en/camera/latest/help/vwg1458142660019.html>. Defendants are thereby liable for infringement of the '821 Patent pursuant to 35 U.S.C. § 271(b).

67. Defendants have indirectly infringed at least claim 7 of the '821 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '821 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '821 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

68. For example, the '821 Accused Products include a white balance control component. This is a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such component is a material part of the invention and upon information and belief is not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '821 Patent pursuant to 35 U.S.C. § 271(c).

69. Defendants have been on notice of the '821 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 7 of the '821 Patent.

70. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '821 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '821 Patent, and that the '821 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '821 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '821 Patent.

71. Maxell has been damaged by Defendants' infringement of the '821 Patent.

COUNT 5- INFRINGEMENT OF U.S. PATENT NO. 6,765,616

72. Maxell incorporates paragraphs 1-71 above by reference.

73. U.S. Patent No. 6,765,616 (the "'616 Patent," attached hereto as Exhibit E) duly issued on July 20, 2004, and is entitled *Electric Camera*.

74. Maxell is the owner by assignment of the '616 Patent and possesses all rights of recovery under the '616 Patent, including the exclusive right to recover for past and future infringement.

75. Defendants have directly infringed one or more claims of the '616 Patent in this judicial district and elsewhere in the United States, including at least claim 13 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling their telecommunications technology, including by way of example a product known as the DTEK60.

76. The DTEK60 includes an electric camera. The DTEK60 includes an image sensing device with an array of pixels arranged vertically and horizontally in a grid pattern. The DTEK60 includes a 21MP camera as well as an 8MP front camera. On information and belief, image sensors such as the 21 megapixel camera have a light receiving surface having an array of pixels arranged vertically and horizontally in a grid pattern with an arbitrary number of vertically arranged pixels N , where N is equal to or more than three times the number of effective scanning lines M of each field of a display screen at least in order to display the image in horizontal and vertical planes on the DTEK60.

77. The DTEK60 includes color filters. On information and belief, the DTEK60 includes color filters arranged on grid-arrayed pixels of the image sensing device, to pass designated colors respectively arranged to cyclically appear horizontally at a designated interval and to pass the same colors arranged vertically.

78. The DTEK60 includes a driver to drive the image sensing device. On information and belief, the DTEK60 includes a driver arranged to drive the image sensing device, to

vertically mix or cull signal charges accumulated in individual pixels of every K pixels to produce a number of lines of output signals which corresponds to the number of effective scanning lines M, K being at least one of integers equal to or less than an integral part of a quotient of N divided by M.

79. The DTEK60 includes a processor programmed to perform various signal processing functions including video recording, digital zoom, face detection, and video image stabilization. In addition, the DTEK60 includes a processor programmed to perform signal processing to generate video in various formats by using the pixel data received from the image sensing device.

80. The DTEK60 includes a display for displaying an image corresponding to the image signals. On information and belief, the DTEK60 includes a driver that vertically mixes or culls signal charges accumulated in individual pixels of every K1 pixels, when first images are displayed on the display unit. On information and belief, the DTEK60 includes a driver that vertically mixes or culls signal charges accumulated in individual pixels of every K2 pixels, when second images are displayed on the display unit. On information and belief, the DTEK60 uses different values K1 and K2 for default zoom and an increased zoom level, respectively.

81. The foregoing features and capabilities of the DTEK60, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 13 of the '616 Patent, under 35 U.S.C. § 271(a).

82. On information and belief, Defendants further infringe the '616 Patent through additional products utilizing the same or reasonably similar functionalities as described above

with respect to the DTEK60 (collectively, “the ’616 Accused Products”). The ’616 Accused Products include, by way of examples, the DTEK50, KeyOne, PRIV, Q20, Classic SQC100-4, Bold Touch 9930, Torch 9810, Z30, Z10, Curve 9360, Leap, Passport, and Classic. These additional products each include all necessary hardware and operating systems and work as described above with respect to the DTEK60. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the ’616 Accused Products are identified to describe the Defendants’ infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

83. Defendants have indirectly infringed at least claim 13 of the ’616 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the ’616 Accused Products. Defendants’ customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants’ instructions directly infringe one or more claims of the ’616 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides or additional instructions, such as those for the DTEK60 located at the following websites: <http://help.blackberry.com/en/dtek60/current/user-guide-pdf/DTEK60-6.0-User-Guide-en.pdf> & <http://help.blackberry.com/en/camera/latest/help/tom1441045908145.html>. Defendants are thereby liable for infringement of the ’616 Patent pursuant to 35 U.S.C. § 271(b).

84. Defendants have indirectly infringed at least claim 13 of the ’616 Patent, by, among other things, contributing to the direct infringement of others, including customers of the ’616 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in

practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '616 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

85. For example, the '616 Accused Products include components for processing image signals and displaying images. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '616 Patent pursuant to 35 U.S.C. § 271(c).

86. Defendants have been on notice of the '616 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 13 of the '616 Patent.

87. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '616 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '616 Patent, and that the '616 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '616 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high

likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '616 Patent.

88. Maxell has been damaged by Defendants' infringement of the '616 Patent.

COUNT 6- INFRINGEMENT OF U.S. PATENT NO. 7,995,897

89. Maxell incorporates paragraphs 1-88 above by reference.

90. U.S. Patent No. 7,995,897 (the "897 Patent," attached hereto as Exhibit F) duly issued on August 9, 2011, and is entitled *Video Recording and Reproducing Method, and Video Reproducing Apparatus and Method*.

91. Maxell is the owner by assignment of the '897 Patent and possesses all rights of recovery under the '897 Patent, including the exclusive right to recover for past and future infringement.

92. Defendants have directly infringed one or more claims of the '897 Patent in this judicial district and elsewhere in the United States, including at least claims 4-6 and 10-12 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including by way of example a product known as the Leap.

93. The Leap is a mobile communications terminal that is capable of reproducing video by one encoding method, such as MPEG-4 and pictures by a second encoding method, such as JPEG. The Leap also produces thumbnails having a smaller number of pixels than the pictures as evidenced by, for example, the file size. The Leap has a recording medium for storing the videos, pictures, and thumbnails and a display for reproducing the same.

94. The foregoing features and capabilities of the Leap, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claims 4-6 and 10-12 of the '897 Patent, under 35 U.S.C. § 271(a).

95. On information and belief, Defendants further infringe the '897 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the Leap (collectively, "the '897 Accused Products"). The '897 Accused Products include, by way of examples, KeyOne, PRIV, Q20, Classic SQC100-4, Bold Touch 9930, Torch 9810, Z30, Z10, Curve 9360, Passport, and Classic. These additional products each include all necessary hardware and operating systems and work as described above with respect to the Leap. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '897 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

96. Defendants have indirectly infringed at least claims 4-6 and 10-12 of the '897 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '897 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of the '897 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides, such as those for the Leap located at the following website: <https://help.blackberry.com/en/blackberry-leap/10.3.1/user-guide->

pdf/BlackBerry_Leap_Smartphone-User_Guide-1425654822887-10.3.1-en.pdf. Defendants are thereby liable for infringement of the '897 Patent pursuant to 35 U.S.C. § 271(b).

97. Defendants have indirectly infringed at least claims 4-6 and 10-12 of the '897 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '897 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '897 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

98. For example, the '897 Accused Products include components for moving and still picture encoding and reproducing. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not staple articles or commodities of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '897 Patent pursuant to 35 U.S.C. § 271(c).

99. Defendants have been on notice of the '897 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that its continued actions would actively induce and contribute to actual infringement of at least claims 4-6 and 10-12 of the '897 Patent.

100. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '897 Patent, which has been duly issued by the

USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '897 Patent, and that the '897 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '897 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '897 Patent

101. Maxell has been damaged by Defendant's infringement of the '897 Patent

COUNT 7- INFRINGEMENT OF U.S. PATENT NO. 9,100,604

102. Maxell incorporates paragraphs 1-101 above by reference.

103. U.S. Patent No. 9,100,604 (the "'604 Patent," attached hereto as Exhibit G) duly issued on August 4, 2015, and is entitled *Electric Camera*.

104. Maxell is the owner by assignment of the '604 Patent and possesses all rights of recovery under the '604 Patent, including the exclusive right to recover for past and future infringement.

105. Defendants have directly infringed one or more claims of the '604 Patent in this judicial district and elsewhere in the United States, including at least claim 4 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling their telecommunications technology, including by way of example a product known as the DTEK60.

106. The DTEK60 includes an electric camera. The DTEK60 includes an image sensing device with an array of pixels arranged vertically and horizontally in a grid pattern. The DTEK60 includes a 21MP camera as well as an 8MP front camera. On information and belief, image sensors such as the 21 megapixel camera have a light receiving surface having an array of pixels arranged vertically and horizontally in a grid pattern with an arbitrary number of vertically arranged pixels N , where N is equal to or more than three times the number of effective scanning lines M of each field of a display screen at least in order to display the image in horizontal and vertical planes on the DTEK60.

107. The DTEK60 includes a processor programmed to perform various signal processing functions including video recording, digital zoom, face detection, and video image stabilization. In addition, the DTEK60 includes a processor programmed to perform signal processing to generate video in various formats (*e.g.*, 720p HD) by using the pixel data received from the image sensing device.

108. The DTEK60 has a zoom switch configured to enable a user to input zooming operation information. The DTEK60 includes a processor programmed to provide a graphical user interface (GUI) to allow a user to control the operation of the functionalities provided in the DTEK60 including for controlling camera operation. The GUI provides a zoom switching functionality.

109. On information and belief, the DTEK60 has a signal processing unit that generates the image signals, read out with mixing or culling vertical pixel lines of signals, at pixel intervals of a quantity K of lines, from different areas of the imaging device, the areas

being continuously changed, and the quantity K being discontinuously changed according to magnification factors.

110. The foregoing features and capabilities of the DTEK60, and Defendants' description and/or demonstration thereof, including in user manuals and advertising, reflect Defendants' direct infringement by satisfying every element of at least claim 4 of the '604 Patent, under 35 U.S.C. § 271(a).

111. On information and belief, Defendants further infringe the '604 Patent through additional products utilizing the same or reasonably similar functionalities as described above with respect to the DTEK60 (collectively, "the '604 Accused Products"). The '604 Accused Products include, by way of examples, DTEK50, KeyOne, PRIV, Q20, Classic SQC100-4, Bold Touch 9930, Torch 9810, Z30, Z10, Curve 9360, Leap, Passport, and Classic. These additional products each include all necessary hardware and operating systems and work as described above with respect to the DTEK60. Maxell reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the '604 Accused Products are identified to describe the Defendants' infringement and in no way limit the discovery and infringement allegations against Defendants concerning other devices that incorporate the same or reasonably similar functionalities.

112. Defendants have indirectly infringed at least claim 4 of the '604 Patent in this judicial district and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the '604 Accused Products. Defendants' customers who purchase devices and components thereof and operate such devices and components in accordance with Defendants' instructions directly infringe one or more claims of

the '604 Patent in violation of 35 U.S.C. § 271. Defendants instruct their customers through at least user guides and additional instructions, such as those for the DTEK60 located at the following websites: <http://help.blackberry.com/en/dtek60/current/user-guide-pdf/DTEK60-6.0-User-Guide-en.pdf> & <http://help.blackberry.com/en/camera/latest/help/tom1441045908145.html>. Defendants are thereby liable for infringement of the '604 Patent pursuant to 35 U.S.C. § 271(b).

113. Defendants have indirectly infringed at least claim 4 of the '604 Patent, by, among other things, contributing to the direct infringement of others, including customers of the '604 Accused Products by making, offering to sell, or selling, in the United States, or importing a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in infringement of the '604 Patent, and not a staple article or commodity of commerce suitable for substantial non-infringing use.

114. For example, the '604 Accused Products include components for processing image signals and displaying images. These are components of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and upon information and belief are not a staple article or commodity of commerce suitable for substantial non-infringing use. Thus, Defendants are liable for infringement of the '604 Patent pursuant to 35 U.S.C. § 271(c).

115. Defendants have been on notice of the '604 Patent since at the latest, the service of this complaint. By the time of trial, Defendants will thus have known and intended (since receiving such notice), that their continued actions would actively induce and contribute to actual infringement of at least claim 4 of the '604 Patent.

116. Defendants undertook and continue their infringing actions despite an objectively high likelihood that such activities infringed the '604 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the service of this complaint, Defendants have been aware of an objectively high likelihood that their actions constituted and continue to constitute infringement of the '604 Patent, and that the '604 Patent is valid. On information and belief, Defendants could not reasonably, subjectively believe that their actions do not constitute infringement of the '604 Patent, nor could they reasonably, subjectively believe that the patent is invalid. Despite that knowledge and subjective belief, and the objectively high likelihood that their actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '604 Patent.

117. Maxell has been damaged by Defendants' infringement of the '604 Patent.

PRAYER FOR RELIEF

WHEREFORE, Maxell prays for relief as follows:

118. A judgment declaring that Defendants have infringed and are infringing one or more claims of the '999, '394, '334, '821, '616, '897, and '604 Patents;

119. A judgment awarding Maxell compensatory damages as a result of Defendants' infringement of one or more claims of the '999, '394, '334, '821, '616, '897, and '604 Patents, together with interest and costs, consistent with lost profits and in no event less than a reasonable royalty;

120. A judgment awarding Maxell treble damages and pre-judgment interest under 35 U.S.C. § 284 as a result of Defendants' willful and deliberate infringement of one or more claims of the '999, '394, '334, '821, '616, '897, and '604 Patents;

121. A judgment declaring that this case is exceptional and awarding Maxell its expenses, costs, and attorneys' fees in accordance with 35 U.S.C. §§ 284 and 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

122. A grant of preliminary and permanent injunctions enjoining Defendants from further acts of infringement of one or more claims of the '999, '394, '334, '821, '616, '897, and '604 Patents; and

123. Such other and further relief as the Court deems just and proper.

JURY TRIAL DEMANDED

Maxell hereby demands trial by jury.

Respectfully submitted,

ROSS ARONSTAM & MORITZ LLP

Of Counsel:

Jamie B. Beaber*
Kfir Levy*
James A. Fussell, III*
Baldine Paul*
Tiffany A. Miller*
Saqib Siddiqui*
MAYER BROWN LLP
1999 K Street, N.W.
Washington, D.C. 20006
(202) 263-3000
jbeaber@mayerbrown.com
klevy@mayerbrown.com
jfussell@mayerbrown.com
bpaul@mayerbrown.com
tmiller@mayerbrown.com
ssiddiqui@mayerbrown.com

Amanda K. Streff*
MAYER BROWN LLP
71 S. Wacker Drive
Chicago, IL 60606
(312) 782-0600
astreff@mayerbrown.com

(* *pro hac vice* application to be filed)

/s/ Benjamin J. Schladweiler
Benjamin J. Schladweiler (#4601)
100 S. West Street, Suite 400
Wilmington, DE 19801
(302) 576-1600
bschladweiler@ramllp.com

Counsel for Plaintiff Maxell, Ltd.

Dated: October 13, 2017