

1 MAYER BROWN LLP
Kfir B. Levy (State Bar No. 235372)
2 1999 K Street, NW
Washington, DC 20006
3 Telephone: (202) 263-3000
Facsimile: (202) 263-3300
4 klevy@mayerbrown.com

5

6 Attorney for Plaintiff Maxell, Ltd.

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UNITED STATES DISTRICT COURT

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CENTRAL DISTRICT OF CALIFORNIA

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MAXELL, LTD.,

CASE NO. 2:17-cv-7528

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Plaintiff,

**COMPLAINT AND DEMAND FOR
JURY TRIAL**

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v.

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ASUSTEK COMPUTER INC., AND
ASUS COMPUTER
INTERNATIONAL, INC.

Judge:

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Defendants.

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1 Plaintiff Maxell, Ltd. (“Maxell”), by and through its undersigned counsel,
2 files this complaint under 35 U.S.C. § 271 for Patent Infringement against
3 Defendants ASUSTeK Computer Inc. and ASUS Computer International, Inc.
4 (“ASUS” or “Defendants”) and further alleges as follows, upon actual knowledge
5 with respect to itself and its own acts, and upon information and belief as to all
6 other matters.

7 **NATURE OF THE ACTION**

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

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

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

23 4. As more fully described below, in 2009 Hitachi, Ltd. assigned much of
24 its intellectual property to Hitachi Consumer Electronics Co., Ltd. Then, in 2013,
25 Hitachi Consumer Electronics Co., Ltd. assigned the intellectual property, including
26 the patents in this case, to Hitachi Maxell, Ltd., which later assigned the patents to
27 Maxell as a result of a reorganization and name change. This was an effort to align
28 its intellectual property with the licensing, business development, and research and

1 development efforts of Maxell, including in the mobile and mobile-media device
2 market (Hitachi, Ltd., Hitachi Consumer Electronics Co., Ltd., and Hitachi Maxell,
3 Ltd. are referred to herein collectively as “Hitachi”). Maxell continues to sell
4 products in the mobile device market including wireless charging solutions,
5 wireless flash drives, multimedia players, storage devices, and headphones. Maxell
6 also maintains intellectual property related to televisions, tablets, digital cameras,
7 and mobile phones. As a mobile technology developer and industry leader, and due
8 to its historical and continuous investment in research and development, Maxell
9 owns a portfolio of patents related to such technologies and actively enforces its
10 patents through licensing and/or litigation. Maxell is forced to bring this action
11 against Defendants as a result of Defendants’ knowing and ongoing infringement of
12 Maxell’s patents.

13 **THE PARTIES**

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

16 6. On information and belief, Defendant ASUSTeK Computer Inc. is a
17 Taiwanese company with its principal place of business at No. 15, Li-Te Rd.,
18 Peitou, Taipei, Taiwan, R.O.C.

19 7. On information and belief, Defendant ASUS Computer International,
20 Inc. is a California company with a principal place of business located at 800
21 Corporate Way, Fremont, CA 94539-6016.

22 8. On information and belief, Defendant ASUS Computer International,
23 Inc. is in the business of providing information and communications technology
24 solutions. Specifically, ASUS Computer International, Inc. provides wireless
25 telecommunications equipment, including smart phones, tablets, and mobile
26 phones.

1 **NATURE OF THE ACTION**

2 9. This is a civil action for patent infringement arising under the patent
3 laws of the United States, 35 U.S.C. §§ 1 *et seq.*

4 10. ASUS has infringed and continues to infringe, contributed to and
5 continues to contribute to the infringement of, and/or actively induced and
6 continues to induce others to infringe Maxell’s U.S. Patent Nos. 6,430,498 (the
7 “498 Patent”); 9,451,229 (the “229 Patent”); 6,973,334 (the “334 Patent”);
8 7,551,209 (the “209 Patent”); 6,243,340 (the “340 Patent”); 7,403,226 (the “226
9 Patent”); and 9,544,517 (the “517 Patent”) (collectively, “the Asserted Patents”).

10 11. Maxell is the legal owner by assignment of the Asserted Patents,
11 which were duly and legally issued by the United States Patent and Trademark
12 Office.

13 12. Maxell seeks injunctive relief and monetary damages.

14 **JURISDICTION AND VENUE**

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

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

20 15. The Court has personal jurisdiction over ASUS because (1) Maxell’s
21 claims arise in whole or in part from ASUS’s conduct in California and (2) ASUS
22 is subject to personal jurisdiction under the provisions of the California Long Arm
23 Statute, Cal. Code. Civ. Proc. § 410.10, by virtue of the fact that, upon information
24 and belief, ASUS has availed itself of the privilege of conducting and soliciting
25 business within this State, including engaging in at least some of the infringing acts
26 alleged herein through the sales and marketing of infringing products in this State.
27 The allegations and claims set forth in this action arise out of ASUS’s infringing
28 activities in this State, as well as by others acting as ASUS’s agents and/or

1 representatives, such that it would be reasonable for this Court to exercise
2 jurisdiction consistent with the principles underlying the U.S. Constitution, and
3 would not offend traditional notions of fair play and substantial justice.

4 16. Upon further information and belief, ASUS has also established
5 minimum contacts with this District and regularly transacts and does business
6 within this District, including advertising, promoting and selling products over the
7 internet, through intermediaries, representatives and/or agents located within this
8 District, that infringe Maxell's patents, which products are then marketed to, sold
9 to, and accessed by citizens residing within this State and this District. Upon further
10 information and belief, ASUS has purposefully directed activities at citizens of this
11 State and located within this District.

12 17. On information and belief, ASUS has purposefully and voluntarily
13 placed its products into the stream of commerce with the expectation that they will
14 be purchased and used by customers located in the State of California and the
15 Central District of California. On information and belief, ASUS's customers in the
16 Central District of California have purchased and used and continue to purchase
17 and use ASUS's products.

18 18. Venue in the Central District of California is proper pursuant to 28
19 U.S.C. §§ 1391 and 1400 because ASUS Computer International, Inc. resides in
20 this District and ASUSTeK Computer Inc. is not a resident of the United States and
21 may, therefore, be sued in any judicial district.

22 **COUNT I – INFRINGEMENT OF U.S. PATENT NO. 6,430,498**

23 19. Maxell incorporates paragraphs 1-18 above by reference.

24 20. U.S. Patent No. 6,430,498 (the "498 Patent," attached hereto at
25 Exhibit 1) duly issued on August 6, 2002 and is entitled *Portable Terminal With the*
26 *Function of Walking Navigation*.

1 21. Maxell is the owner by assignment of the '498 Patent and possesses all
2 rights under the '498 Patent, including the exclusive right to recover for past and
3 future infringement.

4 22. Defendants have directly infringed one or more claims of the '498
5 Patent in this judicial district and elsewhere in California, including at least claims
6 1, 5, and 10 literally and/or under the doctrine of equivalents, by or through
7 making, using, importing, offering for sale and/or selling their telecommunications
8 technology, including by way of example a product known as the ZenFone AR.

9 23. The ZenFone AR is a portable terminal that has GPS functionality and
10 the function of walking navigation through one or more GPS mapping applications
11 such as the AT&T Navigator and the VZ Navigator App. The mapping app on the
12 ZenFone AR shows the present place of the ZenFone AR by denoting a dot or
13 arrow on a map and includes direction information denoting an orientation of the
14 ZenFone AR including, for example, a compass and/or gyroscope. For example, an
15 arrow is used to indicate the direction of travel. The mapping applications also
16 provide route guidance information as walking navigation.

17 24. The foregoing features and capabilities of the ZenFone AR, and
18 Defendants' description and/or demonstration thereof, including in user manuals
19 and advertising, reflect Defendants' direct infringement by satisfying every element
20 of at least claims 1, 5, and 10 of the '498 Patent, under 35 U.S.C. § 271(a).

21 25. On information and belief, Defendants further infringe the '498 Patent
22 through additional products utilizing the same or reasonably similar functionalities
23 as described above with respect to the ZenFone AR (collectively, "the '498
24 Accused Products"). The '498 Accused Products include, by way of examples,
25 ZenFone V (V520KL), ZenPad Z8s (ZT582KL), ZenPad Z8 (ZT581KL), ZenPad
26 Z10 (ZT500KL), and ZenFone 2E Go. These additional products each include all
27 necessary hardware and operating systems and work as described above with
28 respect to the ZenFone AR. Maxell reserves the right to discover and pursue any

1 additional infringing devices that incorporate infringing functionalities. For the
2 avoidance of doubt, the '498 Accused Products are identified to describe the
3 Defendants' infringement and in no way limit the discovery and infringement
4 allegations against Defendants concerning other devices that incorporate the same
5 or reasonably similar functionalities.

6 26. Defendants have indirectly infringed at least claims 1, 5, and 10 of the
7 '498 Patent in this judicial district and elsewhere in the United States by, among
8 other things, actively inducing the use, offering for sale, selling, or importation of at
9 least the '498 Accused Products. Defendants' customers who purchase devices and
10 components thereof and operate such devices and components in accordance with
11 Defendants' instructions directly infringe one or more claims of the '498 Patent in
12 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
13 user guides, such as those for the ZenFone AR located at the following website:
14 [http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZS571KL/E12328_ZS571KL_EM_W](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZS571KL/E12328_ZS571KL_EM_WEB_060917.pdf?_ga=2.103186944.1642803745.1506021674-822418062.1506021674)
15 [EB_060917.pdf?_ga=2.103186944.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZS571KL/E12328_ZS571KL_EM_WEB_060917.pdf?_ga=2.103186944.1642803745.1506021674-822418062.1506021674)
16 [822418062.1506021674](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZS571KL/E12328_ZS571KL_EM_WEB_060917.pdf?_ga=2.103186944.1642803745.1506021674-822418062.1506021674). Defendants are thereby liable for infringement of the '498
17 Patent pursuant to 35 U.S.C. § 271(b).

18 27. Defendants have indirectly infringed at least claims 1, 5, and 10 of the
19 '498 Patent, by, among other things, contributing to the direct infringement of
20 others, including customers of the '498 Accused Products by making, offering to
21 sell, or selling, in the United States, or importing a component of a patented
22 machine, manufacture, or combination, or an apparatus for use in practicing a
23 patented process, constituting a material part of the invention, knowing the same to
24 be especially made or especially adapted for use in infringement of the '498 Patent,
25 and not a staple article or commodity of commerce suitable for substantial non-
26 infringing use.

27 28. For example, the '498 Accused Products include GPS mapping
28 applications. These are a components of a patented machine, manufacture, or

1 combination, or an apparatus for use in practicing a patented process. Furthermore,
2 such components are a material part of the invention and upon information and
3 belief are not a staple article or commodity of commerce suitable for substantial
4 non-infringing use. Thus, Defendants are liable for infringement of the '498 Patent
5 pursuant to 35 U.S.C. § 271(c).

6 29. Defendants have been on notice of the '498 Patent since at the latest,
7 the service of this complaint. By the time of trial, Defendants will thus have known
8 and intended (since receiving such notice), that their continued actions would
9 actively induce and contribute to actual infringement of at least claims 1, 5, and 10
10 of the '498 Patent.

11 30. Defendants undertook and continue their infringing actions despite an
12 objectively high likelihood that such activities infringed the '498 Patent, which has
13 been duly issued by the USPTO, and is presumed valid. For example, since at least
14 the service of this complaint, Defendants have been aware of an objectively high
15 likelihood that their actions constituted and continue to constitute infringement of
16 the '498 Patent, and that the '498 Patent is valid. On information and belief,
17 Defendants could not reasonably, subjectively believe that their actions do not
18 constitute infringement of the '498 Patent, nor could they reasonably, subjectively
19 believe that the patent is invalid. Despite that knowledge and subjective belief, and
20 the objectively high likelihood that their actions constitute infringement,
21 Defendants have continued their infringing activities. As such, Defendants willfully
22 infringe the '498 Patent.

23 31. Maxell has been damaged by Defendants' infringement of the '498
24 Patent.

25 **COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,451,229**

26 32. Maxell incorporates paragraphs 1-31 above by reference.
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1 33. U.S. Patent No. 9,451,229 (the “’229 Patent,” attached hereto at
2 Exhibit 2) duly issued on September 20, 2016 and is entitled *Video Recording and*
3 *Reproducing Method, and Video Reproducing Apparatus and Method*.

4 34. Maxell is the owner by assignment of the ’229 Patent and possesses all
5 rights under the ’229 Patent, including the exclusive right to recover for past and
6 future infringement.

7 35. Defendants have directly infringed one or more claims of the ’229
8 Patent in this judicial district and elsewhere in California, including at least claims
9 1-12 literally and/or under the doctrine of equivalents, by or through making, using,
10 importing, offering for sale and/or selling their telecommunications technology,
11 including by way of example a product known as the ZenFone 3 Zoom.

12 36. The ZenFone 3 Zoom is a mobile communications terminal that is
13 capable of photographing. The ZenFone 3 Zoom includes a 12 megapixel main
14 camera and a 13 megapixel front camera, both of which are configured to
15 photograph an object and output a moving picture and/or a still picture of the
16 object. The ZenFone 3 Zoom includes a processor programmed for reproducing
17 moving pictures stored in internal memory in various video formats, including the
18 MPEG-4 format and for reproducing still pictures stored in memory in the JPEG
19 format.

20 37. The ZenFone 3 Zoom records thumbnail pictures corresponding to
21 each moving picture and still picture recorded. The ZenFone 3 Zoom generates
22 thumbnails corresponding to MPEG encoded moving pictures and the JPEG
23 encoded still pictures that are the same size, which are stored in a different directory
24 than the moving and still pictures.

25 38. The ZenFone 3 Zoom includes a display for displaying the thumbnails,
26 which are shown in a list and can be selected. The ZenFone 3 Zoom can reproduce
27 one of the recorded moving pictures upon selection of one of the thumbnail pictures
28 from the list.

1 39. The foregoing features and capabilities of the ZenFone 3 Zoom, and
2 Defendants' description and/or demonstration thereof, including in user manuals
3 and advertising, reflect Defendants' direct infringement by satisfying every element
4 of at least claims 1-12 of the '229 Patent, under 35 U.S.C. § 271(a).

5 40. On information and belief, Defendants further infringe the '229 Patent
6 through additional products utilizing the same or reasonably similar functionalities
7 as described above with respect to the ZenFone 3 Zoom (collectively, "the '229
8 Accused Products"). The '229 Accused Products include, by way of examples,
9 phones in the Asus ZenFone Series (*e.g.*, ZenFone AR (ZS571KL), 3 Max
10 (ZC520TL), 3 Laser (ZC551KL), 2 Laser (ZE551KL), 3 Deluxe (ZS550KL), 3
11 Zoom (Ze553KL), 4 (ZE554KL), 4 Pro (ZS551KL), 4 Max (ZC554KL), V
12 (V520KL), 3 Deluxe (ZS570KL), Zoom (ZX551ML), PadFone X (US), ZenFone
13 2E, 2 Deluxe Special Edition, 4 Max (ZC520KL)), the Asus ZenPad Series (*e.g.*,
14 ZenPad 3S10 (Z500M), 10 (Z300M), S8.0 (Z580C), C 7.0 (Z170C), Z10
15 (ZT500KL), Z8s (ZT582KL), 8.0 (Z380M), Z8 (ZT581KL)), the Asus MeMO Pad
16 Series (Asus MeMO Pad 8 (ME181C), Pad 7 (ME572C), Pad 7 (ME176CX)), and
17 the Asus VivoTab 8 (M81C). These additional products each include all necessary
18 hardware and operating systems and work as described above with respect to the
19 ZenFone 3 Zoom. Maxell reserves the right to discover and pursue any additional
20 infringing devices that incorporate infringing functionalities. For the avoidance of
21 doubt, the '229 Accused Products are identified to describe the Defendants'
22 infringement and in no way limit the discovery and infringement allegations against
23 Defendants concerning other devices that incorporate the same or reasonably
24 similar functionalities.

25 41. Defendants have indirectly infringed at least claims 1-12 of the '229
26 Patent in this judicial district and elsewhere in the United States by, among other
27 things, actively inducing the use, offering for sale, selling, or importation of at least
28 the '229 Accused Products. Defendants' customers who purchase devices and

1 components thereof and operate such devices and components in accordance with
2 Defendants' instructions directly infringe one or more claims of the '229 Patent in
3 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
4 user guides, such as those for the ZenFone 3 Zoom located at the following
5 website:

6 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
7 [al_v2_web_only.pdf?_ga=2.202261009.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)

8 [822418062.1506021674](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu). Defendants are thereby liable for infringement of the '229
9 Patent pursuant to 35 U.S.C. § 271(b).

10 42. Defendants have indirectly infringed at least claims 1-12 of the '229
11 Patent, by, among other things, contributing to the direct infringement of others,
12 including customers of the '229 Accused Products by making, offering to sell, or
13 selling, in the United States, or importing a component of a patented machine,
14 manufacture, or combination, or an apparatus for use in practicing a patented
15 process, constituting a material part of the invention, knowing the same to be
16 especially made or especially adapted for use in infringement of the '229 Patent,
17 and not a staple article or commodity of commerce suitable for substantial non-
18 infringing use.

19 43. For example, the '229 Accused Products include components for
20 moving and still picture encoding and reproducing functionalities. These are
21 components of a patented machine, manufacture, or combination, or an apparatus
22 for use in practicing a patented process. Furthermore, such components are a
23 material part of the invention and upon information and belief are not staple articles
24 or commodities of commerce suitable for substantial non-infringing use. Thus,
25 Defendants are liable for infringement of the '229 Patent pursuant to 35 U.S.C. §
26 271(c).

27 44. Defendants have been on notice of the '229 Patent since at the latest,
28 the service of this complaint. By the time of trial, Defendants will thus have known

1 and intended (since receiving such notice), that their continued actions would
2 actively induce and contribute to actual infringement of at least claims 1-12 of the
3 '229 Patent.

4 45. Defendants undertook and continue their infringing actions despite an
5 objectively high likelihood that such activities infringed the '229 Patent, which has
6 been duly issued by the USPTO, and is presumed valid. For example, since at least
7 the service of this complaint, Defendants have been aware of an objectively high
8 likelihood that their actions constituted and continue to constitute infringement of
9 the '229 Patent, and that the '229 Patent is valid. On information and belief,
10 Defendants could not reasonably, subjectively believe that their actions do not
11 constitute infringement of the '229 Patent, nor could they reasonably, subjectively
12 believe that the patent is invalid. Despite that knowledge and subjective belief, and
13 the objectively high likelihood that their actions constitute infringement,
14 Defendants have continued their infringing activities. As such, Defendants willfully
15 infringe the '229 Patent.

16 46. Maxell has been damaged by Defendants' infringement of the '229
17 Patent.

18 **COUNT III – INFRINGEMENT OF U.S. PATENT NO. 6,973,334**

19 47. Maxell incorporates paragraphs 1-46 above by reference.

20 48. U.S. Patent No. 6,973,334 (the "334 Patent," attached hereto as
21 Exhibit 3) duly issued on December 6, 2005, and is entitled *Cellular Telephone*.

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

25 50. Defendants have directly infringed one or more claims of the '334
26 Patent in this judicial district and elsewhere in California, including at least claims
27 1 and 4 literally and/or under the doctrine of equivalents, by or through making,
28

1 using, importing, offering for sale and/or selling their telecommunications
2 technology, including by way of example a product known as the ZenFone 3 Zoom.

3 51. The ZenFone 3 Zoom is a cellular telephone used in a CDMA system,
4 such as WCDMA, TD-SCDMA, and CDMA 1x.

5 52. The ZenFone 3 Zoom has at least one antenna for receiving signals
6 from and transmitting signals to cell-site stations, such as a base station. The
7 ZenFone 3 Zoom supports and implements at least the UMTS (universal mobile
8 telecommunications service) standards and relevant technical specifications
9 promulgated by the 3GPP. For example, the ZenFone 3 Zoom's antenna receives a
10 first communication signal (such as data signals transmitted on a downlink channel)
11 and a transmitting power control signal (such as a TPC transmitted on a downlink
12 channel) from a cell-site station (such as a base station), as evidenced by the 3GPP
13 Standards. The ZenFone 3 Zoom also has an antenna that transmits a second
14 communication signal (such as data on an uplink channel) to the cell-site station
15 (base station), as demonstrated by the 3GPP Specifications.

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

22 54. The ZenFone 3 Zoom has an acoustic transducer in accordance with
23 the 3GPP standards. The ZenFone 3 Zoom also has a transmitter connected to the
24 encoder/decoder and to the antenna through the duplexer, a controller connected to
25 the receiver and the transmitter, and a power amplifier. The controller includes a
26 central processing unit and a memory and controls the transmitter.

27 55. The foregoing features and capabilities of the ZenFone 3 Zoom, and
28 Defendants' description and/or demonstration thereof, including in user manuals

1 and advertising, reflect Defendants' direct infringement by satisfying every element
2 of at least claims 1 and 4 of the '334 Patent, under 35 U.S.C. § 271(a).

3 56. On information and belief, Defendants further infringe the '334 Patent
4 through additional products utilizing the same or reasonably similar functionalities
5 as described above with respect to the ZenFone 3 Zoom (collectively, "the '334
6 Accused Products"). The '334 Accused Products include, by way of examples,
7 ZenFone AR (ZS571K), ZenFone V (V520KL), ZenFone 3 Max (ZC520TL),
8 ZenFone 3 Laser (ZC551KL), Zenfone 3 Deluxe (ZS550KL), ZenFone 3 Zoom
9 (ZE553KL), ZenFone 4 Max (ZC554KL), ZenFone 3 Deluxe (ZS570KL), ZenFone
10 4 Max (ZC520KL), ZenPad S 8.0 (Z580C), ZenPad C 7.0 (Z170C), MeMO Pad 7
11 (ME572C), ZenPad Z8s (ZT582KL), ZenPad Z8 (ZT581KL), and ZenPad Z10
12 (ZT500KL). These additional products each include all necessary hardware and
13 operating systems and work as described above with respect to the ZenFone 3
14 Zoom. Maxell reserves the right to discover and pursue any additional infringing
15 devices that incorporate infringing functionalities. For the avoidance of doubt, the
16 '334 Accused Products are identified to describe the Defendants' infringement and
17 in no way limit the discovery and infringement allegations against Defendants
18 concerning other devices that incorporate the same or reasonably similar
19 functionalities.

20 57. Defendants have indirectly infringed at least claims 1 and 4 of the '334
21 Patent in this judicial district and elsewhere in the United States by, among other
22 things, actively inducing the use, offering for sale, selling, or importation of at least
23 the '334 Accused Products. Defendants' customers who purchase devices and
24 components thereof and operate such devices and components in accordance with
25 Defendants' instructions directly infringe one or more claims of the '334 Patent in
26 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
27 user guides, such as those for the ZenFone 3 Zoom located at the following
28 website:

1 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
2 [al_v2_web_only.pdf?_ga=2.167685950.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)
3 [822418062.1506021674](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu). Defendants are thereby liable for infringement of the '334
4 Patent pursuant to 35 U.S.C. § 271(b).

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

14 59. For example, the '334 Accused Products include a component to
15 effectuate power control. This is a component of a patented machine, manufacture,
16 or combination, or an apparatus for use in practicing a patented process.
17 Furthermore, such component is a material part of the invention and upon
18 information and belief is not a staple article or commodity of commerce suitable for
19 substantial non-infringing use. Thus, Defendants are liable for infringement of the
20 '334 Patent pursuant to 35 U.S.C. § 271(c).

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

26 61. Defendants undertook and continue their infringing actions despite an
27 objectively high likelihood that such activities infringed the '334 Patent, which has
28 been duly issued by the USPTO, and is presumed valid. For example, since at least

1 the service of this complaint, Defendants have been aware of an objectively high
2 likelihood that their actions constituted and continue to constitute infringement of
3 the '334 Patent, and that the '334 Patent is valid. On information and belief,
4 Defendants could not reasonably, subjectively believe that their actions do not
5 constitute infringement of the '334 Patent, nor could they reasonably, subjectively
6 believe that the patent is invalid. Despite that knowledge and subjective belief, and
7 the objectively high likelihood that their actions constitute infringement,
8 Defendants have continued their infringing activities. As such, Defendants willfully
9 infringe the '334 Patent.

10 62. Maxell has been damaged by Defendants' infringement of the '334
11 Patent.

12 **COUNT IV – INFRINGEMENT OF U.S. PATENT NO. 7,551,209**

13 63. Maxell incorporates paragraphs 1-62 above by reference.

14 64. U.S. Patent No. 7,551,209 (the "'209 Patent," attached hereto at
15 Exhibit 4) duly issued on June 23, 2009 and is entitled *Imaging Apparatus and*
16 *Method For Controlling White Balance*.

17 65. Maxell is the owner by assignment of the '209 Patent and possesses all
18 rights under the '209 Patent, including the exclusive right to recover for past and
19 future infringement.

20 66. Defendants have directly infringed one or more claims of the '209
21 Patent in this judicial district and elsewhere in California, including at least claims
22 1, 3, 5, and 6 literally and/or under the doctrine of equivalents, by or through
23 making, using, importing, offering for sale and/or selling their telecommunications
24 technology, including by way of example a product known as the ZenFone 3 Zoom.

25 67. The ZenFone 3 Zoom is an imaging apparatus with a display that
26 displays images that are picked up by an image pick up device and processed by the
27 image processor. The ZenFone 3 Zoom has a white balance circuit that ensures that
28 white objects in images picked up by the image sensor appear white. The ZenFone

1 3 Zoom also includes a circuit and/or processor for detecting object distance,
2 detecting a zoom value, and detecting object brightness. For example, the ZenFone
3 3 Zoom has autofocus functions, brightness measurement functions, zooming
4 functions, and white balance functionalities. The ZenFone 3 Zoom controls white
5 balance in an image based on these distance, zoom, and brightness values. The
6 ZenFone 3 Zoom also has a circuit for setting a threshold on the basis of object
7 brightness, zoom, and distance.

8 68. The foregoing features and capabilities of the ZenFone 3 Zoom, and
9 Defendants' description and/or demonstration thereof, including in user manuals
10 and advertising, reflect Defendants' direct infringement by satisfying every element
11 of at least claims 1, 3, 5, and 6 of the '209 Patent, under 35 U.S.C. § 271(a).

12 69. On information and belief, Defendants further infringe the '209 Patent
13 through additional products utilizing the same or reasonably similar functionalities
14 as described above with respect to the ZenFone 3 Zoom (collectively, "the '209
15 Accused Products"). The '209 Accused Products include, by way of examples,
16 Asus ZenFone Series (*e.g.*, ZenFone AR (ZS571KL), 3 Max (ZC520TL), 3 Laser
17 (ZC551KL), 2 Laser (ZE551KL), 3 Deluxe (ZS550KL), 3 Zoom (Ze553KL), 4
18 (ZE554KL), 4 Pro (ZS551KL), 4 Max (ZC554KL), V (V520KL), 3 Deluxe
19 (ZS570KL), Zoom (ZX551ML), PadFone X (US), ZenFone 2E, 2 Deluxe Special
20 Edition, 4 Max (ZC520KL)) and the Asus ZenPad Series (*e.g.*, ZenPad 3S10
21 (Z500M), 10 (Z300M), S8.0 (Z580C), C 7.0 (Z170C), Z10 (ZT500KL), Z8s
22 (ZT582KL), 8.0 (Z380M), Z8 (ZT581KL)). These additional products each include
23 all necessary hardware and operating systems and work as described above with
24 respect to the ZenFone 3 Zoom. Maxell reserves the right to discover and pursue
25 any additional infringing devices that incorporate infringing functionalities. For the
26 avoidance of doubt, the '209 Accused Products are identified to describe the
27 Defendants' infringement and in no way limit the discovery and infringement
28

1 allegations against Defendants concerning other devices that incorporate the same
2 or reasonably similar functionalities.

3 70. Defendants have indirectly infringed at least claims 1, 3, 5, and 6 of
4 the '209 Patent in this judicial district and elsewhere in the United States by, among
5 other things, actively inducing the use, offering for sale, selling, or importation of at
6 least the '209 Accused Products. Defendants' customers who purchase devices and
7 components thereof and operate such devices and components in accordance with
8 Defendants' instructions directly infringe one or more claims of the '209 Patent in
9 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
10 user guides, such as those for the ZenFone 3 Zoom located at the following
11 website:

12 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
13 [al_v2_web_only.pdf?_ga=2.167685950.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)
14 [822418062.1506021674](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu). Defendants are thereby liable for infringement of the '209
15 Patent pursuant to 35 U.S.C. § 271(b).

16 71. Defendants have indirectly infringed at least claims 1, 3, 5, and 6 of
17 the '209 Patent, by, among other things, contributing to the direct infringement of
18 others, including customers of the '209 Accused Products by making, offering to
19 sell, or selling, in the United States, or importing a component of a patented
20 machine, manufacture, or combination, or an apparatus for use in practicing a
21 patented process, constituting a material part of the invention, knowing the same to
22 be especially made or especially adapted for use in infringement of the '209 Patent,
23 and not a staple article or commodity of commerce suitable for substantial non-
24 infringing use.

25 72. For example, the '209 Accused Products include a white balance
26 control component. This is a component of a patented machine, manufacture, or
27 combination, or an apparatus for use in practicing a patented process. Furthermore,
28 such component is a material part of the invention and upon information and belief

1 is not a staple article or commodity of commerce suitable for substantial non-
2 infringing use. Thus, Defendants are liable for infringement of the '209 Patent
3 pursuant to 35 U.S.C. § 271(c).

4 73. Defendants have been on notice of the '209 Patent since at the latest,
5 the service of this complaint. By the time of trial, Defendants will thus have known
6 and intended (since receiving such notice), that their continued actions would
7 actively induce and contribute to actual infringement of at least claims 1, 3, 5, and 6
8 of the '209 Patent.

9 74. Defendants undertook and continue their infringing actions despite an
10 objectively high likelihood that such activities infringed the '209 Patent, which has
11 been duly issued by the USPTO, and is presumed valid. For example, since at least
12 the service of this complaint, Defendants have been aware of an objectively high
13 likelihood that their actions constituted and continue to constitute infringement of
14 the '209 Patent, and that the '209 Patent is valid. On information and belief,
15 Defendants could not reasonably, subjectively believe that their actions do not
16 constitute infringement of the '209 Patent, nor could they reasonably, subjectively
17 believe that the patent is invalid. Despite that knowledge and subjective belief, and
18 the objectively high likelihood that their actions constitute infringement,
19 Defendants have continued their infringing activities. As such, Defendants willfully
20 infringe the '209 Patent.

21 75. Maxell has been damaged by Defendants' infringement of the '209
22 Patent.

23 **COUNT V – INFRINGEMENT OF U.S. PATENT NO. 6,243,340**

24 76. Maxell incorporates paragraphs 1-75 above by reference.

25 77. U.S. Patent No. 6,243,340 (the "'340 Patent," attached hereto at
26 Exhibit 5) duly issued on June 5, 2001 and is entitled *Information Recording*
27 *Apparatus Including System Control Means for Producing Managing Information*
28

1 *for Managing Data Recorded on an Information Recording Medium and*
2 *Preventing Designated Data From Being Accessed.*

3 78. Maxell is the owner by assignment of the '340 Patent and possesses all
4 rights under the '340 Patent, including the exclusive right to recover for past and
5 future infringement.

6 79. Defendants have directly infringed one or more claims of the '340
7 Patent in this judicial district and elsewhere in California, including at least claim 1
8 literally and/or under the doctrine of equivalents, by or through making, using,
9 importing, offering for sale and/or selling their telecommunications technology,
10 including by way of example a product known as the ZenFone 3 Zoom.

11 80. The ZenFone 3 Zoom is an information recording apparatus with a
12 recording medium for storing data such as pictures and videos. The ZenFone 3
13 Zoom has electrical components for controlling and interfacing with the recording
14 medium. The ZenFone 3 Zoom also has a processor for processing data stored on
15 the recording medium and a control unit for controlling the software for interfacing
16 between the camera and the internal or external memory, the processor, and the
17 recording medium.

18 81. The ZenFone 3 Zoom has a battery for supplying electric power to the
19 information recording apparatus. The ZenFone 3 Zoom has a battery indicator to
20 show the amount of remaining battery power as the battery power decreases over
21 time. The recording medium in ZenFone 3 Zoom records pictures and videos and
22 records information with the pictures and videos such as time, data, format, size etc.
23 in order to manage the stored data.

24 82. The foregoing features and capabilities of the ZenFone 3 Zoom, and
25 Defendants' description and/or demonstration thereof, including in user manuals
26 and advertising, reflect Defendants' direct infringement by satisfying every element
27 of at least claim 1 of the '340 Patent, under 35 U.S.C. § 271(a).
28

1 83. On information and belief, Defendants further infringe the '340 Patent
2 through additional products utilizing the same or reasonably similar functionalities
3 as described above with respect to the ZenFone 3 Zoom (collectively, "the '340
4 Accused Products"). The '340 Accused Products include, by way of examples,
5 Asus ZenFone Series (*e.g.*, ZenFone AR (ZS571KL), 3 Max (ZC520TL), 3 Laser
6 (ZC551KL), 2 Laser (ZE551KL), 3 Deluxe (ZS550KL), 3 Zoom (Ze553KL), 4
7 (ZE554KL), 4 Pro (ZS551KL), 4 Max (ZC554KL), V (V520KL), 3 Deluxe
8 (ZS570KL), Zoom (ZX551ML), PadFone X (US), ZenFone 2E, 2 Deluxe Special
9 Edition, 4 Max (ZC520KL)), the Asus ZenPad Series (*e.g.*, ZenPad 3S10 (Z500M),
10 10 (Z300M), S8.0 (Z580C), C 7.0 (Z170C), Z10 (ZT500KL), Z8s (ZT582KL), 8.0
11 (Z380M), Z8 (ZT581KL)), the Asus MeMO Pad Series (Asus MeMO Pad 8
12 (ME181C), Pad 7 (ME572C), Pad 7 (ME176CX)), and the Asus VivoTab 8
13 (M81C). These additional products each include all necessary hardware and
14 operating systems and work as described above with respect to the ZenFone 3
15 Zoom. Maxell reserves the right to discover and pursue any additional infringing
16 devices that incorporate infringing functionalities. For the avoidance of doubt, the
17 '340 Accused Products are identified to describe the Defendants' infringement and
18 in no way limit the discovery and infringement allegations against Defendants
19 concerning other devices that incorporate the same or reasonably similar
20 functionalities.

21 84. Defendants have indirectly infringed at least claim 1 of the '340 Patent
22 in this judicial district and elsewhere in the United States by, among other things,
23 actively inducing the use, offering for sale, selling, or importation of at least the
24 '340 Accused Products. Defendants' customers who purchase devices and
25 components thereof and operate such devices and components in accordance with
26 Defendants' instructions directly infringe one or more claims of the '340 Patent in
27 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
28 user guides, such as those for the ZenFone 3 Zoom located at the following

1 website:

2 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
3 [al_v2_web_only.pdf?_ga=2.167685950.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)

4 822418062.1506021674. Defendants are thereby liable for infringement of the '340
5 Patent pursuant to 35 U.S.C. § 271(b).

6 85. Defendants have indirectly infringed at least claim 1 of the '340
7 Patent, by, among other things, contributing to the direct infringement of others,
8 including customers of the '340 Accused Products by making, offering to sell, or
9 selling, in the United States, or importing a component of a patented machine,
10 manufacture, or combination, or an apparatus for use in practicing a patented
11 process, constituting a material part of the invention, knowing the same to be
12 especially made or especially adapted for use in infringement of the '340 Patent,
13 and not a staple article or commodity of commerce suitable for substantial non-
14 infringing use.

15 86. For example, the '340 Accused Products include an information
16 recording component. This is a component of a patented machine, manufacture, or
17 combination, or an apparatus for use in practicing a patented process. Furthermore,
18 such component is a material part of the invention and upon information and belief
19 is not a staple article or commodity of commerce suitable for substantial non-
20 infringing use. Thus, Defendants are liable for infringement of the '340 Patent
21 pursuant to 35 U.S.C. § 271(c).

22 87. Defendants have been on notice of the '340 Patent since at the latest,
23 the service of this complaint. By the time of trial, Defendants will thus have known
24 and intended (since receiving such notice), that their continued actions would
25 actively induce and contribute to actual infringement of at least claim 1 of the '340
26 Patent.

27 88. Defendants undertook and continue their infringing actions despite an
28 objectively high likelihood that such activities infringed the '340 Patent, which has

1 been duly issued by the USPTO, and is presumed valid. For example, since at least
2 the service of this complaint, Defendants have been aware of an objectively high
3 likelihood that their actions constituted and continue to constitute infringement of
4 the '340 Patent, and that the '340 Patent is valid. On information and belief,
5 Defendants could not reasonably, subjectively believe that their actions do not
6 constitute infringement of the '340 Patent, nor could they reasonably, subjectively
7 believe that the patent is invalid. Despite that knowledge and subjective belief, and
8 the objectively high likelihood that their actions constitute infringement,
9 Defendants have continued their infringing activities. As such, Defendants willfully
10 infringe the '340 Patent.

11 89. Maxell has been damaged by Defendants' infringement of the '340
12 Patent.

13 **COUNT VI – INFRINGEMENT OF U.S. PATENT NO. 7,403,226**

14 90. Maxell incorporates paragraphs 1-89 above by reference.

15 91. U.S. Patent No. 7,403,226 (the "'226 Patent," attached hereto at
16 Exhibit 6) duly issued on July 22, 2008 and is entitled *Electric Camera*.

17 92. Maxell is the owner by assignment of the '226 Patent and possesses all
18 rights under the '226 Patent, including the exclusive right to recover for past and
19 future infringement.

20 93. Defendants have directly infringed one or more claims of the '226
21 Patent in this judicial district and elsewhere in California, including at least claim 1
22 literally and/or under the doctrine of equivalents, by or through making, using,
23 importing, offering for sale and/or selling their telecommunications technology,
24 including by way of example a product known as the ZenFone 3 Zoom.

25 94. The ZenFone 3 Zoom includes an electric camera. The ZenFone 3
26 Zoom includes an image sensing device with an array of pixels arranged vertically
27 and horizontally in a grid pattern. The ZenFone 3 Zoom includes a 12MP camera
28 with as well as a 13MP front camera. On information and belief, image sensors

1 such as the 12 megapixel camera have a light receiving surface having an array of
2 pixels arranged vertically and horizontally in a grid pattern with an arbitrary
3 number of vertically arranged pixels N , where N is equal to or more than three
4 times the number of effective scanning lines M of a display screen of a television
5 system, at least in order to display the image in horizontal and vertical planes on the
6 ZenFone 3 Zoom.

7 95. The ZenFone 3 Zoom downsamples/culls the signal charges
8 accumulated in individual pixels of every K pixels in order to produce a number of
9 lines of output signals which corresponds to the number of effective scanning lines
10 M , in this case, 480 (*i.e.*, 480p video capture).

11 96. The ZenFone 3 Zoom includes a processor programmed to perform
12 various signal processing functions including PixelMaster related functions such as
13 video recording, zooming, and electronic image stabilization. The ZenFone 3
14 Zoom can vertically mix or cull the numbers of pixels which are at least two of
15 integers equal to or less than an integral part of a quotient of the number of
16 vertically arranged pixel rows N divided by the number of effective scanning lines
17 M , and the driver drives the image sensing device in at least two modes
18 corresponding to the at least two integers. For example, while capturing video at
19 default zoom, the image is downsampled/culled in order to capture a 480p image
20 from a high resolution 12MP sensor.

21 97. On information and belief, the driver for the image sensing device of
22 the ZenFone 3 Zoom changes the number of pixels to be cyclically mixed or culled
23 according to input information from a switch provided inside or outside the camera
24 which requests a view angle change. For example, the zoom level (*i.e.*, a “view
25 angle change”) can be adjusted during the recording of video by performing a
26 “pinch” operation to zoom in or out.

27 98. The foregoing features and capabilities of the ZenFone 3 Zoom, and
28 Defendants’ description and/or demonstration thereof, including in user manuals

1 and advertising, reflect Defendants' direct infringement by satisfying every element
2 of at least claim 1 of the '226 Patent, under 35 U.S.C. § 271(a).

3 99. On information and belief, Defendants further infringe the '226 Patent
4 through additional products utilizing the same or reasonably similar functionalities
5 as described above with respect to the ZenFone 3 Zoom (collectively, "the '226
6 Accused Products"). The '226 Accused Products include, by way of examples,
7 Asus ZenFone Series (*e.g.*, ZenFone AR (ZS571KL), 3 Max (ZC520TL), 3 Laser
8 (ZC551KL), 2 Laser (ZE551KL), 3 Deluxe (ZS550KL), 3 Zoom (Ze553KL), 4
9 (ZE554KL), 4 Pro (ZS551KL), 4 Max (ZC554KL), V (V520KL), 3 Deluxe
10 (ZS570KL), Zoom (ZX551ML), PadFone X (US), ZenFone 2E, 2 Deluxe Special
11 Edition, 4 Max (ZC520KL)) and the Asus ZenPad Series (*e.g.*, ZenPad 3S10
12 (Z500M), 10 (Z300M), S8.0 (Z580C), C 7.0 (Z170C), Z10 (ZT500KL), Z8s
13 (ZT582KL), 8.0 (Z380M), Z8 (ZT581KL)). These additional products each include
14 all necessary hardware and operating systems and work as described above with
15 respect to the ZenFone 3 Zoom. Maxell reserves the right to discover and pursue
16 any additional infringing devices that incorporate infringing functionalities. For the
17 avoidance of doubt, the '226 Accused Products are identified to describe the
18 Defendants' infringement and in no way limit the discovery and infringement
19 allegations against Defendants concerning other devices that incorporate the same
20 or reasonably similar functionalities.

21 100. Defendants have indirectly infringed at least claim 1 of the '226 Patent
22 in this judicial district and elsewhere in the United States by, among other things,
23 actively inducing the use, offering for sale, selling, or importation of at least the
24 '226 Accused Products. Defendants' customers who purchase devices and
25 components thereof and operate such devices and components in accordance with
26 Defendants' instructions directly infringe one or more claims of the '226 Patent in
27 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
28 user guides, such as those for the ZenFone 3 Zoom located at the following

1 website:

2 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
3 [al_v2_web_only.pdf?_ga=2.167685950.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)
4 [822418062.1506021674](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu). Defendants are thereby liable for infringement of the '226
5 Patent pursuant to 35 U.S.C. § 271(b).

6 101. Defendants have indirectly infringed at least claim 1 of the '226
7 Patent, by, among other things, contributing to the direct infringement of others,
8 including customers of the '226 Accused Products by making, offering to sell, or
9 selling, in the United States, or importing a component of a patented machine,
10 manufacture, or combination, or an apparatus for use in practicing a patented
11 process, constituting a material part of the invention, knowing the same to be
12 especially made or especially adapted for use in infringement of the '226 Patent,
13 and not a staple article or commodity of commerce suitable for substantial non-
14 infringing use.

15 102. For example, the '226 Accused Products include components for
16 processing image signals and displaying images. These are components of a
17 patented machine, manufacture, or combination, or an apparatus for use in
18 practicing a patented process. Furthermore, such components are a material part of
19 the invention and upon information and belief are not a staple article or commodity
20 of commerce suitable for substantial non-infringing use. Thus, Defendants are
21 liable for infringement of the '226 Patent pursuant to 35 U.S.C. § 271(c).

22 103. Defendants have been on notice of the '226 Patent since at the latest,
23 the service of this complaint. By the time of trial, Defendants will thus have known
24 and intended (since receiving such notice), that their continued actions would
25 actively induce and contribute to actual infringement of at least claim 1 of the '226
26 Patent.

27 104. Defendants undertook and continue their infringing actions despite an
28 objectively high likelihood that such activities infringed the '226 Patent, which has

1 been duly issued by the USPTO, and is presumed valid. For example, since at least
2 the service of this complaint, Defendants have been aware of an objectively high
3 likelihood that their actions constituted and continue to constitute infringement of
4 the '226 Patent, and that the '226 Patent is valid. On information and belief,
5 Defendants could not reasonably, subjectively believe that their actions do not
6 constitute infringement of the '226 Patent, nor could they reasonably, subjectively
7 believe that the patent is invalid. Despite that knowledge and subjective belief, and
8 the objectively high likelihood that their actions constitute infringement,
9 Defendants have continued their infringing activities. As such, Defendants willfully
10 infringe the '226 Patent.

11 105. Maxell has been damaged by Defendants' infringement of the '226
12 Patent.

13 **COUNT VII – INFRINGEMENT OF U.S. PATENT NO. 9,544,517**

14 106. Maxell incorporates paragraphs 1-105 above by reference.

15 107. U.S. Patent No. 9,544,517 (the "'517 Patent," attached hereto at
16 Exhibit 7) duly issued on January 10, 2017 and is entitled *Electric Camera*.

17 108. Maxell is the owner by assignment of the '517 Patent and possesses all
18 rights under the '517 Patent, including the exclusive right to recover for past and
19 future infringement.

20 109. Defendants have directly infringed one or more claims of the '517
21 Patent in this judicial district and elsewhere in California, including at least claims
22 1, 4, and 8 literally and/or under the doctrine of equivalents, by or through making,
23 using, importing, offering for sale and/or selling their telecommunications
24 technology, including by way of example a product known as the ZenFone 3 Zoom.

25 110. The ZenFone 3 Zoom includes an electric camera. The ZenFone 3
26 Zoom includes an image sensing device with an array of pixels arranged vertically
27 and horizontally in a grid pattern. The ZenFone 3 Zoom includes a 12MP camera
28 as well as a 13MP front camera. On information and belief, image sensors such as

1 the 12 megapixel camera have a light receiving surface having an array of pixels
2 arranged vertically and horizontally in a grid pattern with an arbitrary number of
3 vertically arranged pixels N , where N is equal to or more than three times the
4 number of effective scanning lines M of a display screen of a television system, at
5 least in order to display the image in horizontal and vertical planes on the ZenFone
6 3 Zoom.

7 111. The ZenFone 3 Zoom downsamples/culls the signal charges
8 accumulated in individual pixels of every K pixels in order to produce a number of
9 lines of output signals which corresponds to the number of effective scanning lines
10 M , in this case, 480 (*i.e.*, 480p video capture).

11 112. The ZenFone 3 Zoom has a zoom operation unit configured to receive
12 a request to continuously change a view angle of a moving image by performing
13 digital processing operations on the image. On information and belief, the ZenFone
14 3 Zoom uses a combination of hardware, and software including a processor
15 programmed to provide zooming functionality. For example, it incorporates
16 PixelMaster's Clear Zoom technology to allow zooming in and out without losing
17 clarity.

18 113. The ZenFone 3 Zoom includes a processor programmed to perform
19 various signal processing functions including PixelMaster related functions such as
20 video recording, zooming, and electronic image stabilization. The ZenFone 3
21 Zoom has a display screen that displays the moving image.

22 114. The ZenFone 3 Zoom includes a driver that drives the image sensing
23 device to vertically mix or cull signals at intervals of K_1 pixels in a first area on the
24 image sensing device corresponding to a first image of the moving image, when the
25 first image is displayed on a display unit. For example, while capturing video at
26 default zoom, the image is downsampled/culled in order to capture a 480p image
27 from a high resolution 12MP sensor.
28

1 115. On information and belief, the ZenFone 3 Zoom includes a driver that
2 drives the image sensing device to vertically mix or cull signals at intervals of K2
3 pixels in a second area on the image sensing device corresponding to a second
4 image of the moving image, when the second image is displayed on the display
5 unit. In the ZenFone 3 Zoom, the magnification factor of the first image (default
6 zoom) is smaller than the magnification factor of the second image (full zoom). On
7 information and belief, the value of K1 is larger than a value of K2 (*e.g.*, where the
8 zoomed region has a vertical resolution less than the full vertical resolution of the
9 image sensor).

10 116. The foregoing features and capabilities of the ZenFone 3 Zoom, and
11 Defendants' description and/or demonstration thereof, including in user manuals
12 and advertising, reflect Defendants' direct infringement by satisfying every element
13 of at least claims 1, 4, and 8 of the '517 Patent, under 35 U.S.C. § 271(a).

14 117. On information and belief, Defendants further infringe the '517 Patent
15 through additional products utilizing the same or reasonably similar functionalities
16 as described above with respect to the ZenFone 3 Zoom (collectively, "the '517
17 Accused Products"). The '517 Accused Products include, by way of examples,
18 Asus ZenFone Series (*e.g.*, ZenFone AR (ZS571KL), 3 Max (ZC520TL), 3 Laser
19 (ZC551KL), 2 Laser (ZE551KL), 3 Deluxe (ZS550KL), 3 Zoom (Ze553KL), 4
20 (ZE554KL), 4 Pro (ZS551KL), 4 Max (ZC554KL), V (V520KL), 3 Deluxe
21 (ZS570KL), Zoom (ZX551ML), PadFone X (US), ZenFone 2E, 2 Deluxe Special
22 Edition, 4 Max (ZC520KL)) and the Asus ZenPad Series (*e.g.*, ZenPad 3S10
23 (Z500M), 10 (Z300M), S8.0 (Z580C), C 7.0 (Z170C), Z10 (ZT500KL), Z8s
24 (ZT582KL), 8.0 (Z380M), Z8 (ZT581KL)). These additional products each include
25 all necessary hardware and operating systems and work as described above with
26 respect to the ZenFone 3 Zoom. Maxell reserves the right to discover and pursue
27 any additional infringing devices that incorporate infringing functionalities. For the
28 avoidance of doubt, the '517 Accused Products are identified to describe the

1 Defendants' infringement and in no way limit the discovery and infringement
2 allegations against Defendants concerning other devices that incorporate the same
3 or reasonably similar functionalities.

4 118. Defendants have indirectly infringed at least claims 1, 4, and 8 of the
5 '517 Patent in this judicial district and elsewhere in the United States by, among
6 other things, actively inducing the use, offering for sale, selling, or importation of at
7 least the '517 Accused Products. Defendants' customers who purchase devices and
8 components thereof and operate such devices and components in accordance with
9 Defendants' instructions directly infringe one or more claims of the '517 Patent in
10 violation of 35 U.S.C. § 271. Defendants instruct their customers through at least
11 user guides, such as those for the ZenFone 3 Zoom located at the following
12 website:

13 http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu
14 [al_v2_web_only.pdf?_ga=2.167685950.1642803745.1506021674-](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu)
15 [822418062.1506021674.](http://dlcdnet.asus.com/pub/ASUS/ZenFone/ZE553KL/E12763_ZE553KL_Emanu) Defendants are thereby liable for infringement of the '517
16 Patent pursuant to 35 U.S.C. § 271(b).

17 119. Defendants have indirectly infringed at least claims 1, 4 and 8 of the
18 '517 Patent, by, among other things, contributing to the direct infringement of
19 others, including customers of the '517 Accused Products by making, offering to
20 sell, or selling, in the United States, or importing a component of a patented
21 machine, manufacture, or combination, or an apparatus for use in practicing a
22 patented process, constituting a material part of the invention, knowing the same to
23 be especially made or especially adapted for use in infringement of the '517 Patent,
24 and not a staple article or commodity of commerce suitable for substantial non-
25 infringing use.

26 120. For example, the '517 Accused Products include components for
27 processing image signals and displaying images. These are components of a
28 patented machine, manufacture, or combination, or an apparatus for use in

1 practicing a patented process. Furthermore, such components are a material part of
2 the invention and upon information and belief are not a staple article or commodity
3 of commerce suitable for substantial non-infringing use. Thus, Defendants are
4 liable for infringement of the '517 Patent pursuant to 35 U.S.C. § 271(c).

5 121. Defendants have been on notice of the '517 Patent since at the latest,
6 the service of this complaint. By the time of trial, Defendants will thus have known
7 and intended (since receiving such notice), that their continued actions would
8 actively induce and contribute to actual infringement of at least claims 1, 4, and 8 of
9 the '517 Patent.

10 122. Defendants undertook and continue their infringing actions despite an
11 objectively high likelihood that such activities infringed the '517 Patent, which has
12 been duly issued by the USPTO, and is presumed valid. For example, since at least
13 the service of this complaint, Defendants have been aware of an objectively high
14 likelihood that their actions constituted and continue to constitute infringement of
15 the '517 Patent, and that the '517 Patent is valid. On information and belief,
16 Defendants could not reasonably, subjectively believe that their actions do not
17 constitute infringement of the '517 Patent, nor could they reasonably, subjectively
18 believe that the patent is invalid. Despite that knowledge and subjective belief, and
19 the objectively high likelihood that their actions constitute infringement,
20 Defendants have continued their infringing activities. As such, Defendants willfully
21 infringe the '517 Patent.

22 123. Maxell has been damaged by Defendants' infringement of the '517
23 Patent.

24 **PRAYER FOR RELIEF**

25 WHEREFORE, Maxell prays for relief as follows:

26 1. A judgment declaring that ASUS has infringed and is infringing one or
27 more claims of the '498, '229, '334, '209, '340, '226, and '517 Patents;
28

1 2. A judgment awarding Maxell compensatory damages as a result of
2 ASUS's infringement of one or more claims of the '498, '229, '334, '209, '340, '226,
3 and '517 Patents, together with interest and costs, consistent with lost profits and in
4 no event less than a reasonable royalty;

5 3. A judgment awarding Maxell treble damages and pre-judgment
6 interest under 35 U.S.C. § 284 as a result of ASUS's willful and deliberate
7 infringement of one or more claims of the '498, '229, '334, '209, '340, '226, and
8 '517 Patents;

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

12 5. A grant of preliminary and permanent injunctions enjoining ASUS
13 from further acts of infringement of one or more claims of the '498, '229, '334, '209,
14 '340, '226, and '517 Patents; and

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

16 **JURY TRIAL DEMANDED**

17 Maxell hereby demands a trial by jury.

18
19 Dated: October 13, 2017

Respectfully submitted,

MAYER BROWN LLP

21 By: /s/ Kfir B. Levy

22 Kfir B. Levy (State Bar No. 235372)
23 1999 K Street, NW
24 Washington, DC 20006
25 Telephone: (202) 263-3000
26 Facsimile: (202) 263-3300
27 klevy@mayerbrown.com

28 Attorney for Plaintiff
Maxell, Ltd.