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SEMICONDUCTOR ENERGY
LABORATORY CO., LTD.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

SEMICONDUCTOR ENERGY
LABORATORY CO., LTD.,

Plaintiff,

v.

BOE TECHNOLOGY GROUP CO., LTD., BOE
TECHNOLOGY AMERICA, INC., and
MOTOROLA MOBILITY LLC,

Defendants.

Case No. 3:20-cv-4297

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

Plaintiff Semiconductor Energy Laboratory Co., Ltd. (“SEL”), for its Complaint against
Defendants BOE Technology Group Co., Ltd., BOE Technology America, Inc., and Motorola
Mobility LLC (collectively “Defendants”), alleges as follows:

INTRODUCTION

1. SEL is an award-winning innovator in the research and development of technologies
for semiconductor manufacturing, OLED displays, rechargeable batteries, crystalline oxide

1 semiconductors, and other technologies used in well-known products throughout the world. SEL
2 was founded in 1980, and over the last four decades has focused on research and development in
3 many diverse technical fields, resulting in thousands of patents around the world, and numerous
4 significant awards.

5 2. SEL was founded by Dr. Shunpei Yamazaki, who continues as its President today.
6 Dr. Yamazaki and his research have won many distinctions over the years. He is a Life Fellow of
7 the Institute of Electrical and Electronics Engineers, a foreign member of the Royal Swedish
8 Academy of Engineering Sciences, was ranked in “the top 100 Living Geniuses” by Synectics, and
9 has received many other awards over the years for his research. In 2016, Dr. Yamazaki was
10 recognized by the Guinness World Records as having the most patents credited as an inventor,
11 totaling 11,353 patents in ten different countries and Europe.

12 3. SEL’s research can be found in consumer products worldwide through its
13 collaborations with other companies and licensing of its independently-researched technology. One
14 recent example of SEL’s award-winning technology and collaboration was an award SEL received
15 in conjunction with its work with the Sharp Corporation related to display technology for cell
16 phones. The technology co-developed by SEL received the 2019 R&D 100 Award, which is given
17 to the 100 most significant innovations of the year. In 2019, SEL was among other notable
18 recipients of the award including well-respected national labs like the Lawrence Berkeley National
19 Laboratory and Lawrence Livermore National Laboratory, U.S. government agencies like the
20 NASA Glenn Research Center, as well as a select group of private companies. The award was
21 presented to SEL and Sharp in this District in San Mateo, California.

22 4. SEL brings this action to protect its rights and investments in its innovations
23 embodied in U.S. Patent Nos. 7,372,199 (“the ’199 patent”), 8,618,732 (“the ’732 patent”),
24 9,208,717 (“the ’717 patent”), and 9,825,059 (“the ’059 patent”), (collectively “the Asserted
25 Patents”), used by Defendants in their infringing products.

26 **THE PARTIES**

27 5. SEL is a Japan-based research and development company, and has a regular and
28 established place of business at 398 Hase, Atsugi-shi, Kanagawa, 243-0036, Japan.

6. Upon information and belief, defendant BOE Technology Group Co. Ltd. (“BOE China”) is a global technology company headquartered at 12 Xihuanzhong RD, BDA, Beijing, 100176, P.R. China.

7. Upon information and belief, defendant BOE Technology America, Inc. (“BOE America”)¹ is a subsidiary of BOE China that facilitates BOE China’s U.S. activities, performs research and development, markets BOE products, and provides customer service and outreach to U.S. customers. BOE America is incorporated under the laws of the state of California, with its principal place of business located at 2350 Mission College Boulevard, Suite 600, Santa Clara, California 95054.

8. Upon information and belief, defendant Motorola Mobility LLC (“Motorola”) is a consumer electronics and telecommunications company incorporated in Delaware and wholly owned by Lenovo, with its principal place of business located at 222 W. Merchandise Mart Plaza, Suite 1800, Chicago, Illinois 60654.

JURISDICTION AND VENUE

9. This action arises under the patent laws of the United States, Title 35 U.S.C. § 1, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

10. This Court has personal jurisdiction over Defendants because Defendants are located in the Northern District of California and/or have purposely availed themselves of the privilege of conducting activities within this state and judicial district. On information and belief, each of the Defendants, directly or indirectly through intermediaries (including distributors, retailers, and others), ships, distributes, offers for sale, sells, and advertises products in the United States, the State of California, and the Northern District of California. Each Defendant has purposefully and voluntarily sold one or more of its infringing products with the expectation that they will be purchased by consumers in the Northern District of California. On information and belief, these infringing products have been and continue to be purchased by consumers in the Northern District of California. The Defendants have committed acts of patent infringement within the United States and, more particularly, within the Northern District of California.

¹ BOE China and BOE America are collectively referred to herein as “BOE.”

1 11. In addition, this Court has personal jurisdiction over BOE America because it is
2 incorporated under the laws of California, and maintains continuous and systematic contacts with
3 California and with this District, including maintaining and staffing a corporate office within this
4 District in Santa Clara, California. On information and belief, BOE America's office in Santa Clara
5 is its headquarters and has been since BOE America's incorporation in 2011. On information and
6 belief, BOE America, on behalf of BOE China, participates in the promotion and marketing of BOE
7 displays to U.S. customers, and at U.S. conferences and events. On information and belief, BOE
8 America participates in research and development on behalf of BOE China, and facilitates BOE
9 China's U.S. activities. BOE China controls its wholly-owned subsidiary, BOE America, as well as
10 many other subsidiaries. BOE America gives BOE China substantially the business advantages that
11 it would have enjoyed if it conducted its business through its own offices or paid agents in the state.

12 12. This Court has personal jurisdiction over Motorola because Motorola and its parent
13 company Lenovo maintain continuous and systematic contacts with this District, including
14 maintaining and staffing corporate offices within this District, including corporate offices for
15 Motorola Mobility in Sunnyvale, California, and a Lenovo development lab in San Jose, California.

16 13. This Court also has personal jurisdiction over Defendants because they have
17 committed acts within California giving rise to this action and/or have established minimum
18 contacts with California such that personal jurisdiction over Defendants would not offend
19 traditional notions of fair play and substantial justice. The Defendants are also subject to this
20 Court's jurisdiction pursuant to due process and/or the California Long Arm Statute, due at least to
21 their substantial business conducted in this forum, directly and/or indirectly through agents and
22 intermediaries, including (i) having solicited business in the State of California and in this District,
23 transacted business within the State of California and in this District, and attempted to derive
24 financial benefit from residents of the State of California and this District; (ii) having placed their
25 products and services into the stream of commerce throughout the United States and having been
26 actively engaged in transacting business in California and in this District; (iii) either alone or in
27 conjunction with others, having committed acts of infringement within California and in this
28 District. On information and belief, the Defendants, directly and/or indirectly through

intermediaries, have advertised (including through websites, BOE America's activities, and Verizon), offered to sell, sold, and/or distributed infringing products, and/or have actively induced the sale and use of infringing products within California and within this District, as well as imported into the United States; and (iv) through their presence and physical locations in Santa Clara, and Sunnyvale, California. The Defendants have, directly or indirectly, through their distribution network, purposefully and voluntarily placed such products in the stream of commerce knowing and expecting them to be purchased and used by consumers in California and in this District. The Defendants have committed direct infringement in California or committed indirect infringement based on acts of direct infringement in California and from Defendants' locations in Santa Clara and Sunnyvale, California, among other locations.

14. As a further example, BOE has placed and continues to place infringing cell phone displays into the stream of commerce via an established distribution channel with the knowledge and/or intent that those products were sold and continue to be sold in the United States and California, including in this District. In 2019, BOE reported 6,911,922,720 RMB (nearly US\$978 million) in revenue in the America region. 2019 BOE Annual Report at 16 (available at <https://sscobj.boe.com/online-head-service/website/9eaf4cdc-51d9-4e1e-b079-a210872d23c5.pdf>). BOE supplies infringing displays to customers who target the U.S. market and California, including Motorola and Nubia Technology Co., Ltd. ("Nubia").

15. Motorola incorporates BOE displays into its infringing razr smartphone that is marketed and sold to customers located in California and within this District. Motorola offers to sell and sells its phones directly to customers through its website (*see* <https://www.motorola.com/us/smartphones-razr>), through the website of its carrier partner Verizon (*see* <https://www.verizon.com/smartphones/moto-razr/>), and through numerous physical Verizon Wireless store locations within California and this District (*see* <https://www.verizonwireless.com/stores/california/#/state>). In addition, Motorola provides service and warranty repair within California and this District, including Authorized Motorola Repair Centers (*see, e.g.,* <https://motorola-global-portal.custhelp.com/app/mcp/track-repair/service-center-locator/type/inw> (showing Authorized Motorola Repair Center in Antioch, California)). On

1 information and belief, certain customer support and service may also be available at local physical
2 Verizon stores within California and this District.

3 16. Nubia incorporates BOE displays into its infringing Z20 smartphone that is marketed
4 and sold to U.S. customers through its website. See <https://www.nubia.com/en/>;
5 <https://mall.nubia.com/pages/z20>. Nubia has directed sales of its Z20 smart phone to the U.S.
6 market as evident through at least its website, FCC approval, and statements of compliance with
7 certain U.S. laws and regulations.

8 17. On information and belief, BOE induces Motorola and Nubia to include its
9 infringing displays into phones sold by Motorola and Nubia with the knowledge that these phones
10 will be sold in the U.S. and California. As a result, BOE has placed and continues to place
11 infringing cell phone displays into the stream of commerce knowing that many of its products will
12 end up in California.

13 18. Thus, on information and belief, Defendants' presence and activities in this District,
14 including patent infringement as described below, give rise to the claims set forth herein.

15 19. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c) and 1400
16 because the Defendants do business here and are subject to personal jurisdiction in this judicial
17 District. Venue is also proper because Defendants' presence and activities in this District give rise
18 to the claims set forth herein. On information and belief, BOE America's office in Santa Clara is its
19 headquarters and has been since BOE America's incorporation in 2011. BOE America, on behalf of
20 BOE China, conducts activities within this District related to the promotion and marketing of BOE
21 displays to U.S. customers. On information and belief, BOE America participates in research and
22 development on behalf of BOE China, and facilitates BOE China's U.S. activities from this District.
23 Motorola and its parent company Lenovo maintain physical offices within this District, including
24 maintaining and staffing corporate offices within this District, including corporate offices for
25 Motorola Mobility in Sunnyvale, California, and a Lenovo development lab in San Jose, California.
26 In addition, venue is proper for defendant BOE China because it is not a resident of the U.S., so it
27 may be sued in any judicial district. Therefore, venue is proper in this Court.

SEL'S PATENTED TECHNOLOGY

20. The Asserted Patents relate to a number of semiconductor technologies used in the design and manufacturing of semiconductor displays, including OLED displays, used in various consumer products.

21. The '199 patent relates to technology for constructing a light emitting device that is capable of equalizing and raising the luminance of different colors of the emitted light. The patented device uses a combination of a triplet organic compound that emits light via phosphorescence and a singlet organic compound that emits light via fluorescence in conjunction with multiple hole transporting layers. In this way, the patented invention makes it possible to control and equalize the luminance of light emitted, as well as reduce the power consumption and prevent lopsided degradation of the electroluminescent elements.

22. The '732 patent relates to technology for the layered structure of a display device and accompanying housing. The patented structures include a particular ordering of layers in the device, as well as particular shapes and orientations of those layers. The patent also relates to curved display surfaces, among other display technology features. The inventions of the '732 patent realize many benefits, including reduced black-dot defects, improved viewability, improved image quality, and improved yield during manufacturing.

23. The '717 patent generally relates to a circuit configuration of a display device. The patented circuit includes a particular arrangement and interconnection of circuit components. The inventions of the '717 patent realize many benefits, including implementing error correction using a threshold value of a driver transistor of a circuit, such as a pixel circuit, itself and therefore correctly performing threshold value correction.

24. The '059 patent generally relates to a circuit configuration of a display device. The patented circuit includes a particular arrangement and interconnection of circuit components. The inventions of the '059 patent realize many benefits, including suppressing or reducing deterioration of transistors during operation of a circuit, such as pixel and/or driver circuit of a display device.

DEFENDANTS' USE OF SEL'S INNOVATIONS

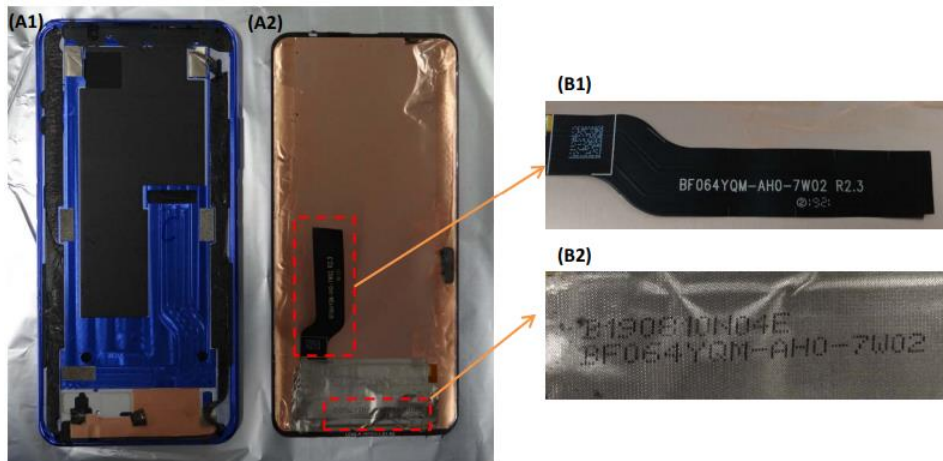
25. On information and belief, BOE announced 2019 revenue of 106 billion RMB (approximately US\$15 billion) for its interface devices business division, which was almost 92% of BOE's revenue in 2019. *See* 2019 BOE Annual Report at 16 (<https://sscobj.boe.com/online-head-service/website/9eaf4cdc-51d9-4e1e-b079-a210872d23c5.pdf>). BOE has stated that “the flexible AMOLED business has achieved its breakthrough” and notes that “flexible AMOLED production” at its Mianyang facility has reached volume production, and that another facility is under construction in Chongqing to produce flexible AMOLEDs. *See id.* at 14.

26. BOE's infringing display panels are a primary component in the razr and Z20 smart phones sold by Motorola and Nubia respectively.² Upon information and belief, BOE sells its displays, including OLED displays, to Motorola and Nubia, who install the displays into their razr and Z20 phones, then import them into the U.S. for marketing and sale to U.S. customers. *See* <https://www.gizchina.com/2019/11/15/boe-is-the-manufacturer-of-motorola-razr-and-think-x1-foldable-displays/>; <https://www.themobileindian.com/news/nubia-z20-launched-with-dual-amoled-display-snapdragon-855-plus-soc-27474>. On information and belief, the serial numbers on displays found in the Accused Products indicate BOE is the source of the displays:



(Motorola razr)

² BOE's infringing displays, including but not limited to those supplied for the Motorola razr and Nubia Z20, along with the razr and Z20 phones themselves, are collectively referred to herein as the “Accused Products.”



(Nubia Z20)

27. Display technology that improves quality, performance, or cost in a smart phone is critical for both consumers of smart phones and companies who develop and market them. On information and belief, display capability and performance has been a driver of sales for the smart phone industry generally for many years.

28. For example, Motorola's advertising and marketing of its displays are a key part of its sales strategy for razr, evident by Motorola's website for the razr which focuses on "Cinematic Viewing" with statements such as "Films and videos come to life in high-def on razr's stunning flexible display featuring CinemaVision." See <https://www.motorola.com/us/smartphones-razr>. The razr's displays are a prominent feature of the razr. See *id.*

29. As another example, Nubia's advertising and marketing of the Z20 phone also relies heavily on the phone's display. One of the top advertised features is the "Dual-screen Display," described as "Two beautifully curved screens – back to back. It's a giant leap for smartphone design, and a turn of the hand for you." See <https://global.mall.nubia.com/pages/z20>. Nubia also advertises that the Z20 is "All Display, No Distraction...That means brilliant colors and deeper blacks, all in stunning detail for an immersive experience," and features curved displays with statements like "Feel the future with its uniquely comfortable curved edge-to-edge design – yes, on both displays." *Id.*

30. SEL's patented technology, used by Defendants, improves the performance and capability of displays, allowing for an improved experience by end-users. SEL's technology also results in higher yields reducing cost to phone providers and consumers.

LICENSING NEGOTIATIONS AND NOTICE OF THE ASSERTED PATENTS

31. Defendants have knowingly used, and are using, SEL's patented technology without a license. Defendants' infringement of SEL's patented technology is willful, as described further below.

32. To protect its intellectual property rights and try to collaborate with BOE, SEL contacted BOE in October 2018 related to BOE's products that relate to OLED and other display and semiconductor technologies. Since at least January 2019, SEL presented detailed information about how BOE's products relate to SEL's patent portfolio. These meetings included specific identification of patents and detailed analyses of how BOE products relate to SEL's patents.

33. For example, at least as early as January 22, 2019, SEL communicated an element-by-element analysis of how the '717 and '059 patents, among others, related to BOE's displays. Multiple meetings, communications, and sets of materials were exchanged during 2019 related to the '717 and '059 patents, among other SEL patents.

34. BOE and SEL met several times during 2019, and met by phone in February 2020. However, these meetings did not result in BOE licensing the Asserted Patents or any other patents. Because BOE has not accepted SEL's numerous outreaches since October 2018, SEL is now compelled to enforce its patent rights through this lawsuit.

35. Moreover, on June 22, 2020, SEL sent BOE and Motorola letters providing notice of each of the Asserted Patents, and identifying their relevance to the Accused Products.

36. As a result of Defendants' disregard for SEL's patent rights, Defendants' infringement has been, and continues to be done willfully and with notice of the Asserted Patents.

FIRST CAUSE OF ACTION

INFRINGEMENT OF U.S. PATENT NO. 7,372,199

37. SEL incorporates by reference the allegations in the preceding paragraphs of its Complaint.

38. The U.S. Patent Office duly and properly issued the '199 patent, entitled "Light emitting device and image playback device having triplet and singlet compounds in electroluminescent layer." SEL is the assignee of all rights, title, and interest in and to the '199

1 patent and possesses the exclusive right of recovery for past, present, and future infringement. Each
2 and every claim of the '199 patent is valid and enforceable. A true and correct copy of the '199
3 patent is attached to this Complaint as Exhibit A.

4 39. On information and belief, Defendants have directly infringed at least claims 1, 9,
5 and 13 of the '199 patent by making, using, selling, offering for sale, and/or importing into the
6 United States the Accused Products in violation of 35 U.S.C. § 271(a). Charts providing exemplary
7 evidence of infringement of the '199 patent are attached to this Complaint as Exhibits B and C.

8 40. On information and belief, BOE has infringed at least claims 1, 9, and 13 of the '199
9 patent by inducing others, including Motorola and Nubia, to infringe at least said claims of the '199
10 patent in violation of 35 U.S.C. § 271(b).

11 41. On information and belief, BOE takes active steps to induce infringement of at least
12 claims 1, 9, and 13 of the '199 patent by others, including Motorola and Nubia, and BOE takes such
13 active steps knowing that those steps will induce, encourage and facilitate direct infringement by
14 others. On information and belief, BOE knows or should know that such activities induce others to
15 directly infringe at least said claims of the '199 patent.

16 42. On information and belief, BOE contributes to the infringement of at least claims 1,
17 9, and 13 of the '199 patent by others, including Motorola and Nubia, in violation of 35 U.S.C. §
18 271(c). Acts by BOE that contribute to the infringement of others include, but are not limited to,
19 the use and/or importation of the Accused Products. Such products are especially made or adapted
20 for use to infringe at least said claims of the '199 patent and are at least a material part of those
21 claims. The Accused Products, including the functionality contributing to infringement of the '199
22 patent, are not suitable for substantial noninfringing use.

23 43. By way of at least SEL's notice to Defendants on June 22, 2020 (as well as this
24 Complaint), Defendants know of the '199 patent and perform acts that they know, or should know,
25 induce, and/or contribute to the direct infringement of the '199 patent.

26 44. Defendants undertook and continue their infringing actions despite an objectively
27 high likelihood that such activities infringed the '199 patent, which is presumed valid. For
28 example, Defendants have been aware of an objectively high likelihood that their actions

constituted, and continue to constitute, infringement of the '199 patent and that the '199 patent is valid since at least June 22, 2020. Defendants could not reasonably subjectively believe that their actions do not constitute infringement of the '199 patent, nor could they reasonably subjectively believe that the '199 patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '199 patent.

45. SEL has been irreparably harmed by Defendants' infringement of the '199 patent and will continue to be harmed unless and until Defendants' infringement is enjoined by this Court.

46. By its actions, Defendants have injured SEL and are liable to SEL for infringement of the '199 patent pursuant to 35 U.S.C. § 271. SEL is entitled to damages as set forth in at least 35 U.S.C. §§ 284 and 285.

SECOND CAUSE OF ACTION

INFRINGEMENT OF U.S. PATENT NO. 8,618,732

47. SEL incorporates by reference the allegations in the preceding paragraphs of its Complaint.

48. The U.S. Patent Office duly and properly issued the '732 patent, entitled "Display device and method of fabricating the display device." SEL is the assignee of all rights, title, and interest in and to the '732 patent and possesses the exclusive right of recovery for past, present, and future infringement. Each and every claim of the '732 patent is valid and enforceable. A true and correct copy of the '732 patent is attached to this Complaint as Exhibit D.

49. On information and belief, Defendants have directly infringed at least claims 1, 8, and 15 of the '732 patent by making, using, selling, offering for sale, and/or importing into the United States the Accused Products in violation of 35 U.S.C. § 271(a). Charts providing exemplary evidence of infringement of the '732 patent are attached to this Complaint as Exhibits E and F.

50. On information and belief, BOE has infringed at least claims 1, 8, and 15 of the '732 patent by inducing others, including Motorola and Nubia, to infringe at least said claims of the '732 patent in violation of 35 U.S.C. § 271(b).

1 51. On information and belief, BOE takes active steps to induce infringement of at least
2 claims 1, 8, and 15 of the '732 patent by others, including Motorola and Nubia, and BOE takes such
3 active steps knowing that those steps will induce, encourage and facilitate direct infringement by
4 others. On information and belief, BOE knows or should know that such activities induce others to
5 directly infringe at least said claims of the '732 patent.

6 52. On information and belief, BOE contributes to the infringement of at least claims 1,
7 8, and 15 of the '732 patent by others, including Motorola and Nubia, in violation of 35 U.S.C. §
8 271(c). Acts by BOE that contribute to the infringement of others include, but are not limited to,
9 the use and/or importation of the Accused Products. Such products are especially made or adapted
10 for use to infringe at least said claims of the '732 patent and are at least a material part of those
11 claims. The Accused Products, including the functionality contributing to infringement of the '732
12 patent, are not suitable for substantial noninfringing use.

13 53. By way of at least SEL's notice to Defendants on June 22, 2020 (as well as this
14 Complaint), Defendants know of the '732 patent and perform acts that they know, or should know,
15 induce, and/or contribute to the direct infringement of the '732 patent.

16 54. Defendants undertook and continue their infringing actions despite an objectively
17 high likelihood that such activities infringed the '732 patent, which is presumed valid. For
18 example, Defendants have been aware of an objectively high likelihood that their actions
19 constituted, and continue to constitute, infringement of the '732 patent and that the '732 patent is
20 valid since at least June 22, 2020. Defendants could not reasonably subjectively believe that their
21 actions do not constitute infringement of the '732 patent, nor could they reasonably subjectively
22 believe that the '732 patent is invalid. Despite that knowledge, subjective belief, and the
23 objectively high likelihood that its actions constitute infringement, Defendants have continued their
24 infringing activities. As such, Defendants willfully infringe the '732 patent.

25 55. SEL has been irreparably harmed by Defendants' infringement of the '732 patent
26 and will continue to be harmed unless and until Defendants' infringement is enjoined by this Court.

56. By its actions, Defendants have injured SEL and are liable to SEL for infringement of the '732 patent pursuant to 35 U.S.C. § 271. SEL is entitled to damages as set forth in at least 35 U.S.C. §§ 284 and 285.

THIRD CAUSE OF ACTION

INFRINGEMENT OF U.S. PATENT NO. 9,208,717

57. SEL incorporates by reference the allegations in the preceding paragraphs of its Complaint.

58. The U.S. Patent Office duly and properly issued the '717 patent, entitled "Semiconductor device and driving method thereof." SEL is the assignee of all rights, title, and interest in and to the '717 patent and possesses the exclusive right of recovery for past, present, and future infringement. Each and every claim of the '717 patent is valid and enforceable. A true and correct copy of the '717 patent is attached to this Complaint as Exhibit G.

59. On information and belief, Defendants have directly infringed at least claims 1, 7, 13, 19, 25, 31, 37, and 43 of the '717 patent by making, using, selling, offering for sale, and/or importing into the United States the Accused Products in violation of 35 U.S.C. § 271(a). Charts providing exemplary evidence of infringement of the '717 patent are attached to this Complaint as Exhibits H and I.

60. On information and belief, BOE has infringed at least claims 1, 7, 13, 19, 25, 31, 37, and 43 of the '717 patent by inducing others, including Motorola and Nubia, to infringe at least said claims of the '717 patent in violation of 35 U.S.C. § 271(b).

61. On information and belief, BOE takes active steps to induce infringement of at least claims 1, 7, 13, 19, 25, 31, 37, and 43 of the '717 patent by others, including Motorola and Nubia, and BOE takes such active steps knowing that those steps will induce, encourage and facilitate direct infringement by others. On information and belief, BOE knows or should know that such activities induce others to directly infringe at least said claims of the '717 patent.

62. On information and belief, BOE contributes to the infringement of at least claims 1, 7, 13, 19, 25, 31, 37, and 43 of the '717 patent by others, including Motorola and Nubia, in violation of 35 U.S.C. § 271(c). Acts by BOE that contribute to the infringement of others include, but are

1 not limited to, the use and/or importation of the Accused Products. Such products are especially
 2 made or adapted for use to infringe at least said claims of the '717 patent and are at least a material
 3 part of those claims. The Accused Products, including the functionality contributing to
 4 infringement of the '717 patent, are not suitable for substantial noninfringing use.

5 63. By way of at least SEL's negotiations with BOE since at least January 22, 2019, and
 6 SEL's notice to Defendants on June 22, 2020 (as well as this Complaint), Defendants know of the
 7 '717 patent and perform acts that they know, or should know, induce, and/or contribute to the direct
 8 infringement of the '717 patent.

9 64. Defendants undertook and continue their infringing actions despite an objectively
 10 high likelihood that such activities infringed the '717 patent, which is presumed valid. For
 11 example, Defendants have been aware of an objectively high likelihood that their actions
 12 constituted, and continue to constitute, infringement of the '717 patent and that the '717 patent is
 13 valid since at least January 22, 2019. Defendants could not reasonably subjectively believe that
 14 their actions do not constitute infringement of the '717 patent, nor could they reasonably
 15 subjectively believe that the '717 patent is invalid. Despite that knowledge, subjective belief, and
 16 the objectively high likelihood that its actions constitute infringement, Defendants have continued
 17 their infringing activities. As such, Defendants willfully infringe the '717 patent.

18 65. SEL has been irreparably harmed by Defendants' infringement of the '717 patent
 19 and will continue to be harmed unless and until Defendants' infringement is enjoined by this Court.

20 66. By its actions, Defendants have injured SEL and are liable to SEL for infringement
 21 of the '717 patent pursuant to 35 U.S.C. § 271. SEL is entitled to damages as set forth in at least 35
 22 U.S.C. §§ 284 and 285.

23 **FOURTH CAUSE OF ACTION**

24 **INFRINGEMENT OF U.S. PATENT NO. 9,825,059**

25 67. SEL incorporates by reference the allegations in the preceding paragraphs of its
 26 Complaint.

27 68. The U.S. Patent Office duly and properly issued the '059 patent, entitled
 28 "Semiconductor device and display device." SEL is the assignee of all rights, title, and interest in

1 and to the '059 patent and possesses the exclusive right of recovery for past, present, and future
2 infringement. Each and every claim of the '059 patent is valid and enforceable. A true and correct
3 copy of the '059 patent is attached to this Complaint as Exhibit J.

4 69. On information and belief, Defendants have directly infringed at least claims 9 and
5 14 of the '059 patent by making, using, selling, offering for sale, and/or importing into the United
6 States the Accused Products in violation of 35 U.S.C. § 271(a). Charts providing exemplary
7 evidence of infringement of the '059 patent are attached to this Complaint as Exhibits K and L.

8 70. On information and belief, BOE has infringed at least claims 9 and 14 of the '059
9 patent by inducing others, including Motorola and Nubia, to infringe at least said claims of the '059
10 patent in violation of 35 U.S.C. § 271(b).

11 71. On information and belief, BOE takes active steps to induce infringement of at least
12 claims 9 and 14 of the '059 patent by others, including Motorola and Nubia, and BOE takes such
13 active steps knowing that those steps will induce, encourage and facilitate direct infringement by
14 others. On information and belief, BOE knows or should know that such activities induce others to
15 directly infringe at least said claims of the '059 patent.

16 72. On information and belief, BOE contributes to the infringement of at least claims 9
17 and 14 of the '059 patent by others, including Motorola and Nubia, in violation of 35 U.S.C. §
18 271(c). Acts by BOE that contribute to the infringement of others include, but are not limited to,
19 the use and/or importation of the Accused Products. Such products are especially made or adapted
20 for use to infringe at least said claims of the '059 patent and are at least a material part of those
21 claims. The Accused Products, including the functionality contributing to infringement of the '059
22 patent, are not suitable for substantial noninfringing use.

23 73. By way of at least SEL's negotiations with BOE since at least January 22, 2019, and
24 SEL's notice to Defendants on June 22, 2020 (as well as this Complaint), Defendants know of the
25 '059 patent and perform acts that they know, or should know, induce, and/or contribute to the direct
26 infringement of the '059 patent.

27 74. Defendants undertook and continue their infringing actions despite an objectively
28 high likelihood that such activities infringed the '059 patent, which is presumed valid. For

example, Defendants have been aware of an objectively high likelihood that their actions constituted, and continue to constitute, infringement of the '059 patent and that the '059 patent is valid since at least January 22, 2019. Defendants could not reasonably subjectively believe that their actions do not constitute infringement of the '059 patent, nor could they reasonably subjectively believe that the '059 patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement, Defendants have continued their infringing activities. As such, Defendants willfully infringe the '059 patent.

75. SEL has been irreparably harmed by Defendants' infringement of the '059 patent and will continue to be harmed unless and until Defendants' infringement is enjoined by this Court.

76. By its actions, Defendants have injured SEL and are liable to SEL for infringement of the '059 patent pursuant to 35 U.S.C. § 271. SEL is entitled to damages as set forth in at least 35 U.S.C. §§ 284 and 285.

DEMAND FOR JURY TRIAL

77. SEL demands a trial by jury on all claims and issues so triable.

PRAYER FOR RELIEF

78. WHEREFORE, SEL respectfully requests that this Court enter judgment against Defendants as follows:

- (a) Finding that Defendants directly infringe the Asserted Patents;
- (b) That Defendants have induced infringement of the Asserted Patents;
- (c) That Defendants have contributed to infringement of the Asserted Patents;
- (d) That Defendants have willfully infringed the Asserted Patents;
- (e) Awarding damages adequate to compensate SEL for the patent infringement that has occurred, in accordance with 35 U.S.C. § 284, including an assessment of pre-judgment and post-judgment interest and costs, and an accounting as appropriate for infringing activity not captured within any applicable jury verdict;
- (f) Awarding SEL an ongoing royalty for Defendants' post-verdict infringement, payable on each product offered by Defendants that is found to infringe one or more of the Asserted Patents, and on all future products that are not colorably different from those found to infringe, or –

1 in the alternative if Defendants refuse the ongoing royalty – permanently enjoining Defendants from
2 further infringement;

3 (g) Providing an award of all other damages permitted by 35 U.S.C. § 284, including
4 increased damages up to three times the amount of compensatory damages found;

5 (h) Finding that this is an exceptional case and an award to SEL of its costs, expenses,
6 and reasonable attorneys’ fees incurred in this action as provided by 35 U.S.C. § 285; and

7 (i) Providing such other relief, including other monetary and equitable relief, as this
8 Court deems just and proper.

9
10 Dated: June 29, 2020

Respectfully submitted,

11
12 By: /s/ David M. Barkan
13 David M. Barkan

14 FISH & RICHARDSON P.C.
15 Attorneys for Plaintiff
16 SEMICONDUCTOR ENERGY
17 LABORATORY CO., LTD.
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