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ELIZABETH DUALL REGARD

VIA HAND DELIVERY

The Honorable Lisa R. Barton Secretary U.S. International Trade Commission 500 E Street, SW, Room 112-A Washington, DC 20436

May 22, 2019

336

Mission

Office of the Secretary
Int'l trade Commission

Re: Certain Touch-Controlled Mobile Devices, Computers, and Components Thereof, Inv. No. 337-TA-

Dear Secretary Barton:

Enclosed for filing on behalf of Complainant Neodron Ltd. ("Neodron") are the following documents in support of Neodron's request that the Commission commence an investigation pursuant to Section 337 of the Tariff Act of 1930, as amended:

- 1. One (1) original plus (8) paper copies of the verified Non-Confidential Complaint and the Public Interest Statement. (19 CFR §§ 210.8(a)(1)(i), 210.8(b));
- 2. One (1) original plus eight (8) copies of Neodron's letter and certification requesting confidential treatment for the information contained in the Confidential Exhibit Nos. 22C, 23C, 80C-84C. (19 CFR §§ 210.4(f)(7)(i), 210.5 (d), 201.6 (b));
- 3. One (1) copy, on CD of the accompanying non-confidential exhibits and public versions of the Confidential Exhibits (19 CFR § 210.8(a)(1)(i));
- 4. One (1) copy, on CD with the Confidential Exhibits Nos. 22C, 23C, 80C-84C. (19 CFR §§ 201.6(c));
- 5. Nine (9) additional copies of the verified Non-Confidential Complaint, Public Interest Statement, Request for

The Honorable Lisa R. Barton May 22, 2019 Page 2

Confidential Treatment and Certification and nine (9) CD's of the Non-Confidential exhibits for each proposed respondent. (19 CFR §§ 210.8(a)(1)(iii) and 210.11(a)(1)(i));

- 6. Nine (9) additional CD's of the Confidential exhibits for each of the proposed respondents. (19 CFR §§ 210.8(a)(1)(iii));
- 7. The original certified copies of the prosecution histories of the Asserted Patents and technical references included as Appendices A-D to the Complaint, and four (4) additional copies of each on separate CDs. (19 C.F.R. §§ 210.12(c)(1) and 19 C.F.R. §§ 210.12(c)(2));
- 8. Two (2) additional copies of the verified Non-Confidential Complaint and the Public Interest Statement for service upon the Embassy of the Republic of Korea in the U.S.A. and the Embassy of the People's Republic of China in the U.S.A. (19 CFR §§ 210.8(a)(1)(iv) and 210.11(a)(1)(ii)).

Please contact me with any questions regarding this submission. Thank you for your attention to this matter.

Respectfully Submitted,

Tom M. Schaumberg

Counsel for Complainant Neodron Ltd.

Enclosures



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May 22, 2019

VIA HAND DELIVERY

REQUEST FOR CONFIDENTIAL TREATMENT

The Honorable Lisa R. Barton Secretary U.S. INTERNATIONAL TRADE COMMISSION 500 E Street, SW, Room 112-A Washington, DC 20436

Re: Certain Touch-Controlled Mobile Devices, Computers, and Components Thereof, Inv. No. 337-TA-

Dear Secretary Barton:

Pursuant to Commission Rules 210.5(d) and 201.6(b)(1), Complainant Neodron Ltd. ("Neodron" or "Complainant") respectfully request confidential treatment of the business information contained in Exhibits Nos. 22C, 23C, 80C-84C ("Conf. Exhibits") to the Verified Complaint.

The information contained in the Conf. Exhibits 22C, 23C, 80C-84C qualifies as confidential business information pursuant to Commission Rule 201.6(a) because:

- It is not available to the general public;
- The disclosure of such information would cause substantial harm to Neodron and the competitive position of Neodron; and
- Unauthorized disclosure of the information could impair the Commission's ability to obtain information necessary to perform its statutory function.

The Honorable Lisa R. Barton May 22, 2019 Page 2

Please contact me with any questions regarding this submission. Thank you for your attention to this matter.

Respectfully Submitted,

Tom M. Schaumberg

Counsel for Complainant Neodron Ltd.

THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

In the Matter of

CERTAIN TOUCH-CONTROLLED MOBILE DEVICES AND COMPONENTS THEREOF

Investigation	No.	337-TA-
mvosuganom	110.	

CERTIFICATION REGARDING REQUEST FOR CONFIDENTIAL TREATMENT

- I, Tom M. Schaumberg, counsel for Complainant Neodron Ltd. ("Neodron" or "Complainant"), declare as follows:
- I have reviewed Neodron's Verified Complaint and Confidential Exhibit Nos. 22C,
 23C, 80C-84C ("Conf. Exhibits") filed concurrently with this Certification.
 - 2. Conf. Exhibits contain the following confidential business information of Neodron:
 - a. proprietary information not available to the public;
 - information regarding Neodron's patented methodologies and processes for producing the covered products;
 - c. activities related to Neodron's domestic industry investments such as manufacturing and equipment, and labor and capital.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 22nd day of May, 2019 in Washington, D.C.

Tom M. Schaumberg

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Counsel for Complainant Neodron Ltd.

THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

In the Matter of	§	
	§	
CERTAIN TOUCH-CONTROLLED	§	Investigation No. 337-TA-
MOBILE DEVICES, COMPUTERS,	§	mvesugation no. 337-1A
AND COMPONENTS THEREOF	§	
	§	

STATEMENT REGARDING THE PUBLIC INTEREST

Pursuant to Commission Rule 210.8(b), 19 C.F.R. § 210.8(b), Complainant Neodron Ltd. ("Neodron" or "Complainant") respectfully submits this Statement Regarding the Public Interest. Neodron seeks a limited exclusion order excluding from entry into the United States certain touch-controlled mobile devices, including smartphone and tablet devices, computers, including notebook and laptop computers, and associated components thereof that infringe United States Patent Nos. 8,432,173 ("'173 Patent"); 8,791,910 ("'910 Patent"); 9,024,790 ("'790 Patent"); and 9,372,580 ("'580 Patent") (collectively, the "Asserted Patents"). Neodron also seeks permanent cease and desist orders prohibiting the Proposed Respondents, their subsidiaries, related companies, and agents from engaging in the importation, sale for importation, marketing and/or advertising, distribution, offering for sale, sale, use after importation, sale after importation, or other transfer within the United States of certain touch-controlled mobile devices, computers, and components thereof that infringe one or more claims of the Asserted Patents. Exclusion of such products from the United States will not have an adverse effect on the public health and welfare in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, or United States consumers.

Exclusion of the Proposed Respondents' infringing touch-controlled mobile devices, computers, and components thereof would not "deprive the public of products necessary for some

important health or welfare need." *Spansion, Inc. v. U.S. Int'l Trade Comm'n*, 629 F.3d 1331, 1360 (Fed. Cir. 2010). Further, because Neodron's licensees supply the market for touch-controlled products, consumers would not face any substantial shortage of like or competitive products in the United States. As described in the Complaint, Neodron's licensees, as well as third-parties, supply touch-controlled products to the U.S. market. Thus, this Investigation does not present an instance where a compelling public interest would supersede entry of the requested remedial orders.

I. Explanation of How the Articles Potentially Subject to the Remedial Orders Are Used in The United States

The products at issue in this investigation include touch-controlled mobile devices, including smartphone and tablet devices, computers, including notebook and laptop computers, and components that are commonly used by consumers in residential and commercial applications. These touch-controlled products comprise numerous components, usually including a touch-responsive surface and associated microcontroller. The products at issue in this investigation are generally used by the end consumers for personal, business, and communication purposes.

II. Identification of Any Public Health, Safety, or Welfare Concerns Relating to the Requested Remedial Orders

Issuance of the requested remedial orders would have no adverse effect on the public health, safety, or welfare in the United States. In general, concerns about a negative impact on public health, safety, or welfare have arisen in cases involving pharmaceuticals, essential equipment for medical treatment, or green technology products, such as hybrid cars and solar panels. *See Spansion*, 629 F.3d at 1360. For example, the Commission has previously concluded that access to essential medical equipment used to treat burn victims is a significant public interest consideration because the equipment "provide[s] benefits unavailable from any other device or method of treatment." *Certain Fluidized Supporting Apparatus & Components Thereof*, Inv. No. 337-TA-182/188, USITC Pub. 1667, Comm'n Op. at 23-25 (Oct. 1984). None of these concerns

is present here. And as discussed further below, the requested remedial orders will not significantly impact the overall market for touch-controlled products in the United States.

Accordingly, access to the accused products does not implicate any meaningful public health, safety, or welfare concern. Indeed, the requested relief serves the public interest because, as previously recognized by the Commission, there is a strong public interest in protecting intellectual property rights. See, e.g., Certain Baseband Processor Chips and Chipsets, Transmitter and Receiver (Radio) Chips, Power Control Chips, and Products Containing Same, Including Cellular Telephone Handsets, Inv. No. 337-TA-543, Comm'n Op. at 136–37 (June 19, 2007). This strong interest in protecting Neodron's intellectual property rights and the domestic industry set forth in the Complaint far outweighs any hypothetical adverse effect on the public.

III. Identification of Like or Directly Competitive Articles That Complainant, Its Licensees, or Third Parties Make Which Could Replace the Subject Article If They Were to Be Excluded

Touch-controlled mobile devices and computers are available from multiple sources with which Proposed Respondents compete. As an initial matter, Neodron's licensees adequately supply the market and will continue to do so irrespective of whether the requested remedial orders are issued. Moreover, Proposed Respondents are a subset of suppliers of touch-controlled products in the United States market, and Proposed Respondents' products do not contain any unique health or safety-related features. No public interest concerns exist where the market contains an adequate supply of competitive or substitute products for those subject to a remedial order. *See, e.g.*, *Certain Lens Fitted Film Packages*, Inv. No. 337-TA-406, Comm'n Op. at 18 (June 28, 1999). The touch-controlled mobile device market is highly competitive, and numerous companies, including Neodron's licensees, have the capacity to replace Proposed Respondents' volume of production of infringing products for the United States market without delay.

IV. Indication of Whether Complainant, Complainant's Licensees, and/or Third Party Suppliers Have the Capacity to Replace the Volume of Articles Subject to the Requested Remedial Orders in a Commercially Reasonable Time

Touch-controlled mobile devices, computers, and components thereof are currently available in the United States including products from Neodron's licensees and non-Respondent third parties. Neodron's licensees and the non-Respondent third parties have the capacity to increase domestic production of touch-controlled mobile device products should demand require. In addition, non-infringing touch-controlled products will also continue to be available from third-party suppliers. Consequently, consumers would have access to competitive non-infringing products from Neodron's licensees and third parties in amounts sufficient to meet the demand should the accused products be excluded from the United States.

V. Statement of How the Requested Remedial Order Would Impact Consumers

Consumers will have available to them in the United States marketplace a wide variety of touch-controlled mobile devices and computers including those supplied by Neodron's licensees, as well as other competitive non-infringing touch-controlled products, if the accused products are excluded from the United States. In view of the availability of commercial alternatives to the accused products, the exclusion of the infringing touch-controlled mobile devices, computers, and components thereof will not negatively impact consumers in the United States. Rather, the requested relief will serve the public interest by enforcing United States intellectual-property rights. Precluding the Proposed Respondents from importing and selling their infringing touch-controlled mobile devices, computers, and components thereof will benefit the public interest by protecting innovators, such as Neodron and its licensees, who invest domestically to research and develop new energy-efficient technology. Permitting unlicensed suppliers like the Proposed Respondents to import and sell infringing touch-controlled mobile devices, computers, and components thereof would not only devalue the licenses Neodron granted to other companies, but

would also undermine future investment in similar technology. See Certain Display Controllers and Products Containing Same, Inv. No. 337-TA-491/481, Comm'n Op. at 66 (Feb. 2005).

Dated: May 22, 2019

Respectfully submitted

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THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

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CERTAIN TOUCH-CONTROLLED MOBILE DEVICES, COMPUTERS, AND COMPONENTS THEREOF

§		
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§	Investigation No. 337-TA-	
\$ §	investigation No. 337-1A	
§		
8		

COMPLAINT UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

COMPLAINANT:

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DELL TECHNOLOGIES INC.

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MOTOROLA MOBILITY LLC

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Exhibits

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1	Certified Copy of U.S. Patent No. 8,432,173
2	Certified Copy of U.S. Patent No. 8,791,910
3	Certified Copy of U.S. Patent No. 9,024,790
4	Certified Copy of U.S. Patent No. 9,372,580
5	Certified Assignment at Reel/Frame 027426/0861 ('580)
6	Certified Assignment at Reel/Frame 027558/0569 ('580)
7	Certified Assignment at Reel/Frame 028471/0590 ('173)
8	Certified Assignment at Reel/Frame 029772/0942 ('173)
9	Certified Assignment at Reel/Frame 029773/0021 ('173)
10	Certified Assignment at Reel/Frame 030145/0194 ('790)
11	Certified Assignment at Reel/Frame 030145/0246 ('790)
12	Certified Assignment at Reel/Frame 030258/0139 ('910)
13	Certified Assignment at Reel/Frame 030259/0225 ('910)
14	Certified Assignment at Reel/Frame 031912/0173 ('173, '910, '790, '580)
15	Certified Assignment at Reel/Frame 038376/0001 ('173, '910, '790, '580)
16	Certified Assignment at Reel/Frame 041715/0747 ('173, '910, '790, '580)
17	Certified Assignment at Reel/Frame 046426/0001 ('173, '910, '790, '580)
18	Certified Assignment at Reel/Frame 047103/0206 ('173, '910, '790, '580)
19	Certified Assignment at Reel/Frame 047976/0884 ('173, '910, '790, '580)
20	Certified Assignment at Reel/Frame 047976/0937 ('173, '910, '790, '580)
21	Certified Assignment at Reel/Frame 048259/0840 ('173, '910, '790, '580)
22C	Complainant's Identification of License Agreements
23C	Microchip License Agreement
24	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Amazon (Amazon Fire HD 10)
25	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Amazon (Amazon Fire HD 10)
26	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Dell (Dell Latitude 7389)

Exhibit	Description
Number 27	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Dell (Dell Latitude 7389)
28	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Dell (Dell Latitude 7389)
29	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Dell (Dell Latitude 7389)
30	Infringement Claim Chart for U.S. Patent No. 8,432,173 to HP (HP X360 15-br095ms)
31	Infringement Claim Chart for U.S. Patent No. 8,791,910 to HP (HP X360 15-br095ms)
32	Infringement Claim Chart for U.S. Patent No. 9,024,790 to HP (HP 15-bs289wm)
33	Infringement Claim Chart for U.S. Patent No. 9,372,580 to HP (HP 15-bw030nr)
34	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Lenovo (Lenovo Tab 4 10.1)
35	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Lenovo (Lenovo Yoga 730)
36	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Lenovo (Lenovo Yoga 730)
37	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Lenovo (Lenovo Yoga 730)
38	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Lenovo (Lenovo Yoga 730)
39	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Microsoft (Microsoft Surface Book 2 13.5)
40	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Microsoft (Microsoft Surface Book 2 13.5)
41	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Microsoft (Microsoft Surface Book 2 13.5)
42	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Microsoft (Microsoft Surface Book 2 13.5)
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44	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Motorola (Motorola Moto G6)
45	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Motorola (Motorola Moto G6)
46	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Samsung (Samsung Galaxy S9+)
47	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Samsung (Samsung Galaxy Tab S4 10.5)
48	Infringement Claim Chart for U.S. Patent No. 8,432,173 to Samsung (Samsung Notebook 9 Pro 15)
49	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Samsung (Samsung Galaxy S9+)

Exhibit	Description
Number	Description
50	Infringement Claim Chart for U.S. Patent No. 8,791,910 to Samsung (Samsung Notebook 9 Pro 15)
51	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Samsung (Samsung Galaxy S9+)
52	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Samsung (Samsung Galaxy Tab S4 10.5)
53	Infringement Claim Chart for U.S. Patent No. 9,024,790 to Samsung (Samsung Notebook 9 Pro 15)
54	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Samsung (Samsung Galaxy S9+)
55	Infringement Claim Chart for U.S. Patent No. 9,372,580 to Samsung (Samsung Galaxy Tab S4 10.5)
56	Receipt from Amazon.com showing purchase of Fire HD 10 Tablet with Alexa Hands-Free, 10.1" 1080p Full HD Display, 32 GB, Black - with Special Offers ("Amazon Fire HD 10")
57	Receipt from Amazon.com showing the purchase of a <i>Dell Latitude 7389 I5 7-7300U 256GB SS FHD Touch 1920X1080 W8265 W10</i> ("Dell Latitude 7389")
58	Receipt from Amazon.com showing the purchase of a 2018 Newest Flagship HP X360 15.6 Inch Full HD Touchscreen 2-in-1 Convertible Laptop with Stylus Pen Intel Core i5-7200U, 8GB RAM, 128GB SSD, AMD Radeon 530 2GB Dedicated Graphics, HDMI, Bluetooth ("HP X360 15-br095ms")
59	Receipt from Amazon.com showing the purchase of a HP 15-inch Laptop, AMD A9-9420 APU, 8GB RAM, 1TB hard drive, Windows 10 (15-bw030nr, Gray) ("HP 15-bw030nr")
60	Receipt from Amazon.com showing the purchase of a HP 2019 Premium Pavilion 15.6 Inch Touchscreen Laptop (Intel Pentium 4-Core N5000 1.10 GHz, up to 2.70 GHz Turbo, 4GB/8GB/16GB RAM, 128GB to 1TB SSD, 500GB to 2TB HDD, WiFi, Bluetooth, Windows 10) ("HP 15-bs289wm")
61	Receipt from Amazon.com showing the purchase of a New 2018 Lenovo Yoga 730 2-in-1 15.6" FHD IPS Touch-Screen Laptop, Intel i5-8250U, 8GB DDR4 RAM, 256GB PCIe SSD, Thunderbolt, Fingerprint Reader, Backlit Keyboard, Built for Windows Ink, Win10 ("Lenovo Yoga 730")
62	Receipt from Amazon.com showing the purchase of two Lenovo Tab 4, 10.1" Android Tablet, Quad-Core Processor, 1.4GHz, 16GB Storage, Slate Black, ZA2J0007US ("Lenovo Tab 4 10.1")
63	Receipt from Amazon.com showing the purchase of a <i>Microsoft Surface Book 2</i> (Intel Core i5, 8GB RAM, 256GB) - 13.5" ("Microsoft Surface Book 2 13.5")
64	Receipt from Amazon.com showing the purchase of a <i>Motorola G6 – 32 GB – Unlocked (AT&T/Sprint/T-Mobile/Verizon) – Black - (U.S. Warranty) - PAAE0000US</i> ("Motorola Moto G6")
65	Receipt from BestBuy.com showing the purchase of two Samsung Galaxy S9+64GB Unlocked Midnight Black ("Samsung Galaxy S9+")
66	Receipt from Amazon.com showing the purchase of two Samsung Electronics SM-T830NZKAXAR Galaxy Tab S4, 10.5" Black with Cover Keyboard, Black ("Samsung Galaxy Tab S4 10.5")

Exhibit Number	Description
67	Receipt from Samsung.com showing the purchase of a <i>Notebook 9 Pro 15"</i> (256GB SSD) ("Samsung Notebook 9 Pro 15")
68	Photograph(s) of product and/or packaging of the Amazon Fire HD 10
69	Photograph(s) of product and/or packaging of the Dell Latitude 7389
70	Photograph(s) of product and/or packaging of the HP X360 15-br095ms
71	Photograph(s) of product and/or packaging of the HP 15-bw030nr
72	Photograph(s) of product and/or packaging of the HP 15-bs289wm
73	Photograph(s) of product and/or packaging of the Lenovo Tab 4 10.1
74	Photograph(s) of product and/or packaging of the Lenovo Yoga 730
75	Photograph(s) of product and/or packaging of the Microsoft Surface Book 2 13.5
76	Photograph(s) of product and/or packaging of the Motorola Moto G6
77	Photograph(s) of product and/or packaging of the Samsung Galaxy S9+
78	Photograph(s) of product and/or packaging of the Samsung Galaxy Tab S4 10.5
79	Photograph(s) of product and/or packaging of the Samsung Notebook 9 Pro 15
80C	Domestic Industry Claim Chart for U.S. Patent No. 8,432,173 (Microchip Maxtouch MXT2912TD-AT)
81C	Domestic Industry Claim Chart for U.S. Patent No. 8,791,910 (Microchip Maxtouch MXT2912TD-AT)
82C	Domestic Industry Claim Chart for U.S. Patent No. 9,024,790 (Microchip Maxtouch MXT2912TD-AT)
83C	Domestic Industry Claim Chart for U.S. Patent No. 9,372,580 (Microchip Maxtouch MXT2912TD-AT)
84C	Declaration concerning Domestic Industry

Appendices

Appendix Letter	Description
A	A1 - Certified copy and three additional copies of the prosecution history of U.S. Patent No. 8,432,173; A2 - References cited in the prosecution history of U.S. Patent No. 8,432,173
В	B1 - Certified copy and three additional copies of the prosecution history of U.S. Patent No. 8,791,910; B2 - References cited in the prosecution history of U.S. Patent No. 8,791,910
С	C1 - Certified copy and three additional copies of the prosecution history of U.S. Patent No. 9,024,790; C2 - References cited in the prosecution history of U.S. Patent No. 9,024,790
D	D1 - Certified copy and three additional copies of the prosecution history of U.S. Patent No. 9,372,580; D2 - References cited in the prosecution history of U.S. Patent No. 9,372,580

I. INTRODUCTION

- 1. This Complaint is filed by Complainant Neodron Ltd. ("Neodron" or "Complainant") pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 ("Section 337").
- 2. Complainant brings this action to remedy violations of Section 337 arising from the unlawful and unauthorized importation into the United States, the sale for importation into the United States, and/or the sale within the United States after importation, of certain touch-controlled mobile devices, computers, and components thereof (the "Accused Products") that infringe one or more claims of United States Patent Nos. 8,432,173 ("173 Patent"); 8,791,910 ("910 Patent"); 9,024,790 ("790 Patent"); and 9,372,580 ("580 Patent") (collectively, the "Asserted Patents").
- 3. Complainant asserts that the Accused Products infringe at least the following claims of one or more Asserted Patents in violation of Section 337(a)(1)(B)(i) and 35 U.S.C. §§ 271(a), (b), and/or (c), either literally or under the doctrine of equivalents:

Asserted Patent Asserted Claims	
U.S. Patent No. 8,432,173 ("'173 Patent")	1–19
U.S. Patent No. 8,791,910 ("'910 Patent")	1–37
U.S. Patent No. 9,024,790 ("'790 Patent")	1, 4–8, 10–14, 16–24
U.S. Patent No. 9,372,580 ("'580 Patent")	1–12

- 4. Touchscreen technology plays a ubiquitous and important role in countless electronic devices today. Beyond just providing greater usability to smartphones, tablets and notebooks, touchscreens now fill our lives in public and private spaces, from our homes and cars to the restaurants and stores we visit.
- 5. But just a few decades ago, touchscreen technology could only be found in science fiction books and film. Although the underlying science behind touch technology can be traced back to the 1940s, working touchscreens were not conceived and feasible until the mid-1960s,

when the first finger-driven touchscreen was invented by E.A. Johnson in 1965 at the Royal Radar Establishment in Malvern, United Kingdom. Since then, it took several generations and major technological advancements for touchscreens to achieve the level of complexity—and convenience—we see and enjoy today.

- 6. Built on the fundamental breakthrough that our hands and fingers can form changes in the capacitance of electrodes and electrode-connections when they are in close proximity to them, touch technology has developed rapidly over the years. Along the way, engineers have worked tirelessly to try to overcome the limitations and roadblocks touch technology presents. From conceiving various ways to detect (and correctly ignore) unintentional touches, to minimizing signal "noise," to reducing the latency and power consumption that comes with any complex, multi-part electrical process, there have been many advances to various aspects of the technology—each building a little on a related advancement before it—to get us to the highly advanced state we enjoy today.
- 7. These advancements range from fundamental ones, which make basic touch technology work, to optional improvements, which typically represent one technological option that improves aspects of the user experience and functionality of a touchscreen. This infringement action is about the latter: several patented improvements—which took years of research and millions of dollars in U.S. investments to develop, and which are infringed by the Respondents Accused Products here.
- 8. The proposed Respondents are Amazon.com, Inc. ("Amazon"); Dell Technologies Inc. ("Dell"); Hewlett Packard Enterprise Company ("HP"); Lenovo Group Ltd.; Lenovo (United States) Inc. (together, "Lenovo"); Microsoft Corporation ("Microsoft"); Motorola Mobility LLC ("Motorola"); and Samsung Electronics Co., Ltd.; Samsung Electronics America, Inc. (together,

- "Samsung"). Collectively, all of these Proposed Respondents are referred to herein as "Respondents."
- 9. On information and belief, and as set forth in this Complaint, each of the Respondents imports into the United States, sells for importation into the United States, and/or sells in the United States after importation Accused Products that directly infringe the Asserted Patents.
- 10. Complainant seeks, as relief for the unfair acts of Respondents, the following: (i) an investigation into Respondents' violations; (ii) a public hearing; (iii) a limited exclusion order barring from entry into the United States the Accused Products that infringe one or more of the Asserted Patents; (iv) permanent cease and desists order prohibiting the importation, sale, sale for importation, offer for sale, and soliciting of the sale in the United States, of the Accused Products that infringe one or more the Asserted Patents; (v) the imposition of a bond on importation and sales of infringing products during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j); and (vi) such other relief as the Commission deems proper.
- 11. A domestic industry exists as the result of activities and investments in the United States related to products that practice the Asserted Patents. These activities include the current and ongoing significant and substantial domestic investments in plant, equipment, labor, and capital of licensee Microchip Technology Incorporated ("Microchip").

II. THE PARTIES

A. Complainant

12. Complainant Neodron, Ltd. is an Irish company, having its principal place of business at Unit 4-5, Burton Hall Road, Sandyford, Dublin 18, D18a094. Neodron is the sole owner by assignment of all right, title, and interest in each Asserted Patent.

- 13. One of Neodron's domestic licensees is Microchip, located at 2355 W. Chandler Boulevard, Chandler, Arizona 85224. Microchip is the predecessor-in-interest of each of the Asserted Patents and has a non-exclusive license to practice each of the Asserted Patents, each of which relates generally to touchscreen technology.
- 14. The patented improvements at issue in this action were made by highly regarded engineers from two U.S. companies: Atmel Corporation ("Atmel") and Microchip. Atmel and Microchip have played separate, significant roles in the development and advancement of such improvements to touch technology—and the domestic market for them.
- 15. Founded and headquartered in the United States, Atmel has dedicated millions of U.S. dollars to engineering, development, and technical service and support of various touch-controlled products in the United States. For example, its Maxtouch mXT224 controller was recognized as the first capacitive touchscreen solution able to support the touch of a finger, stylus, or fingernails for drawing or signature capture and character recognition. Indeed, Atmel is regarded as an early leader in microcontroller and touch solutions and has, in fact, won numerous awards—from the Consumer Electronics Show Innovations Award to the Embedded Technologies Award and many others—for its advancements in the space. In 2016, Atmel was acquired by Microchip.
- 16. Also founded and headquartered in the United States, Microchip likewise has dedicated a similar level of U.S. investments in providing various improvements to touch technology. Before acquiring Atmel in 2016, Microchip itself already had many touch-technology improvement patents—and corresponding product offerings to go with them. After its acquisition of Atmel in 2016, Microchip's investment in the U.S. market for touch technology only grew. In fact, through their combined Maxtouch and QTouch product lines, Microchip soon became a leading supplier of capacitive sensing solutions enabling touch screens and other touch interfaces for mobile devices, automobiles, and other industrial and consumer electronic

systems. Microchip's Maxtouch architecture combines touch sensing with sophisticated algorithms, enabling the most advanced touch capabilities on screen sizes ranging from gaming controls, through mobile phones to tablet devices and larger screen computers. And more recently, with the flexibility of Microchip's microcontroller architecture, a user is able to integrate multiple touch features, such as "proximity sensing" or gesture recognition, in a single device.

- 17. Moreover, Microchip has continued to advance the field of touch technology, both commercially and technologically. Meanwhile, it simultaneously protected and disclosed its innovative intellectual property through hundreds of issued U.S. patents. Those patents, in turn, further advanced the space, garnering dozens of citations from later patents filed by Microchip's competitors. Indeed, the Asserted Patents have collectively received well over 500 citations by later patent applications. Many of the Respondents themselves have cited one or more of the Asserted Patents in seeking their own, later patents.
- 18. In recent years, an explosion of imported products, which, without a license, infringe the innovative Asserted Patents, has significantly eroded Microchip's market standing and injured Microchip's domestic industry related to these patents. Complainant Neodron, as owner of a portfolio of hundreds of touch-technology patents, has undertaken the task of counteracting these unfair and unlawful acts.

B. Respondents

1. Amazon

- 19. Amazon.com, Inc. ("Amazon") is a publicly traded corporation organized under the laws of the State of Delaware. Its principal place of business is at 410 Terry Avenue North, Seattle, Washington 98109.
- 20. On information and belief, Amazon designs and manufactures and/or has manufactured on its behalf abroad certain Accused Products that are then sold for importation into

the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 56, 68.

2. Dell

- 21. Dell Technologies Inc. ("Dell") is a publicly traded corporation organized under the laws of the State of Delaware. Its principal place of business is at One Dell Way, Round Rock, Texas 78682.
- On information and belief, Dell designs and manufactures and/or has manufactured on its behalf abroad certain Accused Products that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 57, 69.

3. HP

- 23. Hewlett Packard Enterprise Company ("HP") is a publicly traded corporation organized under the laws of the State of Delaware. Its principal place of business is at 6280 America Center Drive, San Jose, California 95002.
- On information and belief, HP designs and manufactures and/or has manufactured on its behalf abroad certain Accused Products that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 58-60, 70-72.

4. Lenovo Respondents

- 25. Lenovo Group Ltd. is a publicly traded company organized under the laws of the People's Republic of China. Its principal place of business is at 6 Chuang ye Road, Haidian District, Beijing 100085, China.
- 26. On information and belief, Lenovo Group Ltd. produces abroad certain Accused Products that are then sold for importation into the United States, imported into the United States,

and/or sold within the United States after importation, including through its subsidiary Lenovo (United States) Inc. See Exs. 61-62, 73-74.

- 27. Lenovo (United States) Inc. is a publicly traded corporation organized under the laws of the State of Delaware. Its principal place of business is at 1009 Think Place, Building One, Morrisville, North Carolina 27560.
- 28. On information and belief, Lenovo (United States) Inc., a wholly owned subsidiary of Lenovo Group Ltd., produces certain Accused Products abroad, including in China, that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 61-62, 73-74.
- 29. Lenovo Group Ltd. and Lenovo (United States) Inc. are collectively referred to as the "Lenovo Respondents."

5. Microsoft

- 30. Microsoft Corporation ("Microsoft") is a publicly traded corporation organized under the laws of the State of Washington. Its principal place of business is at One Microsoft Way, Redmond, Washington 98052.
- 31. On information and belief, Microsoft designs and manufactures and/or has manufactured on its behalf abroad certain Accused Products that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 63, 75.

6. Motorola

- 32. Motorola Mobility LLC ("Motorola") is a Delaware limited liability company with its principal office located at 222 W. Merchandise Mart Plaza, Suite 1800, Chicago, Illinois 60654.
- 33. On information and belief, Motorola, a subsidiary of Lenovo Group Ltd., designs and manufactures and/or has manufactured on its behalf abroad certain Accused Products that are

then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 64, 76.

7. Samsung Respondents

- 34. Samsung Electronics Co., Ltd. is a publicly traded corporation organized under the laws of South Korea. It has its principal place of business at 129 Samsung-Ro, Maetan-3dong, Yeongtong-gu, Suwon, 443-742, South Korea.
- 35. On information and belief, Samsung Electronics Co., Ltd. produces abroad certain Accused Products that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation, including through its subsidiary Samsung Electronics America, Inc. *See* Exs. 65-67, 77-79.
- 36. Samsung Electronics America, Inc. is a corporation organized under the laws of the State of New York. Its principal place of business is at 85 Challenger Rd., Ridgefield Park, New Jersey 07660.
- 37. On information and belief, Samsung Electronics America, Inc., a wholly owned subsidiary of Samsung Electronics Co., Ltd., produces certain Accused Products abroad, including in China, that are then sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. *See* Exs. 65-67, 77-79.
- 38. Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. are collectively referred to the "Samsung Respondents."

III. THE TECHNOLOGY AND PRODUCTS AT ISSUE

39. Pursuant to 19 C.F.R. § 210.12(a)(12), the categories of products accused of infringing one or more of the Asserted Patents are certain touch-controlled mobile devices, including smartphone and tablet devices, computers, including notebook and laptop computers, and associated components thereof. Respondents infringe the Asserted Patents through the sale for

importation into the United States, importation into the United States, and/or sale within the United States after importation of such Accused Products. Exemplary identifications of such infringing products are provided in Section V below.

- 40. Capacitive touchsensors are typically actuated by a human finger or a stylus and are capable of reporting a two-dimensional coordinate relating to the location of the finger or stylus, and in some implementations, a three-dimensional coordinate. The use of capacitive touchsensors, for example as a touchscreen, touchpad, or keypad, is commonplace today and found in many products, such as smartphones, tablets, laptop computers, and smartwatches, but also in many other applications, such as in automobiles, household appliances, point-of-sale systems, ATM machines, kiosks, and signage. Capacitive touchsensors are frequently preferred over mechanical switches for a number of reasons. For example, capacitive touchsensors require no moving parts and are much less prone to wear and failure than their mechanical counterparts. Capacitive touchsensors can also be made as an invisible layer applied on top of or integrated into a display, so that a user can directly interact with the display—something a mechanical input system cannot replicate. Most importantly, capacitive touchsensors enable near-infinite input possibilities and combinations, including directly "writing" on a touchscreen display and using gestures to activate commands, such as using three-dimensional gestures where actual contact with the touchsensor is not required. While other touch technologies have some of these benefits, technologies such as resistive touchsensors, acoustic touchsensors, and optical/infrared touchsensors have major drawbacks in precision, accuracy, latency, and cost.
- 41. Generally, capacitive touchsensors operate based on measurements of the capacitance between a drive electrode and a sense electrode, known as mutual capacitance, or between an electrode and a ground, known as self-capacitance. In the case of mutual capacitance, which is widely used today, the region between a drive electrode and sense electrode is often

referred to as a node. When a finger or stylus comes near a node, the finger or stylus effectively "steals" charge from the drive electrode, thereby reducing the capacitance measurement of the node. This concept is illustrated below.

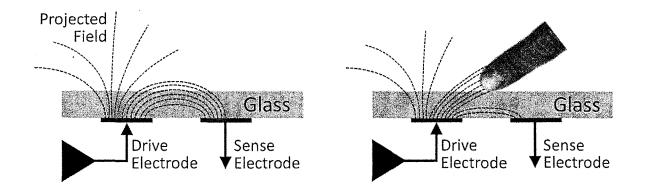
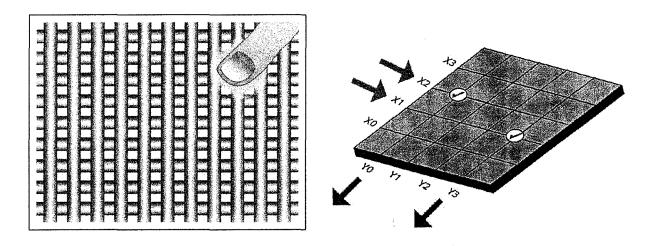


Illustration of Mutual Capacitance

42. In a typical implementation of a touchsensor, such as a touchscreen of a smartphone, there are hundreds of these capacitive nodes for accurately, precisely, and quickly sensing the location of a user's touch. However, a drawback of capacitive touchsensors is that the user's finger or stylus will often be capacitively coupled to multiple capacitive nodes at the same time. In other words, multiple capacitive nodes may sense the finger or stylus simultaneously, which can lead to an ambiguity as to which capacitive node was intentionally selected. Further, this may lead to unintended touches, such as touches from a user's other fingers or palm.



Touchsensor Nodes

43. The Asserted Patents were developed by Atmel and Microchip over many years—some over 15 years—to overcome this and other drawbacks, and to improve capacitive touchsensors and their capabilities beyond the basic capacitive touchsensor concept. The Asserted Patents cover different aspects of capacitive touchsensors and their implementations, including input and positioning techniques specifically tailored for capacitive touchsensors ('173 Patent), capacitive touchsensor input signal prioritization techniques ('910 Patent), input key disambiguation and biasing techniques ('790 Patent), and noise reduction and signal enhancement techniques for capacitive touchsensors ('580 Patent). Section IV, below, identifies the Asserted Patents in detail, along with a further description of the technology covered by each.

IV. THE ASSERTED PATENTS

- 44. The Asserted Patents relate to capacitive touchsensors. Generally, capacitive touchsensors are used in many high-tech products, including smartphones, tablets, laptop computers, smartwatches, and other consumer-electronics products. Capacitive touchsensors are also used in many other products where direct human interface (e.g., through the use of a fingertip) is necessary or desired, including in automobiles, household appliances, point-of-sale systems, ATM machines, kiosks, and signage.
- 45. The identification, ownership, non-technical description, foreign counterparts, and licensees for each Asserted Patent are identified below.

A. U.S. Patent No. 8,432,173

1. Identification of the Patent and Ownership

46. The '173 Patent, titled "Capacitive Position Sensor," issued on April 30, 2013, naming Harald Philipp as the inventor. Ex. 1 ('173 Patent) at 1. The '173 Patent is based on U.S. Patent Application No. 13/118,280 filed May 27, 2011, which is a continuation of U.S. Patent

Application No. 12/703,614 (now U.S. Patent No. 7,952,367) filed February 10, 2010, which is a continuation of U.S. Patent Application No. 11/868,566 (abandoned) filed October 8, 2007, which claims priority to U.S. Provisional Application No. 60/862,358 filed October 20, 2006. *Id.* at 1; *id.* at 1:5–11. The expiration date of the '173 Patent is October 8, 2027. A certified copy of the '173 Patent is attached as Exhibit 1. This complaint is accompanied by a certified copy of the prosecution history for the '173 Patent, three additional copies of the prosecution history, and four copies of each patent and applicable pages of each technical reference mentioned in the prosecution history for the '173 Patent. *See* Appx. A1 and A2.

47. Neodron owns by assignment all rights, title, and interest in the '173 Patent. *See* Exs. 7-9, 14-21. A security interest in the '173 Patent was conveyed to Morgan Stanley Senior Funding, Inc. on December 6, 2013; JPMorgan Chase Bank, N.A. on February 8, 2017, and May 29, 2018; and Wells Fargo Bank, NA on September 14, 2018. Each of these security interests has been released, and Neodron currently retains all rights, title, and interest in the '173 Patent.

2. Nontechnical Description of the Patent

48. The '173 Patent relates to capacitive touchsensors and advanced techniques for detecting touch input and positioning. The '173 Patent describes various novel capacitive touchsensors and related touch detection and signal processing techniques, for example, touch detection techniques that detect a user's touch and enable a change in a device's parameter based on subsequent movement of the user's touch. The '173 Patent's embodiments include one that receives a first signal indicating a capacitive coupling of an object with a sensing element corresponding to the object coming into proximity with the sensing element at a first position along a sensing path; sets a parameter to an initial value based on the first position; receives a second signal indicating a displacement of the object based on a second capacitive coupling; and adjusts the parameter based on the displacement of the object.

3. Foreign Counterparts of the Patent

- 49. The following foreign patents and patent applications correspond to the '173 Patent: (a) International Patent Application No. PCT/US2009/069322 (published as WO2010/075463A4, expired); and (b) Taiwanese Patent Application No. TW20090144268 (published as TW201033882A, abandoned).
- 50. To the best of Neodron's knowledge, information, and belief, there are no other foreign patents issued or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '173 Patent.

4. Licensees

51. All licensees to the '173 Patent are identified in Confidential Exhibit 22C. There are no other known licenses relating to the '173 Patent.

B. U.S. Patent No. 8,791,910

1. Identification of the Patent and Ownership

52. The '910 Patent, titled "Capacitive Keyboard with Position-Dependent Reduced Keying Ambiguity," issued on July 29, 2014, naming Harald Philipp as the inventor. Ex. 2 ('910 Patent) at 1. The '910 Patent is based on U.S. Patent Application No. 13/043,231 filed March 8, 2011, which is a continuation of U.S. Patent Application No. 11/750,430 (now U.S. Patent No. 7,903,092) filed May 18, 2007, which claims priority to U.S. Provisional Application No. 60/803,138 filed May 25, 2006. *Id.* at 1; *id.* at 1:7–11. The expiration date of the '910 Patent is November 21, 2027. A certified copy of the '910 Patent is attached as Exhibit 2. This complaint is accompanied by a certified copy of the prosecution history for the '910 Patent, three additional copies of the prosecution history, and four copies of each patent and applicable pages of each technical reference mentioned in the prosecution history for the '910 Patent. *See* Appx. B1 and B2.

53. Neodron owns by assignment all rights, title, and interest in the '910 Patent. *See* Exs. 12-21. A security interest in the '910 Patent was conveyed to Morgan Stanley Senior Funding, Inc. on December 6, 2013; JPMorgan Chase Bank, N.A. on February 8, 2017, and May 29, 2018; and Wells Fargo Bank, NA on September 14, 2018. Each of these security interests has been released, and Neodron currently retains all rights, title, and interest in the '910 Patent.

2. Nontechnical Description of the Patent

54. The '910 Patent relates to capacitive touchsensors and advanced techniques for processing and prioritizing touch input signals. The '910 Patent describes various novel capacitive touchsensors and related touch detection and signal processing techniques, for example, touch detection techniques that detect multiple user touches, where the multiple touches are analyzed to prioritize or suppress one or more of the touches to achieve the intended touch operation. The '910 Patent's embodiments include one that receives output signals responsive to two or more capacitive couplings occurring between a pointing object and sensing areas; determines if the output signals exceed an activation level; and selects one of the sensing areas exceeding the activation level as an intended sensing area based on a predefined ranking scheme that prioritizes the sensing areas based on their positions within a sensing region.

3. Foreign Counterparts of the Patent

55. The following foreign patents and patent applications correspond to the '910 Patent: (a) German Patent Application No. DE102007024455A1 (pending); (b) German Utility Model No. DE202007007456U1 (expired); (c) UK Patent Application No. GB20070009905 (published as GB2438716A, withdrawn); (d) Japanese Patent Application No. JP20070138106 (published as JP2007317201A, abandoned); and (e) Korean Patent Application No. KR20070050828 (published as KR20070114035A, withdrawn).

56. To the best of Neodron's knowledge, information, and belief, there are no other foreign patents issued or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '910 Patent.

4. Licensees

57. All licensees to the '910 Patent are identified in Confidential Exhibit 22C. There are no other known licenses relating to the '910 Patent.

C. U.S. Patent No. 9,024,790

1. Identification of the Patent and Ownership

58. The '790 Patent, titled "Capacitive Keyboard with Non-Locking Reduced Keying Ambiguity," issued on May 5, 2015, naming Harald Philipp as the inventor. Ex. 3 ('790 Patent) at 1. The '790 Patent is based on U.S. Patent Application No. 13/347,312 filed January 10, 2012, which is a continuation of U.S. Patent Application No. 12/899,229 (now U.S. Patent No. 8,102,286) filed October 6, 2010, which is a continuation of U.S. Patent Application No. 11/279,402 (now U.S. Patent 7,821,425) filed April 12, 2006, which is a continuation-in-part of U.S. Patent Application No. 11/160,885 (now U.S. Patent No. 7,256,714) filed July 14, 2005, which is a continuation of U.S. Patent Application No. 10/617,602 (now U.S. Patent No. 6,993,607) filed July 11, 2003, which claims priority to U.S. Provisional Application No. 60/597,851 filed December 21, 2005, and U.S. Provisional Application No. 60/395,368 filed July 12, 2002. Id. at 1; id. at 1:7-17. The expiration date of the '790 Patent is September 27, 2024. A certified copy of the '790 Patent is attached as Exhibit 3. This complaint is accompanied by a certified copy of the prosecution history for the '790 Patent, three additional copies of the prosecution history, and four copies of each patent and applicable pages of each technical reference mentioned in the prosecution history for the '790 Patent. See Appx. C1 and C2.

59. Neodron owns by assignment all rights, title, and interest in the '790 Patent. *See* Exs. 10-11, 14-21. A security interest in the '790 Patent was conveyed to Morgan Stanley Senior Funding, Inc. on December 6, 2013; JPMorgan Chase Bank, N.A. on February 8, 2017, and May 29, 2018; and Wells Fargo Bank, NA on September 14, 2018. Each of these security interests has been released, and Neodron currently retains all rights, title, and interest in the '790 Patent.

2. Nontechnical Description of the Patent

60. The '790 Patent relates to capacitive touchsensors and advanced techniques for input key disambiguation and biasing. The '790 Patent describes various novel capacitive touchsensors and related touch detection and signal processing techniques, for example, touch detection techniques that corrects ambiguity of user touch inputs based on previous touch input. The '790 Patent's embodiments include one that analyzes sensor values of a plurality of keys to determine a first active key, assigns a first active key, and determines a second active key based on signal values of the plurality of keys and biasing the determination in favor of the first active key.

3. Foreign Counterparts of the Patent

61. The following foreign patents and patent applications correspond to the '790 Patent:

(a) Austrian Patent No. AT306748T (expired); (b) Austrian Patent No. AT462228T (expired);

(c) Chinese Patent No. CN101390290B (patented); (d) German Utility Model No. DE202006019926U1 (expired); (e) German Patent No. DE60301831T2 (patented); (f) European Patent No. EP1381160B8 (patented); (g) European Patent No. EP1964265B1 (patented);

(h) Japanese Patent Application No. JP20080546561 (published as JP2009521035A, abandoned);

(i) Korean Patent Application No. KR20087017780 (published as KR2008081330A, withdrawn);

(j) Taiwanese Patent No. TWI415389B (patented); (k) International Patent Application No. PCT/GB2006/002275 (published as WO2007/071892A1, expired).

62. To the best of Neodron's knowledge, information, and belief, there are no other foreign patents issued or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '790 Patent.

4. Licensees

63. All licensees to the '790 Patent are identified in Confidential Exhibit 22C. There are no other known licenses relating to the '790 Patent.

D. U.S. Patent No. 9,372,580

1. Identification of the Patent and Ownership

- 64. The '580 Patent, titled "Enhanced Touch Detection Methods," issued on June 21, 2016, naming Martin John Simmons, Darren Golbourn, Daniel Pickett, and Andrew Hersee as the inventors. Ex. 4 ('580 Patent) at 1. The '580 Patent is based on U.S. Patent Application No. 13/332,945 filed December 21, 2011. *Id.* at 1. The expiration date of the '580 Patent is February 18, 2033. A certified copy of the '580 Patent is attached as Exhibit 4. This complaint is accompanied by a certified copy of the prosecution history for the '580 Patent, three additional copies of the prosecution history, and four copies of each patent and applicable pages of each technical reference mentioned in the prosecution history for the '580 Patent. *See* Appx. E1 and E2.
- 65. Neodron owns by assignment all rights, title, and interest in the '580 Patent. *See* Exs. 5-6, 14-21. A security interest in the '580 Patent was conveyed to Morgan Stanley Senior Funding, Inc. on December 6, 2013; JPMorgan Chase Bank, N.A. on February 8, 2017, and May 29, 2018; and Wells Fargo Bank, NA on September 14, 2018. Each of these security interests has been released, and Neodron currently retains all rights, title, and interest in the '580 Patent.

2. Nontechnical Description of the Patent

66. The '580 Patent relates to capacitive touchsensors and advanced techniques for reducing noise and enhancing capacitive touchsensor signals. The '580 Patent describes various

novel capacitive touchsensors and related touch detection and signal processing techniques, for example, improving signal level and reducing noise by retransmitting drive signals and compensating touch input measurements based on the retransmission. The '580 Patent's embodiments include one that sends a first set of signals to a first set of touchsensor lines; receives a second set of signals on a second set of lines and measures the capacitive touch input signals; sends a third set of signals to the first set of lines; measures a fourth set of signals based on the third set of signals; and determines a fifth set of signals for sensing touch input by compensating the second set of signals based on the fourth set of signals.

3. Foreign Counterparts of the Patent

- 67. The following foreign patents and patent applications correspond to the '580 Patent: (a) German Utility Model No. DE202012103232U1 (expired).
- 68. To the best of Neodron's knowledge, information, and belief, there are no other foreign patents issued or foreign patent applications pending, filed, abandoned, withdrawn, or rejected corresponding to the '580 Patent.

4. Licensees

69. All licensees to the '580 Patent are identified in Confidential Exhibit 22C. There are no other known licenses relating to the '580 Patent.

V. UNLAWFUL AND UNFAIR ACTS OF THE RESPONDENTS

70. Neodron asserts that Respondents directly infringe, literally or under the doctrine of equivalents, actively induce the infringement of, and/or contributorily infringe at least the following claims of the Asserted Patents, in violation of 35 U.S.C. §§ 271(a), (b), and/or (c):

Respondent	Claim type	'173 Patent	'910 Patent	'790 Patent	'580 Patent
Amazon	Apparatus	10–19			5–12
	Method	1–9			1–4
Dell	Apparatus	10–19	13–37	1, 4–6, 13, 14, 16–21	5–12
	Method	1–9	1-12	7, 8, 10–12, 22–24	1–4

Respondent	Claim type	'173 Patent	'910 Patent	'790 Patent	'580 Patent
HP	Apparatus	10–19	13–37	1, 4–6, 13, 14, 16–21	5–12
	Method	1–9	1–12	7, 8, 10–12, 22–24	1–4
Lenovo Respondents	Apparatus	10–19	13–37	1, 4–6, 13, 14, 16–21	5–12
	Method	1–9	1–12	7, 8, 10–12, 22–24	1-4
Microsoft	Apparatus	10–19	13–37	1, 4–6, 13, 14, 16–21	5–12
	Method	1–9	1–12	7, 8, 10–12, 22–24	1-4
Motorola	Apparatus	10–19	13–37		5–12
	Method	1–9	1–12	2 2	1–4
Samsung Respondents	Apparatus	10-19	13–37	1, 4–6, 13, 14, 16–21	5–12
	Method	1–9	1–12	7, 8, 10–12, 22–24	1–4

A. Amazon

1. Infringement of the '173 Patent

- 71. On information and belief, Amazon imports, sells for importation, and/or sells within the United States after importation certain Accused Products (the "Amazon Accused Products"), such as the Amazon Fire HD 10, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Amazon Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- Amazon also knowingly and intentionally induces infringement of at least claims 1 and 5–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Amazon has had knowledge of the '173 Patent and the infringing nature of the Amazon Accused Products. Despite this knowledge of the '173 Patent, Amazon continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Amazon Accused Products in ways that directly infringe the '173 Patent. Amazon does so knowing and intending that its customers and end users will commit these infringing acts. Amazon also continues to import, sell

for importation, and/or sell in the United States the Amazon Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its customers to infringe the '173 Patent through the customers' normal and customary use of the Amazon Accused Products.

73. A claim chart comparing independent claims 1, 10 and 19 of the '173 Patent to a representative Amazon Accused Product, the Amazon Fire HD 10, and including photographs and drawings where applicable, is attached as Exhibit 24.

2. Infringement of the '580 Patent

- 74. On information and belief, Amazon imports, sells for importation, and/or sells within the United States after importation certain Amazon Accused Products, such as the Amazon Fire HD 10, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Amazon Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- Amazon also knowingly and intentionally induces infringement of at least claims 1–4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Amazon has had knowledge of the '580 Patent and the infringing nature of the Amazon Accused Products. Despite this knowledge of the '580 Patent, Amazon continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Amazon Accused Products in ways that directly infringe the '580 Patent. Amazon does so knowing and intending that its customers and end users will commit these infringing acts. Amazon also continues to import, sell for importation, and/or sell in the United States the Amazon Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to

infringe the '580 Patent through the customers' normal and customary use of the Amazon Accused Products.

76. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to a representative Amazon Accused Product, the Amazon Fire HD 10, and including photographs and drawings where applicable, is attached as Exhibit 25.

B. Dell

1. Infringement of the '173 Patent

- 77. On information and belief, Dell imports, sells for importation, and/or sells within the United States after importation certain Accused Products (the "Dell Accused Products"), such as the Dell Latitude 7389, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Dell Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- 78. Dell also knowingly and intentionally induces infringement of at least claims 1 and 5–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Dell has had knowledge of the '173 Patent and the infringing nature of the Dell Accused Products. Despite this knowledge of the '173 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Dell Accused Products in ways that directly infringe the '173 Patent. Dell does so knowing and intending that its customers and end users will commit these infringing acts. Dell also continues to import, sell for importation, and/or sell in the United States the Dell Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its customers to infringe the '173 Patent through the customers' normal and customary use of the Dell Accused Products.

79. A claim chart comparing independent claims 1, 10 and 19 of the '173 Patent to a representative Dell Accused Product, the Dell Latitude 7389, and including photographs and drawings where applicable, is attached as Exhibit 26.

2. Infringement of the '910 Patent

- 80. On information and belief, Dell imports, sells for importation, and/or sells within the United States after importation certain Dell Accused Products, such as the Dell Latitude 7389, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The Dell Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.
- 81. Dell also knowingly and intentionally induces infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Dell has had knowledge of the '910 Patent and the infringing nature of the Dell Accused Products. Despite this knowledge of the '910 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Dell Accused Products in ways that directly infringe the '910 Patent. Dell does so knowing and intending that its customers and end users will commit these infringing acts. Dell also continues to import, sell for importation, and/or sell in the United States the Dell Accused Products, despite its knowledge of the '910 Patent, thereby specifically intending for and inducing its customers to infringe the '910 Patent through the customers' normal and customary use of the Dell Accused Products.
- 82. A claim chart comparing independent claims 1, 13, and 25 of the '910 Patent to a representative Dell Accused Product, the Dell Latitude 7389, and including photographs and drawings where applicable, is attached as Exhibit 27.

3. Infringement of the '790 Patent

- 83. On information and belief, Dell imports, sells for importation, and/or sells within the United States after importation certain Dell Accused Products, such as the Dell Latitude 7389, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. The Dell Accused Products satisfy all claim limitations of claims 1, 4–8, 10–14, and 16–24 of the '790 Patent at the time of importation into the United States.
- 84. Dell also knowingly and intentionally induces infringement of at least claims 7, 8, 10–12, and 22–24 of the '790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Dell has had knowledge of the '790 Patent and the infringing nature of the Dell Accused Products. Despite this knowledge of the '790 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Dell Accused Products in ways that directly infringe the '790 Patent. Dell does so knowing and intending that its customers and end users will commit these infringing acts. Dell also continues to import, sell for importation, and/or sell in the United States the Dell Accused Products, despite its knowledge of the '790 Patent, thereby specifically intending for and inducing its customers to infringe the '790 Patent through the customers' normal and customary use of the Dell Accused Products.
- 85. A claim chart comparing independent claims 1, 7, and 13 of the '790 Patent to a representative Dell Accused Product, the Dell Latitude 7389, and including photographs and drawings where applicable, is attached as Exhibit 28.

4. Infringement of the '580 Patent

86. On information and belief, Dell imports, sells for importation, and/or sells within the United States after importation certain Dell Accused Products, such as the Dell Latitude 7389,

that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Dell Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.

- 87. Dell also knowingly and intentionally induces infringement of at least claims 1–4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Dell has had knowledge of the '580 Patent and the infringing nature of the Dell Accused Products. Despite this knowledge of the '580 Patent, Dell continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Dell Accused Products in ways that directly infringe the '580 Patent. Dell does so knowing and intending that its customers and end users will commit these infringing acts. Dell also continues to import, sell for importation, and/or sell in the United States the Dell Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to infringe the '580 Patent through the customers' normal and customary use of the Dell Accused Products.
- 88. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to a representative Dell Accused Product, the Dell Latitude 7389, and including photographs and drawings where applicable, is attached as Exhibit 29.

C. HP

1. Infringement of the '173 Patent

89. On information and belief, HP imports, sells for importation, and/or sells within the United States after importation certain Accused Products (the "HP Accused Products"), such as the HP X360 15-br095ms, that directly infringe, literally and/or under the doctrine of equivalents,

at least claims 1–19 of the '173 Patent. The HP Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.

- 90. HP also knowingly and intentionally induces infringement of at least claims 1 and 5–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, HP has had knowledge of the '173 Patent and the infringing nature of the HP Accused Products. Despite this knowledge of the '173 Patent, HP continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the HP Accused Products in ways that directly infringe the '173 Patent. HP does so knowing and intending that its customers and end users will commit these infringing acts. HP also continues to import, sell for importation, and/or sell in the United States the HP Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its customers to infringe the '173 Patent through the customers' normal and customary use of the HP Accused Products.
- 91. A claim chart comparing independent claims 1, 10 and 19 of the '173 Patent to a representative HP Accused Product, the HP X360 15-br095ms, and including photographs and drawings where applicable, is attached as Exhibit 30.

2. Infringement of the '910 Patent

92. On information and belief, HP imports, sells for importation, and/or sells within the United States after importation certain HP Accused Products, such as the HP X360 15-br095ms, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The HP Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.

- 93. HP also knowingly and intentionally induces infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, HP has had knowledge of the '910 Patent and the infringing nature of the HP Accused Products. Despite this knowledge of the '910 Patent, HP continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the HP Accused Products in ways that directly infringe the '910 Patent. HP does so knowing and intending that its customers and end users will commit these infringing acts. HP also continues to import, sell for importation, and/or sell in the United States the HP Accused Products, despite its knowledge of the '910 Patent, thereby specifically intending for and inducing its customers to infringe the '910 Patent through the customers' normal and customary use of the HP Accused Products.
- 94. A claim chart comparing independent claims 1, 13, and 25 of the '910 Patent to representative HP Accused Products, the HP X360 15-br095ms, and including photographs and drawings where applicable, is attached as Exhibit 31.

3. Infringement of the '790 Patent

- 95. On information and belief, HP imports, sells for importation, and/or sells within the United States after importation certain HP Accused Products, such as the HP 15-bs289wm, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. The HP Accused Products satisfy all claim limitations of claims 1, 4–8, 10–14, and 16–24 of the '790 Patent at the time of importation into the United States.
- 96. HP also knowingly and intentionally induces infringement of at least claims 7, 8, 10–12, and 22–24 of the '790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court

complaint referenced in Section VIII, HP has had knowledge of the '790 Patent and the infringing nature of the HP Accused Products. Despite this knowledge of the '790 Patent, HP continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the HP Accused Products in ways that directly infringe the '790 Patent. HP does so knowing and intending that its customers and end users will commit these infringing acts. HP also continues to import, sell for importation, and/or sell in the United States the HP Accused Products, despite its knowledge of the '790 Patent, thereby specifically intending for and inducing its customers to infringe the '790 Patent through the customers' normal and customary use of the HP Accused Products.

97. A claim chart comparing independent claims 1, 7, and 13 of the '790 Patent to a representative HP Accused Product, the HP 15-bs289wm, and including photographs and drawings where applicable, is attached as Exhibit 32.

4. Infringement of the '580 Patent

- 98. On information and belief, HP imports, sells for importation, and/or sells within the United States after importation certain HP Accused Products, such as the HP 15-bw030nr, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The HP Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- 99. HP also knowingly and intentionally induces infringement of at least claims 1–4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, HP has had knowledge of the '580 Patent and the infringing nature of the HP Accused Products. Despite this knowledge of the '580 Patent, HP continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction

materials on its website) to use the HP Accused Products in ways that directly infringe the '580 Patent. HP does so knowing and intending that its customers and end users will commit these infringing acts. HP also continues to import, sell for importation, and/or sell in the United States the HP Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to infringe the '580 Patent through the customers' normal and customary use of the HP Accused Products.

100. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to a representative HP Accused Product, the HP 15-bw030nr, and including photographs and drawings where applicable, is attached as Exhibit 33.

D. Lenovo Respondents

1. Infringement of the '173 Patent

- 101. On information and belief, the Lenovo Respondents import, sell for importation, and/or sell within the United States after importation certain Accused Products (the "Lenovo Accused Products"), such as the Lenovo Tab 4 10.1 and the Lenovo Yoga 730, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Lenovo Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- 102. The Lenovo Respondents also knowingly and intentionally induce infringement of at least claims 1 and 3–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, the Lenovo Respondents have had knowledge of the '173 Patent and the infringing nature of the Lenovo Accused Products. Despite this knowledge of the '173 Patent, the Lenovo Respondents continue to actively encourage and instruct their customers and end users (for example, through their user manuals and online instruction materials on their

websites) to use the Lenovo Accused Products in ways that directly infringe the '173 Patent. The Lenovo Respondents do so knowing and intending that their customers and end users will commit these infringing acts. The Lenovo Respondents also continue to import, sell for importation, and/or sell in the United States the Lenovo Accused Products, despite their knowledge of the '173 Patent, thereby specifically intending for and inducing their customers to infringe the '173 Patent through the customers' normal and customary use of the Lenovo Accused Products.

103. Claim charts comparing independent claims 1, 10 and 19 of the '173 Patent to representative Lenovo Accused Products, the Lenovo Tab 4 10.1 and the Lenovo Yoga 730, and including photographs and drawings where applicable, are attached as Exhibits 34-35.

2. Infringement of the '910 Patent

- 104. On information and belief, the Lenovo Respondents import, sell for importation, and/or sell within the United States after importation certain Lenovo Accused Products, such as the Lenovo Yoga 730, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The Lenovo Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.
- at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, the Lenovo Respondents have had knowledge of the '910 Patent and the infringing nature of the Lenovo Accused Products. Despite this knowledge of the '910 Patent, the Lenovo Respondents continue to actively encourage and instruct their customers and end users (for example, through their user manuals and online instruction materials on their websites) to use the Lenovo Accused Products in ways that directly infringe the '910 Patent. The Lenovo Respondents do so knowing and intending that their customers and end users will commit

these infringing acts. The Lenovo Respondents also continue to import, sell for importation, and/or sell in the United States the Lenovo Accused Products, despite their knowledge of the '910 Patent, thereby specifically intending for and inducing their customers to infringe the '910 Patent through the customers' normal and customary use of the Lenovo Accused Products.

106. A claim chart comparing independent claims 1, 13, and 25 of the '910 Patent to a representative Lenovo Accused Product, the Lenovo Yoga 730, and including photographs and drawings where applicable, is attached as Exhibit 36.

3. Infringement of the '790 Patent

- 107. On information and belief, the Lenovo Respondents import, sell for importation, and/or sell within the United States after importation certain Lenovo Accused Products, such as the Lenovo Yoga 730, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. The Lenovo Accused Products satisfy all claim limitations of claims 1, 4–8, 10–14, and 16–24 of the '790 Patent at the time of importation into the United States.
- 108. The Lenovo Respondents also knowingly and intentionally induce infringement of at least claims 7, 8, 10–12, and 22–24 of the '790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, the Lenovo Respondents have had knowledge of the '790 Patent and the infringing nature of the Lenovo Accused Products. Despite this knowledge of the '790 Patent, the Lenovo Respondents continue to actively encourage and instruct their customers and end users (for example, through their user manuals and online instruction materials on their websites) to use the Lenovo Accused Products in ways that directly infringe the '790 Patent. The Lenovo Respondents do so knowing and intending that their customers and end users will commit these infringing acts. The Lenovo Respondents also continue

to import, sell for importation, and/or sell in the United States the Lenovo Accused Products, despite their knowledge of the '790 Patent, thereby specifically intending for and inducing their customers to infringe the '790 Patent through the customers' normal and customary use of the Lenovo Accused Products.

109. A claim chart comparing independent claims 1, 7, and 13 of the '790 Patent to a representative Lenovo Accused Product, the Lenovo Yoga 730, and including photographs and drawings where applicable, is attached as Exhibit 37.

4. Infringement of the '580 Patent

- 110. On information and belief, the Lenovo Respondents import, sell for importation, and/or sell within the United States after importation certain Lenovo Accused Products, such as the Lenovo Yoga 730, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Lenovo Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- at least claims 1–4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, the Lenovo Respondents have had knowledge of the '580 Patent and the infringing nature of the Lenovo Accused Products. Despite this knowledge of the '580 Patent, the Lenovo Respondents continue to actively encourage and instruct their customers and end users (for example, through their user manuals and online instruction materials on their websites) to use the Lenovo Accused Products in ways that directly infringe the '580 Patent. The Lenovo Respondents do so knowing and intending that their customers and end users will commit these infringing acts. The Lenovo Respondents also continue to import, sell for importation, and/or sell in the United States the Lenovo Accused Products, despite their knowledge of the '580 Patent,

thereby specifically intending for and inducing their customers to infringe the '580 Patent through the customers' normal and customary use of the Lenovo Accused Products.

112. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to representative a Lenovo Accused Product, the Lenovo Yoga 730, and including photographs and drawings where applicable, is attached as Exhibit 38.

E. Microsoft

1. Infringement of the '173 Patent

- 113. On information and belief, Microsoft imports, sells for importation, and/or sells within the United States after importation certain Accused Products (the "Microsoft Accused Products"), such as the Microsoft Surface Book 2 13.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Microsoft Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- 114. Microsoft also knowingly and intentionally induces infringement of at least claims 1 and 5–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Microsoft has had knowledge of the '173 Patent and the infringing nature of the Microsoft Accused Products. Despite this knowledge of the '173 Patent, Microsoft continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Microsoft Accused Products in ways that directly infringe the '173 Patent. Microsoft does so knowing and intending that its customers and end users will commit these infringing acts. Microsoft also continues to import, sell for importation, and/or sell in the United States the Microsoft Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its

customers to infringe the '173 Patent through the customers' normal and customary use of the Microsoft Accused Products.

115. A claim chart comparing independent claims 1, 10 and 19 of the '173 Patent to a representative Microsoft Accused Product, the Microsoft Surface Book 2 13.5, and including photographs and drawings where applicable, is attached as Exhibit 39.

2. Infringement of the '910 Patent

- 116. On information and belief, Microsoft imports, sells for importation, and/or sells within the United States after importation certain Microsoft Accused Products, such as the Microsoft Surface Book 2 13.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The Microsoft Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.
- 117. Microsoft also knowingly and intentionally induces infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Microsoft has had knowledge of the '910 Patent and the infringing nature of the Microsoft Accused Products. Despite this knowledge of the '910 Patent, Microsoft continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Microsoft Accused Products in ways that directly infringe the '910 Patent. Microsoft does so knowing and intending that its customers and end users will commit these infringing acts. Microsoft also continues to import, sell for importation, and/or sell in the United States the Microsoft Accused Products, despite its knowledge of the '910 Patent, thereby specifically intending for and inducing its customers to infringe the '910 Patent through the customers' normal and customary use of the Microsoft Accused Products.

118. A claim chart comparing independent claims 1, 13, and 25 of the '910 Patent to a representative Microsoft Accused Product, the Microsoft Surface Book 2 13.5, and including photographs and drawings where applicable, is attached as Exhibit 40.

3. Infringement of the '790 Patent

- 119. On information and belief, Microsoft imports, sells for importation, and/or sells within the United States after importation certain Microsoft Accused Products, such as the Microsoft Surface Book 2 13.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. The Microsoft Accused Products satisfy all claim limitations of claims 1, 4–8, 10–14, and 16–24 of the '790 Patent at the time of importation into the United States.
- 120. Microsoft also knowingly and intentionally induces infringement of at least claims 7, 8, 10–12, and 22–24 of the '790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Microsoft has had knowledge of the '790 Patent and the infringing nature of the Microsoft Accused Products. Despite this knowledge of the '790 Patent, Microsoft continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Microsoft Accused Products in ways that directly infringe the '790 Patent. Microsoft does so knowing and intending that its customers and end users will commit these infringing acts. Microsoft also continues to import, sell for importation, and/or sell in the United States the Microsoft Accused Products, despite its knowledge of the '790 Patent, thereby specifically intending for and inducing its customers to infringe the '790 Patent through the customers' normal and customary use of the Microsoft Accused Products.

121. A claim chart comparing independent claims 1, 7, and 13 of the '790 Patent to a representative Microsoft Accused Product, the Microsoft Surface Book 2 13.5, and including photographs and drawings where applicable, is attached as Exhibit 41.

4. Infringement of the '580 Patent

- 122. On information and belief, Microsoft imports, sells for importation, and/or sells within the United States after importation certain Microsoft Accused Products, such as the Microsoft Surface Book 2 13.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Microsoft Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- 123. Microsoft also knowingly and intentionally induces infringement of at least claims 1–4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Microsoft has had knowledge of the '580 Patent and the infringing nature of the Microsoft Accused Products. Despite this knowledge of the '580 Patent, Microsoft continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Microsoft Accused Products in ways that directly infringe the '580 Patent. Microsoft does so knowing and intending that its customers and end users will commit these infringing acts. Microsoft Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to infringe the '580 Patent through the customers' normal and customary use of the Microsoft Accused Products.

124. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to a representative Microsoft Accused Product, the Microsoft Surface Book 2 13.5, and including photographs and drawings where applicable, is attached as Exhibit 42.

F. Motorola

1. Infringement of the '173 Patent

- 125. On information and belief, Motorola imports, sells for importation, and/or sells within the United States after importation certain Accused Products (the "Motorola Accused Products"), such as the Motorola Moto G6, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Motorola Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- 126. Motorola also knowingly and intentionally induces infringement of at least claims 1 and 3–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Motorola has had knowledge of the '173 Patent and the infringing nature of the Motorola Accused Products. Despite this knowledge of the '173 Patent, Motorola continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Motorola Accused Products in ways that directly infringe the '173 Patent. Motorola does so knowing and intending that its customers and end users will commit these infringing acts. Motorola also continues to import, sell for importation, and/or sell in the United States the Motorola Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its customers to infringe the '173 Patent through the customers' normal and customary use of the Motorola Accused Products.

127. A claim chart comparing independent claims 1, 10 and 19 of the '173 Patent to a representative Motorola Accused Product, the Motorola Moto G6, and including photographs and drawings where applicable, is attached as Exhibit 43.

2. Infringement of the '910 Patent

- 128. On information and belief, Motorola imports, sells for importation, and/or sells within the United States after importation certain Motorola Accused Products, such as the Motorola Moto G6, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The Motorola Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.
- 129. Motorola also knowingly and intentionally induces infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Motorola has had knowledge of the '910 Patent and the infringing nature of the Motorola Accused Products. Despite this knowledge of the '910 Patent, Motorola continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Motorola Accused Products in ways that directly infringe the '910 Patent. Motorola does so knowing and intending that its customers and end users will commit these infringing acts. Motorola also continues to import, sell for importation, and/or sell in the United States the Motorola Accused Products, despite its knowledge of the '910 Patent, thereby specifically intending for and inducing its customers to infringe the '910 Patent through the customers' normal and customary use of the Motorola Accused Products.

130. A claim chart comparing independent claims 1, 13, and 25 of the '910 Patent to a representative Motorola Accused Product, the Motorola Moto G6, and including photographs and drawings where applicable, is attached as Exhibit 44.

3. Infringement of the '580 Patent

- 131. On information and belief, Motorola imports, sells for importation, and/or sells within the United States after importation certain Motorola Accused Products, such as the Motorola Moto G6, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Motorola Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- 132. Motorola also knowingly and intentionally induces infringement of at least claims 1—4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Motorola has had knowledge of the '580 Patent and the infringing nature of the Motorola Accused Products. Despite this knowledge of the '580 Patent, Motorola continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Motorola Accused Products in ways that directly infringe the '580 Patent. Motorola does so knowing and intending that its customers and end users will commit these infringing acts. Motorola also continues to import, sell for importation, and/or sell in the United States the Motorola Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to infringe the '580 Patent through the customers' normal and customary use of the Motorola Accused Products.

133. A claim chart comparing independent claims 1, 5, and 9 of the '580 Patent to a representative Motorola Accused Product, the Motorola Moto G6, and including photographs and drawings where applicable, is attached as Exhibit 45.

G. Samsung Respondents

1. Infringement of the '173 Patent

- 134. On information and belief, the Samsung Respondents import, sell for importation, and/or sell within the United States after importation certain Accused Products (the "Samsung Accused Products"), such as the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the '173 Patent. The Samsung Accused Products satisfy all claim limitations of claims 1–19 of the '173 Patent at the time of importation into the United States.
- 135. Samsung also knowingly and intentionally induces infringement of at least claims 1 and 3–9 of the '173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Samsung has had knowledge of the '173 Patent and the infringing nature of the Samsung Accused Products. Despite this knowledge of the '173 Patent, Samsung continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Samsung Accused Products in ways that directly infringe the '173 Patent. Samsung does so knowing and intending that its customers and end users will commit these infringing acts. Samsung also continues to import, sell for importation, and/or sell in the United States the Samsung Accused Products, despite its knowledge of the '173 Patent, thereby specifically intending for and inducing its customers to infringe the '173 Patent through the customers' normal and customary use of the Samsung Accused Products.

136. Claim charts comparing independent claims 1, 10 and 19 of the '173 Patent to representative Samsung Accused Products, the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, and including photographs and drawings where applicable, are attached as Exhibits 46-48.

2. Infringement of the '910 Patent

- 137. On information and belief, the Samsung Respondents import, sell for importation, and/or sell within the United States after importation certain Samsung Accused Products, such as the Samsung Galaxy S9+ and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent. The Samsung Accused Products satisfy all claim limitations of claims 1–37 of the '910 Patent at the time of importation into the United States.
- 138. Samsung also knowingly and intentionally induces infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Samsung has had knowledge of the '910 Patent and the infringing nature of the Samsung Accused Products. Despite this knowledge of the '910 Patent, Samsung continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Samsung Accused Products in ways that directly infringe the '910 Patent. Samsung does so knowing and intending that its customers and end users will commit these infringing acts. Samsung also continues to import, sell for importation, and/or sell in the United States the Samsung Accused Products, despite its knowledge of the '910 Patent, thereby specifically intending for and inducing its customers to infringe the '910 Patent through the customers' normal and customary use of the Samsung Accused Products.

139. Claim charts comparing independent claims 1, 13, and 25 of the '910 Patent to representative Samsung Accused Products, the Samsung Galaxy S9+ and Samsung Notebook 9 Pro 15, and including photographs and drawings where applicable, are attached as Exhibits 49-50.

3. Infringement of the '790 Patent

- 140. On information and belief, the Samsung Respondents import, sell for importation, and/or sell within the United States after importation certain Samsung Accused Products, such as the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. The Samsung Accused Products satisfy all claim limitations of claims 1, 4–8, 10–14, and 16–24 of the '790 Patent at the time of importation into the United States.
- 141. Samsung also knowingly and intentionally induces infringement of at least claims 7, 8, 10–12, and 22–24 of the '790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Samsung has had knowledge of the '790 Patent and the infringing nature of the Samsung Accused Products. Despite this knowledge of the '790 Patent, Samsung continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Samsung Accused Products in ways that directly infringe the '790 Patent. Samsung does so knowing and intending that its customers and end users will commit these infringing acts. Samsung also continues to import, sell for importation, and/or sell in the United States the Samsung Accused Products, despite its knowledge of the '790 Patent, thereby specifically intending for and inducing its customers to infringe the '790 Patent through the customers' normal and customary use of the Samsung Accused Products.

142. Claim charts comparing independent claims 1, 7, and 13 of the '790 Patent to representative Samsung Accused Products, the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, and including photographs and drawings where applicable, are attached as Exhibits 51-53.

4. Infringement of the '580 Patent

- 143. On information and belief, the Samsung Respondents import, sell for importation, and/or sell within the United States after importation certain Samsung Accused Products, such as the Samsung Galaxy S9+ and Samsung Galaxy Tab S4 10.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the '580 Patent. The Samsung Accused Products satisfy all claim limitations of claims 1–12 of the '580 Patent at the time of importation into the United States.
- 144. Samsung also knowingly and intentionally induces infringement of at least claims 1—4 of the '580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of the related District Court complaint referenced in Section VIII, Samsung has had knowledge of the '580 Patent and the infringing nature of the Samsung Accused Products. Despite this knowledge of the '580 Patent, Samsung continues to actively encourage and instruct its customers and end users (for example, through its user manuals and online instruction materials on its website) to use the Samsung Accused Products in ways that directly infringe the '580 Patent. Samsung does so knowing and intending that its customers and end users will commit these infringing acts. Samsung also continues to import, sell for importation, and/or sell in the United States the Samsung Accused Products, despite its knowledge of the '580 Patent, thereby specifically intending for and inducing its customers to infringe the '580 Patent through the customers' normal and customary use of the Samsung Accused Products.

145. Claim charts comparing independent claims 1, 5, and 9 of the '580 Patent to representative Samsung Accused Products, the Samsung Galaxy S9+ and Samsung Galaxy Tab S4 10.5, and including photographs and drawings where applicable, are attached as Exhibits 54-55.

VI. SPECIFIC INSTANCES OF IMPORTATION

A. Amazon

146. On information and belief, the Amazon Accused Products are manufactured outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 56 is a receipt from Amazon.com showing the purchase of a *Fire HD 10 Tablet with Alexa Hands-Free*, 10.1" 1080p Full HD Display, 32 GB, Black - with Special Offers ("Amazon Fire HD 10") for delivery to an address in the United States. Exhibit 68 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

B. Dell

147. On information and belief, the Dell Accused Products are manufactured outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 57 is a receipt from Amazon.com showing the purchase of a *Dell Latitude 7389 I5 7-7300U 256GB SS FHD Touch 1920X1080 W8265 W10* ("Dell Latitude 7389") for delivery to an address in the United States. Exhibit 69 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

C. HP

- 148. On information and belief, the HP Accused Products are manufactured outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 58 is a receipt from Amazon.com showing the purchase of a 2018 Newest Flagship HP X360 15.6 Inch Full HD Touchscreen 2-in-1 Convertible Laptop with Stylus Pen Intel Core i5-7200U, 8GB RAM, 128GB SSD, AMD Radeon 530 2GB Dedicated Graphics, HDMI, Bluetooth ("HP X360 15-br095ms") for delivery to an address in the United States. Exhibit 70 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.
- 149. Exhibit 59 is a receipt from Amazon.com showing the purchase of a *HP 15-inch Laptop*, *AMD A9-9420 APU*, *8GB RAM*, *1TB hard drive*, *Windows 10 (15-bw030nr*, *Gray)* ("HP 15-bw030nr") for delivery to an address in the United States. Exhibit 71 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.
- Premium Pavilion 15.6 Inch Touchscreen Laptop (Intel Pentium 4-Core N5000 1.10 GHz, up to 2.70 GHz Turbo, 4GB/8GB/16GB RAM, 128GB to 1TB SSD, 500GB to 2TB HDD, WiFi, Bluetooth, Windows 10) ("HP 15-bs289wm") for delivery to an address in the United States. Exhibit 72 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

D. Lenovo Respondents

151. On information and belief, the Lenovo Accused Products are manufactured outside of the United States and sold for importation into the United States, imported into the United States,

and/or sold within the United States after importation. For example, Exhibit 61 is a receipt from Amazon.com showing the purchase of a New 2018 Lenovo Yoga 730 2-in-1 15.6" FHD IPS Touch-Screen Laptop, Intel i5-8250U, 8GB DDR4 RAM, 256GB PCIe SSD, Thunderbolt, Fingerprint Reader, Backlit Keyboard, Built for Windows Ink, Win10 ("Lenovo Yoga 730") for delivery to an address in the United States. Exhibit 74 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

152. Exhibit 62 is a receipt from Amazon.com showing the purchase of two *Lenovo Tab* 4, 10.1" Android Tablet, Quad-Core Processor, 1.4GHz, 16GB Storage, Slate Black, ZA2J0007US ("Lenovo Tab 4 10.1") for delivery to an address in the United States. Exhibit 73 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

E. Microsoft

outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 63 is a receipt from Amazon.com showing the purchase of a *Microsoft Surface Book 2 (Intel Core i5, 8GB RAM, 256GB) - 13.5"* ("Microsoft Surface Book 2 13.5") for delivery to an address in the United States. Exhibit 75 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

F. Motorola

154. On information and belief, the Motorola Accused Products are manufactured outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 64 is a

receipt from Amazon.com showing the purchase of a *Motorola G6 - 32 GB - Unlocked* (AT&T/Sprint/T-Mobile/Verizon) - Black - (U.S. Warranty) - PAAE0000US ("Motorola Moto G6") for delivery to an address in the United States. Exhibit 76 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

G. Samsung Respondents

- outside of the United States and sold for importation into the United States, imported into the United States, and/or sold within the United States after importation. For example, Exhibit 65 is a receipt from BestBuy.com showing the purchase of two *Samsung Galaxy S9+ 64GB Unlocked Midnight Black* ("Samsung Galaxy S9+") for delivery to an address in the United States. Exhibit 77 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that Korea is the country of origin.
- 156. Exhibit 66 is a receipt from Amazon.com showing the purchase of two Samsung Electronics SM-T830NZKAXAR Galaxy Tab S4, 10.5" Black with Cover Keyboard, Black ("Samsung Galaxy Tab S4 10.5") for delivery to an address in the United States. Exhibit 78 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that Vietnam is the country of origin
- 157. Exhibit 67 is a receipt from Samsung.com showing the purchase of a *Notebook 9 Pro 15" (256GB SSD)* ("Samsung Notebook 9 Pro 15") notebook computer for delivery to an address in the United States. Exhibit 79 contains photograph(s) of the product and/or product packaging, delivered to an address in the United States, indicating that China is the country of origin.

VII. CLASSIFICATION OF THE ACCUSED PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE

158. The Accused Products are classified under at least the following subheadings of the Harmonized Tariff Schedule of the United States: 8517.12.00, 8517.62.00, and 8517.70.00 (smartphones); and 8471.30.01, 8471.41.01, 8471.49.00, or 8471.50.01 (tablets, handheld computers, and laptop computers). These classifications are exemplary in nature and not intended to restrict the scope of any exclusion order or other remedy ordered by the Commission.

VIII. RELATED LITIGATION

- 159. Complainant Neodron, Ltd. is filing complaints in the United States District Court for the Western District of Texas against the Proposed Respondents concurrently with the filing of the instant Complaint, alleging infringement of one or more claims of the '173, '910, '790, and '580 Patents, the same patents that have been asserted in this Complaint.
- 160. Other than the litigations specified above, to Complainant's knowledge, the Asserted Patents are not and have not been the subject of any current or prior litigation.

IX. DOMESTIC INDUSTRY

161. A domestic industry exists under Section 337(a)(2) and 337(a)(3). In particular, a domestic industry exists as a result of Microchip's (a Neodron licensee) significant investment in plant and equipment and significant employment of labor and capital with respect to Microchip products ("Microchip DI Products") that practice and are protected by the Asserted Patents. 19 U.S.C. § 1337(a)(3)(A)-(B). Pursuant to Commission Rule 210.12(a)(9)(iv), Complainant has attached as Confidential Exhibit 23C a copy of the Microchip license agreement.

A. Technical Prong

162. Microchip makes significant and substantial investments in plant and equipment, labor and capital, and engineering and research and development with respect to products that practice one or more claims of the Asserted Patents (the "Domestic Industry Products"), including

the following exemplary Microchip product: Microchip Maxtouch MXT2912TD-AT Touchscreen Controller ("Microchip Maxtouch MXT2912TD-AT").

163. Confidential Exhibits 80C-83C are claim charts demonstrating that the Microchip Domestic Industry Products practice the Asserted Patents. The following table identifies the exemplary Microchip Domestic Industry Product with the corresponding Asserted Patent and exemplary Asserted Claims(s).

Asserted Patent	Exemplary Practiced Claims	Exemplary Domestic Industry Product
8,432,173	1, 10, 19	Microchip Maxtouch MXT2912TD-AT
8,791,910	1, 13, 25	Microchip Maxtouch MXT2912TD-AT
9,024,790	1, 7, 13	Microchip Maxtouch MXT2912TD-AT
9,372,580	1, 5, 9	Microchip Maxtouch MXT2912TD-AT

- 164. Exemplary claim charts showing how the Microchip Domestic Industry Products practice exemplary claims of the '173 Patent are attached as Confidential Exhibit 80C. These claim charts provide a basis for the domestic industry relating to the '173 Patent.
- 165. Exemplary claim charts showing how the Microchip Domestic Industry Products practice exemplary claims of the '910 Patent are attached as Confidential Exhibit 81C. These claim charts provide a basis for the domestic industry relating to the '910 Patent.
- 166. Exemplary claim charts showing how the Microchip Domestic Industry Products practice exemplary claims of the '790 Patent are attached as Confidential Exhibit 82C. These claim charts provide a basis for the domestic industry relating to the '790 Patent.
- 167. Exemplary claim charts showing how the Microchip Domestic Industry Products practice exemplary claims of the '580 Patent are attached as Confidential Exhibit 83C. These claim charts provide a basis for the domestic industry relating to the '580 Patent.

B. Economic Prong

- 168. Microchip has in the United States, with respect to the Domestic Industry Products, significant investments in plant and equipment, significant employment of labor and capital, and substantial investments in exploitation of the Asserted Patents. These investments and employment are all tied to the Asserted Patents. Confidential Exhibit 84C is a declaration from Microchip's Vice President of the Human Machine Interface Division detailing Microchip's significant and substantial activities, investments, and employment with respect to the Asserted Patents.
- 169. Microchip is the predecessor-in-interest of the Asserted Patents and, by virtue of a license back granted by Complainant, Microchip is fully licensed to practice each of the Asserted Patents. *See* Confidential Exhibit 23C. Within the United States, Microchip designs, develops, manufactures, sells, and supports products that use technology claimed by the Asserted Patents.
- 170. Microchip was founded in 1989 and is headquartered in Chandler, Arizona. Microchip is a leader in touch and gesture technology. Microchip's Chandler headquarter campus is the nerve center and worldwide headquarters for all of its touch and gesture-related products and businesses.
- 171. Over the years, through its own patent filings and through company acquisitions, such as the acquisition of Atmel in 2016, Microchip obtained hundreds of United States patents related to touch and gesture lighting, and continues to research, manufacture, and sell products at the forefront of touch and gesture technology. Confidential Exhibit 84C at ¶ 3.
- 172. Microchip and Atmel have invested and continue to invest significant sums in domestic labor and capital relating to the Domestic Industry Products. Details relating to Microchip's and Atmel's domestic expenditures on labor and capital are set forth in Confidential Exhibit 84C at ¶ 7-11.

173. Microchip and Atmel have also invested and continue to invest significant sums in domestic plant and equipment relating to the Domestic Industry Products. Details relating to Microchip's and Atmel's domestic expenditures on plant and equipment are set forth in Confidential Exhibit 84C at ¶¶ 12-16.

X. RELIEF REQUESTED

- 174. Respondents have infringed and will continue to infringe the Asserted Patents as specified in Sections V and VI above, unless the Commission prohibits the importation into and sale within the United States after importation of the Accused Products.
- 175. Accordingly, Neodron respectfully requests that the United States International Trade Commission:
- a) institute an immediate investigation pursuant to Section 337(b)(1) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, into Respondents' violations of Section 337 arising from the sale for importation into the United States, importation, and/or sale within the United States after importation of certain touch-controlled mobile devices, computers, and components thereof that infringe the Asserted Patents;
- b) schedule and conduct a hearing, pursuant to Section 337(c), for purposes of receiving evidence and hearing argument concerning whether Respondents have violated Section 337 and, following the hearing, determine that Respondents have violated Section 337;
- c) issue a permanent limited exclusion order, pursuant to Section 337(d) and (f)(1), excluding from entry into the United States Respondents' touch-controlled mobile devices, computers, and components thereof that infringe one or more claims of the Asserted Patents, including, without limitation, the specific Accused Products identified in this Complaint and the exhibits hereto;

- d) issue permanent orders, pursuant to Section 337(f), directing Respondents to cease and desist from importing, selling, selling for importation, offering for sale, using, demonstrating, promoting, marketing, and/or advertising in the United States Respondents' touch-controlled mobile devices, computers, and components thereof that infringe one or more claims of the Asserted Patents, including, without limitation, the specific Accused Products identified in this Complaint and the exhibits hereto;
- e) impose a bond on importation and sales of infringing products during the 60-day Presidential review period pursuant to 19 U.S.C. § 1337(j); and
- f) grant all such other and further relief as it deems appropriate under the law, based upon the facts complained of herein and as determined by the investigation.

Dated: May 22, 2019

Respectfully submitted,

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Asha Allan

Evan H. Langdon

David H. Hollander

Paulina Starostka

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Counsel for Complainant Neodron Ltd.

THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

In the Matter of	§	
	§	
CERTAIN TOUCH-CONTROLLED	§	Investigation No. 227 TA
MOBILE DEVICES, COMPUTERS,	§	Investigation No. 337-TA
AND COMPONENTS THEREOF	§	
	§	

I, Jerry Padian, declare, in accordance with 19 C.F.R. § 210.12(a)(1), as follows:

- 1. I am a Director at Neodron Limited and I am duly authorized to sign this Complaint;
- 2. I have read the Complaint and am aware of its contents;
- 3. The Complaint is not being presented for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of the investigation or related proceeding;
- 4. To the best of my knowledge, information and belief founded upon reasonable inquiry, claims, defenses, and other legal contentions therein are warranted by existing law or by a non-frivolous argument for the extension, modification, or reversal of existing law or the establishment of new law;
- 5. The allegations and other factual contentions have evidentiary support or are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery.

I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on May 20, 2019

Jerry Padian

Director

Neodron Limited