IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

KONINKLIJKE PHILIPS N.V., **U.S. PHILIPS CORPORATION,** **Plaintiffs,** **v.** **ACER INC.,** **ACER AMERICA CORPORATION,** **Defendants.**	Case No.: 15-1170-GMS JURY TRIAL DEMANDED
MICROSOFT CORPORATION, **Intervenor-Plaintiff,** **v.** **KONINKLIJKE PHILIPS N.V.,** **U.S. PHILIPS CORPORATION,** **Intervenor-Defendants.**	

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Koninklijke Philips N.V. and U.S. Philips Corporation (collectively, "Plaintiffs" or "Philips"), bring this Second Amended Complaint for patent infringement against Defendants Acer Inc. and Acer America Corporation (collectively, "Defendants" or "Acer"), and hereby allege as follows:

Nature of the Action

1. This is an action for patent infringement under 35 U.S.C. § 271, et seq., by Philips

against Acer for infringement of United States Patent Nos. RE 44,913 ("the '913 patent"), 6,690,387 ("the '387 patent"), 7,184,064 ("the '064 patent"), 7,529,806 ("the '806 patent"), 5,910,797 ("the '797 patent"), 6,522,695 ("the '695 patent"), RE 44,006 ("the '006 patent"), 8,543,819 ("the '819 patent"), 9,436,809 ("the '809 patent"), 6,772,114 ("the '114 patent"), and RE 43,564 ("the '564 patent") (collectively, the "patents-in-suit").

The Parties

2. Plaintiff Koninklijke Philips N.V., formerly known as Koninklijke Philips Electronics N.V., is a corporation duly organized and existing under the laws of the Netherlands. Its principal place of business is High Tech Campus 5, 5656 AE Eindhoven, the Netherlands.

3. Plaintiff U.S. Philips Corporation is a corporation duly organized and existing under the laws of Delaware. Its principal place of business is 3000 Minuteman Road, Andover, Massachusetts, 01810.

4. Upon information and belief, Acer Inc. is a corporation organized and existing under the laws of Taiwan, with its principal place of business located at 8F, 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City 221, Taiwan, Republic of China.

5. Upon information and belief, Acer America Corporation is a corporation organized and existing under the laws of California, with its principal place of business located at 333 West San Carlos Street, Suite 1500, San Jose, California 95110.

Jurisdiction and Venue

6. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over Defendants because Defendants have, directly or through intermediaries, committed acts within Delaware giving rise to this action and/or have established minimum contacts with Delaware such that the exercise of jurisdiction would not offend traditional notions of fair play and substantial justice. Defendants have placed, and are continuing to place, products which infringe one or more of the patents-in-suit into the stream of commerce, via an established distribution channel, with the knowledge and/or understanding that such products are sold in the State of Delaware, including in this District. Upon information and belief, Defendants have derived substantial revenues from their infringing acts occurring within the State of Delaware and within this District.

8. Upon information and belief, Defendants are, and have been, engaged in the business of making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include hardware and/or software containing functionality covered by one or more claims of the patents-in-suit.

9. Non-limiting examples of these smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks are the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch

10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, DC Chromebase, and Switch Alpha 12 which, on information and belief, have been used, offered for sale, and/or sold within this judicial District, without limitation, through http://us-store.acer.com/, and the websites and retail locations of third parties.

10. Upon information and belief, Defendants purposefully direct sales and offers for sale of these smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks, including but not limited to those specifically identified above, toward the state of Delaware, including this District.

11. Upon information and belief, Defendants maintain established distribution channels within the United States that permit Defendants to ship these smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks, including but not limited to those specifically identified above, to the state of Delaware, including this District, within a few days.

12. In addition, Defendants have actively induced and continue to actively induce infringement of one or more of the patents-in-suit within this District. Defendants have acted with the specific intent to induce infringement as, with knowledge of the patents-in-suit and knowledge that their products include functionality which, when used by others, directly infringes one or more of the patents-in-suit, Defendants have offered for sale and/or sold within this District, to others, including customers and other end users, products containing infringing functionality, and have provided instructions, user manuals, advertising, and/or marketing

materials encouraging others to use the infringing functionality and thereby directly infringe one or more of the patents-in-suit.

13. In addition, Defendants have contributorily infringed and continue to contributorily infringe one or more of the patents-in-suit within this District. Defendants have, with knowledge of the patents-in-suit and knowledge that their products contain functionality which, when used by others, directly infringes one or more of the patents-in-suit, offered to sell, sold or imported into this District products including infringing functionality to others, including customers and other end users, who use the included infringing functionality to directly infringe at least one of the patents-in-suit. Defendants' products thus constitute a material part of the claimed invention of one or more of the patents-in-suit and Defendants know that these products are especially made and/or especially adapted for use in infringing at least one of the patents-in-suit and are not staple articles of commerce suitable for substantial non-infringing use.

14. Venue is proper under 28 U.S.C. §§ 1391(b) and (c), and 1400.

Philips' Patents-in-Suit

15. On May 27, 2014, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. RE 44,913, entitled "Text entry method and device therefor," to inventor Matthew J. Bickerton. Koninklijke Philips N.V. is the assignee and owner of the '913 patent, a true copy of which is attached hereto as Exhibit 1.

16. On February 10, 2004, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 6,690,387, entitled "Touch-screen image scrolling system and method," to inventors John Zimmerman and Jacquelyn Annette Martino. Koninklijke Philips N.V. is the assignee and owner of the '387 patent, a true copy of which is attached hereto as

Exhibit 2.

17. On February 27, 2007, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 7,184,064, entitled "Touch-screen image scrolling system and method," to inventors John Zimmerman and Jacquelyn Annette Martino. Koninklijke Philips N.V. is the assignee and owner of the '064 patent, a true copy of which is attached hereto as Exhibit 3.

18. On May 5, 2009, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 7,529,806, entitled "Partitioning of MP3 content file for emulating streaming," to inventor Yevgeniy Eugene Shteyn. Koninklijke Philips N.V. is the assignee and owner of the '806 patent, a true copy of which is attached hereto as Exhibit 4.

19. On June 8, 1999, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 5,910,797, entitled "Portable data processing apparatus provided with a screen and a gravitation-controlled sensor for screen orientation," to inventor Leonardus G.M. Beuk. U.S. Philips Corporation is the assignee and owner of the '797 patent, a true copy of which is attached hereto as Exhibit 5.

20. On February 18, 2003, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 6,522,695, entitled "Transmitting device for transmitting a digital information signal alternately in encoded form and non-encoded form," to inventors Alphons A.M.L. Bruekers, Johannes M.M. Verbakel, and Marcel S.E. Van Nieuwenhoven. Koninklijke Philips N.V. is the assignee and owner of the '695 patent, a true copy of which is attached hereto as Exhibit 6.

21. On February 19, 2013, the U.S. Patent and Trademark Office duly and legally

issued United States Patent No. RE 44,006, entitled "User interface for television," to inventors Lisa Cherian, Robert Andrew Lambourne, and Guy James Roberts. Koninklijke Philips N.V. is the assignee and owner of the '006 patent, a true copy of which is attached hereto as Exhibit 7.

22. On September 24, 2013, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 8,543,819, entitled "Secure authenticated distance measurement," to inventor Franciscus Lucas Antonius Johannes Kamperman. Koninklijke Philips N.V. is the assignee and owner of the '819 patent, a true copy of which is attached hereto as Exhibit 8.

23. On September 6, 2016, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 9,436,809, entitled "Secure authenticated distance measurement," to inventor Franciscus Lucas Antonius Johannes Kamperman. Koninklijke Philips N.V. is the assignee and owner of the '809 patent, a true copy of which is attached hereto as Exhibit 9.

24. On August 3, 2004, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. 6,772,114, entitled "High frequency and low frequency audio signal encoding and decoding system," to inventors Robert Johannes Sluijter, Andreas Johannes Gerrits, Rakesh Taori, and Samir Chennoukh. Koninklijke Philips N.V. is the assignee and owner of the '114 patent, a true copy of which is attached hereto as Exhibit 10.

25. On August 7, 2012, the U.S. Patent and Trademark Office duly and legally issued United States Patent No. RE 43,564, entitled "Hand-held with auto-zoom for graphical display of web page," to inventor Jan Van Ee. Koninklijke Philips N.V. is the assignee and owner of the '564 patent, a true copy of which is attached hereto as Exhibit 11.

Factual Background

26. Philips is a world-renowned company that expends enormous efforts and resources to advance research and development in various technological fields. One of those fields is applied electronics, in which Philips has conducted groundbreaking research relating to graphical user interfaces, electronic displays of information, touch screen interfaces, the control of content delivery between multiple devices, and audio/video encoding and decoding, among other things. The patents-in-suit stem from this work and claim protection for interactive systems for which users can control apparatuses, displays, and content in an intuitive manner. These intuitive mechanisms are used in present-day smartphones and tablet computers and other electronic devices.

Notice to Defendants

27. Upon information and belief, Defendants are well-aware of Plaintiffs' Touch-Enabled Devices patent portfolio (see, e.g., http://www.ip.philips.com/licensing/program/111/touch-enabled-devices) relating to Defendants' smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks. Plaintiffs' patent portfolio in this area has been the subject of extensive discussion between the parties.

28. Upon information and belief, Defendants have had knowledge of the '913 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the '913 patent at least upon receiving a letter from Philips dated May 31, 2013, which disclosed U.S. Patent No. 6,885,318 of which the '913 patent is a reissue, upon viewing a presentation on the '913 patent made by Philips on November 14, 2014, and through other communications,

meetings, and presentations. At the very latest, Acer was given notice of its infringement of the '913 patent upon the filing and service of the original Complaint in this action.

29. Upon information and belief, Defendants have had knowledge of the '387 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the '387 patent at least upon receiving a letter from Philips dated May 31, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the '387 patent upon the filing and service of the original Complaint in this action.

30. Upon information and belief, Defendants have had knowledge of the '064 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the '064 patent at least upon receiving a letter from Philips dated May 31, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the '064 patent upon the filing and service of the original Complaint in this action.

31. Upon information and belief, Defendants have had knowledge of the '806 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the '806 patent at least upon viewing a presentation made by Philips on November 20, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the '806 patent upon the filing and service of the original Complaint in this action.

32. Upon information and belief, Defendants have had knowledge of the '797 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of

the ’797 patent at least upon viewing a presentation made by Philips on November 20, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the ’797 patent upon the filing and service of the original Complaint in this action.

33. Upon information and belief, Defendants have had knowledge of the ’695 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the ’695 patent at least upon receiving a letter from Philips dated May 31, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the ’695 patent upon the filing and service of the original Complaint in this action.

34. Upon information and belief, Defendants have had knowledge of the ’006 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the ’006 patent at least upon receiving a letter from Philips dated December 14, 2015. At the very latest, Acer was given notice of its infringement of the ’006 patent upon the filing and service of the original Complaint in this action.

35. Upon information and belief, Defendants have had knowledge of the ’819 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the ’819 patent at least upon receiving a letter from Philips dated December 14, 2015. At the very latest, Acer was given notice of its infringement of the ’819 patent upon the filing and service of the original Complaint in this action.

36. Upon information and belief, Defendants have had knowledge of the ’809 patent in advance of the filing of this Second Amended Complaint. Acer was given notice of its

infringement of the ’809 patent at least upon receiving an email from Philips dated November 1, 2016. At the very latest, Acer was given notice of its infringement of the ’809 patent upon the filing and service of the stipulation dated November 10, 2016, stipulating to Philips’ asserting infringement of the ‘809 patent in this action.

37. Upon information and belief, Defendants have had knowledge of the ’114 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the ’114 patent at least upon receiving a letter from Philips dated May 31, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the ’114 patent upon the filing and service of the original Complaint in this action.

38. Upon information and belief, Defendants have had knowledge of the ’564 patent in advance of the filing of the original Complaint. Acer was given notice of its infringement of the ’564 patent at least upon receiving a letter from Philips dated May 31, 2013 and through other communications, meetings, and presentations. At the very latest, Acer was given notice of its infringement of the ’564 patent upon the filing and service of the original Complaint in this action.

First Cause of Action: Infringement of U.S. Patent No. RE 44,913

39. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

40. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the ’913 patent, including the right to sue and recover for any and all infringements

thereof.

41. Claim 1 of the ’913 patent is illustrative of the method claims of the ’913 patent and is directed toward a method for inputting a character to a device including a keypad, which includes a plurality of keys. At least one of the keys has a primary character, a plurality of secondary characters, and an associated display area. In a default state, the keypad displays the primary character associated with the at least one key in the associated display area. In the default state, the primary character is returned as an input character in response to selection of the at least one key for a period shorter than a predetermined time period. A second state is switched to after a first key selection of the at least one key is detected for a period longer than the predetermined time period. In the second state, each of the secondary characters associated with the first selected key is displayed in a respective display area, a second key selection is detected, the secondary character associated with the second key selection is selected for the input character, and the keypad is returned to the default state.

42. Claim 4 of the ’913 patent is illustrative of the device claims of the ’913 patent and is directed toward a device for receiving character input having a keypad having a plurality of keys. At least one of the keys has a primary character, a plurality of secondary characters, and an associated display area. The device has means for displaying, in a default state, the primary character associated with the at least one key in the associated display area. The device has means for returning, in a default state, the primary character as an input character in response to selection of the at least one key for a period shorter than a predetermined time period and means for switching to a second state responsive to a first key selection of the at least one key for a period longer than the predetermined time period. The device has means for displaying, in the

second state, each of the secondary characters associated with the selected key in a respective display area, means responsive to a second key selection for selecting as the input character the secondary character associated with the second key selection, and means for returning the keypad to the default state.

43. Defendants have directly infringed and continue to directly infringe the '913 patent in violation of 35 U.S.C. § 271(a) by using in the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks to practice, either literally or under the doctrine of equivalents, each step of at least the method of claim 1 of the '913 patent.

44. Defendants have directly infringed and continue to directly infringe the '913 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 4 of the '913 patent.

45. As one example, the Acer Iconia Tab 10 is a tablet which runs the Android Operating System and which has keypad entry functionality similar to that summarized in the next paragraph ("the '913 Accused Keypad Entry Functionality") that meets every element of at least claim 4 of the '913 patent, either literally or under the doctrine of equivalents, and which results in the practice of every step of at least claim 1 of the '913 patent, either literally or under the doctrine of equivalents, when operated by Defendants or other end users.

46. The Acer Iconia Tab 10 has a keypad having a plurality of keys. At least one key

(e.g., the "a" key) has a primary character (e.g., the "a" character), a plurality of secondary characters (e.g., characters such as "à" and "á"), and an associated display area (e.g., a portion of the screen associated with the "a" key). In a default state, the keypad displays the primary character associated with the at least one key in the associated display area (e.g., the "a" character is displayed in the portion of the screen associated with the "a" key). In the default state, the primary character is returned as an input character (e.g., the "a" character is returned as the input character) in response to selection of the at least one key for a period shorter than a predetermined time period (e.g., the "a" key is pressed and not held). A second state is switched to after a first key selection of the at least one key is detected for a period longer than the predetermined time period (e.g., the "a" key is pressed and held). In the second state, each of the secondary characters associated with the first selected key is displayed in a respective display area (e.g., each of the characters such as "à" and "á" that are associated with the selected key, the "a" key, is displayed in a respective portion of the screen), a second key selection is detected (e.g., the selection of the key associated with the "á" character is detected), the secondary character associated with the second key selection is selected for the input character (e.g., the "á" character is selected as the input character), and the keypad is returned to the default state (e.g., the keypad returns to display of the "a" character).

47. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '913 Accused Keypad Entry Functionality (e.g., by being pre-loaded with the Android Operating System 2.1 or higher, the Microsoft Windows Operating System version 8 or higher, or the

Chrome Operating System; see, e.g., https://support.google.com/chromebook/answer/177893?hl=en, https://blogs.msdn.microsoft.com/b8/2012/07/17/designing-the-windows-8-touch-keyboard/) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, DC Chromebase, and Switch Alpha 12 ("the '913 Accused Keypad Entry Devices") and/or software updates that include the '913 Accused Keypad Entry Functionality.

48. Defendants have also actively induced, and continue to actively induce infringement of the '913 patent in violation of 35 U.S.C. § 271(b). Upon information and belief, Defendants' customers and other end users actually use the '913 Accused Keypad Entry Functionality in the '913 Accused Keypad Entry Devices to practice each step of at least the method of claim 1 of the '913 patent and thereby directly infringe. Defendants have had knowledge of the'913 patent since at least May 31, 2013 when they were provided with actual notice of the patent, as explained above. Defendants have also had knowledge that use of the

'913 Accused Keypad Entry Functionality directly infringes the '913 patent by being given actual notice of the patent on May 31, 2013, upon viewing a presentation related to infringement of the '913 patent made by Philips on November 14, 2014 and through other similar communications, meetings, and presentations, and by service of the Original Complaint, First Amended Complaint, and Initial Infringement Contentions in this action. Defendants, both prior and subsequent to the foregoing events, have acted and continued to act with the specific intent to induce infringement as, with knowledge of the '913 patent and knowledge that use of the '913 Accused Keypad Entry Functionality directly infringes the '913 patent, Defendants have offered for sale and/or sold to others, including customers and other end users, the '913 Accused Keypad Entry Devices that include the '913 Accused Keypad Entry Functionality (e.g., by being pre-loaded with the Android Operating System 2.1 or higher, the Microsoft Windows Operating System version 8 or higher, or the Chrome Operating System) and/or software updates that include the '913 Accused Keypad Entry Functionality, and have provided to others instructions, user manuals, advertising, and/or marketing materials encouraging them to use the '913 Accused Keypad Entry Functionality and directly infringe the '913 patent.

49. As one example, Defendants provide user manuals (see, e.g., http://global-download.acer.com/GDFiles/Document/User%20Manual/User%20Manual_Acer_1.0_A_A.pdf?acerid=635666688605012580&Step1=TABLET&Step2=ICONIA%20TAB%2010&Step3=A3-A30&OS=ALL&LC=en&BC=ACER&SC=PA_6) which facilitate, direct, or encourage others, including customers and other end users, to use the '913 Accused Keypad Entry Functionality and thereby directly infringe at least the method of claim 1 of the '913 patent. For example, the Acer Iconia Tab 10 user manual includes at least the following instructions that direct a user to

practice the '913 Accused Keypad Entry Functionality on page 18: "Tap and hold a key to select alternative characters (if available for that key), such as letters with accents or related symbols." Defendants have knowledge that the instructions in this user manual encourage and facilitate the direct infringement of the '913 patent by others, including customers and other end users, as Defendants have had knowledge of the '913 patent and that use of the '913 Accused Keypad Entry Functionality directly infringes the '913 patent since at least May 31, 2013, as explained above.

50. Defendants have also contributorily infringed, and continue to contributorily infringe, the '913 patent in violation of 35 U.S.C. § 271(c). As explained above, Defendants' customers and other end users actually use the '913 Accused Keypad Entry Functionality in the '913 Accused Keypad Entry Devices to practice each step of at least the method of claim 1 of the '913 patent and thereby directly infringe. Further, as explained above, Defendants have had knowledge of the'913 patent since at least May 31, 2013 and have also had knowledge that use of the '913 Accused Keypad Entry Functionality necessarily directly infringes the '913 patent as of this date. Defendants have offered for sale, sold, and/or imported the '913 Accused Keypad Entry Devices that include the '913 Accused Keypad Entry Functionality (e.g., by being pre-loaded with the Android Operating System 2.1 or higher, the Microsoft Windows Operating System version 8 or higher, or the Chrome Operating System) and/or software updates that include the '913 Accused Keypad Entry Functionality to others, including customers and other end users, who use the included '913 Accused Keypad Entry Functionality to directly infringe the '913 patent. Thus, the '913 Accused Keypad Entry Devices and software updates for these devices constitute a material part of the '913 patent.

51. Defendants have knowledge of the '913 patent and knowledge that use of the '913 Accused Keypad Entry Functionality necessarily directly infringes the '913 patent. Further, the '913 Accused Keypad Entry Functionality cannot be practiced without infringing the '913 patent and has no use other than infringing the '913 patent. Upon information and belief, for the reasons above, Defendants know that the '913 Accused Keypad Entry Devices and software updates for these devices are especially made and/or especially adapted for use in infringing the '913 patent, at least because they include software code that was designed to practice the '913 Accused Keypad Entry Functionality when executed, which infringes the '913 patent. Moreover, the '913 Accused Keypad Entry Devices and software updates for these devices are not staple articles of commerce suitable for substantial non-infringing use, at least because the included, above-referenced software code that practices the '913 Accused Keypad Entry Functionality has no use apart from infringing the '913 patent. Further, the included, above-referenced software code that practices the '913 Accused Keypad Entry Functionality is distinct and separate from the rest of the software code in the operating system and, when executed, only practices, and can only be used to practice, each step of at least the method of claim 1 of the '913 patent.

52. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

53. Defendants have had actual notice and knowledge of the '913 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '913 patent directly or indirectly. Further, Philips met and communicated with Defendants on multiple occasions prior

to the filing of this action to explain Defendants' infringement of the '913 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '913 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Second Cause of Action: Infringement of U.S. Patent No. 6,690,387

54. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

55. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '387 patent, including the right to sue and recover for any and all infringements thereof.

56. Claim 9 of the '387 patent is illustrative of the method claims of the '387 patent and is directed toward a method for controlling the scroll-like display of data on an electronic display screen. The duration of finger touch contact time with an electronic display screen

having scrollable data displayed on it is sensed. The speed and direction of motion of the finger touch contact with the display screen is sensed. A scrolling motion of the scrollable data on the display screen is initiated in the sensed direction and at the sensed speed. The speed of the scrolling motion is slowed from its initiated speed at a predetermined rate. The scrolling motion is terminated when a condition of a substantially stationary finger touch having a finite duration is sensed or a condition of an end-of-scroll signal is sensed.

57. Claim 11 of the ’387 patent depends from claim 9 and is directed toward the method of claim 9 comprising the further step of sensing a finger touch on the screen having a duration greater than a first given preset minimum time and less than a second given preset minimum time which is greater than the first given time and then moving the display in correspondence with movement of the finger touch.

58. Claim 12 of the ’387 patent depends from claim 9 and is directed toward the method of claim 9 comprising the further step of sensing a stationary finger touch on the screen having a duration greater than a second preset given minimum time which is greater than a first given preset time and then moving a touch-selected item relative to the stationary display in correspondence with movement of the finger touch.

59. Defendants have directly infringed and continue to directly infringe the ’387 patent in violation of 35 U.S.C. § 271(a) by using in the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks to practice, either literally or under the doctrine of equivalents, each step of at least the methods of claims 9, 11, and 12 of the ’387 patent.

60. As one example, the Acer Iconia Tab 10 is a tablet which runs the Android

Operating System and which has scrolling control functionality similar to that summarized in the next three paragraphs ("the '387 Accused Scrolling Control Functionality") which results in the practice of every step of at least claims 9, 11, and 12 of the '387 patent, either literally or under the doctrine of equivalents, when operated by Defendants or other end users.

61. The Acer Iconia Tab 10 has a touch screen and controls the scroll-like display of data on the touch screen. The Acer Iconia Tab 10 contains hardware and/or software that sense the duration of finger touch contact time with the touch screen having scrollable data (e.g., website content in an Internet browser or application icons in a folder) displayed on it. The Acer Iconia Tab 10 contains hardware and/or software that sense the speed and direction of the finger touch contact with the touch screen. The Acer Iconia Tab 10 contains hardware and/or software that initiate a scrolling motion of the scrollable data in the sensed direction and at the sensed speed (e.g., when a finger touching the screen is sensed as moving up the screen at a fast rate the website content or application icons in a folder are scrolled up the screen quickly or, as another example, when a finger touching the screen is sensed as moving down the screen at a slow rate the website content or application icons in a folder are scrolled down the screen slowly). The Acer Iconia Tab 10 contains hardware and/or software that slow the speed of the scrolling motion from its initiated speed at a predetermined rate (e.g., the speed of the scrolling motion is slowed at a predetermined rate until motion is stopped). The Acer Iconia Tab 10 contains hardware and/or software that terminate the scrolling motion when a condition of a substantially stationary finger touch having a finite duration is sensed (e.g., the scrolling motion is terminated if the finger touch is sensed as being substantially stationary for a finite duration) or a condition of an end-of-scroll signal is sensed (e.g., the scrolling motion is terminated if the bottom of the

website content or application icons in a folder was reached).

62. Further, the Acer Iconia Tab 10 contains hardware and/or software that sense a finger touch on the screen having a duration greater than a first given preset minimum time (e.g., a finger touch on the screen is sensed as having a duration greater than the minimum duration for a "short press" touch) and less than a second given preset minimum time which is greater than the first given time (e.g., the sensed duration is less than the minimum duration for a "long press" touch, which is longer than the "short press" touch duration) and then moving the display in correspondence with movement of the finger touch (e.g., the display is scrolled in a corresponding manner to the finger's movement when the finger touch on the screen is sensed as being longer than a "short press" touch but not long enough to be a "long press" touch).

63. Further, the Acer Iconia Tab 10 contains hardware and/or software that sense a stationary finger touch on the screen having a duration greater than a second preset given minimum time (e.g., a stationary finger touch on the screen is sensed as having a duration greater than the minimum duration for a "long press" touch) which is greater than a first given preset time (e.g., the duration of a "long press" touch is longer than the duration for a "short press" touch) and then moving a touch-selected item (e.g., an application icon that has been touched and selected by the "long press" touch) relative to the stationary display in correspondence with movement of the finger touch (e.g., the application icon is moved along the stationary display in a corresponding manner to the finger's movement).

64. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-

referenced '387 Accused Scrolling Control Functionality (e.g., by being pre-loaded with the Android Operating System version 2.1 or higher, the Microsoft Windows Operating System version 7 or higher, or the Chrome Operating System; see, e.g., https://support.google.com/chromebook/answer/2766492?hl=en, https://blogs.msdn.microsoft.com/e7/2009/03/25/touching-windows-7/ and https://www.microsoft.com/surface/en-us/support/touch-mouse-and-search/using-touch-gestures-tap-swipe-and-beyond?os=windows-8.1-update-1&=undefined) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, DC Chromebase, and Switch Alpha 12 ("the '387 Accused Scrolling Control Devices") and/or software updates that include the '387 Accused Scrolling Control Functionality.

65. Defendants have also actively induced, and continue to actively induce infringement of the '387 patent in violation of 35 U.S.C. § 271(b). Upon information and belief, Defendants' customers and other end users actually use the '387 Accused Scrolling Control Functionality in the '387 Accused Scrolling Control Devices to practice each step of at least the

method of claims 9, 11, and 12 of the '387 patent and thereby directly infringe. Defendants have had knowledge of the'387 patent since at least May 31, 2013 when they were provided with actual notice of the patent, as explained above. Defendants have also had knowledge that use of the '387 Accused Scrolling Control Functionality directly infringes the '387 patent by being given actual notice of the patent on May 31, 2013, through communications, meetings, and presentations related to infringement of the '387 patent, and by service of the Original Complaint, First Amended Complaint, and Initial Infringement Contentions in this action. Defendants, both prior and subsequent to the foregoing events, have acted and continued to act with the specific intent to induce infringement as, with knowledge of the '387 patent and knowledge that use of the '387 Accused Scrolling Control Functionality directly infringes the '387 patent, Defendants have offered for sale and/or sold to others, including customers and other end users, the '387 Accused Scrolling Control Devices that include the '387 Accused Scrolling Control Functionality (e.g., by being pre-loaded with the Android Operating System version 2.1 or higher, the Microsoft Windows Operating System version 7 or higher, or the Chrome Operating System) and/or software updates that include the '387 Accused Scrolling Control Functionality, and have provided to others instructions, user manuals, advertising, and/or marketing materials encouraging them to use the '387 Accused Scrolling Control Functionality and directly infringe the '387 patent.

66. As one example, Defendants provide user manuals (see, e.g., http://global-download.acer.com/GDFiles/Document/User%20Manual/User%20Manual_Acer_1.0_A_A.pdf?acerid=635666688605012580&Step1=TABLET&Step2=ICONIA%20TAB%2010&Step3=A3-A30&OS=ALL&LC=en&BC=ACER&SC=PA_6) which facilitate, direct, or encourage others,

including customers and other end users, to use the '387 Accused Scrolling Control Functionality and thereby directly infringe at least the methods of claims 9, 11, and 12 of the '387 patent. For example, the Acer Iconia Tab 10 user manual includes at least the following instructions that direct a user to practice the '387 Accused Scrolling Control Functionality on page 10: "To scroll up or down the screen, simply drag your finger up or down the screen in the direction that you want to scroll" and on page 16: "To move a widget to the Home screen, tap and hold an item until it is selected. The Home screen will open. Drag the item to any free area on the screen." Defendants have knowledge that the instructions in this user manual encourage and facilitate the direct infringement of the '387 patent by others, including customers and other end users, as Defendants have had knowledge of the '387 patent and that use of the '387 Accused Scrolling Control Functionality directly infringes the '387 patent since at least May 31, 2013, as explained above.

67. Defendants have also contributorily infringed, and continue to contributorily infringe, the '387 patent in violation of 35 U.S.C. § 271(c). As explained above, Defendants' customers and other end users actually use the '387 Accused Scrolling Control Functionality in the '387 Accused Scrolling Control Devices to practice each step of at least the methods of claims 9, 11, and 12 of the '387 patent and thereby directly infringe. Further, as explained above, Defendants have had knowledge of the'387 patent since at least May 31, 2013 and have also had knowledge that use of the '387 Accused Scrolling Control Functionality necessarily directly infringes the '387 patent as of this date. Defendants have offered for sale, sold, and/or imported the '387 Accused Scrolling Control Devices that include the '387 Scrolling Control Functionality (e.g., by being pre-loaded with the Android Operating System version 2.1 or

higher, the Microsoft Windows Operating System version 7 or higher, or the Chrome Operating System) and/or software updates that include the '387 Scrolling Control Functionality to others, including customers and other end users, who use the included '387 Accused Scrolling Control Functionality to directly infringe the '387 patent. Thus, the '387 Accused Scrolling Control Devices and software updates for these devices constitute a material part of the '387 patent.

68. Defendants have knowledge of the '387 patent and knowledge that use of the '387 Accused Scrolling Control Functionality necessarily directly infringes the '387 patent. Further, the '387 Accused Scrolling Control Functionality cannot be practiced without infringing the '387 patent and has no use other than infringing the '387 patent. Upon information and belief, for the reasons above, Defendants know that the '387 Accused Scrolling Control Devices and software updates for these devices are especially made and/or especially adapted for use in infringing the '387 patent, at least because they include software code that was designed to practice the '387 Accused Scrolling Control Functionality when executed, which infringes the '387 patent. Moreover, the '387 Accused Scrolling Control Devices and software updates for these devices are not staple articles of commerce suitable for substantial non-infringing use, at least because the included, above-referenced software code that practices the '387 Accused Scrolling Control Functionality has no use apart from infringing the '387 patent. Further, the included, above-referenced software code that practices the '387 Accused Scrolling Control Functionality is distinct and separate from the rest of the software code in the operating system and, when executed, only practices, and can only be used to practice, each step of at least the methods of claims 9, 11, and 12 of the '387 patent.

69. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will

continue to suffer, substantial damages in an amount to be determined at trial.

70. Defendants have had actual notice and knowledge of the '387 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '387 patent directly or indirectly. Further, Philips has met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '387 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '387 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Third Cause of Action: Infringement of U.S. Patent No. 7,184,064

71. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

72. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in

and to the ’064 patent, including the right to sue and recover for any and all infringements thereof.

73. Claim 1 of the ’064 patent is illustrative of the system claims of the ’064 patent and is directed to an improved touch-screen image scrolling system. The system has an electronic image display screen and a microprocessor coupled to the screen to display information on the screen and to receive interactive signals from the screen. The system has timer means associated with the microprocessor to provide timing capacity for it. The system has a source of scroll format data that is capable of being displayed on the screen. The system has finger touch program instructions associated with the microprocessor to sense the speed, direction, and time duration of a finger touch contact with the screen. The system has scrolling motion program instructions associated with the microprocessor that is responsive to the duration of the finger touch contact such that if the duration exceeds a first preset minimum time and is accompanied by motion along the surface of the screen followed by separation of the finger from the screen, a scroll format display on the screen is caused to begin to scroll in the sensed direction and at the sensed initial speed. The system has time decay program instructions associated with the microprocessor to reduce the rate of scrolling displacement on the screen at a given rate until motion is terminated. The system has stopping motion program instructions associated with the microprocessor to terminate the scrolling displacement of the image on the screen upon first occurrence of a signal comprising a substantially stationary finger touch on the screen for longer than a preset minimum or an end-of scroll signal received from the scroll format data source.

74. Claim 2 of the ’064 patent depends from claim 1 and is directed toward the

system of claim 1 wherein the scrolling motion program instructions further comprise instructions to move the display in correspondence with movement of the finger touch, in response to movement following a touch having a stationary duration greater than the first preset given minimum time and less than a second given preset minimum time.

75. Claim 3 of the ’064 patent depends from claim 1 and is directed toward the system of claim 1 wherein scrolling motion program instructions further comprise instructions to move a touch-selected item relative to the stationary display in correspondence with movement of the finger touch, in response to motion following a touch having a stationary duration greater than a second given preset minimum time.

76. Defendants have directly infringed and continue to directly infringe the ’064 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claims 1, 2, and 3 of the ’064 patent.

77. As one example, the Acer Iconia Tab 10 is a tablet which runs the Android Operating System and which has scrolling control functionality similar to that summarized in the next three paragraphs (“the ’064 Accused Scrolling Control Functionality”) that meets every element of at least claims 1, 2, and 3 of the ’064 patent, either literally or under the doctrine of equivalents.

78. The Acer Iconia Tab 10 has a touch screen and a microprocessor (e.g., the Intel Atom Z3735F) which displays information on the screen and receives interactive signals from

the screen. The Acer Iconia Tab 10 contains hardware and/or software that provide timing capacity for the microprocessor. The Acer Iconia Tab 10 contains hardware and/or software that are a source of scroll format data (e.g., a memory holding scrollable data such as website content in an Internet browser or application icons in a folder) that can be displayed on the screen. The Acer Iconia Tab 10 contains software program instructions associated with the microprocessor that sense the speed, direction, and time duration of a finger touch contact with the screen. The Acer Iconia Tab 10 contains software program instructions associated with the microprocessor that is responsive to the duration of the finger touch contact such that if the duration exceeds a first preset minimum time (e.g., the duration of a finger touching the screen is sensed as being greater than the minimum duration for a "short press" touch) and is accompanied by motion along the surface of the screen followed by separation of the finger from the screen, a scroll format display on the screen is caused to begin to scroll in the sensed direction and at the sensed initial speed (e.g., when a finger touching the screen is sensed as moving up the screen at a fast rate the website content or application icons in a folder are scrolled up the screen quickly or, as another example, when a finger touching the screen is sensed as moving down the screen at a slow rate the website content or application icons in a folder are scrolled down the screen slowly). The Acer Iconia Tab 10 contains software program instructions associated with the microprocessor that reduce the rate of scrolling displacement on the screen at a given rate until motion is terminated (e.g., the scrolling displacement is slowed at a given rate until motion is stopped). The Acer Iconia Tab 10 contains software program instructions associated with the microprocessor that terminate the scrolling displacement of the image on the screen upon first occurrence of a signal comprising a substantially stationary finger touch on the screen for longer

than a preset minimum (e.g., the scrolling displacement of the image on the screen is terminated if the finger touch is sensed as being substantially stationary for longer than a preset minimum) or an end-of-scroll signal is received from the scroll format data source (e.g., the scrolling displacement of the image on the screen is terminated if the bottom of the website content or application icons in a folder was reached).

79. Further, the Acer Iconia Tab 10 contains scrolling motion program instructions to move the display in correspondence with movement of the finger touch (e.g., the display is scrolled in a corresponding manner to the finger's movement when the finger touching the screen is sensed as being longer than a "short press" touch but not long enough to be a "long press" touch as described below), in response to movement following a touch having a stationary duration greater than the first preset given minimum time (e.g., the stationary duration of a finger touching the screen is sensed as being greater than the minimum duration for a "short press" touch) and less than a second given preset minimum time (e.g., the sensed duration is less than the minimum duration for a "long press" touch).

80. Further, the Acer Iconia Tab 10 contains scrolling motion program instructions to move a touch-selected item (e.g., an application icon that has been touched and selected by the "long press" touch as described below) relative to the stationary display in correspondence with movement of the finger touch (e.g., the application icon is moved along the stationary display in a corresponding manner to the finger's movement), in response to motion following a touch having a stationary duration greater than a second given preset minimum time (e.g., the sensed stationary duration is greater than the minimum duration for a "long press" touch).

81. Upon information and belief, Defendants make, have made, use, sell and/or offer

to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '064 Accused Scrolling Control Functionality (e.g., by being pre-loaded with the Android Operating System version 2.1 or higher, the Microsoft Windows Operating System version 7 or higher, or the Chrome Operating System; see, e.g., https://support.google.com/chromebook/answer/2766492?hl=en, https://blogs.msdn.microsoft.com/e7/2009/03/25/touching-windows-7/ and https://www.microsoft.com/surface/en-us/support/touch-mouse-and-search/using-touch-gestures-tap-swipe-and-beyond?os=windows-8.1-update-1&=undefined) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, DC Chromebase, and Switch Alpha 12 ("the '064 Accused Scrolling Control Devices") and/or software updates that include the '064 Accused Scrolling Control Functionality.

82. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

83. Defendants have had actual notice and knowledge of the '064 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '064 patent directly. Further, Philips has met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '064 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '064 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Fourth Cause of Action: Infringement of U.S. Patent No. 7,529,806

84. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

85. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '806 patent, including the right to sue and recover for any and all infringements

thereof.

86. Claim 1 of the '806 patent is illustrative of the method claims of the '806 patent and is directed toward a method of forming a media presentation at a client device from multiple related files, including a control information file, stored on one or more server computers within a computer network. The control information file is downloaded to the client device. The client device parses the control information file and based thereon, the client device: identifies multiple alternative files corresponding to a given segment of the media presentation, determines which file of the multiple alternative files to retrieve based on system restraints, and retrieves the determined file to begin a media presentation. If the determined file is one of a plurality of files required for the media presentation, the client device retrieves a next file concurrent with the media presentation and uses content of the next file to continue the media presentation.

87. Claim 12 of the '806 patent is illustrative of the device claims of the '806 patent and is directed toward a client device for forming a media presentation from multiple related files stored on server computers within a computer network. The client device has means for downloading files to the client device. The client device has means for parsing a control information file and based thereon identifying multiple alternative files corresponding to a given segment of the media presentation, determining which file of the alternative files to retrieve based on system restraints, and retrieving the determined file to begin a media presentation. If the determined file is one of a plurality of files required for the media presentation, the means for parsing comprises means for retrieving a next file concurrent with the media presentation and using content of the next file to continue the media presentation.

88. Defendants have directly infringed and continue to directly infringe the '806

patent in violation of 35 U.S.C. § 271(a) by using in the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, and 2-in-1 PCs to practice, either literally or under the doctrine of equivalents, each step of at least the method of claim 1 of the '806 patent.

89. Defendants have directly infringed and continue to directly infringe the '806 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, and 2-in-1 PCs that embody, either literally or under the doctrine of equivalents, each element of at least claim 12 of the '806 patent.

90. As one example, the Acer Iconia One 7 is a tablet which runs the Android Operating System and which has streaming video functionality similar to that summarized in the next paragraph ("the '806 Accused Streaming Video Functionality") that meets every element of at least claim 12 of the '806 patent, either literally or under the doctrine of equivalents, and which results in the practice of every step of at least claim 1 of the '806 patent, either literally or under the doctrine of equivalents, when operated by Defendants or other end users.

91. The Acer Iconia One 7 runs the Android Operating System and ran Android Operating System version 5.0 when it was released (see, e.g., http://www.acer.com/ac/en/US/content/series/iconiaone7). Since Android Operating System version 3.0, the Android Operating System has supported HTTP Live Streaming (HLS) (see, e.g., http://developer.android.com/about/versions/android-3.0-highlights.html). Since Android Operating System version 4.4, the Android Operating System has supported MPEG-DASH (Dynamic Adaptive Streaming over HTTP) (see, e.g.,

http://developer.android.com/about/versions/kitkat.html). HLS and MPEG-DASH are video streaming technologies that allow a device, such as the Acer Iconia One 7, to form a media presentation from multiple related files stored on server computers in a computer network by use of the Acer Iconia One 7's Internet browser and/or a video playback application such as YouTube. The Acer Iconia One 7 has a wireless modem and related software for downloading a control information file (e.g., a MPD file for MPEG-DASH or a M3U8 file for HLS) to the Acer Iconia One 7. The Acer Iconia One 7 has a processor (e.g., the Intel Atom Z3735G) programmed to parse the control information file (e.g., the processor parses the MPD file or M3U8 file) and based thereon, identifying multiple alternative files corresponding to a given segment of the media presentation (e.g., identifying based on the MPD file or M3U8 file alternative files that correspond to a video segment; for example, a video is encoded into higher quality and lower quality streams and each stream is divided into chunks, such as MPEG-2 transport stream files, and higher quality and lower quality files that correspond to a given video segment are identified based on the MPD file or M3U8 file), determining which file of the alternative files to retrieve based on system restraints (e.g., determining that a lower quality file should be retrieved when bandwidth is more limited or a higher quality file should be retrieved when bandwidth is less limited), and retrieving the determined file to begin a media presentation. If the determined file is one of a plurality of files required for the media presentation, the processor retrieves a next file concurrent with the media presentation and uses content of the next file to continue the media presentation.

92. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet

computers, laptops, All-in-One PCs, and 2-in-1 PCs that include the above-referenced '806 Accused Streaming Video Functionality (e.g., by being pre-loaded with the Android Operating System version 3.0 or higher that supports HLS, the Android Operating System version 4.4 or higher that supports MPEG-DASH, the Microsoft Windows Operating System version 8.1 or higher that supports MPEG-DASH, or the Microsoft Windows Operating System version 10 or higher that supports HLS; see, e.g., https://blogs.msdn.microsoft.com/ie/2015/01/29/simplified-adaptive-video-streaming-announcing-support-for-hls-and-dash-in-windows-10/ and https://blogs.msdn.microsoft.com/ie/2013/09/05/online-professional-quality-video-premium-media-experiences-without-plug-ins-in-internet-explorer-11/) including, without limitation, the Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, and Switch Alpha 12 ("the '806 Accused Streaming Video Devices") and/or software updates that include the '806 Accused Streaming Video Functionality.

93. Defendants have also actively induced, and continue to actively induce infringement of the '806 patent in violation of 35 U.S.C. § 271(b). Upon information and belief, Defendants' customers and other end users actually use the '806 Accused Streaming Video

Functionality in the ’806 Accused Streaming Video Devices to practice each step of at least the method of claim 1 of the ’806 patent and thereby directly infringe. Defendants have had knowledge of the’806 patent since at least November 20, 2013 when they were provided with actual notice of the patent, as explained above. Defendants have also had knowledge that use of the ’806 Accused Streaming Video Functionality directly infringes the ’806 patent by being given actual notice of the patent on November 20, 2013, through communications, meetings, and presentations related to infringement of the ’806 patent, and by service of the Original Complaint, First Amended Complaint, and Initial Infringement Contentions in this action. Defendants, both prior and subsequent to the foregoing events, have acted and continued to act with the specific intent to induce infringement as, with knowledge of the ’806 patent and knowledge that use of the ’806 Accused Streaming Video Functionality directly infringes the ’806 patent, Defendants have offered for sale and/or sold to others, including customers and other end users, the ’806 Accused Streaming Video Devices that include the ’806 Accused Streaming Video Functionality (e.g., by being pre-loaded with the Android Operating System version 3.0 or higher that supports HLS, the Android Operating System version 4.4 or higher that supports MPEG-DASH, the Microsoft Windows Operating System version 8.1 or higher that supports MPEG-DASH, or the Microsoft Windows Operating System version 10 or higher that supports HLS) and/or software updates that include the ’806 Accused Streaming Video Functionality, and have provided to others instructions, user manuals, advertising, and/or marketing materials encouraging them to use the ’806 Accused Streaming Video Functionality and directly infringe the ’806 patent.

94. As one example, Defendants provide to others customized Android Operating

System software updates (see, e.g., http://acer.custhelp.com/app/answers/detail/a_id/14634/related/1/session/L2F2LzEvdGltZS8xNDU5OTgzODU2L3NpZC8yZDVabW5ObQ%3D%3D) which facilitate, direct, or encourage others, including customers and other end users, to use the '806 Accused Streaming Video Functionality and thereby directly infringe at least the method of claim 1 of the '806 patent. Defendants have knowledge that these software updates and instructions encourage and facilitate the direct infringement of the '806 patent by others, including customers and other end users, as Defendants have had knowledge of the '806 patent since at least November 20, 2013 as explained above and are aware that these software updates support MPEG-DASH and/or HLS (see, e.g., http://developer.android.com/about/versions/android-3.0-highlights.html describing new features in Android Operating System v3.0: "Applications can now pass an M3U playlist URL to the media framework to begin an HTTP Live streaming session. The media framework supports most of the HTTP Live streaming specification, including adaptive bit rate." and http://developer.android.com/about/versions/kitkat.html describing new features in Android Operating System v4.4: "Android now supports the Common Encryption (CENC) for MPEG-DASH, providing a standard, multiplatform DRM scheme for managing protecting content. Apps can take advantage of CENC through Android's modular DRM framework and platform APIs for supporting DASH.").

95. Defendants have also contributorily infringed, and continue to contributorily infringe, the '806 patent in violation of 35 U.S.C. § 271(c). As explained above, Defendants' customers and other end users actually use the '806 Accused Streaming Video Functionality in the '806 Accused Streaming Video Devices to practice each step of at least the method of claim

1 of the ’806 patent and thereby directly infringe. Further, as explained above, Defendants have had knowledge of the’806 patent since at least November 20, 2013 and have also had knowledge that use of the ’806 Accused Streaming Video Functionality necessarily directly infringes the ’806 patent as of this date. Defendants have offered for sale, sold, and/or imported the ’806 Accused Streaming Video Devices that include the ’806 Streaming Video Functionality (e.g., by being pre-loaded with the Android Operating System version 3.0 or higher that supports HLS, the Android Operating System version 4.4 or higher that supports MPEG-DASH, the Microsoft Windows Operating System version 8.1 or higher that supports MPEG-DASH, or the Microsoft Windows Operating System version 10 or higher that supports HLS) and/or software updates that include the ’806 Streaming Video Functionality to others, including customers and other end users, who use the included ’806 Accused Streaming Video Functionality to directly infringe the ’806 patent. Thus, the ’806 Accused Streaming Video Devices and software updates for these devices constitute a material part of the ’806 patent.

96. Defendants have knowledge of the ’806 patent and knowledge that use of the ’806 Accused Streaming Video Functionality necessarily directly infringes the ’806 patent. Further, the ’806 Accused Streaming Video Functionality cannot be practiced without infringing the ’806 patent and has no use other than infringing the ’806 patent. Upon information and belief, for the reasons above, Defendants know that the ’806 Accused Streaming Video Devices and software updates for these devices are especially made and/or especially adapted for use in infringing the ’806 patent, at least because they include software code that was designed to practice the ’806 Accused Streaming Video Functionality when executed, which infringes the ’806 patent. Moreover, the ’806 Accused Streaming Video Devices and software updates for these devices

are not staple articles of commerce suitable for substantial non-infringing use, at least because the included, above-referenced software code that practices the '806 Accused Streaming Video Functionality has no use apart from infringing the '806 patent. Further, the included, above-referenced software code that practices the '806 Accused Streaming Video Functionality is distinct and separate from the rest of the software code in the operating system and, when executed, only practices, and can only be used to practice, each step of at least the method of claim 1 of the '806 patent.

97. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

98. Defendants have had actual notice and knowledge of the '806 patent since at least November 20, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '806 patent directly or indirectly. Further, Philips has met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '806 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '806 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants'

website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Fifth Cause of Action: Infringement of U.S. Patent No. 5,910,797

99. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

100. U.S. Philips Corporation is the sole owner of the entire right, title, and interest in and to the '797 patent, including the right to sue and recover for any and all infringements thereof.

101. Claim 6 of the '797 patent is illustrative of the apparatus claims of the '797 patent and is directed to a manipulatable apparatus that has data processing means and screen means for displaying one or more graphical or other objects presented by the data processing means. The apparatus has a gravitation-controlled sensor integrated with the screen means and feeding the data processing means for measuring an acceleration of the screen means that is induced by user manipulation of the screen means. The data processing means have programmed calculating means for, under control of a screen motion sensed by the sensing means, imparting an acceleration based motion pattern to a predetermined selection among the objects. The motion is nonuniform in time under control of a static orientation of the screen means.

102. Defendants have directly infringed and continue to directly infringe the '797 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority,

smartphones, tablet computers, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 6 of the '797 patent.

103. As one example, the Acer Iconia Tab 10 is a tablet which runs the Android Operating System and which has gravitation-controlled motion functionality similar to that summarized in the next paragraph ("the '797 Accused Gravitation-Controlled Motion Functionality") that meets every element of at least claim 6 of the '797 patent, either literally or under the doctrine of equivalents.

104. The Acer Iconia Tab 10 has a processor (e.g., the Intel Atom Z3735F) and a display screen for displaying one or more graphical or other objects (e.g., a virtual keyboard) presented by the processor. The Acer Iconia Tab 10 has a gravitation controlled sensor (e.g., an accelerometer) that is integrated with the display screen and feeds the processor and measures the acceleration of the screen that is induced by a user manipulating the display screen (e.g., the accelerometer measures the acceleration of the screen when a user changes the orientation of the screen from portrait to landscape). The processor has software that, under the control of a screen motion sensed by the sensor (e.g., when the accelerometer senses a screen motion such as when the screen's orientation is changed from portrait to landscape), imparts an acceleration based motion pattern to predetermined selected objects (e.g., the processor imparts an acceleration-based motion pattern that rotates the virtual keyboard from a portrait orientation to a landscape orientation). The motion is nonuniform in time under control of a static orientation of the screen (e.g., when the screen is held in a static landscape orientation after being rotated from a portrait orientation to a landscape orientation, the virtual keyboard rotates from the portrait orientation to the landscape orientation with a motion that is nonuniform in time).

105. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, 2-in-1 PCs, and Chromebooks that include the above-referenced '797 Accused Gravitation-Controlled Motion Functionality (e.g., by being pre-loaded with the Android Operating System version 3.2 or higher, or the Chrome Operating System) including, without limitation, the Acer Chromebook 11 C738T, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid Z410, and Acer Predator 8 ("the '797 Accused Gravitation-Controlled Motion Devices") and/or software updates that include the '797 Accused Gravitation-Controlled Motion Functionality.

106. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

107. Defendants have had actual notice and knowledge of the '797 patent since at least November 20, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '797 patent directly. Further, Philips has met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '797 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the

'797 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Sixth Cause of Action: Infringement of U.S. Patent No. 6,522,695

108. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

109. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '695 patent, including the right to sue and recover for any and all infringements thereof.

110. Claim 14 of the '695 patent is illustrative of the device claims of the '695 patent and is directed to a receiver that has receiving means for receiving a composite signal from a transmission medium and demultiplexing means for deriving at least one signal portion from the composite signal and for deriving a first identification signal of a first type and of a second type from the composite signal. The receiver has decoding means for decoding at least one signal portion. If a control signal is of a first type, the decoding means decodes a signal portion into a portion of a digital information signal and supplies the portion of the digital information and if a control signal is of a second type, the decoding means supplies a signal portion as a portion of

the digital information signal in a substantially unmodified form. The receiver also has means for generating the control signal for application to the decoding means including a control signal of the first type depending on the first identification signal of the first type.

111. Defendants have directly infringed and continue to directly infringe the '695 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 14 of the '695 patent.

112. As one example, the Iconia One 7 is a tablet which runs the Android Operating System and which has audio decoding functionality similar to that summarized in the next paragraph ("the '695 Accused Audio Decoding Functionality") that meets every element of at least claim 14 of the '695 patent, either literally or under the doctrine of equivalents.

113. The Acer Iconia One 7 runs the Android Operating System and ran Android Operating System version 5.0 when it was released (see, e.g., http://www.acer.com/ac/en/US/content/series/iconiaone7). The Acer Iconia One 7 has audio hardware and/or software that recognize and support FLAC (Free Lossless Audio Codec) and that can process audio signals encoded in the FLAC format (see, e.g., http://developer.android.com/guide/appendix/media-formats.html, detailing that the Android Operating System version 3.1 or higher supports FLAC decoding). The Acer Iconia One 7's audio hardware and/or software receiver receives a composite signal (e.g., a FLAC encoded audio signal) from a transmission medium (e.g., from memory or the Internet). The Acer Iconia

One 7's audio hardware and/or software demultiplexer demultiplexes the composite signal and derives at least one signal portion from the composite signal (e.g., the demultiplexer demultiplexes the FLAC signal and derives an audio subframe) and derives a first identification signal of a first type and of a second type from the composite signal (e.g., the demultiplexer derives from the FLAC signal a subframe type, a first identification signal, that indicates either an LPC subframe, a first type, or a verbatim subframe, a second type; see, e.g., https://xiph.org/flac/format.html). The Acer Iconia One 7's audio hardware and/or software decoder decodes at least one signal portion (e.g., the decoder decodes at least one audio subframe). If a control signal is of a first type (e.g., a control signal indicates LPC encoded audio), the decoder decodes a signal portion into a portion of a digital information signal and supplies the portion of the digital information (e.g., the subframe is LPC decoded into a portion of a digital information signal and is supplied) and if a control signal is of a second type (e.g., a control signal indicates verbatim encoded audio), the decoder supplies a signal portion as a portion of the digital information signal in a substantially unmodified form (e.g., the subframe is supplied substantially unmodified as a portion of the digital information signal). The Acer Iconia One 7's audio hardware and/or software generates the control signal for application to the decoder including a control signal of the first type depending on the first identification signal of the first type (e.g., a control signal indicating LPC encoded audio, a first type, is generated for application to the decoder depending on the first identification signal indicating an LPC subframe, a first type).

114. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet

computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '695 Accused Audio Decoding Functionality (e.g., by being pre-loaded with the Android Operating System version 3.1 or higher that supports FLAC, the Microsoft Windows Operating System version 10 or higher that supports FLAC, or the Chrome Operating System that supports FLAC; see, e.g., https://www.chromium.org/audio-video, http://www.pcworld.com/article/2852595/audio-snobs-rejoice-windows-10-will-have-system-wide-flac-support.html and https://msdn.microsoft.com/en-us/library/windows/apps/hh986969.aspx) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire S13, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12s, Aspire U5, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire Z1, Aspire Z3, Aspire Z3 Portable, Aspire ZC, DC Chromebase, and Switch Alpha 12 ("the '695 Accused Audio Decoding Devices") and/or software updates that include the '695 Accused Audio Decoding Functionality.

115. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

116. Defendants have had actual notice and knowledge of the '695 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have

known that their activities outlined in this Cause of Action infringe the '695 patent directly. Further, Philips met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '695 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '695 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Seventh Cause of Action: Infringement of U.S. Patent No. RE 44,006

117. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

118. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '006 patent, including the right to sue and recover for any and all infringements thereof.

119. Claim 1 of the '006 patent is illustrative of the device claims of the '006 patent

and is directed toward an electronic device that has at least one display apparatus and a controller arranged to cause the display apparatus to show a rotating elliptical menu comprising a plurality of menu options. The menu is displayed with a perspective in which all of the menu options that are displayed appear to lie substantially in an elliptical arrangement located on a single apparent plane disposed about a menu center displayed offset from a display center of the display apparatus, so that at least one menu option appears to be rotatable off an edge of the display apparatus at any one time. A sense of perspective is maintained by changing the shape or size of the displayed menu options during rotation of the menu.

120. Defendants have directly infringed and continue to directly infringe the '006 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, and 2-in-1 PCs that embody, either literally or under the doctrine of equivalents, each element of at least claim 1 of the '006 patent.

121. As one example, the Acer Iconia One 7 is a tablet which runs the Android Operating System and which has rotating elliptical menu functionality similar to that summarized in the next paragraph ("the '006 Accused Rotating Elliptical Menu Functionality") that meets every element of at least claim 1 of the '006 patent, either literally or under the doctrine of equivalents.

122. The Acer Iconia One 7 runs the Android Operating System and ran Android Operating System version 5.0 when it was released (see, e.g., http://www.acer.com/ac/en/US/content/series/iconiaone7). The Acer Iconia One 7 is an electronic device that has a display and a processor (e.g., the Intel Atom Z3735G) arranged to

cause the display to show a rotating elliptical menu comprising a plurality of menu options (e.g., the recents screen found in Android Operating System version 5.0 or higher is a rotating elliptical menu of recently accessed activities and tasks; see, e.g., http://developer.android.com/about/versions/android-5.0.html#UI and http://developer.android.com/guide/components/recents.html). The menu is displayed with a perspective in which all of the menu options that are displayed appear to lie substantially in an elliptical arrangement located on a single apparent plane disposed about a menu center (e.g., the recently accessed activities and tasks in the recents screen are displayed such that they appear to lie in an elliptical arrangement on a plane extending into the display disposed about a menu center) displayed offset from a display center of the display apparatus, so that at least one menu option appears to be rotatable off an edge of the display apparatus at any one time (e.g., the center of the recently accessed activities and tasks is offset from the display center and at least one recently accessed activity or task appears to be rotatable off of an edge of the display in response to a finger moving across the screen). A sense of perspective is maintained by changing the shape or size of the displayed menu options during rotation of the menu (e.g., recently accessed activities or tasks appear smaller or bigger as they rotate away or towards the user, respectively).

123. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, and 2-in-1 PCs that include the above-referenced '006 Accused Rotating Elliptical Menu Functionality (e.g., by being pre-loaded with the Android Operating System version 5.0 or higher) including, without limitation, the Acer Iconia One 7,

Acer Iconia One 8, Acer Iconia Tab 10, and Acer Predator 8 ("the '006 Accused Rotating Elliptical Menu Devices") and/or software updates that include the '006 Accused Rotating Elliptical Menu Functionality.

124. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

125. Defendants have had actual notice and knowledge of the '006 patent since at least December 14, 2015 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '006 patent directly. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '006 patent (e.g the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Eighth Cause of Action: Infringement of U.S. Patent No. 8,543,819

126. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

127. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in

and to the '819 patent, including the right to sue and recover for any and all infringements thereof.

128. Claim 1 of the '819 patent is illustrative of the method claims of the '819 patent and is directed toward a method for determining whether protected content stored on a first communication device can be accessed by a second communication device. The method comprises performing a round trip time measurement between the first communication device and the second communication device. The round trip time measurement comprises transmitting a first signal to the second device at a first time, receiving a second signal from the second device at a second time, generating a third signal using a common secret, determining whether the second signal and the third signal are identical to verify that the second signal was generated using the common secret, generating the round trip time as a difference between the first time and the second time, checking whether the round trip time is within a predefined interval. Access to the protected content is allowed provided that the round trip time is within the predefined interval, the second signal and the third signal are identical, and the second device is authenticated. The first device authenticates the second device by receiving a certificate of the second device, verifying that the certificate of the second device identifies the second device as complying with a set of predefined compliance rules, and the first device securely shares the common secret with the second device according to a key management protocol after having authenticated the second device.

129. Claim 10 of the '819 patent is illustrative of the device claims of the '819 patent and is directed toward a first communication device configured for determining whether protected content stored on the first communication device is available for access by a second

communication device. The first communication device comprises means for performing an authentication of the second communication device, which comprises: receiving a certificate of the second device and verifying that that the certificate of said second device identifies the second device as complying with a set of predefined compliance rules. The first communication device comprises means for securely sharing a common secret with the second communication device after the second communication device is authenticated. The first communication device comprises means for performing a round trip time measurement between the first communication device and the second communication device, which comprises: transmitting a first signal to the second device at time t1, receiving at time t2 a second signal from the second device, said second signal being generated using the common secret, and determining the round trip time measurement as a difference between time t1 and time t2. The first communication device comprises means for checking whether the measured round trip time is within a predefined interval, means for generating a third signal using the common secret, means for checking whether the second signal and the third signal are identical, and means for allowing access to the protected content when the round trip time measurement is within the predefined interval and the second and third signals are identical.

130. Defendants have directly infringed and continue to directly infringe the ’819 patent in violation of 35 U.S.C. § 271(a) by using in the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks to practice, either literally or under the doctrine of equivalents, each step of at least the method of claim 1 of the ’819 patent.

131. Defendants have directly infringed and continue to directly infringe the ’819

patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 10 of the '819 patent.

132. As one example, the Acer Aspire Switch 11 is a touch screen laptop which runs the Android Operating System and which has content protection functionality similar to that summarized in the next two paragraphs ("the '819 Accused Content Protection Functionality") that meets every element of at least claim 10 of the '819 patent, either literally or under the doctrine of equivalents, and which results in the practice of every step of at least claim 1 of the '819 patent, either literally or under the doctrine of equivalents, when operated by Defendants or other end users.

133. The Acer Aspire Switch 11 has Miracast hardware and/or software that support the High-bandwidth Digital Content Protection (HDCP) Specification Rev. 2.2 Interface Independent Adaptation (see, e.g., http://www.digital-cp.com/sites/default/files/specifications/HDCP%20Interface%20Independent%20Adaptation%20Specification%20Rev2_2_FINAL.pdf) ("HDCP on Miracast Specification"). A first communication device (e.g., an HDCP transmitter such as the Acer Aspire Switch 11), has hardware and/or software that determine whether protected content that it stores can be accessed by a second communication device (e.g., an HDCP receiver such as a television). The Acer Aspire Switch 11 performs a round trip time measurement between itself and the second communication device. The round trip time measurement comprises transmitting a first signal to

the second device at a first time (e.g., transmitting the message LC_Init, which starts a locality check; see, e.g., HDCP on Miracast Specification, Figure 2.4), receiving a second signal from the second device at a second time (e.g., receiving the message LC_Send_L_prime, thereby receiving L'; see, e.g., HDCP on Miracast Specification, Figure 2.4), generating a third signal using a common secret (e.g., generating L using the common secret, the key k_m, from which k_d is derived; see, e.g., HDCP on Miracast Specification, Figures 2.4 and 2.11), determining whether the second signal and the third signal are identical to verify that the second signal was generated using the common secret (e.g., determining that the received L' is equal to the generated L; see, e.g., HDCP on Miracast Specification, Figure 2.4), generating the round trip time as a difference between the first time and the second time, checking whether the round trip time is within a predefined interval (e.g., checking if the round-trip time is within 7 ms; see, e.g., HDCP on Miracast Specification, Figure 2.4). Access to the protected content is allowed provided that the round trip time is within the predefined interval, the second signal and the third signal are identical, and the second device is authenticated. The Acer Aspire Switch 11 authenticates the second device (e.g., the television) by receiving a certificate of the second device (e.g., the certificate received in the AKE_Send_Cert message; see, e.g., HDCP on Miracast Specification, Figure 2.1), verifying that the certificate of the second device identifies the second device as complying with a set of predefined compliance rules (e.g., verifying the signature on the certificate; see, e.g., HDCP on Miracast Specification, Figure 2.1), and the Acer Aspire Switch 11 securely shares the common secret with the second device according to a key management protocol after having authenticated the second device (e.g., k_m is transmitted securely in the message AKE_No_Stored_km after the second device is authenticated; see, e.g., HDCP on

Miracast Specification, Figure 2.1).

134. A first communication device (e.g., an HDCP transmitter such as the Acer Aspire Switch 11), is configured for determining whether protected content that it stores is available for access by a second communication device (e.g., an HDCP receiver such as a television). The Acer Aspire Switch 11 has hardware and/or software that perform an authentication of the second communication device, which comprises: receiving a certificate of the second device (e.g., the certificate received in the AKE_Send_Cert message; see, e.g., HDCP on Miracast Specification, Figure 2.1) and verifying that that the certificate of said second device identifies the second device as complying with a set of predefined compliance rules (e.g., verifying the signature on the certificate; see, e.g., HDCP on Miracast Specification, Figure 2.1). The Acer Aspire Switch 11 has hardware and/or software that securely share a common secret with the second communication device after the second communication device is authenticated (e.g., k_m is transmitted securely in the message AKE_No_Stored_km after the second device is authenticated; see, e.g., HDCP on Miracast Specification, Figure 2.1). The Acer Aspire Switch 11 has hardware and/or software that perform a round trip time measurement between the first communication device and the second communication device, which comprises: transmitting a first signal to the second device at time t1 (e.g., transmitting the message LC_Init, which starts a locality check; see, e.g., HDCP on Miracast Specification, Figure 2.4), receiving at time t2 a second signal from the second device, said second signal being generated using the common secret (e.g., receiving the message LC_Send_L_prime, thereby receiving L' which is generated using the common secret, the key k_m, from which k_d is derived; see, e.g., HDCP on Miracast Specification, Figures 2.4 and 2.11), and determining the round trip time measurement as a

difference between time t1 and time t2 (e.g., checking if the round-trip time is within 7 ms; see, e.g., HDCP on Miracast Specification, Figure 2.4). The Acer Aspire Switch 11 has hardware and/or software that check whether the measured round trip time is within a predefined interval (e.g., checking if the round-trip time is within 7 ms as explained above), hardware and/or software that generate a third signal using the common secret (e.g., generating L using the common secret, the key k_m, from which k_d is derived; see, e.g., HDCP on Miracast Specification, Figures 2.4 and 2.11), hardware and/or software that check whether the second signal and the third signal are identical (e.g., checking that the received L' is equal to the generated L; see, e.g., HDCP on Miracast Specification, Figure 2.4), and hardware and/or software that allow access to the protected content when the round trip time measurement is within the predefined interval and the second and third signals are identical.

135. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '819 Accused Content Protection Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid Z410, Acer Predator 8, and DC Chromebase ("the '819 Accused Content Protection Devices") and/or software updates that include the '819

Accused Content Protection Functionality.

136. Defendants have also actively induced, and continue to actively induce infringement of the '819 patent in violation of 35 U.S.C. § 271(b). Upon information and belief, Defendants' customers and other end users actually use the '819 Accused Content Protection Functionality in the '819 Accused Content Protection Devices to practice each step of at least the method of claim 1 of the '819 patent and thereby directly infringe. Defendants have had knowledge of the'819 patent since at least December 14, 2015 when they were provided with actual notice of the patent, as explained above. Defendants have also had knowledge that use of the '819 Accused Content Protection Functionality directly infringes the '819 patent by being given actual notice of the patent on December 14, 2015 and by service of the Original Complaint, First Amended Complaint, and Initial Infringement Contentions in this action. Defendants, both prior and subsequent to the foregoing events, have acted and continued to act with the specific intent to induce infringement as, with knowledge of the '819 patent and knowledge that use of the '819 Accused Content Protection Functionality directly infringes the '819 patent, Defendants have offered for sale and/or sold to others, including customers and other end users, the '819 Accused Content Protection Devices that include the '819 Accused Content Protection Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) and/or software updates that include the '819 Accused Content Protection Functionality, and have provided to others instructions, user manuals, advertising, and/or marketing materials encouraging them to use the '819 Accused Content Protection Functionality and directly infringe the '819 patent.

137. As one example, Defendants provide product datasheets (see, e.g., https://us-

store.acer.com/aspire-switch-10-2-in-1-sw3-013-17g7) which facilitate, direct, or encourage others, including customers and other end users, to use the '819 Accused Content Protection Functionality and thereby directly infringe at least the method of claim 1 of the '819 patent. For example, the Aspire Switch 10E product datasheet includes at least the following specifications that encourage a user to practice the '819 Accused Content Protection Functionality: "Number of HDMI® Ports 1 Micro-HDMI™ with HDCP support." Defendants have knowledge that the product datasheet encourages and facilitates the direct infringement of the '819 patent by others, including customers and other end users, as Defendants have had knowledge of the '819 patent and that use of the '819 Accused Content Protection Functionality directly infringes the '819 patent since at least December 14, 2015, as explained above.

138. Defendants have also contributorily infringed, and continue to contributorily infringe, the '819 patent in violation of 35 U.S.C. § 271(c). As explained above, Defendants' customers and other end users actually use the '819 Accused Content Protection Functionality in the '819 Accused Content Protection Devices to practice each step of at least the method of claim 1 of the '819 patent and thereby directly infringe. Further, as explained above, Defendants have had knowledge of the'819 patent since at least December 14, 2015 and have also had knowledge that use of the '819 Accused Content Protection Functionality necessarily directly infringes the '819 patent as of this date. Defendants have offered for sale, sold, and/or imported the '819 Accused Content Protection Devices that include the '819 Content Protection Entry Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) and/or software updates that include the '819 Content Protection Entry Functionality to others, including customers and other end users, who use the

included ’819 Accused Content Protection Functionality to directly infringe the ’819 patent. Thus, the ’819 Accused Content Protection Devices and software updates for these devices constitute a material part of the ’819 patent.

139. Defendants have knowledge of the ’819 patent and knowledge that use of the ’819 Accused Content Protection Functionality necessarily directly infringes the ’819 patent. Further, the ’819 Accused Content Protection Functionality cannot be practiced without infringing the ’819 patent and has no use other than infringing the ’819 patent. Upon information and belief, for the reasons above, Defendants know that the ’819 Accused Content Protection Devices and software updates for these devices are especially made and/or especially adapted for use in infringing the ’819 patent, at least because they include software code that was designed to practice the ’819 Accused Content Protection Functionality when executed, which infringes the ’819 patent. Moreover, the ’819 Accused Content Protection Devices and software updates for these devices are not staple articles of commerce suitable for substantial non-infringing use, at least because the included, above-referenced software code that practices the ’819 Accused Content Protection Functionality has no use apart from infringing the ’819 patent. Further, the included, above-referenced software code that practices the ’819 Accused Content Protection Functionality is distinct and separate from the rest of the software code in the operating system and, when executed, only practices, and can only be used to practice, each step of at least the method of claim 1 of the ’819 patent.

140. By reason of Defendants’ infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

141. Defendants have had actual notice and knowledge of the ’819 patent since at least

December 14, 2015 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '819 patent directly or indirectly. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '819 patent (e.g., the Aspire Switch 10E was first sold by Defendants in February 2016 and is currently still being advertised for sale on Defendants' website at https://us-store.acer.com/aspire-switch-10-2-in-1-sw3-013-17g7). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Ninth Cause of Action: Infringement of U.S. Patent No. 9,436,809

142. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

143. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '809 patent, including the right to sue and recover for any and all infringements thereof.

144. Claim 1 of the '809 patent is illustrative of the device claims of the '809 patent and is directed toward a first device for controlling delivery of protected content to a second device. The first device comprises a memory and a processor. The processor is arranged to receive a certificate of the second device, the certificate providing information regarding the

second device, determine whether the second device is compliant with a set of compliance rules utilizing the information provided in the certificate, provide a first signal to the second device depending when the second device is determined to be compliant with the set of compliance rules, receive a second signal from the second device after providing the first signal, determine whether the second signal is derived from a secret known by the first device, determine whether a time difference between providing the first signal and receiving the second signal is less than a predetermined time, and allow the protected content to be provided to the second device when at least the second signal is determined to be derived from the secret and the time difference is less than the predetermined time.

145. Claim 34 of the ’809 patent is illustrative of the method claims of the ’809 patent and is directed toward a method of a first device controlling delivery of protected content to a second device. The method comprises receiving a certificate of the second device, the certificate providing information regarding the second device, determining whether the second device is compliant with a set of compliance rules utilizing the information provided in the certificate, providing a first signal to the second device depending when the second device is determined to be compliant with the set of compliance rules, receiving a second signal from the second device after providing the first signal, determining whether the second signal is derived from a secret known by the first device, determining whether a time difference between providing the first signal and receiving the second signal is less than a predetermined time, and allowing the protected content to be provided to the second device when at least the second signal is determined to be derived from the secret and the time difference is less than the predetermined time.

146. Defendants have directly infringed and continue to directly infringe the '809 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 1 of the '809 patent.

147. Defendants have directly infringed and continue to directly infringe the '809 patent in violation of 35 U.S.C. § 271(a) by using in the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks to practice, either literally or under the doctrine of equivalents, each step of at least the method of claim 34 of the '809 patent.

148. As one example, the Acer Aspire Switch 11 is a touch screen laptop which runs the Android Operating System and which has content protection functionality similar to that summarized in the next paragraph ("the '809 Accused Content Protection Functionality") that meets every element of at least claim 1 of the '809 patent, either literally or under the doctrine of equivalents, and which results in the practice of every step of at least claim 34 of the '809 patent, either literally or under the doctrine of equivalents, when operated by Defendants or other end users.

149. The Acer Aspire Switch 11 has Miracast hardware and/or software that support the High-bandwidth Digital Content Protection (HDCP) Specification Rev. 2.2 Interface Independent Adaptation (see, e.g., http://www.digital-cp.com/sites/default/files/specifications/HDCP%20Interface%20Independent%20Adaptation%2

0Specification%20Rev2_2_FINAL.pdf) ("HDCP on Miracast Specification"). A first device (e.g., an HDCP transmitter such as the Acer Aspire Switch 11) for controlling delivery of protected content to a second device (e.g., an HDCP receiver such as a television). The first device comprises a memory and a processor. The processor is arranged to receive a certificate of the second device (e.g., the certificate received in the AKE_Send_Cert message; see, e.g., HDCP on Miracast Specification, Figure 2.1), the certificate providing information regarding the second device (e.g., the signature with which the certificate is signed; see, e.g., HDCP on Miracast Specification, Figure 2.1), determine whether the second device is compliant with a set of compliance rules utilizing the information provided in the certificate (e.g., verifying the signature on the certificate; see, e.g., HDCP on Miracast Specification, Figure 2.1), provide a first signal to the second device (e.g., transmitting the message LC_Init, which starts a locality check; see, e.g., HDCP on Miracast Specification, Figure 2.4) depending when the second device is determined to be compliant with the set of compliance rules, receive a second signal from the second device after providing the first signal (e.g., receiving the message LC_Send_L_prime, thereby receiving L'; see, e.g., HDCP on Miracast Specification, Figure 2.4), determine whether the second signal is derived from a secret known by the first device (e.g., determining whether L', received as part of the message LC_Send_L_prime, is generated using the common secret, the key k_m, from which k_d is derived by verifying that L' is equal to the generated L; see, e.g., HDCP on Miracast Specification, Figures 2.4 and 2.11), determine whether a time difference between providing the first signal and receiving the second signal is less than a predetermined time (e.g., checking if the time between sending the LC_Init message and receiving the LC_Send_L_prime message is within 7 ms; see, e.g., HDCP on Miracast Specification, Figure 2.4), and allow the protected

content to be provided to the second device when at least the second signal is determined to be derived from the secret and the time difference is less than the predetermined time.

150. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '809 Accused Content Protection Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) including, without limitation, the Acer Chromebook, Acer Chromebook C720, Acer Chromebook R11, Acer One 10, Aspire E, Aspire E1, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire S3, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire V, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, and DC Chromebase ("the '809 Accused Content Protection Devices") and/or software updates that include the '809 Accused Content Protection Functionality.

151. Defendants have also actively induced, and continue to actively induce infringement of the '809 patent in violation of 35 U.S.C. § 271(b). Upon information and belief, Defendants' customers and other end users actually use the '809 Accused Content Protection Functionality in the '809 Accused Content Protection Devices to practice each step of at least the method of claim 34 of the '809 patent and thereby directly infringe. Defendants have had knowledge of the'809 patent since at least November 1, 2016 when they were provided with actual notice of the patent, as explained above. Defendants have also had knowledge that use of the '809 Accused Content Protection Functionality directly infringes the '809 patent by being given actual notice of the patent on November 1, 2016. Defendants, both prior and subsequent to

the foregoing events, have acted and continued to act with the specific intent to induce infringement as, with knowledge of the '809 patent and knowledge that use of the '809 Accused Content Protection Functionality directly infringes the '809 patent, Defendants have offered for sale and/or sold to others, including customers and other end users, the '809 Accused Content Protection Devices that include the '809 Accused Content Protection Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) and/or software updates that include the '809 Accused Content Protection Functionality, and have provided to others instructions, user manuals, advertising, and/or marketing materials encouraging them to use the '809 Accused Content Protection Functionality and directly infringe the '809 patent.

152. As one example, Defendants provide product datasheets (see, e.g., https://us-store.acer.com/aspire-switch-10-2-in-1-sw3-013-17g7) which facilitate, direct, or encourage others, including customers and other end users, to use the '809 Accused Content Protection Functionality and thereby directly infringe at least the method of claim 34 of the '809 patent. For example, the Aspire Switch 10E product datasheet includes at least the following specifications that encourage a user to practice the '809 Accused Content Protection Functionality: "Number of HDMI® Ports 1 Micro-HDMI™ with HDCP support." Defendants have knowledge that the product datasheet encourages and facilitates the direct infringement of the '809 patent by others, including customers and other end users, as Defendants have had knowledge of the '809 patent and that use of the '809 Accused Content Protection Functionality directly infringes the '809 patent since at least November 1, 2016, as explained above.

153. Defendants have also contributorily infringed, and continue to contributorily

infringe, the '809 patent in violation of 35 U.S.C. § 271(c). As explained above, Defendants' customers and other end users actually use the '809 Accused Content Protection Functionality in the '809 Accused Content Protection Devices to practice each step of at least the method of claim 34 of the '809 patent and thereby directly infringe. Further, as explained above, Defendants have had knowledge of the'809 patent since at least November 1, 2016 and have also had knowledge that use of the '809 Accused Content Protection Functionality necessarily directly infringes the '809 patent as of this date. Defendants have offered for sale, sold, and/or imported the '809 Accused Content Protection Devices that include the '809 Content Protection Entry Functionality (e.g., by being pre-loaded with HDCP version 2.0 or higher on, for example, MHL, Miracast, HDMI, and/or DisplayPort) and/or software updates that include the '809 Content Protection Entry Functionality to others, including customers and other end users, who use the included '809 Accused Content Protection Functionality to directly infringe the '809 patent. Thus, the '809 Accused Content Protection Devices and software updates for these devices constitute a material part of the '809 patent.

154. Defendants have knowledge of the '809 patent and knowledge that use of the '809 Accused Content Protection Functionality necessarily directly infringes the '809 patent. Further, the '809 Accused Content Protection Functionality cannot be practiced without infringing the '809 patent and has no use other than infringing the '809 patent. Upon information and belief, for the reasons above, Defendants know that the '809 Accused Content Protection Devices and software updates for these devices are especially made and/or especially adapted for use in infringing the '809 patent, at least because they include software code that was designed to practice the '809 Accused Content Protection Functionality when executed, which infringes the

'809 patent. Moreover, the '809 Accused Content Protection Devices and software updates for these devices are not staple articles of commerce suitable for substantial non-infringing use, at least because the included, above-referenced software code that practices the '809 Accused Content Protection Functionality, and which is included in these devices and software updates for these devices, has no use apart from infringing the '809 patent. Further, the included, above-referenced software code that practices the '809 Accused Content Protection Functionality is distinct and separate from the rest of the software code in the operating system and, when executed, only practices, and can only be used to practice, each step of at least the method of claim 34 of the '809 patent.

155. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

156. Defendants have had actual notice and knowledge of the '809 patent since at least November 1, 2016 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '809 patent directly or indirectly. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '809 patent (e.g., the Aspire Switch 10E was first sold by Defendants in February 2016 and is currently still being advertised for sale on Defendants' website at https://us-store.acer.com/aspire-switch-10-2-in-1-sw3-013-17g7). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Tenth Cause of Action: Infringement of U.S. Patent No. 6,772,114

157. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

158. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '114 patent, including the right to sue and recover for any and all infringements thereof.

159. Claim 20 of the '114 patent is illustrative of the device claims of the '114 patent and is directed toward a receiver having a first decoder that receives a first coded signal with a low frequency range. The first decoder sequentially applies a narrow-band decoder, an up-sampler, and a low-pass filter to the first coded signal to generate a first reconstructed signal within the low frequency range. The receiver has a second decoder that receives a second coded signal within a high frequency range that is higher than the low frequency range. Based on the second coded signal, the second decoder sequentially applies a high-pass filter, a LPC synthesis filter, and an amplifier to a noise signal to generate a second reconstructed signal within the high frequency range. The receiver also has a combiner for combining the first reconstructed signal and the second reconstructed signal.

160. Defendants have directly infringed and continue to directly infringe the '114 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that embody, either literally or under the doctrine of equivalents, each element of at least claim 20 of

the ’114 patent.

161. As one example, the Acer Iconia Tab 10 is a tablet which runs the Android Operating System and which has audio decoding functionality similar to that summarized in the next paragraph (“the ’114 Accused Audio Decoding Functionality”) that meets every element of at least claim 20 of the ’114 patent, either literally or under the doctrine of equivalents.

162. The Acer Iconia Tab 10 has hardware and/or software that support the Adaptive Multi-Rate Wideband (AMR-WB) Standard 3GPP TS 26.190 (“AMR-WB Standard”) (see, e.g., http://www.etsi.org/deliver/etsi_ts/126100_126199/126190/07.00.00_60/ts_126190v070000p.pdf). AMR-WB is supported by the Android Operating System (see, e.g., http://developer.android.com/guide/appendix/media-formats.html) including, but not limited to, in a voice memo recording application or in an audio playback application. The Acer Iconia Tab 10 audio hardware and/or software that support the AMR-WB Standard 3GPP TS 26.190 have a receiver with a first decoder that receives a first coded signal with a low frequency range (see, e.g., Figure 3 of the AMR-WB Standard). The first decoder sequentially applies a narrow-band decoder (see, e.g., Section 6.1 of the AMR-WB Standard describing several such decoders), an up-sampler (see, e.g., Section 6.2 of the AMR-WB Standard describing upsampling by 5), and a low-pass filter (see, e.g., Section 6.2 of the AMR-WB Standard describing low pass filtering through $H_{decim}(z)$; see, e.g., Section 5.1 describing $H_{decim}(z)$ as a low pass filter) to the first coded signal to generate a first reconstructed signal within the low frequency range. The receiver has a second decoder that receives a second coded signal within a high frequency range that is higher than the low frequency range (see, e.g., Section 6.3.1 of the AMR-WB Standard describing the received gain index in 23.85 kbit/s mode, which contains high frequency power information).

Based on the second coded signal, the second decoder sequentially applies a high-pass filter (see, e.g., Section 6.3.3 of the AMR-WB Standard describing high pass filtering through $H_{HB}(z)$, a filter which passes the relevant high frequency band), a LPC synthesis filter (see, e.g., Section 6.3.2.2 of the AMR-WB Standard describing synthesis filter $A_{HB}(z)$), and an amplifier to a noise signal (see, e.g., Section 6.3.1 of the AMR-WB Standard describing amplifying white noise signal $u_{HB1}(n)$) to generate a second reconstructed signal within the high frequency range. The receiver also has a combiner for combining the first reconstructed signal and the second reconstructed signal (see, e.g., Section 6.3.3 of the AMR-WB Standard).

163. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, All-in-One PCs, 2-in-1 PCs, and Chromebooks that include the above-referenced '114 Accused Audio Decoding Functionality (e.g., by being pre-loaded with the Android Operating System version 2.1 or higher that supports AMR-WB Standard 3GPP TS 26.190, or the Chrome Operating System that supports AMR-WB Standard 3GPP TS 26.190; see, e.g., https://www.chromium.org/audio-video) including, without limitation, the Acer Chromebook, Acer Chromebook 11 C738T, Acer Chromebook C720, Acer Chromebook R11, Acer CloudMobile S500, Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Iconia Tab A100, Acer Iconia Tab A200, Acer Iconia Tab A500, Acer Iconia Tab A501, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid Z410, Acer Predator 8, and DC Chromebase ("the '114 Accused Audio Decoding Devices") and/or software updates that include the '114 Accused Audio Decoding Functionality.

164. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

165. Defendants have had actual notice and knowledge of the '114 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '114 patent directly. Further, Philips met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '114 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '114 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Eleventh Cause of Action: Infringement of U.S. Patent No. RE 43,564

166. Philips repeats and incorporates by reference each and every allegation of paragraphs 1 through 38 of this Second Amended Complaint, as though set forth here in its entirety.

167. Koninklijke Philips N.V. is the sole owner of the entire right, title, and interest in and to the '564 patent, including the right to sue and recover for any and all infringements thereof.

168. Claim 1 of the '564 patent is illustrative of the device claims of the '564 patent and is directed toward a handheld communication device having a wireless modem for receiving data, a display that has a substantially small size suitable for the handheld communication device, a data processing system connected to the modem and to the display for processing the received data and for rendering an image corresponding to the data received, and a touch screen for enabling a user to interact with the device. The system operates to enable the user to select, through a touch location on the touch screen, a portion of the image when it is displayed at a first scale. The selected portion is rendered on the display at a second scale larger than the first scale thereby facilitating a selection of a feature. The selected portion when rendered at the second scale is a zoomed-in version of part of the image at the first scale substantially centered around the touch location.

169. Claim 7 of the '564 patent depends from claim 1 and is directed toward the device of claim 1 wherein the data processing system is further operative to cause a window containing the selected portion displayed at the second scale to scroll across the image such that successive new selected portions of the image are displayed at the second scale.

170. Defendants have directly infringed and continue to directly infringe the '564 patent in violation of 35 U.S.C. § 271(a) by making, having made, using, selling and/or offering to sell within the United States, and/or importing into the United States, without authority, smartphones, tablet computers, laptops, and 2-in-1 PCs that embody, either literally or under the

doctrine of equivalents, each element of at least claims 1 and 7 of the '564 patent.

171. As one example, the Acer Iconia One 7 is a tablet which runs the Android Operating System and which has zoom functionality similar to that summarized in the next two paragraphs ("the '564 Accused Zoom Functionality") that meets every element of at least claims 1 and 7 of the '564 patent, either literally or under the doctrine of equivalents.

172. The Acer Iconia One 7 runs the Android Operating System and ran Android Operating System version 5.0 when it was released (see, e.g., http://www.acer.com/ac/en/US/content/series/iconiaone7). The Acer Iconia One 7 is a handheld communication device having a wireless modem for receiving data, a display that has a substantially small size suitable for the handheld communication device, a processor (e.g., the Intel Atom Z3735G) connected to the modem and to the display for processing the received data and for rendering an image corresponding to the data received (e.g., a rendered image of received website content), and a touch screen for enabling a user to interact with the device. The system operates to enable the user to select, through a touch location on the touch screen, a portion of the image when it is displayed at a first scale (e.g., the user selects, using a magnification gesture, a portion of the website when it is displayed at a first scale; see, e.g., https://support.google.com/accessibility/android/answer/6006949?hl=en and https://sites.google.com/a/blinddroid.org/blinddroid/training/magnification-gestures, detailing that the Android Operating System version 4.2 or higher supports magnification gestures). The selected portion is rendered on the display at a second scale larger than the first scale thereby facilitating a selection of a feature (e.g., the selected portion of the image is magnified to facilitate selection of a feature such as a link to a webpage). The selected portion when rendered

at the second scale is a zoomed-in version of part of the image at the first scale substantially centered around the touch location (e.g., the magnified portion is substantially centered around the user's touch location).

173. Further, the data processing system is further operative to cause a window containing the selected portion displayed at the second scale to scroll across the image such that successive new selected portions of the image are displayed at the second scale (e.g., a magnification window containing the selected portion that is magnified scrolls across the image such that successive new selected portions of the image are magnified).

174. Upon information and belief, Defendants make, have made, use, sell and/or offer to sell within the United States and/or import into the United States smartphones, tablet computers, laptops, and 2-in-1 PCs that include the above-referenced '564 Accused Zoom Functionality (e.g., by being pre-loaded with the Android Operating System version 4.2 or higher, or the Microsoft Windows Operating System version 7 or higher; see, e.g., http://download.microsoft.com/download/7/e/4/7e4154ae-7ac2-4235-a2f1-3d25b1d161cd/win8_accessibility_tutorials.doc and https://www.microsoft.com/enable/products/windows7/) including, without limitation, the Acer Iconia, Acer Iconia One 7, Acer Iconia One 8, Acer Iconia Tab 10, Acer Iconia Tab 7, Acer Iconia Tab 8, Acer Liquid E2, Acer Liquid Jade Z, Acer Liquid M220, Acer Liquid M330, Acer Liquid Z410, Acer One 10, Acer Predator 8, Aspire E, Aspire E1, Aspire F, Aspire R11, Aspire R13, Aspire R14, Aspire R15, Aspire R7, Aspire S13, Aspire S3, Aspire S7, Aspire Switch 10, Aspire Switch 10E, Aspire Switch 11, Aspire Switch 11v, Aspire Switch 12, Aspire Switch 12s, Aspire V, Aspire V 15, Aspire V Nitro, Aspire V13, Aspire V5, Aspire V7, and Switch Alpha 12

("the '564 Accused Zoom Devices") and/or software updates that include the '564 Accused Zoom Functionality.

175. By reason of Defendants' infringing activities, Plaintiffs have suffered, and will continue to suffer, substantial damages in an amount to be determined at trial.

176. Defendants have had actual notice and knowledge of the '564 patent since at least May 31, 2013 as explained above, and upon information and belief, have known or should have known that their activities outlined in this Cause of Action infringe the '564 patent directly. Further, Philips met and communicated with Defendants on multiple occasions prior to the filing of this action to explain Defendants' infringement of the '564 patent. Philips has also provided Defendants with detailed infringement allegations in the Original Complaint, First Amended Complaint, and in its Initial Infringement Contentions. Defendants have nonetheless continued to engage in and have escalated their infringing activities by developing, advertising, and selling additional infringing products since first becoming aware of their infringement of the '564 patent (e.g., the Liquid Jade Z smartphone was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/liquidjadez and the Iconia One 8 tablet was first sold by Defendants in April 2015 and is currently still being advertised for sale on Defendants' website at http://www.acer.com/ac/en/US/content/series/iconiaone8). Accordingly, Defendants' misconduct is willful and egregious and beyond typical infringement, and this case is exceptional under 35 U.S.C. § 285.

Prayer for Relief

WHEREFORE, Plaintiffs respectfully request the Court to enter judgment as follows:

A. That Defendants have directly infringed, indirectly infringed, induced others to infringe, and contributed to the infringement of the patents-in-suit;

B. That Defendants be ordered to pay damages adequate to compensate Plaintiffs for Defendants' infringement of the patents-in-suit, but in no event less than a reasonable royalty, together with prejudgment and post-judgment interest thereon;

C. That Defendants be ordered to account for post-verdict infringement and pay no less than a reasonable royalty, together with interest, thereon;

D. That Defendants' infringement is deliberate and willful and that Defendants be ordered to pay treble damages under 35 U.S.C. § 284;

E. That this is an exceptional case under 35 U.S.C. § 285 and that Plaintiffs be awarded its reasonable attorneys' fees, costs, and expenses; and

F. That Plaintiffs be granted such other and additional relief as the Court deems just and proper.

Jury Demand

Plaintiffs hereby demand a jury trial as to all issues so triable.

Dated: November 23, 2016

MCCARTER & ENGLISH, LLP

/s/ Daniel M. Silver

Michael P. Kelly (#2295)
Daniel M. Silver (#4758)
Benjamin A. Smyth (#5528)
Renaissance Centre
405 N. King Street, 8th Floor
Wilmington, Delaware 19801
(302) 984-6300
mkelly@mccarter.com
dsilver@mccarter.com
bsmyth@mccarter.com

Attorneys for Plaintiffs

Of Counsel:

Michael P. Sandonato
John D. Carlin
Jonathan M. Sharret
Daniel A. Apgar
Robert S. Pickens
FITZPATRICK, CELLA, HARPER & SCINTO
1290 Avenue of the Americas
New York, New York 10104-3800
Tel: (212) 218-2100
Fax: (212) 218-2200
msandonato@fchs.com
jcarlin@fchs.com
jsharret@fchs.com
dapgar@fchs.com
rpickens@fchs.com