UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

WASHINGTON RESEARCH FOUNDATION, a Washington Corporation, Plaintiff, vs. SHARP CORPORATION, a Japanese Corporation; and SHARP ELECTRONICS CORPORATION, a New York Corporation,, Defendants.	NO. 2:11-cv-2080 **COMPLAINT** **JURY DEMAND**

Plaintiff Washington Research Foundation complains against defendants Sharp Corporation and Sharp Electronics Corporation (collectively, "Sharp") as follows:

I. PARTIES, JURISDICTION AND VENUE

1. This action arises under the Patent Laws of the United States, 35 United States Code. This Court has jurisdiction of this action under 28 U.S.C. § 1338(a).

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2. Washington Research Foundation (also referred to as "WRF") is an independent nonprofit Washington State 501(c)(3) organization based in Seattle, Washington. Washington Research Foundation was created in 1981 and is mandated by federal statute to review technology disclosures by the University of Washington and other Washington research institutions, obtain protection for such technology through patents, copyrights, or other means, and provide for the license, sale, or other exploitation of such technology. The activities of the Washington Research Foundation are funded by revenue from technology licensing and the investment of retained funds. Washington Research Foundation has benefited Washington State research institutions by licensing a variety of technologies to industry, including the basis for a hepatitis B virus vaccine, blood clotting factors, recombinant insulin, and wireless technology supporting the "Bluetooth" and other wireless technologies.

3. Washington Research Foundation provides support through gifts and grants for scholarship and research. Washington Research Foundation has made gifts and licensing disbursements to the University of Washington totaling more than $330 million, thus providing a substantial return on investment to the taxpayers whose dollars support this institution. The gifts from the Washington Research Foundation have supported the creation of over 100 endowments for chairs, professorships, research fellowships and graduate stipends in science, medicine and engineering, all at reduced or no cost to the taxpayer. Educational programs created and supported by the Washington Research Foundation include the Center for Technology Entrepreneurship (University of Washington Business School) and the Program for Technology Commercialization (University of Washington Bioengineering), all of which substantially benefit society and improve the human condition. The Washington Research Foundation was a founding supporter of technology "gap" funding programs at the University of Washington, the Fred Hutchinson Cancer Research Center, and Washington State University.

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4. Defendant Sharp Corporation is a corporation established under the laws of Japan and based in Osaka, Japan. Defendant Sharp Electronics Corporation is a corporation established under the laws of the State of New York and based in Mahwah, New Jersey, and is a wholly owned subsidiary of Sharp Corporation. Sharp Corporation, including through its subsidiary Sharp Electronics Corporation, manufactures, sells electronic devices such as cell phones, including selling or offering to sell such devices (including the accused devices) within this judicial district, and conducts other business within this judicial district or elsewhere in the United States that impacts this jurisdiction.

5. Sharp has manufactured, used, imported into the United States, sold and/or offered for sale devices which infringe, or the use of which infringes, at least the Asserted Patents. Specifically, and by way of example, Sharp has manufactured, used, imported into the United States, sold and/or offered for sale products employing unlicensed chipsets that are made by third party semiconductor manufacturer NXP.

II. WASHINGTON RESEARCH FOUNDATION'S LOW IF PATENT PORTFOLIO

6. The University of Washington is the assignee of a portfolio of patents duly and legally issued to Edwin A. Suominen for the inventions claimed therein relating to radio frequency (RF) receiver technology using a low intermediate frequency ("Low-IF") design, including certain Low IF radio frequency receiver technology used in commercially significant Bluetooth®, FM, GSM radio data communication systems, and other Low IF radios. Relevant issued patents include (collectively, the "Subject Patents"):

- U.S. Patent 5,937,341, titled "Simplified high frequency tuner and tuning method," filed September 13, 1996, and issued August 10, 1999;

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- U.S. Patent 6,427,068, titled “Simplified high frequency tuner and tuning method,” filed May 24, 1999, as a division of the ‘341 Patent, issued July 30, 2002;
- U.S. Patent 6,631,256, titled “Simplified high frequency tuner and tuning method,” filed October 27, 2001, as a continuation of the ‘068 Patent, issued October 7, 2003;
- U.S. Patent 7,116,963, titled “Simplified high frequency tuner and tuning method,” filed August 25, 2003, as a continuation of the ‘256 Patent, issued October 3, 2006;
- U.S. Patent 7,606,542, titled “Simplified high frequency tuner and tuning method,” filed June 15, 2005, issued October 20, 2009;
- U.S. Patent 7,606,549, titled “Selective channel tuner and tuning method,” filed August 23, 2006, issued October 20, 2009;
- U.S. Patent 7,639,996, titled “Simplified high frequency tuner and tuning method,” filed July 10, 2008, as a divisional of the ‘542 Patent, issued December 29, 2009;
- U. S. Patent 7,853,225, titled “Simplified high frequency tuner and tuning method,” filed), filed on November 9, 2009, is a divisional of the ‘996 patent, issued December 14, 2010;
- U.S. Patent 7,853,239, titled “Simplified high frequency tuner and tuning method,” filed November 9, 2009 as a divisional of the ‘996 Patent, issued December 14, 2010;

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- U.S. Patent 7,860,482, titled "Simplified high frequency tuner and tuning method," filed November 9, 2009, as a divisional of the '996 Patent, issued December 28, 2010;
- U.S. Patent 7,925,238, titled "Simplified high frequency tuner and tuning method," filed July 10, 2008, issued April 12, 2011; and,
- U.S. Patent 8,005,450, titled "Simplified high frequency tuner and tuning method," filed June 12, 2009, issued August 23, 2011.

The '341, '256, '963, and '542 Patents are hereinafter referred to as "the Asserted Patents."

7. The University of Washington is also the assignee of a portfolio of patent applications naming Edwin A. Suominen as inventor relating to radio frequency (RF) receiver technology, including certain Low IF radio frequency receiver technology used in commercially significant LowIF radio data communication systems. The relevant allowed applications include (the " Allowed Application"):

- U.S. Patent Application 12/614,623, filed on November 9, 2009, allowed October 7, 2011.

Relevant pending applications include (the "Pending Applications"):

- SN 12/749,742, filed March 30, 2010; and
- SN 13/084,029, filed April 11, 2011.

Each of these applications has been published by the U.S. Patent and Trademark Office ("USPTO"). Under 35 U.S.C. § 154(d), the Defendants may be responsible for provisional damages if they infringe any of WRF's published claims that issue as patents without substantive change. Hereinafter, the Subject Patents and the Pending Applications may be referred to jointly as the "Subject Patents and Applications."

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8. Mr. Suominen assigned all right, title and interest in the Subject Patents and Applications to the University of Washington, including the right to sue for past damages. The University of Washington, in turn, exclusively licensed the Subject Patents and Applications to the Washington Research Foundation to include in its patent licensing program and, if necessary, to enforce in the name of the Washington Research Foundation all rights available in law and equity under the Subject Patents and Applications including the right to sue and collect for past infringement.

9. Two of WRF's Asserted Patents have recently been reconfirmed over two separate reexamination requests. An anonymous third-party Requester initially filed a Request for *Ex Parte* Reexamination with the USPTO identifying Claims 1 – 55 of Patentee's '542 Patent (90/011,063). Later, the same anonymous third-party Requester filed a second Request for Ex Parte Reexamination identifying Claims 18 – 20 of WRF's '341 Patent (90/011,107). These reexamination requests were filed after WRF asserted that Silicon Labs' AERO GSM chipsets infringed the '341 and '542 Patents.

10. As part of its ongoing patent prosecution of related cases, WRF promptly filed copies of the reexamination requests in each of its pending cases, as well as copies of its responses. WRF encouraged the Examiners of the pending cases to review the arguments therein. Six of those pending applications were subsequently allowed by two independent Examiners. Five cases are now issued as patents (the '225, '239, '482, '238, and '450 Patents). The Allowed Application ('623 Application) is expected to issue shortly.

11. On March 4, 2011, the USPTO terminated both of the reexamination requests in WRF's favor. Reexamination certificates published on May 17, 2011. Thus, within the last year, eight patents and applications have been allowed, issued, or confirmed valid over all of the art and arguments presented to WRF during the course of enforcing the patents and in the two ex

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parte requests for reexamination. In particular, the favorable determination in the '107 Reexamination has significantly strengthened WRF's original '341 Patent. The '341 Patent originally issued on August 10, 1999, prior to WRF's enforcement program. With the citation of art provided by WRF to the Examiner of the '107 Reexamination, WRF's earliest '341 Patent is now confirmed patentable over all of the art and arguments that have been presented to WRF by more than a dozen licensees and potential licensees in the last twelve years.

III. THE LICENSING PROGRAM

12. The Washington Research Foundation has for several years engaged in a program to license the Subject Patents and Applications. In accordance with that program, WRF provided notice of the Subject Patents and Applications (in their various stages of issuance and pendency) to numerous companies that manufactured, imported, sold and/or offered for sale in the United States electronic devices believed to practice the inventions described and claimed in the Subject Patents and Applications. More specifically, WRF advised major companies in several industries that the use of certain unlicensed Low IF radio chipsets in products that they manufactured, imported, sold and/or offered for sale in the United States would or could result in direct infringement of various claims of the Subject Patents and Applications. WRF provided notice to these companies, and not to the chipset manufacturers, because these companies are the direct infringers; that is, these companies import, sell or offer for sale in the United States products that either infringe device claims, or the use of which infringes method claims of WRF's issued patents. Thus, WRF provided notice of the Subject Patents and Applications to (among others) major corporations in the following industries:

- Automotive industry;
- Cellular Handset industry;
- Computer/Electronics industry,

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- Electronics and Consumer Retailers / Distributors, and
- Wireless Module Manufacturers.

These major companies placed on notice by the Washington Research Foundation are referred to collectively as "the Alleged Direct Infringers."

13. A number of the Alleged Direct Infringers informed WRF that they believed certain suppliers of Low IF radio chipsets were at least indirectly responsible for any infringement of the Subject Patents and Applications, and further, that they intended to rely on indemnity obligations from the Low IF radio chipset suppliers. As a result, numerous of the Alleged Direct Infringers declined to accept a license from WRF. On information and belief, a number of the Alleged Direct Infringers provided notice to their respective Low IF radio chipset suppliers of WRF's infringement allegations.

14. Thereafter, several Low IF radio chipset suppliers contacted WRF to discuss the merits of WRF's infringement allegations and the possibility of acquiring a license under the Subject Patents and Applications. In addition, WRF initiated discussion with other Low IF radio chipset suppliers.

15. As a result of its licensing efforts, Washington Research Foundation was able to conclude licenses under the Subject Patents and Applications with several Low IF radio chipset companies, including:

- Airoha Technology Corp.,
- Broadcom Corp.,
- CSR plc,
- Ericsson AB with rights extending to two of its licensees:
    - National Semiconductor and
    - Winbond,

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- Infineon,
- Marvell Semiconductor, Inc.,
- Silicon Laboratories,
- SiTel Semiconductor BV
- ST-Ericsson and ST-NXP, with limited rights extending to:
    - STMicroelectronics (for STMicroelectronics non-automotive Bluetooth products made or sold prior to August 2, 2008), and
- TOSHIBA Corp.

These licensed companies are hereinafter referred to as "Licensed Chipset Suppliers." The specific terms and conditions of each license signed with the Licensed Chipset Suppliers are confidential. In general, however, each of the Licensed Chipset Suppliers obtained a license that, among other things, enables its customers to make, import, use, sell or offer for sale in the United States products that include licensed Low IF radio chipsets (as defined by the respective Licensed Fields of each agreement). As a result of these licenses, many of the Alleged Direct Infringers are now indirectly licensed for the subset of their products that use chipsets from the Licensed Chipset Suppliers.

16. Recently, a license agreement was reached with ST-Ericsson, ST-NXP, and STMicroelectronics (the "ST Companies"). The license agreement allows third parties to make, use, sell and offer for sale products incorporating infringing chipsets made by ST-E and to a more limited degree STMicroelectronics in the licensed fields, which specifically includes all infringing products made or sold by ST-E, non-automotive Bluetooth products made or sold by STMicroelectronics prior to August 2, 2008, and products made for or sold to STMicroelectronics by ST-E. The license agreement, however, expressly excludes any other products of STMicroelectronics and any products of NXP Semiconductors N.V.

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17. In addition, as a result of the refusal of certain chipset companies to acquire licenses to avoid subjecting their customers to litigation, WRF successfully licensed the Subject Patents and Applications to several of Alleged Direct Infringers, including at least:

- Cisco Systems, Inc.,
- GN Netcom A/S,
- Harman International Industries, Inc., and
- VTech Communications, Inc.

These companies are hereinafter referred to as "Licensed Integrators." The terms and conditions of the licenses signed with the Licensed Integrators are confidential. However, in general, these licenses allow Licensed Integrators to employ in their products infringing Low IF chipsets without regard to whether the chipsets are licensed by the manufacturer under the Subject Patents and Applications.

18. Products manufactured by the Licensed Chipset Suppliers or the Licensed Integrators within the scope of their respective license agreements with WRF are hereinafter referred to as "Licensed Products." WRF does not assert that use of a Licensed Product by any company (including any named Defendant or Alleged Direct Infringer), constitutes infringement of any of the Subject Patents or Applications. Due to the existence of numerous Licensed Products manufactured by the Licensed Chipset Suppliers and Licensed Integrators, each Defendant had and continues to have the ability to avoid infringement of WRF's Asserted Patents.

19. WRF is informed and believes that other Alleged Direct Infringers manufactured, used, imported, sold or offered for sale in the United States products that included certain chipsets of at least NXP, that are not licensed under the Subject Patents or Applications. In addition to Alleged Direct Infringers known to WRF, WRF has endeavored without success to

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identify additional companies that directly infringe WRF's patents. However, the identity of chipset suppliers and customers is often held confidential by OEMs and integrators. To avoid continuing loss of potential damages caused by the applicable six year statutory damage limitation, WRF will seek the Court's assistance in discovery to promptly identify those additional direct infringers and, as appropriate.

20. The AERO GSM chipset was designed and originally sold by Silicon Labs. In 2007, NXP acquired the AERO GSM product line from Silicon Labs. In 2008, NXP divested the AERO GSM product line to ST-NXP (now doing business as ST-Ericsson). While Silicon Labs, ST-NXP, and ST-Ericsson are now licensed as discussed above in paragraphs 15-16, NXP has remained an unlicensed supplier of AERO GSM Low IF chipsets after a series of corporate transformations and acquisitions that occurred over a period of years. Thus, the original designer of the AERO GSM product, and the current owner of the AERO GSM chipset line have elected to take licenses covering the AERO GSM chipsets. For almost four years, NXP has continued to refuse a license on its sales of AERO GSM chipsets from 2007 to 2008. Specifically, on information and belief:

- NXP acquired Silicon Labs' line of AERO GSM products on or around March 23, 2007. As stated in paragraph 15, above, Silicon Labs acquired a license under WRF's Asserted Patents and Applications; however, the license is limited to its own sales of the AERO GSM product line and other products , and does not include AERO GSM products sold by NXP.
- NXP divested its line of AERO GSM products to ST-NXP on or around August 2, 2008. As stated in paragraph 15, above, ST-NXP and ST-Ericsson acquired a license under WRF's Asserted Patents and Applications; however, the license is limited, and does not include AERO GSM products sold by NXP.

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- ST-Ericsson was formed on February 3, 2009, after Ericsson Mobile Platforms and ST-NXP Wireless were merged into a 50/50 joint venture. ST-Ericsson currently manufactures the AERO GSM chipsets. As stated in paragraphs 15-16 above, ST-Ericsson acquired a license under WRF's Subject Patent and Applications.

Accordingly, ***NXP is the only chipset manufacturer that has sold the AERO GSM products and remains unlicensed.***

21. Over the last several years WRF has engaged in negotiations with NXP. During these negotiations, WRF has explained its infringement contentions and offered NXP a license under WRF's Asserted Patents on terms substantially similar to those signed on by the Licensed Chipset Suppliers listed in paragraph 15. To date, NXP has failed to take a license that would cover the past and present infringing activities of the OEM and integrator companies such as the Defendants for the manufacture, use, importation, sale and/or offer for sale in the United States of products employing its AERO GSM chipsets.

IV. DEFENDANTS' INFRINGEMENT

22. Sharp manufactures, uses, imports, sells and/or offers for sale in the United States products employing certain Low IF GSM radio chipsets (including at least the AERO4210 GSM radio) manufactured or sold by NXP. Specifically, at least Sharp's (Danger) Sidekick LX phone, , and likely others, is believed to use an AERO GSM radio supplied by NXP. The manufacture, use, importation, sale and/or offer for sale in the United States of products by Sharp that employ at least the identified chips infringe numerous claims of WRF's patents, including (without limitation) claims 18 and 20 of WRF's asserted U.S. Patent 5,937,341; claims 36, 37 and 38 of WRF's asserted U.S. Patent 7,116,963; and claims 1, 2, 26, 31, and 35 of WRF's asserted U.S. Patent 7,606,542. WRF placed Sharp on notice of the 11/154,272

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Application on December 4, 2007. The asserted claims of the '272 Application have since issued as the '542 Patent. The claims are in substantially the same form as they were published. Accordingly, WRF is entitled to provisional damages against Sharp under 35 U.S.C. § 154(d).

23. WRF will employ the tools of discovery to determine what, if any, other products of Sharp infringed in the past six years due to the use of Low IF chipsets manufactured or sold by NXP.

24. Defendants' use of chipsets that include inventions claimed in WRF's Asserted Patents significantly increases the sales price and revenue associated with those products. For example, the infringing GSM chipset is the chip that enables Defendant's cellular phones to communicate on GSM cellular networks. Without the infringing GSM chipset, Defendant's cellular phones would not work.

25. Since at least the issuance of the Asserted Patents, Defendants have infringed, induced or contributed to the infringement of the Asserted Patents, in violation of 35 U.S.C. § 271, with resultant damage to Washington Research Foundation, in an amount to be proven at trial.

26. Moreover, Defendants, with actual knowledge of the Subject Patents and Applications, and without lawful justification, willfully and deliberately infringed at least the Asserted Patents.

WHEREFORE, WASHINGTON RESEARCH FOUNDATION PRAYS FOR:

27. Judgment on the Complaint that Defendants, and each of them, have infringed, contributed to the infringement of, or actively induced others to infringe U.S. Patents 5,937,341; 6,631,256; 7,116,963; and 7,606,542.

28. An award of damages against Defendants, and each of them, adequate to compensate Washington Research Foundation for past infringement of at least the Asserted

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Patents, together with interest and costs as fixed by the Court, such damages to be trebled because of the willful and deliberate character of the infringement;

29. Judgment that this case is "exceptional" in the sense of 35 U.S.C. § 285, and that Washington Research Foundation is entitled to an award of its reasonable attorneys' fees in the prosecution of this action; and

30. Such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Plaintiff hereby makes a demand for a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure as to all issues in this lawsuit.

RESPECTFULLY SUBMITTED this 12th day of December, 2011.

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By: /s/ C. Dean Little

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