IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

Sockeye Licensing TX LLC,

Plaintiff,

v.

Case No. _____

Patent Case

Funai Corporation, Inc.; Funai Electric Co., Ltd.

Defendants.

Jury Trial Demanded

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Sockeye Licensing TX LLC ("Sockeye"), through its attorney, Isaac Rabicoff, complains against Funai Corporation, Inc. and Funai Electric Co., Ltd. ("Defendants") and alleges the following:

PARTIES

1. Plaintiff Sockeye Licensing TX LLC is a limited liability company organized and existing under the laws of Texas with its principal place of business at 320 Wilmette Avenue, Glenview, IL 60025.

2. Defendant Funai Corporation, Inc. is a corporation organized and existing under the laws of New Jersey with its principal place of business at 201 Route 17 North, Suite 903, Rutherford, NJ 07070.

3. Defendant Funai Electric Co., Ltd. is a foreign corporation with its principal place of business at 7-7-1 Nakagaito, Daito, 574-0013, Japan.

JURISDICTION

4. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 2 of 15 PageID #:2

5. This Court has exclusive subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Defendants because they have engaged in systematic and continuous business activities in the Northern District of Illinois. Specifically, Defendants provide their full range of services to residents in this District. As described below, Defendants have committed acts of patent infringement giving rise to this action within this District.

VENUE

7. Venue is proper in this District under 28 U.S.C. § 1400(b) because Defendants have sold infringing products in this District. In addition, Sockeye has suffered harm in this District.

PATENTS-IN-SUIT

8. Sockeye is the assignee of all right, title, and interest in United States Patent Nos. 9,547,981 (the "981 Patent") and 8,135,342 (the "342 Patent") (collectively, the "Patents-in-Suit"), including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the Patents-in-Suit. Accordingly, Sockeye possesses the exclusive right and standing to prosecute the present action for infringement of the Patents-in-Suit by Defendants.

9. On January 17, 2017, the United States Patent and Trademark Office issued the '981 Patent. The '981 Patent is titled "System, Method and Apparatus for Using a Wireless Device to Control Other Devices." The application leading to the '981 Patent was filed on November 3, 2014, which is a continuation of U.S. Application No. 13/418,829; which was filed on March 13, 2012; which is a divisional application of U.S. Application No. 11/898,912, now the '342 Patent, which was filed on September 17, 2007; which claims priority from provisional application

-2-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 3 of 15 PageID #:3

number 60/844,645, which was filed on September 15, 2006. A true and correct copy of the '981 Patent is attached hereto as Exhibit A and incorporated herein by reference. A true and correct copy of the parent patent, the '342 Patent, is attached hereto as Exhibit B and incorporated herein by reference.

10. Prior to the filing of the applications that matured into the '981 patent and its parent '342 patent in 2006, state of the art cell phone designs emphasized their use as standalone devices. In the industry it was widely expected that, as the multimedia capabilities of the cell phone became richer, the cell phone itself would serve as a multimedia player and alternative to traditional modes of viewing video, such as via television screens. Accordingly, cell phone manufacturers at the time of filing focused on developing the "onboard" capabilities of their products, rather than adapting them to connect with and control a higher resolution device. Thus, for example, the Nokia N92 mobile device announced in 2005 was marketed as a phone for watching TV. The Nokia N92, while capable of playing "mobile TV," was designed as an alternate platform for watching television, and it operated as a standalone device, wholly-independent of television sets of the period. The '981 patent went further. In contrast to the standalone approach of the Nokia N92, the '981 patent taught particular methods by which the cell phone could connect with and control a higher resolution display device, streaming video thereto. The state-of-the-art cell phones of the day were not equipped to operate in this way, nor was this their goal. Indeed, as Nokia stated at the time, the "Nokia N92 offers easy access to TV programs without having to sit in front of a television set." Exhibit C. Notably, so-called "[t]hird generation mobile phones" or "3G mobiles" which were capable of "multi-media communication" of this kind—i.e., "viewing TV on a mobile phone"—were far from the norm in 2006. Exhibit D. As NEC stated at the time, although such devices were "expected to be extremely popular," using a cell phone to view

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 4 of 15 PageID #:4

television was itself a "groundbreaking way to use mobile phones." *Id.* Still more groundbreaking was the inventive approach of the '981 patent, which went beyond the cell phones merely equipped to play television, such as the Nokia N92 and the NEC e636, and taught particular methods by which the cell phone could connect with and control a higher resolution display device for streaming video. The claimed inventions would have been inoperable on even the most sophisticated cell phones of the period, such as the Nokia N92 and NEC e636, because they required significant technical advancements and improvements to the hardware and software "stack" of the cell phone in order to enable their inventive functionality. *See* Exhibit E.

The '981 Patent

11. The '981 patent taught the hardware and software "stack" necessary to implement the particular methods claimed in the patents. For example, Figure 3D illustrates the relationships between the hardware and software components of the cell phone itself, as well as the internet and a high-resolution display device, in terms of their hierarchy and I/O requirements and functions. Figure 3D teaches a cell phone operating system that supports TCP/IP services, a desktop browser and operating system within the cell phone, and the device drivers necessary to manage streaming media as it is received from the network, rendered by the operating system, and communicated to external devices. Figure 3D teaches that the cell phone's device drivers interact with the peripheral communications hardware and software that, in turn, communicates with external display devices. Further, Figure 3B shows that the peripheral communications hardware and software interacts with multichannel USB, and IEEE 1394 and IEEE 802.11 protocols that, in turn, use a multiport wireless interface to communicate with a high-resolution digital display device. Without the hardware and software stack (or its equivalents) disclosed, *inter alia*, in Figures 3B and 3D of the '981 patent, the claimed inventions would have been inoperable. The hardware and software stack

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 5 of 15 PageID #:5

disclosed in the patent was absent from the more advanced cell phones of the day (e.g., the Nokia N92 and NEC e636), which were designed as mere standalone devices—a completely different paradigm than disclosed in the '981 patent, which teaches the cell phone connecting with and controlling a higher resolution display device on which media may be streamed.

In the few prior art examples where a cell phone was actually connected to another 12. device, the cell phone was used in a manner completely different than that claimed in the '981 patent, and for different purposes. As the inventor pointed out during prosecution of the parent '342 patent, the prior art merely "describe[d] a conventional tethering operation of a cell phone to a computer, and not peripheral cell phone control of the claimed invention." Exhibit F [Prosecution History of '342 Parent Patent, Amendment, May 31, 2011, at 11]. According to the "conventional tethering operation[s]" of the prior art, the "PC or laptop connects to the internet via another PC's or a cell phone's wireless Internet connection, providing a bridge connection but not ceding control." Id. By contrast, the "instant invention," the inventor explained, "does not use a cell phone to connect a 'computer' to the Internet" — "[q]uite the reverse, the instant invention connects peripheral devices (connected to the computer) to the cell phone to create a desktop computing environment on the cell phone." Id. As the inventor described it in a later amendment during prosecution of the '342 parent patent, the "present invention" was one "directed to an innovative approach to employ a cell phone or like PDA . . . to create a media center controlled by the user through the cell phone-without the usage of the computing power of the peripherals' PC." Exhibit G. [Prosecution History of '342 Patent, Amendment, January 17, 2012, at 31]. The inventor emphasized that in the prior art "the portable device is a mere tether" and "has zero control – the network server is running things directly" in the "traditional client/server relationship." Id. at 32. By contrast, the parent '342 patent "expressly involves and claims control of the peripheral device

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 6 of 15 PageID #:6

by the portable device, not at network control." *Id.* Thus, at best, the prior art contemplated the "conventional tethering" of the cell phone to the computer for the purpose of improving the functionality of the computer according to the "traditional client/server relationship." The '981 patent, however—which shares a specification with the parent '342 patent—teaches improvements in the cell phone hardware and software "stack," enabling it to control the high-resolution display device, in a clear reversal of the "traditional client/server relationship" and departure from "conventional tethering." As the inventor stated during prosecution of the '981 patent, quoting the summary of the invention, " '[t]he user may access' the movies and videos 'using the desktop monitor' because, for example the 'user interfaces' of the web site providing this content 'can be displayed through' the 'desktop monitor' " and "[t]hose 'user interfaces are sent to the 'desktop monitor' by means of the 'wireless cell phone.' " Exhibit H [Prosecution History of '981 Patent, Sept. 7, 2016, Declaration of Michael D. Harold, at pages 3-4, para 7(a)(4)]. None of the prior art discloses the hardware and software "stack" necessary to execute this novel functionality or to accomplish the objectives of the '981 patent.

13. As the inventor pointed out during prosecution of the '981 patent, the methods employed in the prior art failed to disclose the claimed step of "transmitting by the mobile communications device of at least some of the particular movie or video to the display device for display thereon **simultaneously** while at least some of the particular movie or video is being downloaded from the server to the mobile communications device." Exhibit I [Prosecution History of '981 Patent, Sept. 9, 2016 Amendment, at 8] (emphasis added). This step of claim 1 of the '981 patent not only distinguishes it from prior art methods but constitutes one of the '981 patent's "inventive concepts," both in its own right as well as in combination with other claim elements, rendering the patent eligible under 35 U.S.C. § 101. Indeed, the inventor pointed out that this step

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 7 of 15 PageID #:7

"teaches away" from the prior art, which merely "discloses that a document must be fully downloaded before it can be accessed," from prior art wherein "content is fully downloaded *before* the mobile device 'detects' the display" or from prior art wherein "a video conference is received or initiated *before* it is routed to the external display." (Emphasis added). As such, the inventor noted, the prior art "teach[es] away from the claimed methods." *Id.* at 8-9.

14. As the inventor further noted during prosecution of the '981 patent, the "claims are specifically limited to the field of consumer electronic entertainment, as contemplated by the specification." For example, claim 1 specifically limits the "electrical coupling" between the display device and the mobile communications device to be "for consumer electronic entertainment purposes," which puts "limitations . . . on the type of electrical couplings that are covered by the claims." *Id.* at 10-11.

15. The USPTO issued the '981 patent on January 17, 2017, without ever having rejected any of the claims under 35 U.S.C. § 101 during prosecution.

16. The inventor of the '981 patent conceived of the inventions disclosed and claimed therein and worked to commercialize them for several years. Among his goals (and later those of his company, Zamboola) was to provide hardware and software solutions for the mobile market to allow the interfacing of user information between devices in an enhanced way. Accordingly, after filing in 2006 the applications that eventually issued as the '981 patent and its parent '342 patent, he set to work prototyping solutions that reduced the claimed inventions to practice. Mr. Harold began by modifying an "open source" cell phone released after filing, the Openmoko "Neo," which had an operating system and some of the hardware necessary to support streaming media from the Internet to a high-resolution display device. However, because the software on the Neo proved to be too unstable for the purposes of the claimed inventions, the inventor was forced to migrate to

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 8 of 15 PageID #:8

an "Android" operating system. Still more modifications were necessary after migrating to the Android OS, which was not designed for the purpose of streaming media to a high-resolution display device, and lacked the architecture for concurrent, multi-threaded operations and interprocess communications. Subsequently, the inventor adapted open source device drivers to these purposes. Additionally, because the Neo had a USB port, the inventor developed a USB-to-VGA connector that allowed the cell phone to display media at the higher resolution VGA, controlled by the user via the Neo touchscreen. Thus, the conventional software and hardware components available required significant modifications from their original form before it was possible to integrate them into a prototype incorporating the claimed inventions.

17. The '981 Patent is valid and enforceable.

18. The '981 Patent describes a need to provide an improved paradigm for using a wireless cell phone or other such communications device as a central component of a desktop or other such computing environment. Ex. A, 2:61-64.

19. The '981 Patent describes a system, method and apparatus in which the user of a wireless cell phone device establishes a direct connection with a desktop computer monitor, keyboard, mouse or other component using any combination of wireline connections and wireless connections. *Id.* at 1:30-36.

20. The '981 Patent is not directed to a method of organizing human activity or to a fundamental economic practice long prevalent in commerce. The '981 Patent describes a system that addresses a technical problem—using a wireless cell phone as a central component of a desktop or other computing environment that includes, in addition to a desktop computer monitor and a desktop keyboard and mouse, using the use of desktop speakers and a desktop printer. *Id.* at 3:7-12—with a technical solution: increasing the use of a cell phone as a connection,

-8-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 9 of 15 PageID #:9

communications and controlling device for desktop computers, digital display monitor and keyboard and mouse. *Id.* at 3:41-48.

21. The '981 Patent does not preempt the field or preclude the use of other wireless cell phones. For example, many companies offer currently offer rudimentary products that allow a cell phone to project images, presentations and movies onto a nearby wall or surface. *Id.* at 2:9-12. The prior art also only uses cell phones as computing devices and not as a full-sized computer monitor or other full-size digital output device for manipulating data or issuing commands remotely through the handheld communications devices. *Id.* at 3:20-27.

22. The '981 Patent does not take a well-known or established business method or process and apply it to a general-purpose computer. Instead, in an exemplary embodiment, it uses a wireless cell phone as a central component of a desktop or other computing environment that includes, in addition to a desktop computer monitor and a desktop keyboard and mouse, the use of desktop speakers and a desktop printer. *Id.* at 3:7-12. The desktop computer monitor or other full-size digital display device is also used as a visual output device, and a full-size keyboard and mouse are used as user input devices. *Id.* 2:66-3:1.

23. In the application leading to the '981 Patent, the Examiner expressly considered all of the IPR petitions filed against the '342 Patent, *see* ¶ 29 *infra*, and allowed the '981 Patent to issue over all the prior art cited in those IPR petitions.

The '342 Patent:

24. The '342 Patent is valid and enforceable.

25. The '342 Patent describes a need to provide an improved paradigm for using a wireless cell phone or other such communications device as a central component of a desktop or other such computing environment. Ex. B, 2:51-54.

-9-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 10 of 15 PageID #:10

26. The '342 Patent describes a system, method and apparatus in which the user of a wireless cell phone device establishes a direct connection with a desktop computer monitor, keyboard, mouse or other component using any combination of wireline connections and wireless connections. *Id.* at 1:10-16.

27. The '342 Patent is not directed to a method of organizing human activity or to a fundamental economic practice long prevalent in commerce. The '342 Patent describes a system that addresses a technical problem—using a wireless cell phone as a central component of a desktop or other computing environment that includes, in addition to a desktop computer monitor and a desktop keyboard and mouse, the use of desktop speakers and a desktop printer. *Id.* at 3:38-45—with a technical solution: increasing the use of a cell phone as a connection, communications and controlling device for desktop computers, digital display monitors and keyboard and mouse. *Id.* at 3:30-37.

28. The '342 Patent does not preempt the field or preclude the use of other wireless cell phones. For example, many companies offer currently offer rudimentary products that allow a cell phone to project images, presentations and movies onto a nearby wall or surface. *Id.* at 1:65-2:1. The prior art also only uses cell phones as computing devices and not as a full-sized computer monitor or other full-size digital output device for manipulating data or issuing commands remotely through the handheld communications devices. *Id.* at 2:10-17.

29. The '342 Patent does not take a well-known or established business method or process and apply it to a general-purpose computer. Instead, in an exemplary embodiment, it uses a wireless cell phone as a central component of a desktop or other computing environment that includes, in addition to a desktop computer monitor and a desktop keyboard and mouse, the use of desktop speakers and a desktop printer. *Id.* at 3:38-45. The desktop computer monitors, or other

-10-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 11 of 15 PageID #:11

full-size digital display device is also used as a visual output device, and a full-size keyboard and mouse are used as user input devices. *Id.* at 2:54-63.

30. The PTAB declined to institute an IPR against the asserted claim 21 of the '342 Patent in IPR2016-00989, and therefore determined that there was not a reasonable likelihood of unpatentability on the given grounds. *See RPX Corp. v. Sockeye Licensing TX, LLC*, IPR2016-00989 (P.T.A.B. 2016) (declining to institute an IPR as to claims 21, 22, 25 and 26). In IPR2016-01052, the Petitioner did not seek to institute an IPR of claim 21. *See RPX Corp. v. Sockeye Licensing TX, LLC*, IPR2016-01052 (P.T.A.B. 2016) (requesting an IPR for claims 11-19 and 58-76 and denying institution of an IPR for claims 60-61 and 69).

COUNT I: INFRINGEMENT OF THE '981 PATENT

31. Sockeye incorporates the above paragraphs herein by reference.

32. **Direct Infringement.** Defendants have been and continue to directly infringe one or more claims of the '981 Patent in at least this District by making, using, offering to sell, selling and/or importing, without limitation, at least the Magnavox Smart TV ("Exemplary Funai Products") that infringe at least exemplary claim 1 Patent (the "Exemplary '981 Patent Claim") literally or by the doctrine of equivalence. On information and belief, numerous other devices that infringe the claims of the Patents-in-Suit have been made, used, sold, imported, and offered for sale by Defendants and/or their customers.

33. **Induced Infringement.** Defendants actively, knowingly, and intentionally have been and continue to induce infringement of the '981 Patent, literally or by the doctrine of equivalence, by selling Exemplary Funai Products to their customers for use in end-user products in a manner that infringes one or more claims of the '981 Patent.

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 12 of 15 PageID #:12

34. **Contributory Infringement.** Defendants actively, knowingly, and intentionally have been and continue to materially contribute to their own customers' infringement of the '981 Patent, literally or by the doctrine of equivalence, by selling Exemplary Funai Products to their customers for use in end-user products in a manner that infringes one or more claims of the '981 Patent.

The filing of this Complaint also constitutes notice in accordance with 35 U.S.C. §
287.

36. Despite such notice, Defendants continue to make, use, test, sell, offer for sale, market, and/or import into the United States, products that infringe the '981 Patent. On information and belief, Defendants have also continued to sell the Exemplary Funai Products and distribute product literature and website materials inducing end users and others to use its products in the customary and intended manner that infringes the '981 Patent. Thus, on information and belief, Defendants are contributing to and/or inducing the infringement of the '981 Patent.

37. Exhibit J includes charts comparing the Exemplary '981 Patent Claims to the Exemplary Funai Products. As set forth in these charts, this Exemplary Funai Product practices the technology claimed by the '981 Patent. Accordingly, the Exemplary Funai Products incorporated in these charts satisfy all elements of the Exemplary '981 Patent Claims.

 Sockeye therefore incorporates by reference in its allegations herein the claim charts of Exhibit J.

39. Sockeye is entitled to recover damages adequate to compensate for Defendants' infringement.

COUNT II: INFRINGEMENT OF THE '342 PATENT

40. Sockeye incorporates the above paragraphs herein by reference.

-12-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 13 of 15 PageID #:13

41. **Direct Infringement.** Defendants have been and continue to directly infringe one or more claims of the '342 Patent in at least this District by making, using, offering to sell, selling and/or importing, without limitation, at least the Magnavox Smart TV ("Exemplary Funai Products") that infringe at least exemplary claim 21 of the '342 Patent (the "Exemplary '342 Patent Claim") literally or by the doctrine of equivalence. On information and belief, numerous other devices that infringe the claims of the Patents-in-Suit have been made, used, sold, imported, and offered for sale by Defendants and/or their customers.

42. **Induced Infringement.** Defendants actively, knowingly, and intentionally have been and continue to induce infringement of the '342 Patent, literally or by the doctrine of equivalence, by selling Exemplary Funai Products to their customers for use in end-user products in a manner that infringes one or more claims of the '342 Patent.

43. **Contributory Infringement.** Defendants actively, knowingly, and intentionally have been and continue to materially contribute to their own customers' infringement of the '342 Patent, literally or by the doctrine of equivalence, by selling Exemplary Funai Products to their customers for use in end-user products in a manner that infringes one or more claims of the '342 Patent.

44. Prior to the filing of this complaint, Defendants had actual knowledge of the '342 Patent, its Exemplary Funai Products and the products incorporating the Exemplary Funai Products that are imported into, sold, offered for sale, and used in the United States.

45. The filing of this Complaint also constitutes notice in accordance with 35 U.S.C. §287.

46. Despite such notice, Defendants continue to make, use, test, sell, offer for sale, market, and/or import into the United States, products that infringe the '342 Patent. On information

-13-

Case: 1:19-cv-02773 Document #: 1 Filed: 04/24/19 Page 14 of 15 PageID #:14

and belief, Defendants have also continued to sell the Exemplary Funai Products and distribute product literature and website materials inducing end users and others to use its products in the customary and intended manner that infringes the '342 Patent. Thus, on information and belief, Defendants are contributing to and/or inducing the infringement of the '342 Patent.

47. Exhibit K includes charts comparing the Exemplary '342 Patent Claims to the Funai Exemplary Products. As set forth in these charts, this Exemplary Funai Product practices the technology claimed by the '342 Patent. Accordingly, the Exemplary Funai Products incorporated in these charts satisfy all elements of the Exemplary '342 Patent Claims.

48. Sockeye therefore incorporates by reference in its allegations herein the claim charts of Exhibit K.

49. Sockeye is entitled to recover damages adequate to compensate for Defendants' infringement.

PRAYER FOR RELIEF

WHEREFORE, Sockeye respectfully requests the following relief:

- A. A judgment that the '981 Patent and the '342 Patent are valid and enforceable.
- B. A judgment that Defendants have infringed, contributorily infringed, and/or induced infringement of one or more claims of the '981 Patent;
- C. A judgment that Defendants have infringed, contributorily infringed, and/or induced infringement of one or more claims of the '342 Patent;
- D. An accounting of all damages not presented at trial;
- E. A judgment that awards Sockeye all appropriate damages under 35 U.S.C. § 284 for Defendants' past infringement, and any continuing or future infringement of the Patents-in-Suit, up until the date such judgment is entered, including pre- or

post-judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Sockeye for Defendants' infringement, an accounting:

- that this case be declared exceptional within the meaning of 35 U.S.C. § 285 and that Sockeye be awarded its reasonable attorneys' fees against Defendants that it incurs in prosecuting this action;
- ii. that Sockeye be awarded costs, and expenses that it incurs in prosecuting this action; and
- iii. that Sockeye be awarded such further relief at law or in equity as the Court deems just and proper.

Dated: April 24, 2019

Respectfully submitted,

<u>/s/ Isaac Rabicoff</u> Isaac P. Rabicoff **Rabicoff Law LLC** 73 W Monroe St Chicago, IL 60603 (773) 669-4590 isaac@rabilaw.com

Counsel for Plaintiff