IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

STEELHEAD LICENSING	LLC,
Plaintiff,	

v.

NEC CASIO MOBILE COMMUNICATIONS, LTD., C.A. No.13-040-LPS

TRIAL BY JURY DEMANDED

Defendant.

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Steelhead Licensing LLC ("Steelhead"), by and through its undersigned counsel, for its Complaint against NEC Casio Mobile Communications, Ltd. ("NEC Casio" or "Defenadnt"), alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code ("U.S.C.") to prevent and enjoin Defendant from infringing and profiting, in an illegal and unauthorized manner and without authorization and/or consent from Steelhead, from U.S. Patent No. 5,491,834 (the "834 Patent"), attached hereto as Exhibit A) pursuant to 35 U.S.C. §271, and to recover damages, attorneys' fees, and costs.

THE PARTIES

2. Plaintiff Steelhead is a Delaware limited liability with its principal place of business at 222 Delaware Avenue, PO Box 25130, Wilmington, DE 19899.

3. Defendant NEC Casio is a Japanese corporation with its principal place of business at 1753, Shimonumabe Nakahara-Ku, Kawasaki, 211-8666, Japan. Upon information

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and belief, Defendant maintains a registered agent at Corporation Service Company, 80 State St., Albany, New York, 12207.

4. Defendant is in the business of making, using, selling, offering for sale and/or importing mobile devices.

JURISDICTION AND VENUE

5. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a) because the action arises under the patent laws of the United States, 35 U.S.C. §§1 et seq.

6. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction, as well as because of the injury to Steelhead and the cause of action Steelhead has raised, as alleged herein.

7. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Delaware Long-Arm Statute, *Del Code. Ann. Tit. 3, §3104*, due to at least their substantial business in this forum, including: (i) at least a portion of the infringement alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in Delaware.

8. Defendant has conducted and does conduct business within the state of Delaware, directly or through intermediaries, resellers, agents, or offer for sale, sell, advertise products in Delaware that infringe the '834 Patent.

9. In addition to Defendant's continuously and systematically conducting business in Delaware, the causes of action against Defendant are connected (but not limited) to Defendant's purposeful acts committed in the state of Delaware, including Defendant's making, using,

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importing, offering for sale, or selling products which include features that fall within the scope of at least one claim of the '834 Patent.

10. Venue lies in this District under 28 U.S.C. §§1391 and 1400(b) because, among other reasons, Defendant is subject to personal jurisdiction in this District, and has committed and continues to commit acts of patent infringement in this District. For example, Defendant has used, sold, offered for sale, and/or imported infringing products in this District.

FACTUAL ALLEGATIONS

11. On February 13, 1996, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '834 Patent, entitled "Mobile Radio Handover Initiation Determination" after a full and fair examination. Steelhead is presently the owner of the patent and possesses all right, title and interest in and to the '834 Patent. Steelhead owns all rights of recovery under the '834 Patent, including the exclusive right to recover for past infringement. The '834 Patent is valid and enforceable.

12. The '834 Patent contains eight independent claims and twelve dependent claims. Defendant commercializes, *inter alia*, methods that perform all the steps recited in one or more claim of the '834 Patent. Defendant makes, uses, imports, and sells or offers for sale telecommunication products, including mobile devices, which encompass one or more of the features recited and which perform all the steps comprised in the patented claims.

13. The invention claimed in the '834 Patent includes a process for determining the manner in which handover is performed in a mobile radio network including a plurality of cells, where each cell is associated with a base station supporting communication with a mobile device.

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14. The patented process includes the steps of monitoring the quality of a signal as a function of time respectively transmitted between candidate base stations and the mobile unit. The process further includes producing an indication of either the rise or fall of the signal's quality as a function of time. Handover from a serving base station supporting communication with the mobile unit to another base station is initiated based on the rise or fall in the signal's quality.

15. For example, manufacturers of mobile telecommunications devices rely on the patented process to handle service associated with their mobile devices. Specifically, Defendant relies on the patented process to determine the manner in which communication service associated with a mobile device is to be handed over from one cell to another.

16. Defendant commercializes mobile devices which support the 3G Code-Division Multiple Access (hereinafter, CDMA) standard. These products will be hereinafter identified as NEC Casio's CDMA Products.

17. 3G CDMA (or CDMA 2000) is a leading mobile phone technology. CDMA technology operates by transmitting multiple digital signals simultaneously over the same carrier frequency (i.e., the same channel), thus optimizing the use of available bandwidth. In CDMA implementations, every user is allocated the entire spectrum all of the time and connections are uniquely identified using codes.

18. In mobile telephony, it is necessary to maintain an established user connection even if the user is changing locations, or the radio access environment surrounding the user is changing, while a connection is still active. "Handover" refers to the transfer of user connection from one access point to another. For NEC Casio's CDMA Products, Defendants rely on the

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patented process to determine mobile device communication conditions for initiating a handover from one cell to another.

DEFENDANT'S INFRINGEMENT

19. Defendant practices patented mobile telecommunications methods with respect to certain mobile telecommunications devices commercialized in this judicial district. Specifically, NEC Casio practices a method that determines the manner in which handover of service is performed among cells in a mobile network with respect to certain mobile devices.

20. NEC Casio's CDMA Products include, but are not limited to, the G'z Ravine 2[™] mobile phone.

21. Each NEC Casio's CDMA Product forms a mobile terminal that can be used on a mobile radio network such as that provided by a telecommunications company or a carrier. This network is formed by a plurality of cells.

22. Each NEC Casio's CDMA Product includes a processor and a memory device with instructions stored therein. Upon execution, these instructions perform a handover determination method in which each of NEC Casio's CDMA Products searches for a better cell pursuant to the cell reselection process stated in the CDMA standard. Under the CDMA standard, each NEC Casio's CDMA Product sends out route update messages to the serving base stations, when conditions dictate, to initiate a cell reselection to a better base station.

23. Each NEC Casio's CDMA Product complies with the 3G CDMA standard. As such, when communicating, it maintains an active list of base stations with which the NEC Casio's CDMA Product has sufficient signal strength to communicate. The active list of base stations is used by each NEC Casio's CDMA Product itself to initiate cell reselection.

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24. Specifically, when NEC Casio's CDMA Product is used in a mobile radio network, it receives signals from base stations within range. In accordance with CDMA standards, each NEC Casio's CDMA Product maintains a set of pilot channels transmitted by each sector in the neighborhood of the serving sector in which the cell phone is used. The strength of each pilot channel is a quality of a signal from each candidate base station that is monitored by each NEC Casio's CDMA Product as a function of time. The pilots are ranked in order of signal strength. The action of the drop timer in connection with monitoring the strength of the pilot channels evidence whether the strength or quality of each signal is rising or falling as a function of time. Whenever conditions indicate, each NEC Casio's CDMA Product initiates a handover to a better cell by sending out a route update message. The initiation of the handover is based on the fact that, for example, the signal strength of the pilot was not disabled by the action of a drop timer.

25. The patented method recited in one or more claims of the '834 Patent is performed when a cell reselection is made by any NEC Casio's CDMA Product when, for example, it is using the 3G CDMA standard to communicate.

<u>COUNT 1:</u> <u>DIRECT INFRINGEMENT OF THE '834 PATENT</u>

26. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1-25.

27. Taken together, either partially or entirely, the features included in the NEC Casio's CDMA Products including, but not limited to, G'z Ravine 2^{TM} mobile phone, perform the process recited in one or more claims of the '834 Patent.

28. Defendant directly infringes one or more claims of the '834 Patent by using NEC Casio's CDMA Products, which perform the process defined by one or more claims of the '834

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Patent. For example, without limitation, Defendant directly infringes at least claim 8 of the '834 Patent by using NEC Casio's CDMA Products, including use by Defendant's employees and agents, use during product development and testing processes, and use when servicing and/or repairing phones on behalf of customers.

29. Additionally, Defendant directly infringes one or more claims of the '834 Patent by offering to sell NEC Casio's CDMA Products and by licensing—to end users in a commercial transaction—software embedded in NEC Casio's CDMA Products that performs the process defined by one or more claims of the '834 Patent. For example, without limitation, Defendant directly infringe at least claim 8 of the '834 Patent by offering to sell and conveying NEC Casio's CDMA Products to end users including a license to a fully operational software program implementing and thus embodying the claimed method.

30. By engaging in the conduct described herein, Defendant has injured Steelhead and are thus liable for infringement of the '834 Patent, pursuant to 35 U.S.C. §271.

31. Defendant has committed these acts of infringement without license or authorization.

32. To the extent that facts learned in discovery show that NEC Casio's infringement of the '834 Patent is or has been willful, Steelhead reserves the right to request such a finding at the time of trial.

33. As a result of NEC Casio's infringement of the '834 Patent, Steelhead has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for NEC Casio's past infringement, together with interests and costs.

34. Steelhead will continue to suffer damages in the future unless NEC Casio's infringing activities are enjoined by this Court. As such, Steelhead is entitled to compensation

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for any continuing or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.

35. Steelhead has also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them from directly or indirectly infringing the '834 Patent.

<u>COUNT 2:</u> INDUCING INFRINGEMENT OF THE '834 PATENT

36. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1-35.

37. Defendant has had knowledge of infringement of the '834 Patent at least as of the service of the complaint filed on January 4, 2013 (D.I. 1).

38. Specifically, on January 23, 2013, Defendant was put on notice of its infringement of the '834 Patent by a letter that contained an exemplary presentation showing how Defendant's products infringe the patent-in-suit (Exhibit B).

39. Despite having been put on notice, Defendant has been and still is indirectly infringing by way of inducing infringement by others of the '834 Patent in the State of Delaware, in this judicial district, and elsewhere in the United States, by, among other things, illegally making, using, importing, offering for sale, and/or selling, products for performing processes that fall within the scope of one or more claims of the '834 Patent, in violation of 35 USC § 271(b). Such products include, without limitation, the G'z Ravine 2[™] mobile phone. For example, Defendant indirectly infringes one or more claims of the '834 Patent by actively inducing its

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customers, users, subscribers and licensees who directly infringe due to their use of the G'z Ravine 2TM mobile phone.

40. With knowledge of the '834 patent, including knowledge that NEC Casio's CDMA Products are specifically designed to infringe the '834 Patent, Defendant actively induces others, such as its customers, users, subscribers, and licensees, to use NEC Casio's CDMA Products, including but not limited to, the G'z Ravine 2TM mobile phone.

41. Such NEC Casio's CDMA Products perform all the steps recited in at least claim 8 of the '834 Patent.

42. Furthermore, Defendant indirectly infringes one or more claims of the '834 Patent by actively inducing third-party developers to create applications and/or offer features enabling without limitation, the function to make use of the services offered and sold by Defendant, who directly infringes one or more of the claims of the '834 Patent due to its use of NEC Casio's CDMA Products.

DEMAND FOR JURY TRIAL

43. Steelhead demands a trial by jury of any and all causes of action.

PRAYER FOR RELIEF

Steelhead respectfully prays for the following relief:

1. That Defendant be adjudged to have infringed directly and indirectly, by inducing others to infringe, the '834 Patent, literally and/or under the doctrine of equivalents;

2. That Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them, be preliminarily and permanently restrained and enjoined from directly and/or indirectly infringing the '834 Patent;

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3. An award of damages pursuant to 35 U.S.C. §284 sufficient to compensate Steelhead for Defendant's past infringement and any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement, including compensatory damages;

4. An assessment of pre-judgment and post-judgment interests and costs against Defendant, together with an award of such interests and costs, in accordance with 35 U.S.C. §284;

5. That Defendant be directed to pay enhanced damages, including Steelhead's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. §285; and

6. That Steelhead have such other and further relief as this Court may deem just and proper.

Dated: February 11, 2013

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