

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

NANO492 TECHNOLOGIES, LLC,

Plaintiff,

v.

LG ELECTRONICS INC., and LG
ELECTRONICS U.S.A., INC.,

Defendants.

Civil Action No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Nano492 Technologies, LLC (“Nano492” or “Plaintiff”), for its Complaint against Defendant LG Electronics Inc. (“LG Inc.”), and LG Electronics U.S.A., Inc., (“LG U.S.A.”) (individually each a “Defendant” and collectively “Defendants” or “LG”) alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff is a limited liability company organized under the laws of the State of Delaware with a place of business at 717 North Union Street, Wilmington, Delaware 19805.

3. Upon information and belief, LG Inc. is a corporation organized and existing under the laws of South Korea, with a place of business at LG Twin Towers 20 Yoido-dong, Youngdungpo-gu, Seoul, Korea. Upon information and belief, LG Inc. sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing

technology knowing that they would be sold in this judicial district and elsewhere in the United States.

4. Upon information and belief, LG U.S.A. is a corporation organized and existing under the laws of Delaware, with a place of business at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey 07632, and can be served through its registered agent, United States Corporation Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808. Upon information and belief, LG U.S.A. sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

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

7. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, each Defendant conducts business in this District, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.

8. On information and belief, each Defendant is subject to this Court's general and specific personal jurisdiction because each Defendant has sufficient minimum contacts within the State of Delaware, pursuant to due process and/or the Del. Code. Ann. Tit. 3, § 3104 because each Defendant purposefully availed itself of the privileges of conducting business in the State of Delaware, because each Defendant regularly conducts and solicits business within the State of Delaware, and because Plaintiff's causes of action arise directly from each of Defendant's

business contacts and other activities in the State of Delaware. Further, this Court has personal jurisdiction over LG U.S.A. because it is incorporated in Delaware and has purposely availed itself of the privileges and benefits of the laws of the State of Delaware.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,319,733

9. The allegations set forth in the foregoing paragraphs 1 through 8 are incorporated into this First Claim for Relief.

10. On November 27, 2012, U.S. Patent No. 8,319,733 (“the ’733 patent”), entitled “Electronic Device System Utilizing a Character Input Method,” was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the ’733 patent is attached as Exhibit 1.

11. Plaintiff is the assignee and owner of the right, title and interest in and to the ’733 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

12. Upon information and belief, each Defendant has and continues to directly infringe at least claims 27, 30, 31, 34, 35, and 36 of the ’733 patent by making, using, selling, importing and/or providing and causing to be used electronic device systems including displays that are programmed to execute a character input method within the scope of claims 27, 30, 31, 34, 35, and 36 of the ’733 patent, including, but not limited to, the products with the following designations or trade names: LG Optimus L5, LG Tribute™ HD Boost Mobile®, LG V20® AT&T, LG V20® AT&T, LG V20® Sprint, LG V20® LRA, LG V20® Unlocked, LG V20® U.S. Cellular, LG V20® in Titan, LG V20® Verizon Wireless, LG G5 T-Mobile in Silver, LG G5 Sprint in Silver, LG G5™ Verizon Wireless, LG G5 ACG in Silver, LG G5 ACG in Titan, LG Tribute™ HD Sprint, LG X power™ Cricket®, LG X power™ Boost Mobile®, LG X power™ Sprint®, LG X power™ Virgin Mobile®, LG X power™ U.S. Cellular, LG X power™ Unlocked,

LG K10 MetroPCS, LG Tribute™ HD Virgin Mobile®, LG Stylo™ 2 Boost Mobile®, LG Stylo™ 2 Virgin Mobile®, LG Escape 3™ Cricket®, LG Escape 3™ Cricket®, LG K10 T-Mobile, LG Stylo™ 2 Cricket Wireless®, LG Classic™ U.S. Cellular, LG Rebel™ LTE (GSM) TracFone®, LG Rebel™ LTE (CDMA) TracFone®, LG Treasure™ LTE (GSM) TracFone®, LG Treasure™ LTE (CDMA) TracFone®, LG Premier™ LTE TracFone®, LG Stylo™ 2 LTE TracFone®, LG Stylo™ 2 Sprint, LG K8™ LRA, LG K4™ Verizon Wireless, LG Optimus Zone™ 3 Verizon Wireless, LG K8™ V Verizon Wireless, LG K8™ ACG, LG Phoenix® 2 AT&T, LG Tribute 5™ Sprint, LG K8™ U.S. Cellular®, LG V10™ Verizon Wireless, LG V10™ Verizon Wireless, Nexus 5X, LG Spree™ Cricket®, LG G4 AT&T in Genuine Leather Black, LG G4 AT&T in Metallic Gray, LG G4 T-Mobile in Genuine Leather Brown, LG G4 T-Mobile in Metallic Gray, LG Risio™ for Cricket®, Leon™ LTE T-Mobile®, Escape2™, Access™ LTE (the “Infringing Instrumentalities”). Exemplary images of the Infringing Instrumentalities are provided below:



13. Claim 27 of the '733 patent generally recites a character input method executable by an electronic device system connectable to a display, comprising: receiving a first operation on a first key among a plurality of keys displayable by the electronic device system, wherein each key of the plurality of keys is operable as a toggle key and is associated with a sequence of character candidates that comprises optional characters arranged in a specific arrangement for character input to the electronic device system, and two different keys in the plurality of keys are respectively associated with different sequences of character candidates; wherein one character candidate associated with the first key is selectable as a currently selected character in response to one or more operations based on the first key during the operation period of the first key, the operation period is extendable by one or more operations based on the first key, and the currently selected character is input to a text area of the electronic device system upon expiration of the operation period, the first key is associated with a first sequence of character candidates; presenting a first character in the first sequence of character candidates as the currently selected character according to a first arrangement of characters in the first sequence of character candidates in response to a first instance of short press on the first key in a condition that the first operation comprises the first instance of short press; and displaying a graphical user interface operable to present the first sequence of character candidates associated with the first key during the operation period, wherein the graphical user interface comprises a focus operable to indicate the currently selected character; receiving and classifying a touch movement detectable by a two-dimensional touch sensitive device of the electronic device system into an operation of a forward direction or an operation of a backward direction of the graphical user interface according to a direction of the touch movement detectable by two-dimensional touch sensitive device during the

operation period; wherein the graphical user interface allows a forward movement of the focus in the first sequence of character candidates in response to the operation of the forward direction and a backward movement of the focus in the first sequence of character candidates in response to the operation of the backward direction; wherein the first sequence of character candidates comprises a first optional character, a second optional character, and a third optional character arranged in order, in a condition that the focus indicates the second optional character as the currently selected character, in the forward movement the focus moves from the second optional character to the third optional character to indicate the third optional character as the currently selected character in substitution for the second optional character, and in the backward movement the focus moves from the second optional character to the first optional character to indicate the first optional character as the currently selected character in substitution for the second optional character; and entering the currently selected character to a text area of the electronic device system upon expiration of the operation period.

14. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 27 of the '733 patent because they are electronic device systems connected to displays



and they are programmed to execute a character input method, comprising: receiving a first operation on a first key among a plurality of keys displayable by the electronic device system, wherein each key of the plurality of keys is operable as a toggle key and is associated with a sequence of character candidates that comprise optional characters arranged in a specific arrangement for character input to the electronic device system, and two different keys in the plurality of keys are respectively associated with different sequences of character candidates; wherein one character candidate associated with the first key is selectable as a currently selected character in response to one or more operations based on the first key during the operation period of the first key,

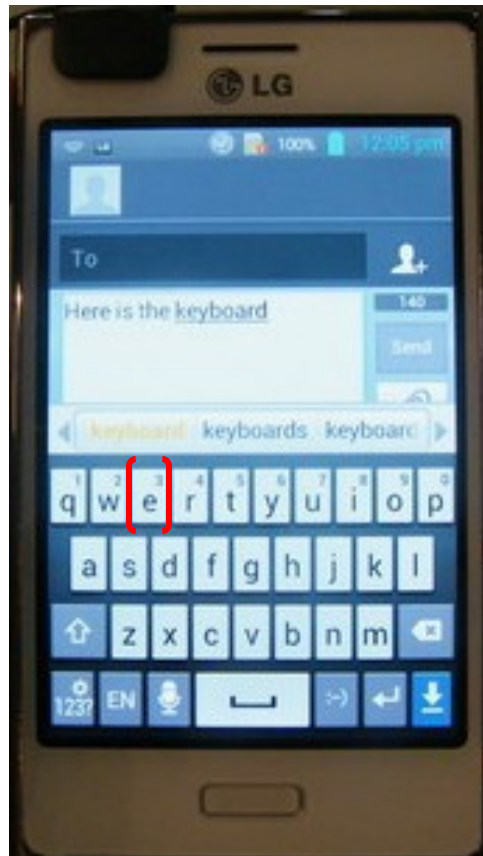




the operation period is extendable by one or more operations based on the first key, and the currently selected character is input to a text area of the electronic device system upon expiration of the operation period, the first key is associated with a first sequence of character candidates;



presenting a first character in the first sequence of character candidates as the currently selected character according to a first arrangement of characters in the first sequence of character candidates in response to a first instance of short press on the first key in a condition that the first operation comprises the first instance of short press;



and displaying a graphical user interface operable to present the first sequence of character candidates associated with the first key during the operation period, wherein the graphical user interface comprises a focus operable to indicate the currently selected character;



receiving and classifying a touch movement detectable by a two-dimensional touch sensitive device of the electronic device system into an operation of a forward direction or an operation of a backward direction of the graphical user interface according to a direction of the touch movement detectable by two-dimensional touch sensitive device during the operation period;





wherein the graphical user interface allows a forward movement of the focus in the first sequence of character candidates in response to the operation of the forward direction and a backward movement of the focus in the first sequence of character candidates in response to the operation of the backwards direction;





wherein the first sequence of character candidates comprises a first optional character, a second optional character, and a third optional character arranged in order, in a condition that the focus indicates the second optional character as the currently selected character, in the forward movement the focus moves from the second optional character to the third optional character to indicate the third optional character as the currently selected character in substitution for the second optional character, and in the backward movement the focus moves from the second optional character to the first optional character to indicate the first optional character as the currently selected character in substitution for the second optional character;





and entering the currently selected character to a text area of the electronic device system upon expiration of the operation period:



15. Claim 30 of the '733 patent generally recites the character input method as claimed in claim 27, wherein the graphical user interface is displayed in response to an instance of long press on the first key during the operation period.

16. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 30 of the '733 patent because they are electronic device systems connected to displays, programmed to execute the character input method as claimed in claim 27, wherein the graphical user interface is displayed in response to an instance of long press on the first key during the operation period:

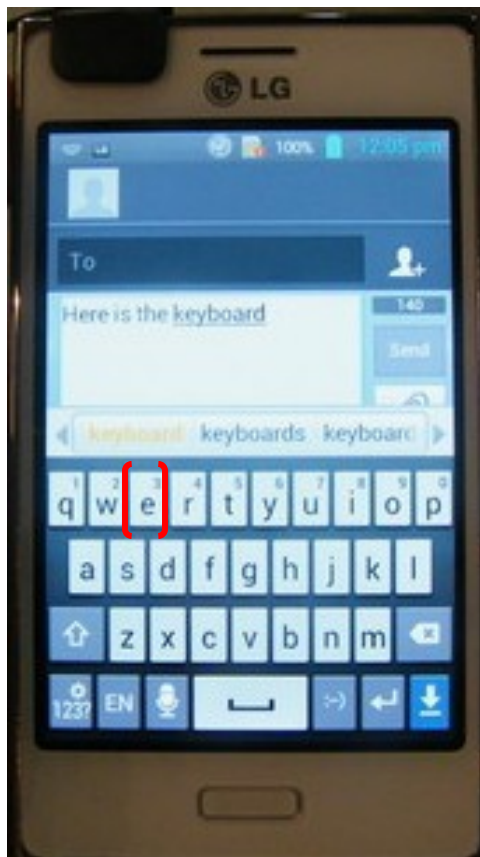




17. Claim 31 of the '733 patent generally recites the character input method as claimed in claim 30, wherein the short press on the first key represents a default input scheme operable to select one character candidate associated with the first key as the currently selected character according to the first arrangement, wherein duration of the short press is less than a predetermined time interval, and the long press on the first key represents an alternative input scheme operable to select one character candidate associated with the first key as the currently selected character, wherein the duration of the long press is greater than the predetermined time interval.

18. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 31 of the '733 patent because they are electronic device systems connected to displays, programmed to execute the character input method as claimed in claim 30, wherein the

short press on the first key represents a default input scheme operable to select one character candidate associated with the first key as the currently selected character according to the first arrangement, wherein duration of the short press is less than a predetermined time interval, and the long press on the first key represents an alternative input scheme operable to select one character candidate associated with the first key as the currently selected character, wherein the duration of the long press is greater than the predetermined time interval:





19. Claim 34 of the '733 patent generally recites the character input method as claimed in claim 27, wherein each of the plurality of keys is operable to be toggled between a pressed state and a released state, the plurality of keys are arranged as an electronically displayable virtual keyboard, and the first key is switchable between the pressed state and the released state and is not transitioned to a specialized state beyond toggling of the first key between the pressed state and the released state in response to any or all of the instances of short press and the touch movement.

20. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 34 of the '733 patent because they are electronic device systems connected to displays, programmed to execute the character input method as claimed in claim 27, wherein each of the plurality of keys is operable to be toggled between a pressed state and a released

state, the plurality of keys are arranged as an electronically displayable virtual keyboard, and the first key is switchable between the pressed state and the released state and is not transitioned to a specialized state beyond toggling of the first key between the pressed state and the released state in response to any or all of the instances of short press and the touch movement:





21. Claim 35 of the '733 patent generally recites the character input method as claimed in claim 27, wherein the graphical user interface comprises a menu.

22. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 35 of the '733 patent because they are electronic device systems connected to

displays, programmed to execute the character input method as claimed in claim 27, wherein the graphical user interface comprises a menu:





23. Claim 36 of the '733 patent generally recites the character input method as claimed in claim 35, wherein the character candidates of the first sequence are arranged linearly in the menu or scattered in a two-dimensional layout in an area of the menu.

24. As demonstrated in the exemplary images below, the Infringing Instrumentalities infringe claim 36 of the '733 patent because they are electronic device systems connected to displays, programmed to execute the character input method as claimed in claim 35, wherein the character candidates of the first sequence are arranged linearly in the menu or scattered in a two-dimensional layout in an area of the menu:



25. Plaintiff has been harmed by Defendants' infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment for itself and against Defendants as follows:

- A. An adjudication that each Defendant has infringed the '733 patent;
- B. An award of damages to be paid by Defendants adequate to compensate Plaintiff for Defendants' past infringement of the '733 patent, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: December 15, 2016

DEVLIN LAW FIRM LLC

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