IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

UNILOC USA, INC. and UNILOC LUXEMBOURG, S.A.,	§	Civil Action No. 3:18-cv-00561-DCG
Plaintiffs,	§	
v.	§	PATENT CASE
LG ELECTRONICS U.S.A., INC., LG ELECTRONICS MOBILECOMM U.S.A. INC. and LG ELECTRONICS, INC.,	§	
Defendants.	§	JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs, Uniloc USA, Inc. and Uniloc Luxembourg, S.A., (together "Uniloc"), for their First Amended Complaint against defendants, LG Electronics U.S.A., Inc., LG Electronics Mobilecomm U.S.A., Inc. and LG Electronics, Inc. (together "LG"), allege as follows:[1]

THE PARTIES

1. Uniloc USA, Inc. is a Texas corporation having a principal place of business at Legacy Town Center I, Suite 380, 7160 Dallas Parkway, Plano, Texas 75024.

2. Uniloc Luxembourg, S.A. is a Luxembourg company having a principal place of business at 15, Rue Edward Steichen, 4th Floor, L-2540, Luxembourg (R.C.S. Luxembourg B159161).

[1] An amended complaint supersedes the original complaint and renders it of no legal effect, *King v. Dogan*, 31 F.3d 344, 346 (5th Cir. 1994), rendering a motion to dismiss the original complaint moot. *See, e.g., Mangum v. United Parcel Services*, No. 3:09-cv-0385, 2009 WL 2700217 (N.D. Tex. Aug. 26, 2009).

3. LG Electronics U.S.A., Inc. is a Delaware corporation having a regular and established place of business at 2151-2155 Eagle Parkway, Fort Worth, Texas 76177. LG Electronics U.S.A., Inc. offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas and in the judicial Northern District of Texas.

4. LG Electronics Mobilecomm U.S.A., Inc. is a California corporation having a regular and established place of business in San Diego, California. LG Electronics Mobilecomm U.S.A., Inc. offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas and in the judicial Northern District of Texas.

5. LG Electronics, Inc. is a corporation organized under the laws of Korea with a principal place of business at LG Twin Tower 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Korea. LG Electronics, Inc. is in the business of manufacturing and selling electronic goods, including cellular telephones, tablets, laptops and televisions.

JURISDICTION

6. Uniloc brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, and 1338(a).

COUNT I
(INFRINGEMENT OF U.S. PATENT NO. 7,167,487)

7. Uniloc incorporates paragraphs 1-6 above by reference.

8. Uniloc Luxembourg, S.A. is the owner, by assignment, of U.S. Patent No. 7,167,487 ("the '487 Patent"), entitled NETWORK WITH LOGIC CHANNELS AND

TRANSPORT CHANNELS, which issued on January 23, 2007. A copy of the '487 Patent is attached as Exhibit A.

9. Uniloc USA., Inc. is the exclusive licensee of the '487 Patent, with ownership of all substantial rights, including the right to grant sublicenses, to exclude others, and to enforce and recover past damages for infringement.

10. The '487 Patent describes in detail and claims in various ways inventions in wireless networks having logic channels and transport channels developed by Koninklijke Philips Electronics N.V.

11. The '487 Patent describes problems and shortcomings in the then-existing field of communications in wireless networks and devices and describes and claims novel and inventive technological improvements and solutions to such problems and shortcomings. The technological improvements and solutions described and claimed in the '487 Patent were not conventional or generic at the time of their respective inventions but involved novel and non-obvious approaches to the problems and shortcomings prevalent in the art at the time.

12. The inventions claimed in the '487 Patent involve and cover more than just the performance of well-understood, routine and/or conventional activities known to the industry prior to the invention of such novel and non-obvious systems and devices by the '487 Patent inventor.

13. The inventions claimed in the '487 Patent represent technological solutions to technological problems. The written description of the '487 Patent describes in technical detail each of the limitations of the claims, allowing a person of ordinary skill in the art to understand what the limitations cover and how the non-conventional and non-generic combination of claim

elements differ markedly from and improved upon what may have been considered conventional or generic.

14. LG imports, uses, offers for sale, and sells in the United States electronic devices that operate in compliance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above, such as those designated: LG G7 ThinQ, LG Q7, LG Q7+, LG Q7α, LG Q Stylus, LG Q Stylus+, LG Q Stylusα, LG V35 ThinQ, LG V30, LG V30+, LG Q6, LG G6, LG Rebel 3, LG V20, LG Wine, LG Tribute HD, LG Rebel 2, LG Stylo 3, LG X charge, LG K20, LG Exalt, LG G5, LG X power, LG B470, LG B471, LG Escape 3, LG X style, LG Phoenix 2, LG G Vista 2, LG G4, LG Destiny, LG Sunset, LG 450, LG Xpression 2, G Flex, LG G Stylo, LG Leon, LG Tribute 2, LG Optimus F60, LG G3, LG G3 Vigor, LG G Vista, LG Optimus L70, LG Optimus L90, LG 306G, LG A380, LG Optimus F3Q, LG Nexus 5, LG G2, LG Optimus F6, LG Optimus L9, LG Optimus F3, Optimus G Pro, LG Optimus Ultimate, LG Nexus 4, LG Optimus Extreme, LG Optimus Logic, LG Optimus G, LG Escape, LG Spectrum 2, LG Intuition, LG Xpression, LG A340, LG Optimus Showtime, LG Nitro, LG myTouch, LG DoublePlay, LG Thrill, LG G2x, LG Thrive, LG Phoenix, LG Optimus T, LG Encor, LG dLite, LG Vu Plus, LG Fathom, LG Arena, LG Lotus Elite, LG eXpo, LG Shine 2, LG Xenon, LG CF360, LG CU920, LG Incite, CB630, LG380, CU720, CU915, CU500 (collectively "Accused Infringing Devices").

15. The Accused Infringing Devices implement networks having a first plurality of logic channels and a second plurality of transport channels associated by a MAC layer for sending and receiving packet units in accordance with HSPA/HSPA+ standardized in UMTS 3GPP Release 6 and above using a minimum bit rate criteria.

16. LG has infringed, and continues to infringe, at least claims 1, 3-6 and 12 of the ’487 Patent in the United States, by making, using, offering for sale, selling and/or importing the Accused Infringing Devices in violation of 35 U.S.C. §271(a).

17. The Accused Infringing Devices implement a network with a first plurality of logic channels with which is associated a plurality of transport channels. The transport channels transmit transport blocks formed from packet units received over the logic channels. For example, the Accused Products communicate with a base station in a network by associating logical channels with the transport channels, by means of a MAC layer. Each user equipment has a MAC Layer, which receives PDUs (packet units) on logical channels and multiplexes the upper layer PDUs into transport blocks that are passed to the physical layer using transport channels. The MAC is responsible for mapping of logical channels onto the appropriate transport channels.

18. The Accused Products implement a network wherein a plurality of valid transport format combinations is allocated to the transport channels, which combinations indicate the transport blocks provided for transmission on each transport channel. For example, the UE is assigned transport format combinations (TFCs), used for transmitting on transport channels. For the enhanced DCH (E-DCH) transport channel, the UE is configured to use a specific enhanced TFCs (E-TFCs) for defining characteristics of transport blocks. The MAC selects the appropriate transport format within an assigned format set for each active transport channel depending on source rate.

19. The Accused Infringing Devices implement a network wherein a selection algorithm is provided for selecting the transport format combinations, and wherein the selection algorithm uses a minimum bit rate criteria applicable to the respective logic channel. For example, when selecting a TFC from a set of valid TFCs, the selection algorithm takes into

account the priorities of the data flow to be mapped onto the transport channels. For example, high priority data can be mapped with a "high bit rate" Transport Format while lower priority data can be mapped with a "low bit rate" Transport Format. The radio resource layer controls the QoS requirements of the transmission via QCI classes, which can include a minimum guaranteed bit rate (GBR).

20. The Accused Products implement a network wherein logic channels having different priorities are each imaged on exactly one transport channel, and in that the network is designed for carrying out the allocation of the packet units in order of priority of the logic channels. The logical channels are mapped to transport channels in order of their priority where, for example, 1 is the highest priority and 8 is the lowest. Data transport is scheduled in accordance with the order of priority.

21. The Accused Infringing Devices implement a network wherein the network comprises a wireless network with a radio network controller and a plurality of associated terminals which are each designed for transmitting transport blocks formed from packet units of a logic channel over a transport channel which has a transmission time interval of at least one radio frame and which is active when the start of its transmission time interval coincides with that of a radio frame. The Transmission Time Interval of the transport channel represents the time at which one transport block set is exchanged between the physical layer and MAC layer using the same transport channel. The TTI is a multiple of the minimum interleaving period, which is 1 radio frame (10ms), i.e. will always be at least one radio frame.

22. LG specifically, knowingly and intentionally incorporates into the Accused Infringing Devices components and software that enable the devices automatically as described

above to send and receive data packets in accordance with the HSPA/HSPA+ functionality when in normal use by LG's customers.

23. In its marketing, promotional and/or instructional materials, including those identified below, LG also specifically and intentionally instructs its customers to use the Accused Infringing Devices in a manner that causes the devices to send and receive data packets in accordance with the HSPA/HSPA+ functionality.

24. LG has infringed, and continues to infringe, at least claims 1, 3-6 and 12 of the '487 Patent by actively inducing others to use, offer for sale, and sell the Accused Infringing Devices. LG's customers who use those devices in accordance with LG's instructions infringe at least claims 1, 3-6 and 12 of the '487 Patent, in violation of 35 U.S.C. § 271(a). LG intentionally instructs its customers to use the Accused Infringing Devices in an infringing manner as described above through training videos, demonstrations, brochures, websites and installation and user guides, such as those located at:

- www.lg.com/us/mobile-phones/
- www.lg.com/us/cell-phones/lg-P930-nitro
- www.lg.com/us/search.lg?search=lte
- www.lg.com/us/support/manuals-documents
- www.youtube.com
- www.youtube.com/watch?v=T_km8oZ2g98
- www.youtube.com/watch?v=841dtKrpz5U
- www.youtube.com/watch?v=ybG8iWK4e2I
- www.youtube.com/watch?v=zOxdt2vY6_s
- www.youtube.com/watch?v=kW1MlrDbJQE

- www.youtube.com/watch?v=HOukPxjIHRw
- www.youtube.com/watch?v=gtk65-NqZBc
- www.youtube.com/watch?v=NvlvPgGUspw
- www.youtube.com/watch?v=KD3GSzOBuUo
- www.youtube.com/watch?v=4u5JQRQibBw

LG is thereby liable for infringement of the ’487 Patent under 35 U.S.C. § 271(b).

25. LG has also contributed, and continues to contribute, to the infringement of the ’487 patent by others by offering to sell, selling and importing the Accused Infringing Devices knowing that the devices are used as described above in practicing the processes, or using the systems, of the ’487 patent, and constitute a material part of the invention. LG knows that the software used by LG and its customers to perform the infringing functionality is a material part of the invention, as it is essential to the ability of the Accused Infringing Devices to perform the infringing functionality, has no substantial non-infringing use and is not a staple article or a commodity of commerce suitable for substantial noninfringing use. LG is thereby liable for infringement of the ’487 Patent under 35 U.S.C. § 271(c).

26. LG will have been on notice of the ’487 Patent since, at the latest, the service of the Original Complaint upon it in this case. By the time of trial, LG will have known and intended (since receiving such notice) that its continued encouragement and instructions to use the Accused Infringing Devices in an infringing manner would contribute to and induce those acts by others, including its customers. Despite that knowledge, and as further evidence of its intent, LG has refused to discontinue its infringing acts and to remove the infringing functionality from the Accused Infringing Devices, or otherwise place a non-infringing limit on their use.

27. LG may have infringed the ’487 Patent through other software and devices utilizing the same or reasonably similar functionality, including other versions of the Accused Infringing Devices.

28. Uniloc has been damaged by LG’s infringement of the ’487 Patent.

PRAYER FOR RELIEF

Uniloc requests that the Court enter judgment against LG:

(A) declaring that LG has infringed the ’487 Patent;

(B) awarding Uniloc its damages suffered as a result of LG’s infringement of the ’487 Patent;

(C) awarding Uniloc its costs, attorneys’ fees, expenses, and interest, and

(D) granting Uniloc such further relief as the Court finds appropriate.

DEMAND FOR JURY TRIAL

Uniloc demands trial by jury, under Fed. R. Civ. P. 38.

Date: July 2, 2018.

Respectfully submitted,

/s/ Kevin Gannon

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ATTORNEYS FOR THE PLAINTIFFS

CERTIFICATE OF SERVICE

I hereby certify that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on July 2, 2018.

/s/ Kevin Gannon
Kevin Gannon