Plaintiff Cellular Transitions, LLC ("CellTran"), by and through the undersigned counsel, hereby brings this action and makes the following allegations of patent infringement relating to U.S. Patent Nos. 8,855,637 ("the '637 patent") and 9,888,425 ("the '425 patent") against Razer USA Ltd. ("Razer"), and alleges as follows upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters:

NATURE OF THE ACTION

1. This is an action for patent infringement. CellTran alleges that Razer infringes one or more claims of the '637 patent and the '425 patent, copies of which are attached as Exhibits A-B, respectively (collectively "the Asserted Patents").

THE PARTIES

- 2. Plaintiff CellTran is a Texas limited liability company with its principal place of business in Plano, Texas.
- 3. Upon information and belief, Defendant Razer USA Ltd., is a Delaware corporation with a regular and established place of business at 9 Pasteur, Suite 100, Irvine, California 92618. Razer may be served with process through its registered agent, Michael Dilmagani, 9 Pasteur, Suite 100, Irvine California 92618.

JURISDICTION AND VENUE

- 4. This action for patent infringement arises under the Patent Laws of the United States, 35 U.S.C. § 1 et. seq. This Court has original jurisdiction under 28 U.S.C. §§ 1331 and 1338.
- 5. This Court has both general and specific personal jurisdiction over Razer because Razer has committed acts within this District giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over Razer would not offend traditional notions of fair play and substantial justice. Razer, directly and through subsidiaries and intermediaries (including distributors, retailers, franchisees and others), has committed and

continues to commit acts of infringement in this District by, among other things, making, using, testing, selling, importing, and/or offering for sale products that infringe the Asserted Patents.

6. Venue is proper in this district and division under 28 U.S.C. §§ 1391(b)-(d) and 1400(b) because Razer has committed acts of infringement in the Central District of California and has a regular and established place of business in the Central District of California.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,855,637

- 7. The allegations of paragraphs 1-6 of this Complaint are incorporated by reference as though fully set forth herein.
- CellTran owns by assignment the entire right, title, and interest in the 8. '637 patent.
- 9. The '637 patent was issued by the United States Patent and Trademark Office on October 7, 2014, and is titled "Methods and Apparatus for Performing Handoff Based on the Mobility of a Subscriber Station." A true and correct copy of the '637 patent is attached as Exhibit A.
- Upon information and belief, Razer has infringed at least claim 13 of 10. the '637 patent by making, using, testing, selling, offering for sale, importing and/or licensing in the United States licensed assisted access (LAA) mobile devices, including at least the Razer Phone (collectively the "Accused Infringing Devices") in an exemplary manner as described below.
- 11. The Accused Infringing Devices are subscriber stations sometimes referred to as user equipment ("UE"), which support LTE-Advanced connectivity and LAA technology.

26

27

Razer Phone

Featuring a Snapdragon 835 mobile platform.

Experience lightning-fast performance with the latest Qualcomm Snapdragon 835 with 8GB of RAM, and best-in-class thermal design. Capture the perfect shot with 12MP dual cameras featuring f1.7 wide angle lens and 2x telephoto lens. Backed by a powerful 4000mAh battery, you have the power to last all day.

https://www.qualcomm.com/snapdragon/smartphones/razer-phone https://support.razer.com/mobile/razer-phone

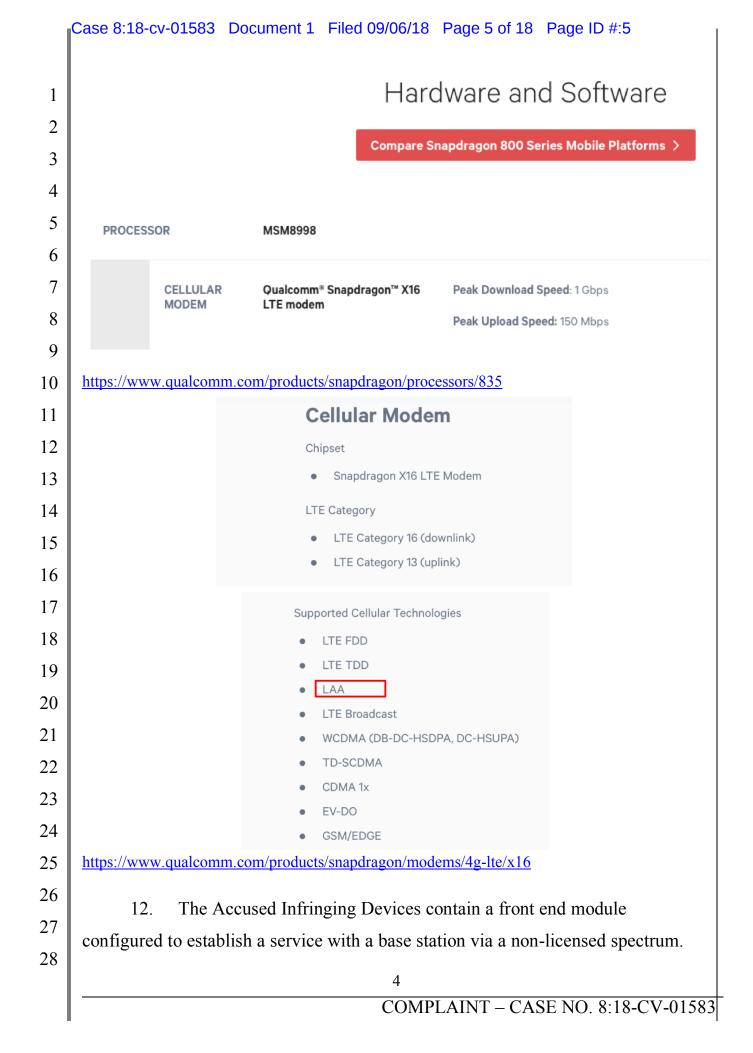
Qualcomm
Snapdragon 835 Mobile Platform

Snapdragon 835 Mobile Platform

Snapdragon 835 Mobile Platform

With an advanced 10-nanometer design, the Qualcomm® Snapdragon™ 835 mobile platform can support phenomenal mobile performance. It is 35% smaller and uses 25% less power than previous designs, and is engineered to deliver exceptionally long battery life, lifelike VR and AR experiences, cutting-edge camera capabilities and Gigabit Class download speeds.

Qualcomm Snapdragon processors are a product of Qualcomm Technologies. Inc.



For example, the Accused Infringing Devices contain front end components that convert information into radio signals that can be transmitted and received over the air.

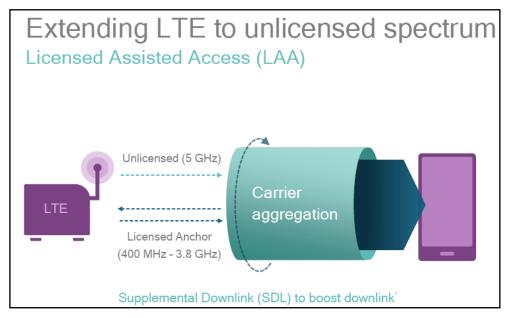
RFFE (RF Front-End):

2.5

<u>RF Front End</u> (RFFE) refers to a set of mobile device components that convert information into radio signals that can be transmitted and received over the air. RFFE components work in conjunction with a device's modem and antenna.

https://www.qualcomm.com/news/onq/2017/02/23/mwc-2017-fundamentals-cheat-sheet

13. Being LAA-enabled UE, the Accused Infringing Devices are configured to establish a service with a base station ("eNB") in a non-licensed (alternatively referred to as "unlicensed") spectrum.



https://www.qualcomm.com/media/documents/files/laa-webinar-feb-2016.pdf

14. The Accused Infringing Devices contain a mobility monitoring module. For example, the Accused Infringing Devices include a mobility monitoring module within its cellular baseband processor, such as the Qualcomm Snapdragon x16 LTE modem.

https://www.qualcomm.com/news/onq/2017/10/13/lg-v30-and-snapdragon-835-unite-premium-photography-security-and-mobile-vr

1	15. The mobility monitoring module in the Accused Infringing Devices is			
2	configured to determine a first value of a mobility factor indicative of a relative			
3	motion of the subscriber station communicating using non-licensed spectrum. For			
4	example, the Accused Infringing Devices will make radio resource management			
5	measurements representing one or more values of a mobility factor and report them			
6	to LTE LAA-enabled base stations.			
7	5.5 Measurements			
8	5.5.1 Introduction			
9	The UE reports measurement information in accordance with the measurement configuration as provided by E- UTRAN. E-UTRAN provides the measurement configuration applicable for a UE in RRC_CONNECTED by means of dedicated signalling, i.e. using the RRCConnectionReconfiguration or RRCConnectionResume message.			
11	The UE can be requested to perform the following types of measurements:			
12	 Intra-frequency measurements: measurements at the downlink carrier frequency(ies) of the serving cell(s). 			
13	 Inter-frequency measurements: measurements at frequencies that differ from any of the downlink carrier frequency(ies) of the serving cell(s). 			
14	 Inter-RAT measurements of UTRA frequencies. 			
	 Inter-RAT measurements of GERAN frequencies. 			
15	 Inter-RAT measurements of CDMA2000 HRPD or CDMA2000 1xRTT or WLAN frequencies. 			
16	ETSI TS 136 331 V13.8.1 (2018-01)			
17	144.5.//			
18	https://www.etsi.org/deliver/etsi_ts/136300_136399/136331/13.08.01_60/ts_13633 1v130801p.pdf			
19				
20	16. The mobility monitoring module in the Accused Infringing Devices is			
21	configured to determine availability of the service via a licensed spectrum. For			

inging Devices is pectrum. For example, the mobility monitoring module within the Qualcomm Snapdragon processors within the Accused Infringing Devices is also configured to communicate with a base station ("eNB") in a licensed spectrum to determine availability of the service.

27

26

22

23

24

25

28

17. The front end module in the Accused Infringing Devices is further configured to initiate transfer of the service to the licensed spectrum associated with the base station if the first value of the mobility factor indicates that the subscriber station has been in a high mobility state for at least a predetermined period of time. For example, an Accused Infringing Device ("UE") will trigger a measurement event that produces measurement results which, when processed by the base station ("eNB"), indicate that the UE is in a high mobility state, e.g., a UE's measurement results may indicate fast signal fades or rapidly increasing (or decreasing) received power from a neighbor cell (or serving cell). The reporting of these measurements by the UE's front end module will initiate a transfer of the service to the licensed spectrum. The UE will not report measurement results unless the UE has experienced conditions for triggering a measurement event for a predetermined period of time (referred to as the TimeToTrigger).

15

16

17

18

19

20

21

22

23

24

25

26

27

Case 8:18-cv-01583 Document 1 Filed 09/06/18 Page 9 of 18 Page ID #:9

the '637 patent by making, using, testing, selling, offering for sale, importing

19. 20. 21. '425 patent. 22.

and/or licensing the Accused Infringing Devices.

Razer's acts of direct infringement have caused, and continue to cause, damage to CellTran, and CellTran is entitled to recover damages sustained as a result of Razer's wrongful acts in an amount subject to proof at trial.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,888,425

- The allegations of paragraphs 1-6 of this Complaint are incorporated by reference as though fully set forth herein.
- CellTran owns by assignment the entire right, title, and interest in the
- The '425 patent was issued by the United States Patent and Trademark Office on February 6, 2018, and is titled "Methods and Apparatus for Performing Handoff Based on the Mobility of a Subscriber Station." A true and correct copy of the '425 patent is attached as Exhibit B.
- 23. Upon information and belief, Razer has infringed at least claim 7 of the '425 patent by making, using, testing, selling, offering for sale, importing and/or licensing in the United States licensed assisted access (LAA) mobile devices, including at least the Razer Phone (collectively the "Accused Infringing Devices") in an exemplary manner as described below.
- 24. The Accused Infringing Devices are subscriber stations sometimes referred to as user equipment ("UE"), which support LTE-Advanced connectivity and LAA technology.

22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

23

24

25 26

27

13:37
WEDNESDAY, NOTAMBERS

IMARGENCY

Razer Phone

Featuring a Snapdragon 835 mobile platform.

Experience lightning-fast performance with the latest Qualcomm Snapdragon 835 with 8GB of RAM, and best-in-class thermal design. Capture the perfect shot with 12MP dual cameras featuring f1.7 wide angle lens and 2x telephoto lens. Backed by a powerful 4000mAh battery, you have the power to last all day.



https://www.qualcomm.com/snapdragon/smartphones/razer-phone https://support.razer.com/mobile/razer-phone

Qualcomm

Snapdragon 835 Mobile Platform

Snapdragon 835 Mobile Platform

With an advanced 10-nanometer design, the Qualcomm® Snapdragon™ 835 mobile platform can support phenomenal mobile performance. It is 35% smaller and uses 25% less power than previous designs, and is engineered to deliver exceptionally long battery life, lifelike VR and AR experiences, cutting-edge camera capabilities and Gigabit Class download speeds.

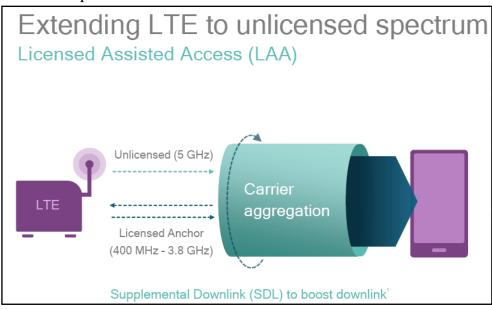
transmit a message to the base station to determine availability of the service via a non-licensed (alternatively referred to as "unlicensed") spectrum. For example, the Accused Infringing Devices contain front end components that convert information into radio signals that can be transmitted and received over the air.

RFFE (RF Front-End):

<u>RF Front End</u> (RFFE) refers to a set of mobile device components that convert information into radio signals that can be transmitted and received over the air. RFFE components work in conjunction with a device's modem and antenna.

 $\frac{https://www.qualcomm.com/news/onq/2017/02/23/mwc-2017-fundamentals-cheat-sheet}{}$

26. Being LAA-enabled UE, the Accused Infringing Devices are configured to establish a service with a base station ("eNB") in a licensed spectrum and to transmit a message to the base station to determine availability of the service via a non-licensed spectrum.



https://www.qualcomm.com/media/documents/files/laa-webinar-feb-2016.pdf

 $\underline{https://www.qualcomm.com/documents/progress-laa-and-its-relationship-lte-u-and-multefire}$

27. The Accused Infringing Devices contain a mobility monitoring module. For example, the Accused Infringing Devices include a mobility monitoring module within its cellular baseband processor, such as the Qualcomm Snapdragon x16 LTE modem.

 $\frac{https://www.qualcomm.com/news/onq/2017/10/13/lg-v30-and-snapdragon-835-unite-premium-photography-security-and-mobile-vr}{}$

28. The Accused Infringing Devices contain a mobility monitoring module configured to determine a first value of a mobility factor of the subscriber station wherein the mobility factor is determined from values of one or more metrics concerning communications between the base station and the subscriber station. For example, the Accused Infringing Devices will make radio resource management measurements representing values of one or more metrics that are reported to LTE LAA-enabled base stations.

27

12

13

14

15

16

17

18

19

20

21

22

23

24

2.5

26

27

Gase 8:18-cv-01583 Document 1 Filed 09/06/18 Page 16 of 18 Page ID #:16

3 4

6 7

5

9

8

10 11

12

13 14

15 16

17

18

19 20

21

22 23

24

25

26

27

28

30. The Accused Infringing Devices initiate transfer of the service from the licensed spectrum to the non-licensed spectrum associated with the base station based on the first value of the mobility factor. For example, an Accused Infringing Device ("UE") can initiate transfer of the service from a licensed to non-licensed spectrum via a measurement report triggering event. One such exemplary triggering is Event A3, which specifies that a UE will initiate transfer if RRC conditions for a neighbor cell (a Secondary Cell ("SCell") on non-licensed spectrum) become better than those of the Primary Cell ("PCell") (on licensed spectrum) to which the UE is presently camped.

5.5.4 Measurement report triggering

5.5.4.1 General

If security has been activated successfully, the UE shall:

1> for each measId included in the measIdList within VarMeasConfig:

2> if the triggerType is set to event and if the entry condition applicable for this event, i.e. the event corresponding with the eventId of the corresponding reportConfig within VarMeasConfig, is fulfilled for one or more applicable cells for all measurements after layer 3 filtering taken during timeToTrigger defined for this event within the VarMeasConfig, while the VarMeasReportList does not include an measurement reporting entry for this measId (a first cell triggers the event):

ETSI TS 136 331 V13.8.1 (2018-01)

- 31. Razer has thus infringed and continues to infringe at least claim 7 of the '425 patent by making, using, testing, selling, offering for sale, importing and/or licensing the Accused Infringing Devices.
- Razer's acts of direct infringement have caused, and continue to cause, 32. damage to CellTran, and CellTran is entitled to recover damages sustained as a result of Razer's wrongful acts in an amount subject to proof at trial.

PRAYER FOR RELIEF

WHEREFORE, CellTran, respectfully prays that the Court enter judgment in its favor and against Razer as follows:

A judgment that Razer has infringed the '637 patent;

1	b.	b. A judgment that Razer has infringed the '425 patent;			
2	c.	c. A judgment that CellTran be awarded damages adequate to			
3	compensate it for Razer's past infringement and any continuing or future				
4	infringement of the '637 patent and the '425 patent, including pre-judgment and				
5	post-judgment interest costs and disbursements as justified under 35 U.S.C. § 284				
6	and an accounting;				
7	d.	That CellTran be granted its reasonable attorneys' fees in this			
8	action;				
9	e.	That this Court award CellTran its costs; and			
10	f.	f. That this Court award CellTran such other and further relief as			
11	the Court deems proper.				
12	DEMAND FOR JURY TRIAL				
13	Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, CellTran				
14	demands a trial by jury for all issues so triable.				
15	5 1 6				
16	Dated: Septemer 6, 2018		FEINBERG DAY ALBERTI LIM & BELLOLI LLP		
17					
18	By: /s/ M. Elizabeth Day M. Elizabeth Day				
19			-		
20			Attorneys for Plaintiff Cellular Transitions, LLC		
21			Condida Transitions, EDC		
22					
23					
24					
25					
26					
27					
28			17		
			COMPLAINT – CASE NO. 8:18-CV-01583		