## IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

MOD STACK LLC,	
Plaintiff,	CASE NO. 2:16-cv-797
v. CALIX, INC.,	PATENT CASE
Defendant.	JURY TRIAL DEMANDED

#### **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Mod Stack LLC files this Complaint for Patent Infringement against Calix, Inc., and would respectfully show the Court as follows:

#### I. THE PARTIES

- 1. Plaintiff Mod Stack LLC ("Mod Stack" or "Plaintiff") is a Texas limited liability company with its principal place of business in the Eastern District of Texas at 2150 S. Central Expy, McKinney, Texas 75070.
- 2. On information and belief, Defendant Calix, Inc. ("Defendant"), is a Delaware corporation with a place of business at 1035 N. McDowell Blvd., Petaluma, CA 94954.

### II. JURISDICTION AND VENUE

- 3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction of such action under 28 U.S.C. §§ 1331 and 1338(a).
- 4. On information and belief, Defendant is subject to this Court's specific and general personal jurisdiction, pursuant to due process and the Texas Long Arm Statute, due at

least to its substantial business in this forum, including at least a portion of the infringements alleged herein.

- 5. Without limitation, on information and belief, within this state, Defendant has used the patented inventions thereby committing, and continuing to commit, acts of patent infringement alleged herein. In addition, on information and belief, Defendant has derived substantial revenues from its infringing acts occurring within the State of Texas and this District. Further, on information and belief, Defendant is subject to the Court's general jurisdiction, including from regularly doing or soliciting business, engaging in other persistent courses of conduct, and deriving substantial revenue from goods and services provided to persons or entities in the State of Texas and in this District. Further, on information and belief, Defendant is subject to the Court's personal jurisdiction at least due to its sale of products and/or services within the State of Texas and within this District. Defendant has committed such purposeful acts and/or transactions in the State of Texas and in this District such that it reasonably should know and expect that it could be haled into this Court as a consequence of such activity.
- 6. Venue is proper in this district under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). On information and belief, Defendant has sufficient contacts with the State of Texas and this District such that this Court is a fair and reasonable venue for the litigation of this action. On information and belief, from and within this District Defendant has committed at least a portion of the infringements at issue in this case. In addition, on information and belief, Defendant has derived substantial revenues from its infringing acts and is subject to personal jurisdiction in this District for at least the reasons identified above, including due at least to its offering for sale and sale of products and/or services within the State of Texas and from this District.

7. For these reasons, personal jurisdiction exists and venue is proper in this Court under 28 U.S.C. §§ 1391(b) and (c) and 28 U.S.C. § 1400(b).

# III. <u>COUNT I</u> (PATENT INFRINGEMENT OF UNITED STATES PATENT NO. 7,460,520)

- 8. Plaintiff incorporates the above paragraphs herein by reference.
- 9. On December 2, 2008, United States Patent No. 7,460,520 ("the '520 Patent") was duly and legally issued by the United States Patent and Trademark Office. The '520 Patent is titled "Apparatus and Method for Using Multiple Call Controllers of Voice-Band Calls." The '520 patent issued from Application No. 10/463,964 filed on June 18, 2003, and is related to Provisional Application No. 60/427,804 filed on November 20, 2002. A true and correct copy of the '520 Patent is attached hereto as Exhibit A and incorporated herein by reference.
- 10. Mod Stack is the assignee of all right, title and interest in the '520 patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the '520 Patent. Accordingly, Plaintiff possesses the exclusive right and standing to prosecute the present action for infringement of the '520 Patent by Defendant.
- 11. The invention of the '520 patent is generally directed to systems for supporting multiple call controllers of voice-band calls. In the past, circuit-switched networks were used to carry voice traffic from one subscriber to another, while separate packet-switched networks were used to carry data traffic. Two networks were used because the existing protocols and technology available for packet networks did not provide certain characteristics necessary for voice-band calls, such as low latency and deterministic quality of service. Improvements in packet network protocols and technology which address these deficiencies allow a new kind of packet network, sometimes called a "converged network," to carry both voice and data traffic.

- 12. The equipment that interfaces a converged packet network with a circuit-switched network is referred to as a "voice gateway." The voice gateway interfaces with one or more call controllers on its trunk side, and with one or more integrated access devices (IADs) on its subscriber side. The IAD provides a link to the packet network and to the voice gateway for multiple subscribers. The call controller directs the voice gateway to make voice connections. In a circuit-switched network, call control is performed by a telephony switch. In a convergence packet-network, call control is performed by a "softswitch." Several different call control protocols are in use by different switches.
- 13. Migrating from the circuit-switched network to the converged network is an evolutionary process, so that for some period of time many customers will be reachable only through a circuit-switched network. Yet all customers expect the ability to call from one telephone to any other telephone, regardless of what type of network the originating and terminating telephones are located on. Converged networks therefore need to interface with circuit-switched networks as well as other converged networks. In view of this, the inventors of the '520 patent recognized the need for a voice gateway which can support multiple call control protocols and interface with different types of telephony switches and different types of softswitches, simultaneously. The inventors therefore invented the apparatuses and methods disclosed in the claims of the '520 patent.
- 14. **Direct Infringement.** Upon information and belief, Defendant has been and now is directly infringing at least claim 1 of the '520 patent in the State of Texas, in this District, and elsewhere in the United States, by actions comprising making, using, selling, and/or offering for sale an apparatus for connecting a local packet network ("LPN") and a circuit-switched network, including Calix C7 TDM Gateway devices ("Accused Instrumentality").

- 15. The Accused Instrumentality provides an interconnect between PSTN and various IP endpoints, and between IP endpoints and PSTN to enable communication between a circuit-switched telephony network and Session Initiated Protocol (SIP) compatible remote devices such as IP phones. The Accused Instrumentality brings PSTN subscribers into the IP core and provides a bridge between circuit- and packet-based networks. The Accused Instrumentality supports call routing such as from PSTN-to-IP and IP-to-PSTN.
- 16. The Accused Instrumentality has a first protocol endpoint configured to receive a first external call control message of a first protocol from a first call controller associated with the circuit-switched network, for example a call control message from a T1 connection using a QSIG protocol. The Accused Instrumentality maps the first external call control message to one corresponding first internal call control message of an internal protocol.
- 17. The Accused Instrumentality has a second protocol endpoint configured to receive at least one second external call control message of a second protocol from an integrated access device (IAD) associated with the LPN, such as a call control message from a VoIP using an SIP protocol. The Accused Instrumentality maps the second external call control message to a corresponding second internal call control message of an internal protocol.
- 18. The Accused Instrumentality has a protocol adapter configured to receive the first and the second internal call control messages and to route the first internal call control message to the second protocol endpoint and the second internal call control message to the first protocol endpoint. For example, for a connection between a TDM endpoint and a VoIP endpoint, a first internal call message from the TDM endpoint would be routed through a protocol adaptor to the VoIP endpoint and a second internal message from the VoIP endpoint would be routed through protocol adapter to the TDM endpoint.

- 19. The first protocol endpoint of the Accused Instrumentality is further configured to receive the second internal call control message and to map the second internal call control message to a third external call control message of the first protocol. For example, for a connection between TDM and VoIP, the second internal call control message for the VoIP connection to the TDM would be mapped to a third external call control message of the first protocol at the TDM interface.
- 20. The second protocol endpoint of the Accused Instrumentality is further configured to receive at least one first internal call control message and to map at least one first internal call control message to a fourth external call control message of the second protocol. For example, for a connection between VoIP and TDM, the first internal call control message for the TDM connection to the VoIP would be mapped to a fourth external call control message of the second protocol at the VoIP interface.
- 21. At a minimum, Defendant has used the accused instrumentality by performing testing and usage of its Accused Instrumentality, for example for connection between TDM and VoIP. Defendant has promoted the infringing use above, for example through advertising the use of the Accused Instrumentality to connect a LPN and a circuit-switched network.
- 22. Plaintiff has been damaged as a result of Defendant's infringing conduct. Defendant is thus liable to Plaintiff for damages in an amount that adequately compensates Plaintiff for such Defendant's infringement of the '520 patent, *i.e.*, in an amount that by law cannot be less than would constitute a reasonable royalty for the use of the patented technology, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.
- 23. On information and belief, Defendant will continue its infringement of one or more claims of the '520 patent unless enjoined by the Court. Each and all of the Defendant's

infringing conduct thus causes Plaintiff irreparable harm and will continue to cause such harm

without the issuance of an injunction.

24. On information and belief, Defendant has had at least constructive notice of the

'520 patent by operation of law, and there are no marking requirements that have not been

complied with.

VI. <u>JURY DEMAND</u>

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of

any issues so triable by right.

VII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that the Court find in its favor and against

Defendant, and that the Court grant Plaintiff the following relief:

a. Judgment that one or more claims of United States Patent No. 7,460,520 have

been infringed, either literally and/or under the doctrine of equivalents, by

Defendant;

b. Judgment that Defendant account for and pay to Plaintiff all damages to and costs

incurred by Plaintiff because of Defendant's infringing activities and other

conduct complained of herein;

c. That Plaintiff be granted pre-judgment and post-judgment interest on the damages

caused by Defendant's infringing activities and other conduct complained of

herein;

d. That Defendant be permanently enjoined from any further activity or conduct that

infringes one or more claims of United States Patent No. 7,460,520; and

e. That Plaintiff be granted such other and further relief as the Court may deem just

and proper under the circumstances.

Dated: July 19, 2016 Respectfully submitted,

/s/ David R. Bennett

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