

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

**QoS IP, LLC,**

**Plaintiff**

v.

**ZYXEL COMMUNICATIONS, INC.  
and ZYXEL COMMUNICATIONS  
CORPORATION,**

**Defendants.**

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**CASE NO. 6:16-cv-01353-JRG-KNM**

**PLAINTIFF’S FIRST AMENDED COMPLAINT AND JURY DEMAND**

Plaintiff QoS IP, LLC (“QoS”) alleges as follows as its First Amended Complaint for patent infringement against ZyXEL Communications, Inc. and ZyXEL Communications Corporation (collectively, “ZyXEL”):

**THE PARTIES**

1. Plaintiff QoS is a Texas limited liability company with its headquarters and principal place of business at 1400 Preston Road, Suite 475, Plano, Texas 75093.
2. Defendant ZyXEL Communications, Inc. is a corporation organized and existing under the laws of the State of California with its principal place of business located at 1130 N. Miller Street, Anaheim, California, 92806. ZyXEL Communications, Inc. and may be served through its agent for service of process, Jeremy Chou, at 1130 N. Miller Street, Anaheim, California, 92806.
3. Defendant ZyXEL Communications Corporation is a Taiwanese corporation with its principal office at No 2, Industry East RD. IX, Hsinchu Science Park, Hsinchu,

30075, Taiwan, ROC.

4. ZyXEL waived service of process and currently is scheduled to respond to QoS's Original Complaint on or before February 17, 2017.

### **JURISDICTION AND VENUE**

5. QoS brings this action for patent infringement under the United States Patent Act, namely 35 U.S.C. §§ 271, 281, and 284-285, among other laws. This Court has subject-matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), and 1367.

6. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(c) and 1400(b). Defendants do business in this judicial district, have committed acts of infringement in this judicial district, have purposely transacted business in this judicial district involving the accused products, and/or, have regular and established places of business in this judicial district.

7. Defendants are subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long-Arm Statute, due at least to its substantial business in this State and judicial district, including at least part of its infringing activities and regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from goods sold and services provided to Texas residents.

### **COUNT I (INFRINGEMENT OF U.S. PATENT NO. 7,385,982)**

8. QoS incorporates paragraphs 1 through 6 herein by reference.

9. QoS is the owner, by assignment, of U.S. Patent No. 7,385,982 (the "982

Patent”), titled “SYSTEMS AND METHODS FOR PROVIDING QUALITY OF SERVICE (QoS) IN AN ENVIRONMENT THAT DOES NOT SUPPORT QoS FEATURES.”

10. A true and correct copy of the '982 Patent is attached as Exhibit A.

11. As the owner of the '982 Patent, QoS holds all substantial rights in and under the '982 Patent, including the right to grant sublicenses, exclude others, and to enforce, sue, and recover damages for past and future infringement.

12. The United States Patent Office granted the '982 Patent on June 10, 2008.

13. The '982 Patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

14. ZyXEL is practicing one or more claims of the '982 Patent, including at least claims 1 and 13, by making, using, offering for sale, selling and/or importing products that include systems and perform methods of providing quality of service based upon non-QoS information.

15. ZyXEL has no consent or authorization to practice the '982 Patent.

16. ZyXEL infringes the '982 Patent directly and indirectly by making, using, selling, offering to sell, and/or importing, without limitation, the ZyXEL XS3900 Series switches (the “Accused Products”) including the ZyXEL XS3900-48F switch.

17. ZyXEL makes, uses, sells, offers to sell, and imports the XS3900 Series switches and substantially similar models having multiple input and output ports for data ingress and egress.

18. ZyXEL's XS3900 Series switch examines received packet information

including source and/or destination address information in order to apply QoS policies.

**ZyXEL XS3900-48F**

48-port 10GbE Top-of-rack Switch with 40GbE Uplink



19. On its domestic website ZyXEL describes the XS3900-48F switch as follows:

The ZyXEL XS3900-48F is optimized to deliver the service quality required in demanding converged data center networks. This high-performance ToR switch offers enhanced management of data center traffic with support for Data Center Bridging Exchange (DCBX), 802.1Qaz Enhanced Transmission Selection (ETS) and 802.1Qbb Priority-based Flow Control (PFC) protocols. The switch can discover and communicate with other DCB-enabled network devices with the DCBX protocol, and utilize PFC and ETS to manage, pause and schedule the behavior of different traffic to avoid traffic congestions, ensure lossless operation, and guarantee bandwidth for critical applications.

[http://www.zyxel.com/us/en/products\\_services/xs3900\\_series.shtml?t=p&tabOrder=1](http://www.zyxel.com/us/en/products_services/xs3900_series.shtml?t=p&tabOrder=1)

20. ZyXELGuard.com, ZyXEL’s “Authorized Online Reseller” located in Irvine, California, advertised the XS3900-48F using the same copy and provided pricing:

<b>ZyXEL Products</b>	
<b>ZyXEL XS3900-48F</b>	
ZyXEL XS3900-48F - AC 48-Port SFP+ Layer 2+ Managed 10 Gigabit Switch w/4 QSFP+ 40G Uplinks 1.28TB Switching Fabric (Includes Chassis, Fan, Power Modules. SFP+ and QSFP+ transceivers and Rack Mounts sold separately)	#XS3900-48F List Price: \$14,999.99 <b>Our Price: \$11,950.00</b>
	<a href="#">Add to Cart</a>

21. ZyXEL’s XS3900-48F Series switch employ Enhanced Transmission Selection (ETS) and Data Center Bridging (DCB) to ensure low latency and zero packet

loss.

22. The Enhanced Transmission Selection feature in the XS3900 Series switches is used to allocate bandwidth on converged links in end stations and bridges in a Data Center Bridging environment.

23. XS3900 Series switches classify and queue data for transmission based upon policies applied according to source and/or destination address.

24. In the XS3900 Series switches, a classifier groups traffic into data flows according to non-QoS criteria such as the source or destination address.

25. ZyXEL offered for sale and sold the XS3900-48F switch in the United States. The product datasheet is embossed with ZyXEL's U.S. Copyright notice dated 2013 and notifies of ZyXEL's U.S. trademark registrations:

For more product information, visit us on the web at [www.ZyXEL.com](http://www.ZyXEL.com)



Copyright © 2013 ZyXEL Communications Corp. All rights reserved. ZyXEL, ZyXEL logo are registered trademarks of ZyXEL Communications Corp. All other brands, product names, or trademarks mentioned are the property of their respective owners. All specifications are subject to change without notice.

26. The XS3900-48F User Manual instructs users how to configure the switch day and time for Daylight Savings time, noting the rule for the start of Daylight Saving Time in the United States:

Start Date	<p>Configure the day and time when Daylight Saving Time starts if you selected <b>Daylight Saving Time</b>. The time is displayed in the 24 hour format. Here are a couple of examples:</p> <p>Daylight Saving Time starts in most parts of the United States on the second Sunday of March. Each time zone in the United States starts using Daylight Saving Time at 2 A.M. local time. So in the United States you would select <b>Second, Sunday, March</b> and <b>2:00</b>.</p> <p>Daylight Saving Time starts in the European Union on the last Sunday of March. All of the time zones in the European Union start using Daylight Saving Time at the same moment (1 A.M. GMT or UTC). So in the European Union you would select <b>Last, Sunday, March</b> and the last field depends on your time zone. In Germany for instance, you would select <b>2:00</b> because Germany's time zone is one hour ahead of GMT or UTC (GMT+1).</p>
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27. ZyXEL sold and offered to sell the Accused Product in the United States.

28. Since December 2, 2016, when QoS filed its original complaint in this case, ZyXEL has known about the '982 Patent and the acts, structures, and methods that QoS accuses of infringing. Despite having such knowledge of infringement, ZyXEL continued to market the Accused Products through distributors in the United States.

29. In addition to its authorized reseller, ZyXELGuard.com, the ZyXEL Accused Products have been available in the United States through Office Depot; RJI Technology Integration; and B&H Photo & Electronics Corp.

30. QoS contends ZyXEL indirectly infringes the '982 Patent by encouraging, directing, aiding and abetting distributors such as those listed to sell and offer to sell the Accused Products in or from the United States. ZyXEL induces infringement by end users and system integrators who use the Accused Products to practice the claimed methods or use the Accused Products in claimed systems.

31. ZyXEL instructs and encourages end users and administrators of the Accused Products to use the ETS and DCBX features.

32. ZyXEL knowingly induces users to infringe the '982 Patent by encouraging, aiding and abetting the installation, configuration, deployment, use, and operation of the Accused Products.

33. The ZyXEL XS3900-48F User Guide provides the two-step instructional process for using non-QoS information to classify traffic:

## **18.1 About the Classifier and QoS**

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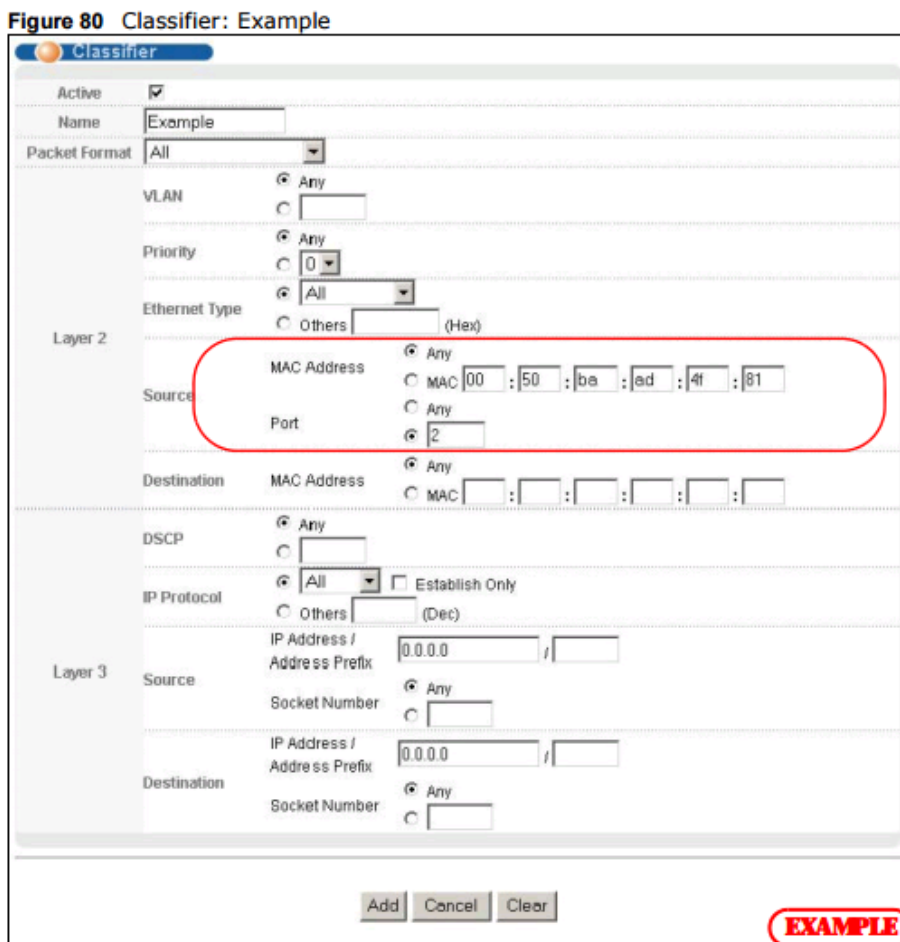
Configure QoS on the Switch to group and prioritize application traffic and fine-tune network performance. Setting up QoS involves two separate steps:

- 1 Configure classifiers to sort traffic into different flows.
- 2 Configure policy rules to define actions to be performed for a classified traffic flow (refer to [Chapter 19 on page 157](#) to configure policy rules).

34. An example in ZyXEL’s XS3900 manual provides instructions on how to configure the classifier based upon address information:

### 18.4 Classifier Example

The following screen shows an example of configuring a classifier that identifies all traffic from MAC address 00:50:ba:ad:4f:81 on port 2.



After you have configured a classifier, you can configure a policy to define action(s) on the classified traffic flow. See [Chapter 19 on page 157](#) for information on configuring a policy rule.

35. ZyXEL instructs users how to set priority based upon address information to

classify traffic flow using DCBX and ETS.

36. ZyXEL's step-by-step instructions direct users and administrators of the Accused Products to perform the functions and carry out the operations described here.

37. Since learning about the '982 Patent, QoS's infringement allegations, and the specific acts and functionality accused of infringing the '982 Patent, ZyXEL has made no effort to modify its instructions or the Accused Products to avoid infringement.

38. ZyXEL has not deactivated the functionality of the Accused Products identified in QoS's complaint as infringing the '982 Patent, and ZyXEL has provided no instructions to users about how to avoid infringing the '982 Patent.

39. ZyXEL's knowledge of the '982 Patent and QoS's infringement allegations combined with its knowledge of the Accused Products and how they are used to infringe the '982 Patent, consistent with ZyXEL's instructions to users, demonstrate ZyXEL's specific intent to infringe the '982 Patent.

40. ZyXEL directly infringes at least claims 1 and 13 by using, importing, selling, and offering for sale the XS3900 Series switches.

41. As a result of ZyXEL's infringing conduct, QoS has been harmed. ZyXEL is thus liable to QoS in an amount that adequately compensates for ZyXEL's infringement, which compensation cannot be less than a reasonable royalty together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**NOTICE OF REQUIREMENT OF LITIGATION HOLD**

42. Defendants are hereby notified it is legally obligated to locate, preserve, and maintain all records, notes, drawings, documents, data, communications, materials,



electronic recordings, audio/video/photographic recordings, and digital files, including edited and unedited or “raw” source material, and other information and tangible things that Defendants know, or reasonably should know, may be relevant to actual or potential claims, counterclaims, defenses, and/or damages by any party or potential party in this lawsuit, whether created or residing in hard copy form or in the form of electronically stored information (hereafter collectively referred to as “Potential Evidence”).

43. As used above, the phrase “electronically stored information” includes without limitation: computer files (and file fragments), e-mail (both sent and received, whether internally or externally), information concerning e-mail (including but not limited to logs of e-mail history and usage, header information, and deleted but recoverable e-mails), text files (including drafts, revisions, and active or deleted word processing documents), instant messages, audio recordings and files, video footage and files, audio files, photographic footage and files, spreadsheets, databases, calendars, telephone logs, contact manager information, internet usage files, and all other information created, received, or maintained on any and all electronic and/or digital forms, sources and media, including, without limitation, any and all hard disks, removable media, peripheral computer or electronic storage devices, laptop computers, mobile phones, personal data assistant devices, Blackberry devices, iPhones, video cameras and still cameras, and any and all other locations where electronic data is stored. These sources may also include any personal electronic, digital, and storage devices of any and all of Defendants’ agents, resellers, or employees if Defendants’ electronically stored information resides there.

44. Defendants are hereby further notified and forewarned that any alteration,

destruction, negligent loss, or unavailability, by act or omission, of any Potential Evidence may result in damages or a legal presumption by the Court and/or jury that the Potential Evidence is not favorable to Defendants' claims and/or defenses. To avoid such a result, Defendants' preservation duties include, but are not limited to, the requirement that Defendants immediately notify its agents and employees to halt and/or supervise the auto-delete functions of Defendants' electronic systems and refrain from deleting Potential Evidence, either manually or through a policy of periodic deletion.

### **JURY DEMAND**

45. QoS hereby demands a trial by jury on all claims, issues and damages so triable.

### **PRAYER FOR RELIEF**

QoS prays for the following relief:

- a. That ZyXEL be summoned to appear and answer;
- b. That the Court enter an order declaring that Defendants have infringed the '982 Patent;
- c. That this is an exceptional case under 35 U.S.C. § 285;
- d. That the Court grant QoS judgment against Defendants for all actual, consequential, special, punitive, exemplary, increased, and/or statutory damages, including treble damages pursuant to 35 U.S.C. 284 including, if necessary, an accounting of all damages; pre and post-judgment interest as allowed by law; and reasonable attorney's fees, costs, and expenses incurred in this action; and
- e. That QoS be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: February 16, 2017

Respectfully submitted,


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