

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

**REEFEDGE NETWORKS, LLC,**

Plaintiff,

v.

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

Defendants.

Civil Action No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

This is an action for patent infringement in which Plaintiff ReefEdge Networks, LLC makes the following allegations against Defendants ZyXEL Communications Corporation and ZyXEL Communications, Inc.

**PARTIES**

1. Plaintiff ReefEdge Networks, LLC ("ReefEdge" or "Plaintiff") is a Delaware limited liability company having a principal place of business at of 12024 Lake Newport Road, Reston, Virginia 20194-2742.

2. On information and belief, Defendant ZyXEL Communications Corporation ("ZyXEL Taiwan") is a Taiwanese corporation with its principal office at No. 6, Innovation Rd., II Science Park, Hsinchu, 300, Taiwan.

3. On information and belief, Defendant ZyXEL Communications, Inc. ("ZyXEL USA") is a California corporation with its principal office at 1130 North Miller Street Anaheim, California 92806.

4. ZyXEL Taiwan and ZyXEL USA shall be referred to collectively as "ZyXEL" or "Defendants."

**JURISDICTION AND VENUE**

5. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this district under 28 U.S.C. §§ 1391(c) and 1400(b). On information and belief, Defendants have transacted business in this district, and has committed, induced and/or contributed to acts of patent infringement in this district.

7. On information and belief, Defendants are subject to this District's specific and general personal jurisdiction, due at least to its substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in this District.

**BACKGROUND**

8. ReefEdge is the owner by assignment of a patent portfolio claiming technology developed by ReefEdge Networks, Inc. ("ReefEdge Networks"). ReefEdge Networks was founded in 2000 by former executive officers from Fortune 500 companies including AT&T, IBM, and Symantec. ReefEdge Networks was founded in part to develop and market innovative solutions for the seamless user mobility issue in short-range wireless networking environments.

9. ReefEdge Networks was recognized for its innovations in both wireless management and security. For example, in approximately 2003, ReefEdge Networks was the first to develop and market interoperable WLAN switches and access points. ReefEdge Networks was also the first to introduce WLAN switching systems with access point management software for multi-site enterprise deployments. ReefEdge Networks was also a

recognized leader in WLAN security. As an example, ReefEdge Networks' products received Federal Information Processing Standards (FIPS) 140-2, Level 2 certification, from the National Institute of Standards and Technology (NIST), which is a U.S. government computer security standard that specifies requirements for cryptography modules (FIPS 140-2, Level 2 issued on or around 2001). More particularly, ReefEdge Networks received FIPS 140-2, Level 2 certification for the ReefEdge Networks' "Edge Controller 100x" (Software v3.1.3, Hardware v3.0) on or around August 2003 (*see* the certificate: <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140crt/140crt341.pdf>) and for the "Edge Controller 200" (Software version 3.1.3a, Hardware version 2.0) on or around January 2004 (*See* <http://csrc.nist.gov/groups/STM/cmvp/documents/140-1/140crt/140crt377.pdf>). As a result of these certifications, ReefEdge Networks' products were deployed in several military installations.

10. Furthermore, industry leaders such as Cisco Systems, Inc. relied on ReefEdge Networks to fill in their own gaps in security. For example, in 2004, the Cisco Compatible Wireless Security (CCWS) implementation included ReefEdge Networks equipment.

11. The patent portfolio resulting from ReefEdge Networks' innovation includes 9 U.S. issued patents, 16 foreign patents and applications. The portfolio has been cited by over 255 patents.

## COUNT I

### INFRINGEMENT OF U.S. PATENT NO. 6,633,761

12. ReefEdge references and incorporates by reference paragraph 1 through 11 of this Complaint.

13. ReefEdge is the owner by assignment of United States Patent No. 6,633,761 (the "'761 patent"), entitled "Enabling Seamless User Mobility In A Short-Range Wireless Networking Environment." The '761 patent issued on October 14, 2003. A true and correct copy of the '761 patent is included as Exhibit A.

14. ZyXEL has been and still is directly infringing at least claims 13 and 33 of the '761 patent, literally and under the doctrine of equivalents, by making, using, selling, offering to sell, or importing, without license or authority, products and services that enable seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claims 13 and 33 of the '761 patent. By making, using, importing, offering for sale, and/or selling such products and services, and all like products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '761 patent pursuant to 35 U.S.C. § 271(a).

15. ZyXEL has been and still is indirectly infringing, by way of inducing infringement by others of the '761 patent, by, among other things, making, using, importing, offering for sale, and/or selling, without license or authority, products and services that infringe at least claims 13 and 33 of the '761 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices.

For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claims 13 and 33 of the '761 patent. These products and services are made, used, imported, offered for sale, and/or sold by direct infringers of the '761 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.*, [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). Since at least the filing of this complaint, ZyXEL has had knowledge of the '761 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, induce infringement of the '761 patent. Thus, by making, using, importing, offering for sale, and/or selling infringing products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '761 patent under 35 U.S.C. § 271(b).

16. ZyXEL has also been and still is indirectly infringing, by way of contributing to the infringement by others of the '761 patent, by, among other things, making, using, importing, offering for sale, and/or selling, without license or authority, products and services that infringe at least claims 13 and 33 of the '761 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and

related software infringe at least claims 13 and 33 of the '761 patent. These products and services are made, used imported, offered for sale, and/or sold by direct infringers of the '761 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.,* [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). ZyXEL's infringing products and services are a material part of the invention, and are especially made or especially adapted for use in the infringement of the '761 patent and are not a staple article or commodity of commerce suitable for substantial noninfringing uses. Since at least the filing of this complaint, ZyXEL has had knowledge of the '761 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, contribute to the infringement of the '761 patent. Thus, by making, using, importing, offering for sale, and/or selling such products and software, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '761 patent under 35 U.S.C. § 271(c).

17. To the extent that facts learned in discovery show that ZyXEL's infringement of the '761 patent is or has been willful, ReefEdge reserves the right to request such a finding at time of trial.

18. As a result of Defendants' infringement of the '761 patent, ReefEdge has suffered monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court, and ReefEdge will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

19. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '761 patent, ReefEdge will be greatly and irreparably harmed.

**COUNT II**

**INFRINGEMENT OF U.S. PATENT NO. 6,975,864**

20. ReefEdge references and incorporates by reference paragraph 1 through 11 of this Complaint.

21. ReefEdge is the owner by assignment of United States Patent No. 6,975,864 (the "'864 patent"), entitled "Seamless User Mobility In A Short-Range Wireless Networking Environment." The '864 patent issued on December 13, 2005. A true and correct copy of the '864 patent is included as Exhibit B.

22. ZyXEL has been and still is directly infringing at least claim 1 of the '864 patent, literally and under the doctrine of equivalents, by making, using, selling, offering to sell, or importing, without license or authority, products and services that enable seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claim 1 of the '864 patent. By making, using, importing, offering for sale, and/or selling such products and services, and all like products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '864 patent pursuant to 35 U.S.C. § 271(a).

23. ZyXEL has been and still is indirectly infringing, by way of inducing infringement by others of the '864 patent, by, among other things, making, using, importing, offering for sale, and/or selling, without license or authority, products and services that infringe at least claim 1 of the '864 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claims 13 and 33 of the '761 patent. These products and services are made, used, imported, offered for sale, and/or sold by direct infringers of the '864 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.*, [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). Since at least the filing of this complaint, ZyXEL has had knowledge of the '864 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, induce infringement of the '864 patent. Thus, by making, using, importing, offering for sale, and/or selling infringing products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '864 patent under 35 U.S.C. § 271(b).

24. ZyXEL has also been and still is indirectly infringing, by way of contributing to the infringement by others of the '864 patent, by, among other things, making, using, importing,



offering for sale, and/or selling, without license or authority, products and services that infringe at least claim 1 of the '864 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claim 1 of the '864 patent. These products and services are made, used imported, offered for sale, and/or sold by direct infringers of the '864 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.,* [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). ZyXEL's infringing products and services are a material part of the invention, and are especially made or especially adapted for use in the infringement of the '864 patent and are not a staple article or commodity of commerce suitable for substantial noninfringing uses. Since at least the filing of this complaint, ZyXEL has had knowledge of the '864 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, contribute to the infringement of the '864 patent. Thus, by making, using, importing, offering for sale, and/or selling such products and software, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '864 patent under 35 U.S.C. § 271(c).

25. To the extent that facts learned in discovery show that ZyXEL's infringement of the '864 patent is or has been willful, ReefEdge reserves the right to request such a finding at time of trial.

26. As a result of Defendants' infringement of the '864 patent, ReefEdge has suffered monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court, and ReefEdge will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

27. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '864 patent, ReefEdge will be greatly and irreparably harmed.

### **COUNT III**

#### **INFRINGEMENT OF U.S. PATENT NO. 7,197,308**

28. ReefEdge references and incorporates by reference paragraph 1 through 11 of this Complaint.

29. ReefEdge is the owner by assignment of United States Patent No. 7,197,308 (the "'308 patent"), entitled "Enabling Seamless User Mobility In A Short-Range Wireless Networking Environment." The '308 patent issued on March 27, 2007. A true and correct copy of the '308 patent is included as Exhibit C.

30. ZyXEL has been and still is directly infringing at least claim 20 of the '308 patent, literally and under the doctrine of equivalents, by making, using, selling, offering to sell, or importing, without license or authority, products and services that enable seamless user mobility in a wireless networking environment by, for example, dynamically registering access points

with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claim 20 of the '308 patent. By making, using, importing, offering for sale, and/or selling such products and services, and all like products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '308 patent pursuant to 35 U.S.C. § 271(a).

31. ZyXEL has been and still is indirectly infringing, by way of inducing infringement by others of the '308 patent, by, among other things, making, using, importing, offering for sale, and/or selling, without license or authority, products and services that infringe at least claim 20 of the '308 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point, and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claim 20 of the '308 patent. These products and services are made, used, imported, offered for sale, and/or sold by direct infringers of the '308 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.*, [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). Since at least the filing of

this complaint, ZyXEL has had knowledge of the '308 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, induce infringement of the '308 patent. Thus, by making, using, importing, offering for sale, and/or selling infringing products and services, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '308 patent under 35 U.S.C. § 271(b).

32. ZyXEL has also been and still is indirectly infringing, by way of contributing to the infringement by others of the '308 patent, by, among other things, making, using, importing, offering for sale, and/or selling, without license or authority, products and services that infringe at least claim 20 of the '308 patent by enabling seamless user mobility in a wireless networking environment by, for example, dynamically registering access points with a server, registering a user device with an access point and handing off a user device to another access point wherein the hand off does not disrupt wireless networking services to the user's devices. For example, ZyXEL's Wireless LAN Controllers (including the ZyXEL NWA5000-N Wireless LAN Controllers), Access Points (including the ZyXEL NWA5000 Series Access Point) and related software infringe at least claim 20 of the '308 patent. These products and services are made, used imported, offered for sale, and/or sold by direct infringers of the '308 patent in the United States, such as ZyXEL's customers and end-users of ZyXEL's customers. ZyXEL induces others to directly infringe by inducing or encouraging the use of its infringing products and services. *See, e.g.,* [http://www.zyxel.com/us/en/products\\_services/nxc5200.shtml?t=p](http://www.zyxel.com/us/en/products_services/nxc5200.shtml?t=p) (ZyXEL's technical specifications describing its controllers' seamless mobility features). ZyXEL's infringing products and services are a material part of the invention, and are especially made or especially adapted for use in the infringement of the '308 patent and are not a staple article or commodity of commerce suitable for substantial noninfringing uses. Since at least the filing of this complaint,

ZyXEL has had knowledge of the '308 patent and, by continuing the actions described above, has had the specific intent to, or was willfully blind to the fact that its actions would, contribute to the infringement of the '308 patent. Thus, by making, using, importing, offering for sale, and/or selling such products and software, ZyXEL has injured ReefEdge and is thus liable to ReefEdge for infringement of the '308 patent under 35 U.S.C. § 271(c).

33. To the extent that facts learned in discovery show that ZyXEL's infringement of the '308 patent is or has been willful, ReefEdge reserves the right to request such a finding at time of trial.

34. As a result of Defendants' infringement of the '308 patent, ReefEdge has suffered monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court, and ReefEdge will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court.

35. Unless a permanent injunction is issued enjoining Defendants and their agents, servants, employees, representatives, affiliates, and all others acting or in active concert therewith from infringing the '308 patent, ReefEdge will be greatly and irreparably harmed.

#### **PRAYER FOR RELIEF**

WHEREFORE ReefEdge respectfully requests that this Court enter:

- A. A judgment in favor of ReefEdge that Defendants have infringed, directly and jointly, jointly, and/or indirectly, by way of inducing and/or contributing to the infringement of the '761 patent, '864 patent and '308 patent;

- B. A permanent injunction enjoining Defendants and their officers, directors, agents, servants affiliates, employees, divisions, branches, subsidiaries, parents, and all other acting in active concert or participation with them, from infringement, inducing the infringement, or contributing to the infringement of the '761 patent, '864 patent and '308 patent;
- C. A judgment and order requiring Defendants to pay ReefEdge its damages, costs, expenses, and prejudgment and post-judgment interest for Defendants' infringement of the '761 patent, '864 patent and '308 patent as provided under 35 U.S.C. § 284;
- D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to ReefEdge its reasonable attorneys' fees against Defendant;
- E. Any and all other relief to which ReefEdge may show itself to be entitled.

**DEMAND FOR JURY TRIAL**

ReefEdge, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

September 17, 2012

Farnan LLP

/s/ Brian E. Farnan

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