UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

ROCK CREEK NETWORKS, LLC, Plaintiff v. **SENAO NETWORKS, INC.,** Defendant	**Case No. 6:21-cv-00**673 **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Rock Creek Networks, LLC ("Plaintiff" or "RCN") files this Complaint against Defendant Senao Networks, Inc. ("Senao" or "Defendant") for infringement of RCN's patent: U.S. Patent No. 6,671,750 (PX-750 attached).

THE PARTIES

1.   Plaintiff and patent owner RCN is a Texas limited liability company with its headquarters and principal place of business in Waco, Texas.

2.   Defendant Senao Networks, Inc. is a corporation organized under the laws of Taiwan with a principal place of business at No. 500, Fuxing 3rd Rd., Guishan Dist., Taoyuan City 333001, Taiwan.

JURISDICTION AND VENUE

3.   This is a patent suit brought 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 and 1338(a).

4.   Senao, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), purposefully and voluntarily places one or more of its infringing products into the stream of commerce with both the expectation and the knowledge that those products will be purchased and used by consumers in the Western District of Texas. Senao, directly and/or through its subsidiaries and agents (including distributors, retailers, and others), offers for sale and sells products within the State of Texas and within the Western District of Texas that infringe the Asserted Patent. Senao and its subsidiaries import and insert into the stream of commerce switches such that infringing switches will be offered for sale and sold in this District. Senao either itself and/or through the activities of its subsidiaries, makes, uses, sells, offers for sale, and/or imports throughout the United States, including within this District, products accused of infringement. Senao provides a distribution channel of infringing products within this District and the U.S. nationally. At the direction and control of Senao, its wholly owned subsidiaries import, sell, offer and/or offer for sale infringing products, such as switches, into the United States and this District. Senao has committed acts of patent infringement within the State of Texas and, more particularly, within Western District of Texas.

5.   Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b). Defendant markets, sells, and delivers accused products in this district, and has committed acts of infringement in this judicial district.

6.   Venue is proper as to Senao in this District under 28 U.S.C. § 1391(c)

because Senao is a foreign corporation.

NOTICE OF RCN'S PATENT

7.   Plaintiff is the owner, by assignment, of U.S. Patent No. 6,671,750 (the "'750 Patent"), entitled LAN INTERFACE, which issued on December 30, 2003. A copy of the '750 Patent is attached hereto as Exhibit PX-750.

8.   RCN possesses all rights of recovery under the Asserted Patents.

9.   Defendant has been on notice of the '750 Patent at least as early as the date it received service of this complaint.

SENAO'S PRODUCTS

10.   Senao directly and/or through its subsidiaries makes, imports, sells, offers to sell, distributes, licenses, markets and/or uses products that meet the IEEE 802.3az standard, a standard that includes the contents of RCN's infringed patent, such as 10G Multi-G Switches, 2.5G Multi-G Switches, and Gigabit Ethernet Switches ("the Accused Products").

11.   According to Senao, the Accused Products, including the 10G Multi-G Switches, are compliant with 802.3az, and feature "simplified network configuration, monitoring and management options along with an easy-to-use web interface."

https://www.senaonetworks.com/en/products/high-speed-ethernet/ethernet-switches/8port-10g/.

10G Multi-G Switches

10G managed network switch, including PoE model and Non-PoE model, is the second/third layer designed for Wi-Fi 6 (11ax) wireless environment Layer switch

Model: ECS5512, ECS5512FP

Contact Us

Category	Item	Specification
Technical	Switch class	Layer 2+
	Port standard	802.3 10Base-T Ethernet / 802.3u 100Base-TX Ethernet / 802.3ab 10000Base-T Ethernet / 802.3x Full-Duplex Flow Control / 802.3az Energy-Efficient Ethernet / 802.3bz NBASE-T and MGBASE-T
	Multi-G Ethernet ports	8 x 10G
	SFP+ ports	4
	RJ45 console port	Yes
	PoE ports	Ports 1 - 8 (ECS5512FP)
	Power - over -Ethernet	802.3af/at/bt (ECS5512FP)
	Max. power budget	420W
	Switching capacity	240 Gbps
	MAC address size	32K
	Power	100 to 240 VAC／50/60Hz
	VLANs	VID from 1-4094／(Max. 256 groups)

Software	L2 features	802.1d Spanning tree, Loopback Detection, Multicast Filtering, IGMP Multicast Forwarding, IGMP Snooping, MLD Multicast Forwarding, 802.1Q VLAN tagging, 802.3x flow control, 802.3ad Link Aggregation, IPv4 DHCP Relay, IPv4 DHCP Snooping, IPv4 DHCP Snooping Source MAC Address Check-up, ARP Inspection, ARP Packet Validation (additional validation checks), Voice VLAN, Port-based VLAN, Protocol-Based VLAN, CoS Mapping, 802. 1X Radius Authentication Protocol, IEEE 802. 3az Energy Efficient Ethernet (EEE), Command Line Interface (CLI), SSH Server, Telnet Server, TFTP Client, Configuration Upgrade/ Backup, Simple Network, Time Protocol (SNTP), SYSLOG, 802.1d Spanning tree
	Multicast Group	Max 256 groups
	MLD Snooping	MLD Snooping: v1
	Trust Mode	Cos/802.1p DSCP CoS/802.1p-DSCP
	Scheduling Mechanism	Strict / WRR/ Strict + WRR
	Bandwidth Control	Port-based bandwidth control (Ingress/Egress)
	Access Control List (ACL)	MAC Based ACL IPv4/IPv6 Based ACL ACL Binding Timebase ACL
	Web Graphical User Interface (GUI)	HTTP IPv4 / IPv6, HTTPS IPv4 / IPv6
	SSL Certificate	Certificate/Key Import
	SNMP	SNMP v1/v2c/v3 Support 環境 溫度 Operating: 32 to 104° F/0 to 40° C
Environment	Operating Tempurature	0°C ~ 50°C (32°F ~ 122°F)
	Humidity(Non-condensing)	5% ~ 95%
Device	Dimension(mm)	330 x 230 x 44
	Form factor	13"1U

Product Highlights

Layer 2 Managed supporting 802.3bt Power-over-Ethernet Compliant 8 Port Network Switch, features simplified network configuration, monitoring and management options along with an easy-to-use web interface.

ECS5512
- 8 x 100/1000/2500/5000/10000 Mbps Ethernet Ports
- 4 x 1000/10000 SFP+ Ports
- Rackmount Model Supports Full-Featured Layer 2 Switching

- ECS5512FP
- 8 x 100/1000/2500/5000/10000 Mbps PoE Ports
- 4 x 1000/10000 SFP+ Ports
- Rackmount Model Supports Full-Featured Layer 2 Switching

https://www.senaonetworks.com/en/products/high-speed-ethernet/ethernet-switches/8port-10g/

12.   The Accused Products regulate the transmission of signals passing through them to conserve energy and lower operating expenses.

13.   IEEE 802.3az Energy Efficient Ethernet describes reducing energy usage when no data packets are sent through a link by putting a link into a sleep mode in the absence of data packet transmission:

Ethernet is the dominant wireline communications technology for LANs with over 1 billion interfaces installed in the U.S. and over 3 billion worldwide. In 2006 the IEEE 802.3 Working Group started an effort to improve the energy efficiency of Ethernet. This effort became IEEE P802.3az Energy Efficient Ethernet (EEE) resulting in IEEE Std 802.3az-2010, which was approved September 30, 2010. EEE uses a Low Power Idle mode to reduce the energy consumption of a link when no packets are being sent. In this article, we describe the development of the EEE standard and how energy savings resulting from the adoption of EEE may exceed $400 million per year in the U.S. alone (and over $1 billion worldwide). We also present results from a simulation-based performance evaluation showing how packet coalescing can be used to improve the energy efficiency of EEE. Our results show that packet coalescing can significantly improve energy efficiency while keeping absolute packet delays to tolerable bounds. We are aware that coalescing may cause packet loss in downstream buffers, especially when using TCP/IP. We explore the effects of coalescing on TCP/IP flows with an ns-2 simulation, note that coalescing is already used to reduce packet processing load on the system CPU, and suggest open questions for future work. This article will help clarify what can be expected when EEE is deployed.

https://www.csee.usf.edu/~kchriste/energy/commMag10b.pdf

14.   IEEE 802.3az Energy Efficient Ethernet describes preventing data transmission when there is no data to send and then resume data transmission when new data packets arrive:

(EEE) standard [2, 3]. The approach in EEE is to limit transmission when there is no data to short periodic refresh intervals to maintain alignment between the transmitter and receiver. The IEEE Std 802.3az-2010 focuses on Ethernet transceivers that operate over UTP, which account for the vast majority of Ethernet links. The standard defines mechanisms to stop transmission when there is no data to send and to resume it quickly when new packets arrive. This is done by introducing the concept of Low Power Idle (LPI), which is used instead of the continuous IDLE signal when there is no data to transmit. LPI defines large periods over which no signal is transmitted and small periods during which a signal is transmitted to refresh the receiver state to align it with current conditions. Large energy savings are obtained when the device spends a significant fraction of the time in the low power mode. Although the savings vary from device to device, the energy consumption when the device is in low power mode can be as low as 10 percent that of the active mode. During the transitions in and out of low power mode there is significant energy consumption as many elements in the transceiver have to be active. The actual value will depend on the implementation possibly ranging from 50 percent to 100 percent of the active mode energy consumption.

https://www.csee.usf.edu/~kchriste/energy/commMag10b.pdf

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,671,750

15.   Plaintiff incorporates the above paragraphs herein by reference.

16.   The '750 Patent is valid, enforceable, and was duly issued in full

COMPLAINT FOR PATENT INFRINGEMENT   PAGE | 6

compliance with Title 35 of the United States Code.

17.   The Accused Products are designed to connect to provide interactive services using applications.

18.   Upon information and belief, Defendant has infringed and continue to infringe one or more claims, including Claim 1, of the '750 Patent by making, using, importing, selling, and/or, offering for sale the Accused Products in the United States without authority.

19.   Defendant has infringed and continue to infringe the '750 Patent either directly or through the acts of inducement in violation of 35 U.S.C. § 271.

20.   Defendant encourages others, including their customers, to use the Accused Products in the United States without authority.

21.   Claim 1 of the '750 Patent recites:

1.   A LAN interface comprising:

a terminal connected to an I/O bus; and

a counter device connected to connection ports of said LAN interface;

said LAN interface being connected to said I/O bus and transmitting and

receiving a link pulse to confirm connection between said terminal and said counter device;

said LAN interface including:

a LAN controller for processing a signal transmitted from said terminal

and then transmitting a processed signal to said counter device,

and for processing a signal transmitted from said counter device

and then transmitting a processed signal to said connection device;

an isolation section connected between said LAN controller and said I/O bus, for electrically disconnecting said LAN controller from said I/O bus;

an analog circuit connected between said LAN controller and said connection port, for subjecting a transmission signal and a received signal to an analog process; and

a link pulse detector for operating on a predetermined voltage supplied via said I/O bus and detecting a link pulse from said counter device connected to said connection port;

wherein said link pulse detector, when detecting a link pulse output from the counter device, controls the LAN controller and the isolation section to controllably bring them to an operation state thereof and, when not detecting a link pulse output from the counter device, controls the LAN controller and the isolation section to controllably bring them to a non-operation state.

22.   As exemplified in the information referenced in the above paragraphs and the use of one or more of the Accused Products, the Accused Products include a LAN interface that has a terminal connected to an I/O bus and a counter device connected to connection ports of said LAN interface.

23.   The Accused Product has a LAN interface that is connected to the I/O

bus and transmits and receives a link pulse to confirm connection between the terminal and the counter device.

24.   The LAN interface includes a LAN controller for processing a signal transmitted from the terminal and then transmitting a processed signal to the counter device, and for processing a signal transmitted from the counter device and then transmitting a processed signal to the connection device.

25.   The LAN interface includes an isolation section connected between the LAN controller and the I/O bus, for electrically disconnecting the LAN controller from the I/O bus.

26.   The LAN interface includes an analog circuit connected between the LAN controller and the connection port, for subjecting a transmission signal and a received signal to an analog process.

27.   The LAN interface includes a link pulse detector for operating on a predetermined voltage supplied via the I/O bus and detecting a link pulse from the counter device connected to the connection port.

28.   In operation, the link pulse detector, when detecting a link pulse output from the counter device, controls the LAN controller and the isolation section to controllably bring them to an operation state thereof and, when not detecting a link pulse output from the counter device, controls the LAN controller and the isolation section to controllably bring them to a non-operation state.

29.   Plaintiff has been damaged by Defendant's infringement of the '750 Patent.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the Court enter judgment against Defendant:

1.   declaring that the Defendant have infringed the '750 Patent;

2.   awarding Plaintiff its damages suffered as a result of Defendant's infringement of the '750 Patent;

3.   awarding Plaintiff its costs, attorneys' fees, expenses, and interest; and

4.   granting Plaintiff such further relief as the Court finds appropriate.

JURY DEMAND

Plaintiff demands trial by jury, Under Fed. R. Civ. P. 38.

Dated: June 25, 2021   Respectfully Submitted,

By: */s/ Cabrach Connor*
Cabrach J. Connor
State Bar No. 24036390
cab@connorkudlaclee.com
John M. Shumaker
State Bar No. 24033069
john@connorkudlaclee.com
CONNOR KUDLAC LEE PLLC
609 Castle Ridge Road, Suite 450
Austin, Texas 78746
512.777.1254 Telephone
888.387.1134 Facsimile
ATTORNEYS FOR PLAINTIFF