**UNITED STATES DISTRICT COURT**
**WESTERN DISTRICT OF TEXAS**
**WACO DIVISION**

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| INTELLECTUAL VENTURES I LLC,<br>and<br>INTELLECTUAL VENTURES II LLC,<br><br>Plaintiffs,<br><br>v.<br><br>LENOVO GROUP LIMITED,<br><br>Defendant. | Civil Action No. 6:23-cv-00307-ADA |

## CLAIM CONSTRUCTION ORDER

Before the Court are the parties' claim construction briefings in the above captioned matter. ECF Nos. 33, 41, 46, 48, and 49. Pursuant to this Court's Order Governing Proceedings, the parties were given the Court's preliminary constructions via email on May 21, 2024. The parties then notified the Court that no hearing was necessary, and they would rest on their briefing. The patents-in-suit are U.S. Patent Nos. 7,325,140 ("the '140 patent"); 8,474,016 ("the '016 patent"); 7,089,443 ("the '443 patent"); 7,623,439 ("the '439 patent"); and 7,646,835 ("the '835 patent"). This order memorializes the Court's final constructions of the disputed terms in this case. The Court will issue memorandum opinion on these rulings in due course.

## Final Constructions

a. "processor configured to facilitate operation of the network device" ('016 patent, claim 1)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Plain and ordinary meaning | Subject to §112, ¶6 | Plain and ordinary meaning.<br><br>Not subject to §112, ¶6. |

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| | **Function**: "facilitating the operation of the network device"<br>**Structure**: Indefinite | |

b. "The apparatus of claim 1, wherein the apparatus is a component within the network device" ('016 patent, claim 9)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Plain and ordinary meaning | Indefinite | Plain and ordinary meaning. |

c. "A remote device management communication system for securely controlling access to management applications and communications to and from said management applications on network devices in a distributed computer network that includes one or more network services, one or more secure management access controllers, and one or more managed network devices, the remote device management system comprising:" ('140 patent, claim 1)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Preamble is not limiting | Preamble is limiting | Preamble is limiting. |

d. "out-of-band connection means:" ('140 patent, claims 1, 6, and 7)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to 112, ¶6<br>**Function**: "connecting said one or more network services or remote users with said secure management access controller for management of said network device"<br>**Structure**: a SMACC Network Enabled Management Interface; and/or communication | Subject to 112, ¶6<br>**Function**: "connecting said one or more network services or remote users with said secure management access controller for management of said network device"<br>**Structure**: Structure disclosed at '140 Patent, 3:2-4, 6:14-21, 7:60-62, 8:30-38, 11:16-18, 12:21- | Subject to 112, ¶6<br><br>**Function**: "connecting said one or more network services or remote users with said secure management access controller for management of said network device"<br><br>**Structure**:<br>one or more of the following networks: a Public switch |

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| protocols, modems, and physical interfaces (collectively communication system components) disclosed in the specification; and/or equivalents of both the SMACC Network Enabled Management Interface; and/or communication system component(s).<br><br>*See* '140 Patent, 3:2-4, 6:14-21, 7:60-62, 8:30-38, 11:16-18, 12:21-13:31, 15:3-25, 15:40-16:34, FIGS. 3-5, 9-13, 18, 23- 26, 30. | 13:31, 15:3-25, 15:40-16:34, FIGS. 3-5, 9-13, 18, 23-26, and 30, and equivalents | Telephone Network (PSTN) (2:45-57, 3:2-4, 12:37-61), a Integrated Services Digital Network (ISDN) (2:45-57), a cellular network (6:14-21, 7:60-62, 12:37-61), an Ethernet network (12:37-61), a wireless network, and/or a Digital Subscriber Line (DSL) (12:37-61, 15:55-60),<br><br>where the one or more networks use one or more of the following protocols: SNMP, TFTP, FTP, DNS, SysLog, Telnet, SSH, HTTP, HTTPs, point to point IP, and/or XML (8:30-38).<br><br>*See also* FIGS. 3-5, 9-13, 18, 23-26, and 30 |

e. "virtual management interface connection means" ('140 patent, claim 1)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to §112, ¶6<br>**Functions**:<br>(i) "connecting said one or more network services or remote users with said secure management access controller";<br>(ii) "provides logical separation of management data from user data"<br>(iii) "utilizes user interfaces of said managed network element for connecting said one or more network services or remote users with said secure management access controller"<br>**Structure**: a Virtual Management Interface | Subject to §112, ¶6<br>**Functions**:<br>(i) "connecting said one or more network services or remote users with said secure management access controller";<br>(ii) "provides logical separation of management data from user data"<br>(iii) "utilizes user interfaces of said managed network element for connecting said one or more network services or remote users with said secure management access controller"<br>**Structure**: Structure disclosed at '140 Patent, | Subject to 112, ¶6<br><br>**Functions**:<br>(i) "connecting said one or more network services or remote users with said secure management access controller";<br>(ii) "provides logical separation of management data from user data"<br>(iii) "utilizes user interfaces of said managed network element for connecting said one or more network services or remote users with said secure management access controller"<br><br>**Structure**:<br>a virtual private network (VPN) (6:22-44, 6:63-7:5, 12:5-21). |

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| (VMI) coupled to a user interface on the managed device, where the VMI utilizes communication protocols, modems, and physical interfaces (collectively communication system components) disclosed in the specification; and/or equivalents.<br><br>*See* '140 Patent, 3:2-33, 6:22-31, 6:63-7:5, 8:20-29, 9:2-7, 11:60-67, 12:5-21, 12:37-64, 14:55-16:34, FIGS. 3-5, 9-13, 18, and 23-26. | 3:2-33, 6:22-31, 6:63-7:5, 9:2-7, 11:60-67, 12:5-21, 15:26-39, FIGS. 3-5 | *See also* 4:15-31, 11:60-67, FIGS. 3-5 |

f. "protection means" ('140 patent, claim 11)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
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| Subject to §112, ¶6<br>**Function**: "protecting the management data"<br>**Structure**: A virtual private network (VPN) via a virtual management interface (VMI) and/or an SMACC interface; and/or equivalents.<br><br>*See* '140 patent, 3:49-60, 6:22-33, 6:58-7:6, 12:5- 36, FIGS. 3-5, 21, and 22. | Subject to §112, ¶6<br>**Function**: "protecting the management data"<br>**Structure**: Structure disclosed at '140 Patent, 3:49-60, 6:22-33, 6:34-7:6, 12:5-36, and FIGS. 4, 5 and 22. | Subject to 112, ¶6<br><br>**Function**: "protecting the management data"<br><br>**Structure**:<br>a firewall (3:49-60), a virtual private network (VPN) (3:49-60, 12:5-36), or a combination of a firewall, VPN, and authentication and authorization applications (6:22-7:6).<br><br>*See also* FIGS. 4, 5, and 22 |

g. "monitoring means for monitoring the status of at least one computer network component" ('140 patent, claim 13)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to §112, ¶6<br>**Function**: "monitoring the status of at least one computer network component"<br>**Structure**: the SMACC; and/or the SMACC processor; and/or circuitry and/or software disclosed in the specification as monitoring the status of network components and availability of power thereto; and/or equivalents of the SMACC; and/or the SMACC processor; and/or the above-identified circuitry and/or software.<br><br>*See* '140 patent, 7:25-44, 17:64-18:4, 18:20-51, 19:23-31, 19:65-20:4, 20:11-21:19, 21:28-65, FIGS. 2, 9, and 15-17. | Subject to §112, ¶6<br>**Function**: "monitoring the status of at least one computer network component"<br>**Structure**:<br>Indefinite.<br><br>Alternatively, algorithms disclosed at '140 Patent, 7:25-44, 17:64-18:4, 18:20-51, 19:23-31, 21:28-65, and FIGS. 15-16. | Subject to 112, ¶6<br><br>**Function**: : "monitoring the status of at least one computer network component"<br><br>**Structure**:<br>a processor performing an algorithm to monitor network components for loss of connectivity by testing the network connection. (7:25-44, 17:50-18:4, 18:20-32, 21:13-65, FIGS. 15-16), or<br><br>an uninterruptable power supply (UPS) that monitors network components for loss of external power (11:25-46, 18:33-51, 20:36-47, FIGS. 2 and 17). |

h. "monitoring means for monitoring the status of the network power supply" ('140 patent, claim 14)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to §112, ¶6<br>**Function**: "monitoring the status of the network power supply"<br>**Structure**: The SMACC; the SMACC processor; voltage detection circuitry; and/or equivalents.<br><br>*See* '140 patent, 7:25-44, 11:25-36, 17:64-18:4, 18:20-51, 19:23- 31, 19:65-20:4, | Subject to §112, ¶6<br>**Function**: "monitoring the status of the network power supply"<br>**Structure**: Indefinite | Subject to 112, ¶6<br><br>**Function**: "monitoring the status of the network power supply"<br><br>**Structure**:<br>an uninterruptable power supply (UPS) that monitors network components for loss of power (11:25-46, 18:33-51, 20:36-47, FIGS. 2 and 17). |

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| 20:11-21:19, 21:28-65, FIGS. 2, 9, and 15-17. | | |

i. "reporting means" ('140 patent, claim 14)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to §112, ¶6<br>**Function**: "reporting the status of the network power supply"<br>**Structure**: The SMACC; and/or the VMI; and/or the SMACC interface; and/or equivalents.<br><br>*See* '140 patent, 6:22-33, 7:39-44, 11:25-36, 11:60-67, 12:5-20, 18:20-51, 20:11-21:12, FIGS. 2, 3, 9, and 15-17. | Subject to §112, ¶6<br>**Function**: "reporting the status of the network power supply"<br>**Structure**: Indefinite | Subject to 112, ¶6<br><br>**Function**: "reporting the status of the network power supply"<br><br>**Structure**:<br>a processor performing the algorithm disclosed at Col. 20:24-29 or the algorithm disclosed at Col. 21:3-12. |

j. "means for monitoring connection attempts made through the management access controller" ('140 patent, claim 16)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Subject to §112, ¶6<br>**Function**: "monitoring connection attempts made through the management access controller"<br>**Structure**: the SMACC; and/or equivalents.<br><br>*See* '140 patent, 6:34-37, 6:44-57, 7:7-24, 8:13-19, 15:25-39, 15:47-56, 19:44-64, 22:4-25, FIG. 32. | Subject to §112, ¶6<br>**Function**: "monitoring connection attempts made through the management access controller"<br>**Structure**: Algorithm disclosed at '140 Patent, 22:4-25 and Figure 32. | Subject to 112, ¶6<br><br>**Function**: "monitoring connection attempts made through the management access controller"<br><br>**Structure**:<br>an Access Control Server (ACS) using protocols to authenticate and authorize access (19:44-64), or<br><br>a processor running one or more of RADIUS, |

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| | | TACACS+ and/or LDAP. (6:22-57, 7:7-24, 15:26-39).<br><br>*See also* 4:37-40, 8:13-19 |

k. "said . . . remote users" ('140 patent, claim 1)

| IV's Proposed Construction | LGL's Proposed Construction | Court's Construction |
|---|---|---|
| Plain and ordinary meaning | Indefinite | Plain and ordinary meaning. |

l. Preambles (‘835 patent, claims 1, 7, 12, 20, and 23)

| IV’s Proposed Construction | LGL’s Proposed Construction | Court’s Construction |
|---|---|---|
| Preamble is not limiting | Preamble is limiting | Preamble is not limiting. |

m. “the valid operation range includes an optimal operation point for the integrated circuit device” (‘835 patent, claims 1, and 7)

| IV’s Proposed Construction | LGL’s Proposed Construction | Court’s Construction |
|---|---|---|
| Plain and ordinary meaning | Indefinite | Plain and ordinary meaning.<br><br>Note: this claim element does not require determining the optimal operation point. |

n. cyclically advancing the first OFDM packet by shifting the samples in a first direction” (‘439 patent, claims 1 and 7)

| IV’s Proposed Construction | LGL’s Proposed Construction | Court’s Construction |
|---|---|---|
| Plain and ordinary meaning | “cyclically advancing the first OFDM packet by shifting the samples in the direction of transmission” | “cyclically advancing the first OFDM packet by shifting the samples in the direction of transmission” |

IT IS SO **ORDERED**.

SIGNED this 28th day of May, 2024.

ALAN D ALBRIGHT
UNITED STATES DISTRICT JUDGE