Patent Owner InfoExpress's Oral Argument Demonstrative Slides

Before the Patent Trial and Appeal Board
July 17, 2025

***Cisco Systems, Inc. and Fortinet, Inc. v. InfoExpress Inc.*, IPR2024-00539, -00675, -00676, -00677, -00679**

Groupings of Claim Limitations

"Auditing"/"Applying a Security Policy to the Access Device"

- '460 Patent, claims 1.4, 16.4 ("applying a security policy to the access device")
- '444 Patent, claims 1.5, 22.5 ("applying a security policy that includes at least one requirements pertaining to the audit data")
- '450 Patent, claims 1.3 ("applying a security policy, the security policy including one or more requirements pertaining to the authentication and the information…"), 16.2, 22.2 ("applying a security policy…including performing an audit")
- '484 Patent, claims 1.2 ("a policy auditor configured to audit the access device using the at least one security policy"), 28.4, 41.4, 56.5 ("applying a security policy to the access device"), 57.3 ("a gatekeeper configured to enforce a security policy")

"(Re)configuring" Claim Limitations

- '460 Patent, claims 1.5, 16.5 ("reconfiguring the communication port")
- '444 Patent, claims 2, 22.6 ("…configuring the access point")
- '450 Patent, claims 1.4, 17, 22.4 ("configuring the access point")
- '484 Patent, claims 1.3 ("an access control configured to reconfigure the communication device"), 28.5, 41.5, 56.6 ("reconfiguring the communication port"), 57.4 ("configuring the communication port")

"(Less) Restricted Subset" Claim Limitations

- '460 Patent, claims 1.1, 16.1
- '444 Patent, claims 6, 22.7
- '450 Patent, claims 16.1, 22.1
- '484 Patent, claims 1.1, 28.1, 41.1, 56.1, 57.3

“Monitoring” Claim Limitations

- ‘460 Patent, claim 22 (“monitor security status”)
- ‘444 Patent, claim 22.7 and 22.8 (“receiving…updated audit [data]…and re-auditing the device”)
- ‘484 Patent, claim 28.6 (“monitor security status of the access device after reconfiguring”)

"Updating" Claim Limitations

- '460 Patent, claim 27 ("update the access device when requirements of the security policy are not satisfied")
- '444 Patent, claim 17 ("bringing a software on the device up to date")
- '450 Patent, claims 2, ("facilitating updates to software on the device"), 16.3, 22.3 ("improve compliance of the access device to the security policy")
- '484 Patent, claims 3, 24, 38, 41.6 ("updat[e/ing] the access device")

"Operating System" Claim Limitations

- '444 Patent, claim 12 ("wherein the received audit data includes information that concerns operating system of the device")
- 450 Patent, claim 10 ("wherein one of the requirements pertains to a status of an operating system exon the device"), 25 ("receiving operating system information from the access device")

Prima Facie Obviousness

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

'484 Patent and '460 Patent – All Challenged Claims

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

'484 Patent (All Challenged Claims):

- Independent claim 1: "an access control configured to reconfigure the communication device such that data sent from the access device is received by the ***less-restricted subset of the protected network*** rather than merely ***a restricted subset of the protected network … the restricted subset of the protected network including the gatekeeper***"

- Independent claims 28, 41, 56, 57: "receiving a request for access to ***a less-restricted subset of the protected network*** from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and ***a restricted subset of the protected network, the restricted subset including a gatekeeper…***"

'460 Patent (All Challenged Claims):

- Independent claims 1, 16: "receiving a request for access to ***a less-restricted subset of the protected network*** from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and ***a restricted subset of the protected network, the restricted subset including a gatekeeper…***"

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

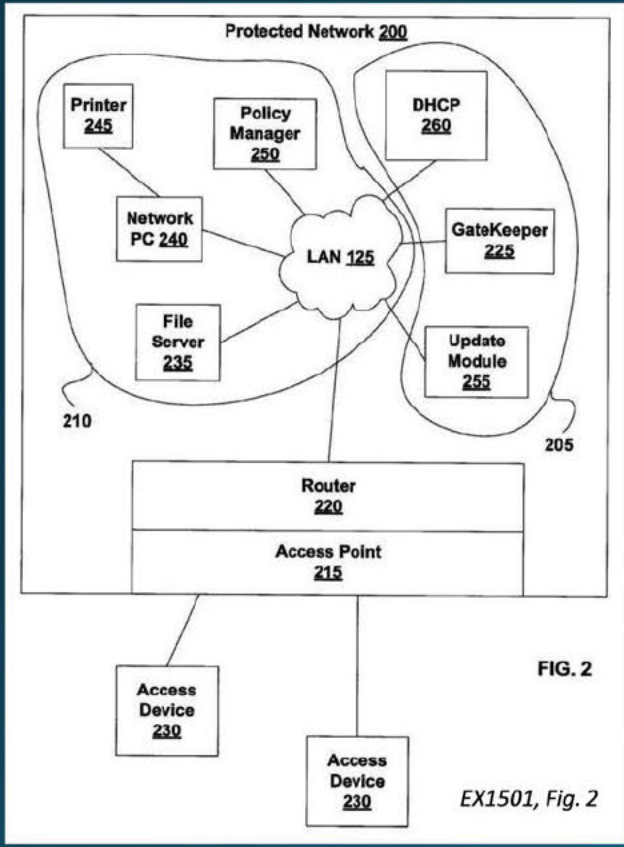


FIG. 2

EX1501, Fig. 2

FROM SUMMARY OF INVENTION

Systems and methods of the invention include a **protected network physically or logically divided into a restricted subset and one or more less-restricted subsets. Requests from an access device for access to the less-restricted subset are first passed to the restricted subset. Elements (e.g., a gatekeeper) of the restricted subset are then used to apply security policies to the access device and if security policies are satisfied, the access device is granted access to a less-restricted subset of the protected network**. The passing of access requests to the restricted subset and granting of access are accomplished by configuring and reconfiguring a communication port of an access point. After access is granted, further communication between the access device and the protected network can include access to the less restricted subset.

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

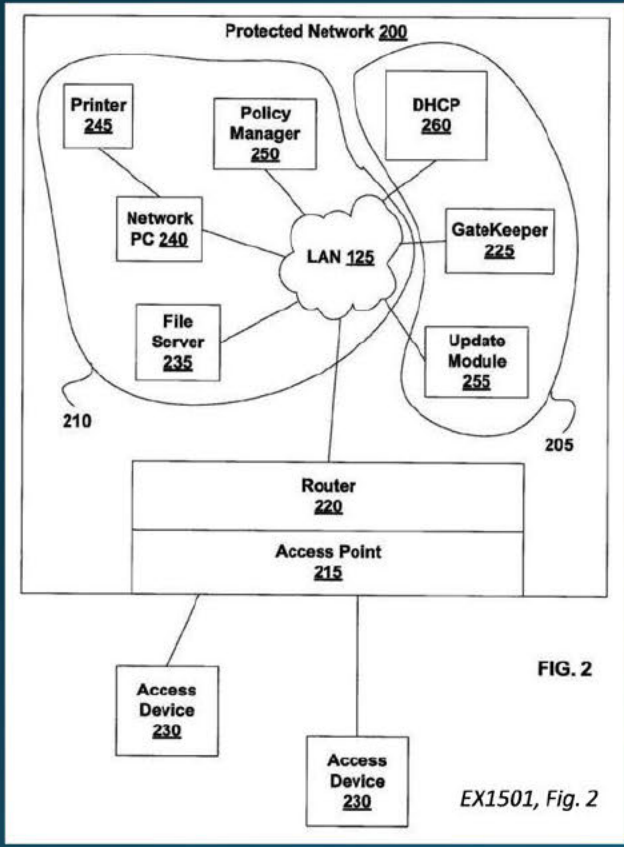


FIG. 2

EX1501, Fig. 2

FROM SUMMARY OF INVENTION

Typically, the less-restricted subset of the protected network and the restricted subset of the protected network are characterized by Virtual Local Area Networks (e.g., VLANs) defined within the access point and optionally by access control lists (ACL) of a router, firewall, or switch situated between the VLAN and the protected network. Different VLANs within the same access point, or within different access points, may be configured to characterize a plurality of restricted subsets and/or a plurality of less-restricted subsets within the protected network. A communication port of the access point is configured such that network traffic directed at the protected network is initially passed through a restricted VLAN rather than through a less-restricted VLAN. The restricted VLAN allows network traffic to pass to the restricted subset of the protected network and is typically restricted in the sense that it only allows access to elements of the protected network that are configured to communicate with an access device whose security characteristics are unknown or questionable. In contrast, the less-restricted VLAN allows access to the less-restricted subset of the protected network and, in typical embodiments, to elements of both the less-restricted subset and the restricted subset.

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

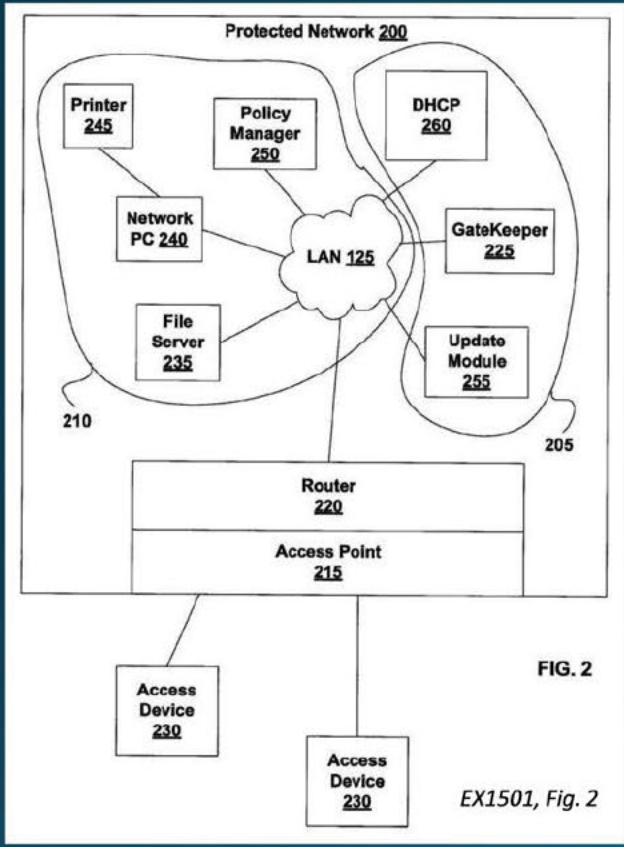


FIG. 2

EX1501, Fig. 2

FROM DETAILED DESCRIPTION

Access to a protected computing network is controlled by manipulating a communication port within an access point. When an access request is first received, the communication port is configured to pass the request to a restricted subset of a protected computing network. This **restricted subset includes a gatekeeper configured to administer a security policy governing access to those parts of the protected computing network that are not part of the restricted subset. Those parts of the protected computing network that are not part of the restricted network are considered to be in a less-restricted subset.** The less-restricted subset being less restricted relative to the restricted subset in terms of what elements may be included in each subset. If the device requesting access satisfies requirements of the security policy, then the gatekeeper sends commands to the access point in order to reconfigure the communication port through which the access request was received. The communication port is reconfigured such that further communication from the access device is passed to the less-restricted subset as well as, optionally, the restricted subset.

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

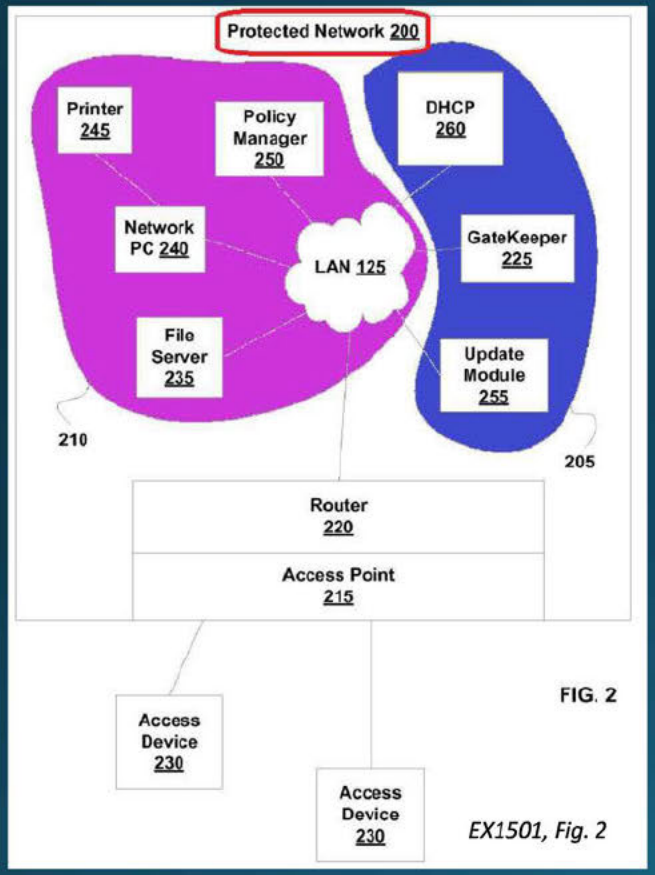


FIG. 2

EX1501, Fig. 2

FROM DETAILED DESCRIPTION

FIG. 2 is a block diagram of a Protected Network 200, according to various embodiments of the invention. **Protected Network 200 is either physically or logically divided into a Restricted Subset 205 and a Less-Restricted Subset 210**. Access to Protected Network 200 is possible through an Access Point 215 (a communication device) and an optional Router 220. As is described further herein this access is under the control of a GateKeeper 225. GateKeeper 225 is configured to enforce a security policy against one or more Access Device 230 requesting access to Less-Restricted Subset 210. Typically, Less-Restricted Subset 210 and Restricted Subset 205 are characterized by VLAN settings within Access Point 215.

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

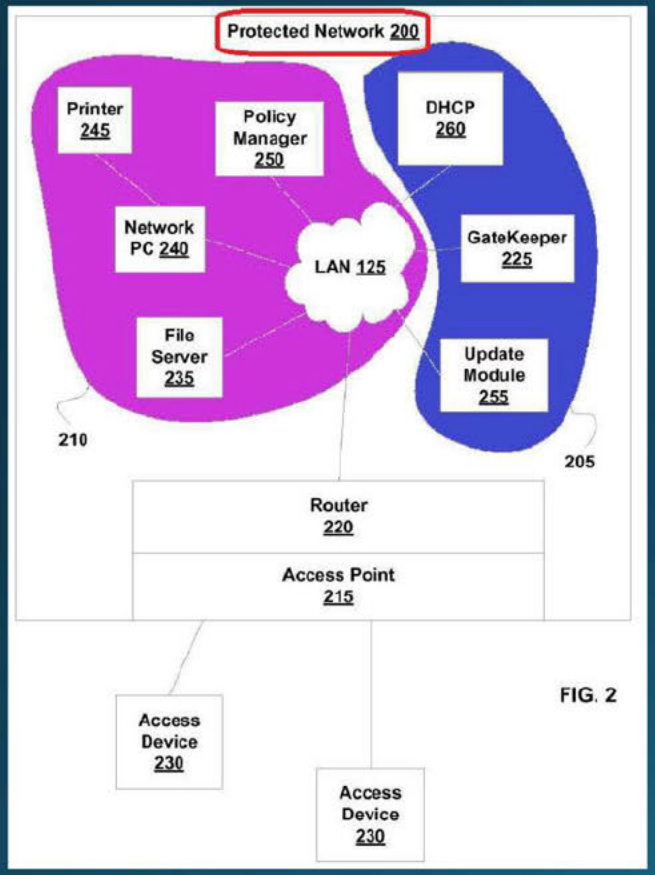


FIG. 2

FROM DETAILED DESCRIPTION

In various embodiments, Protected Network 200 includes a corporate network, telephone network, private network, local area network, wide area network, wireless network, communication network, government network, university network, and/or the like. Restricted Subset 205 is a subset of Protected Network 200 including at least GateKeeper 225. ... Less-Restricted Subset 210 includes those elements of Protected Network 200 not included in Restricted Subset 205. ... Protected Network 200 maybe large, including tens, hundreds, or thousands of devices. The hierarchy of access restrictions may be enforced by a hierarchical set of security policies defined using Policy Manager 250. In various embodiments, Router 220 and Access Point 215 may be considered part of Restricted Subset 205 or Less-Restricted Subset 210.

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Claim Construction - Plain and Ordinary Meaning

"Protected Network"

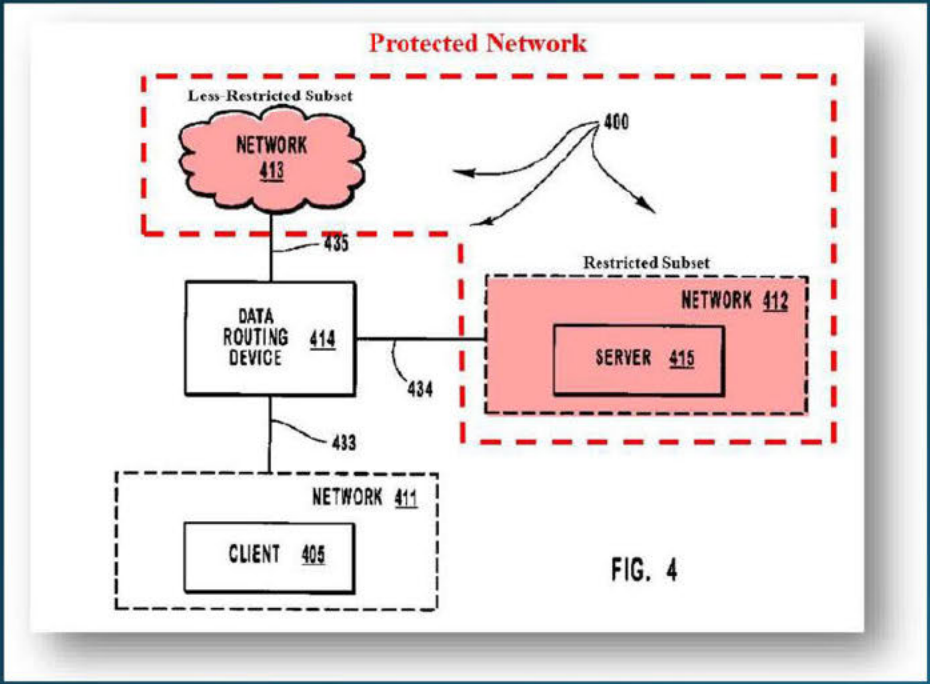
a secure network environment that is safeguarded from unauthorized access

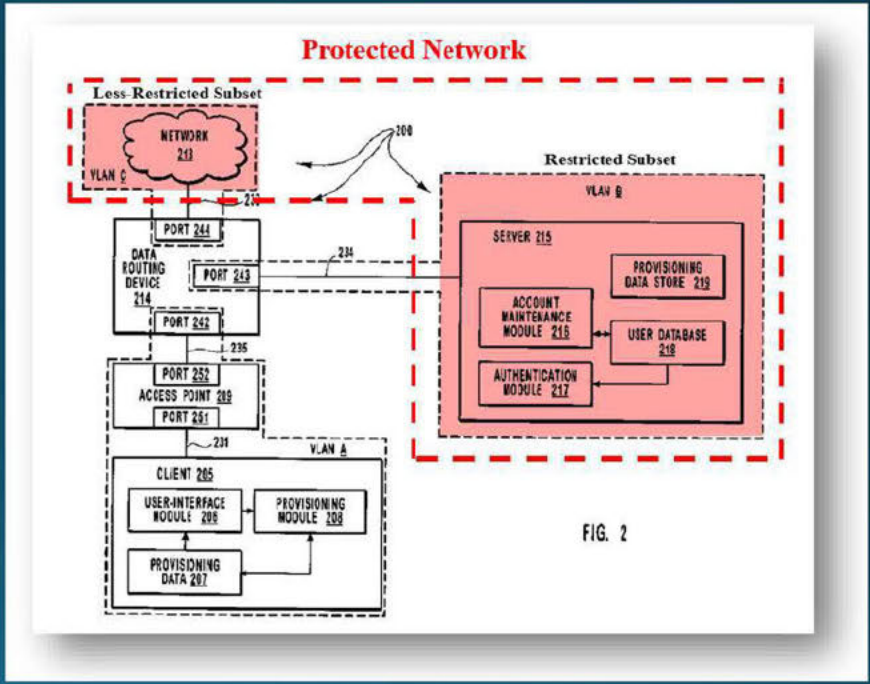
"Subset"

a part of a larger whole

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Petitioner's Argument

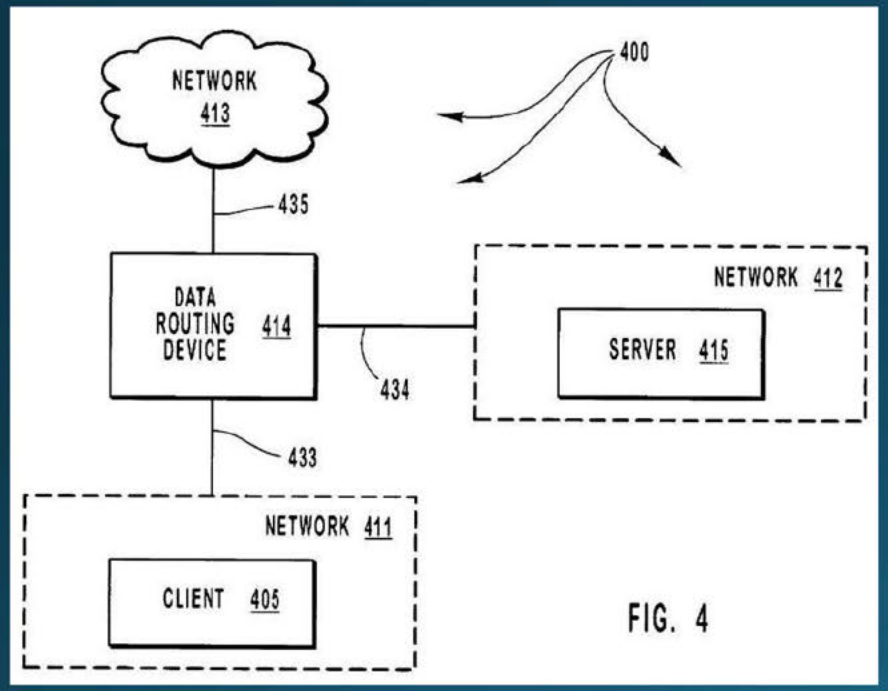




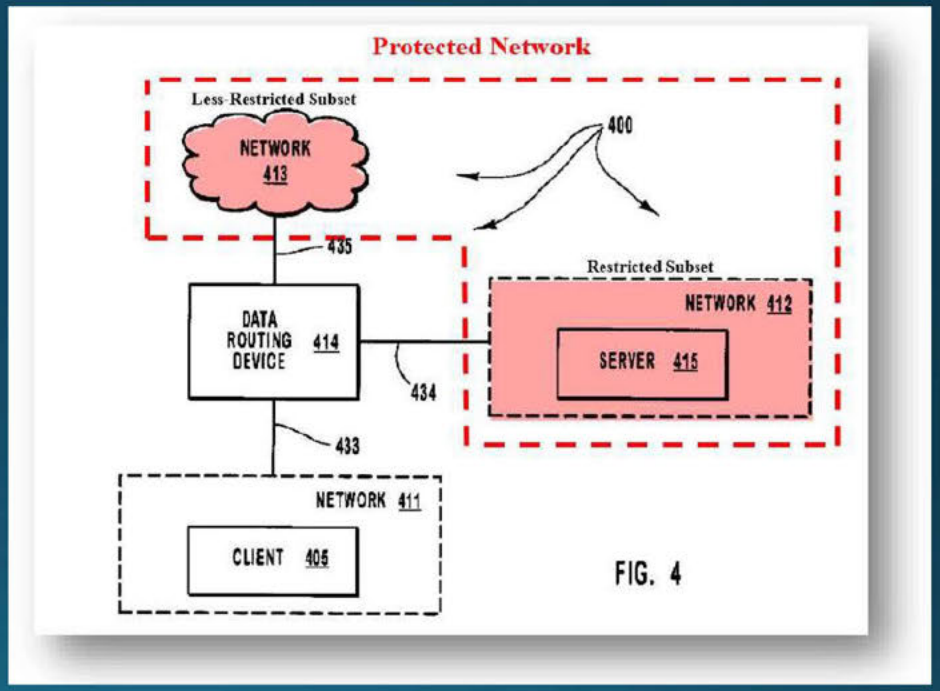
'484 (675) Pet. at 22

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Krantz (Unaltered) vs. Petitioner's Presentation



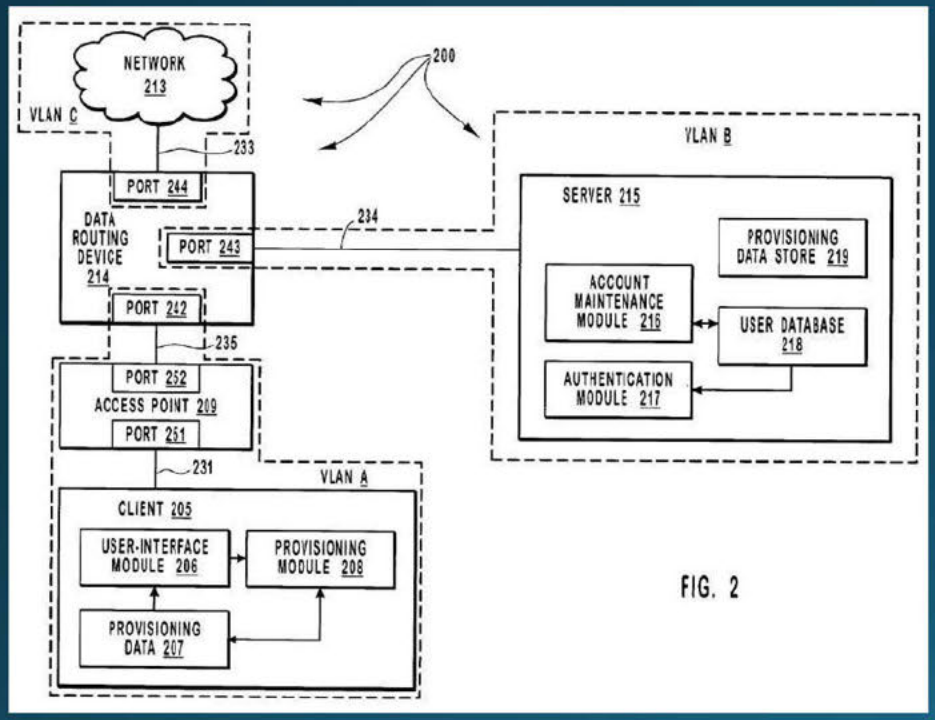
EX1505



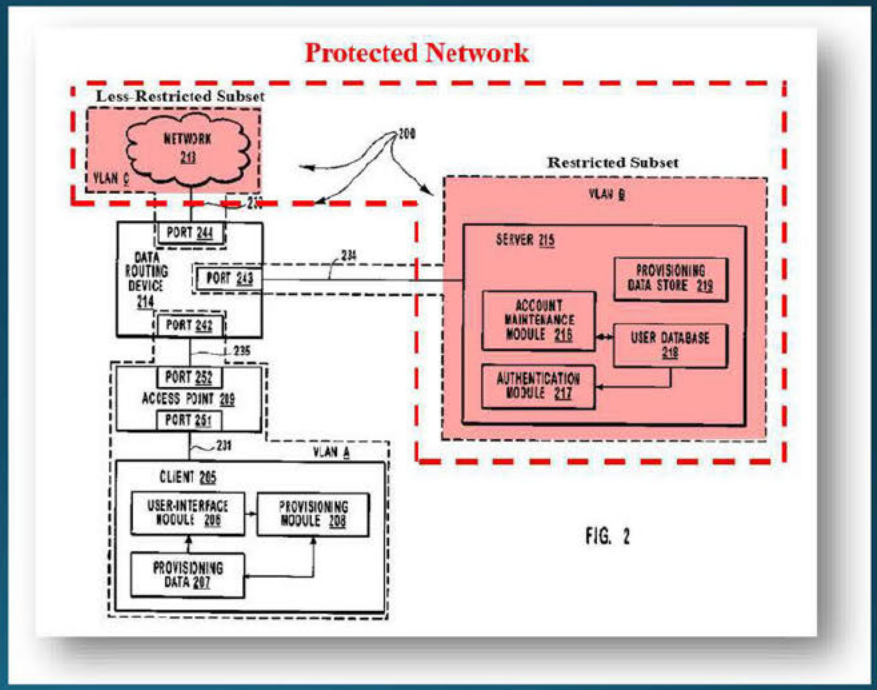
'484 (675) Pet. at 22

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Krantz (Unaltered) vs. Petitioner's Presentation



EX1505



'484 (675) Pet. at 22

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Krantz's (EX1505) Disclosure

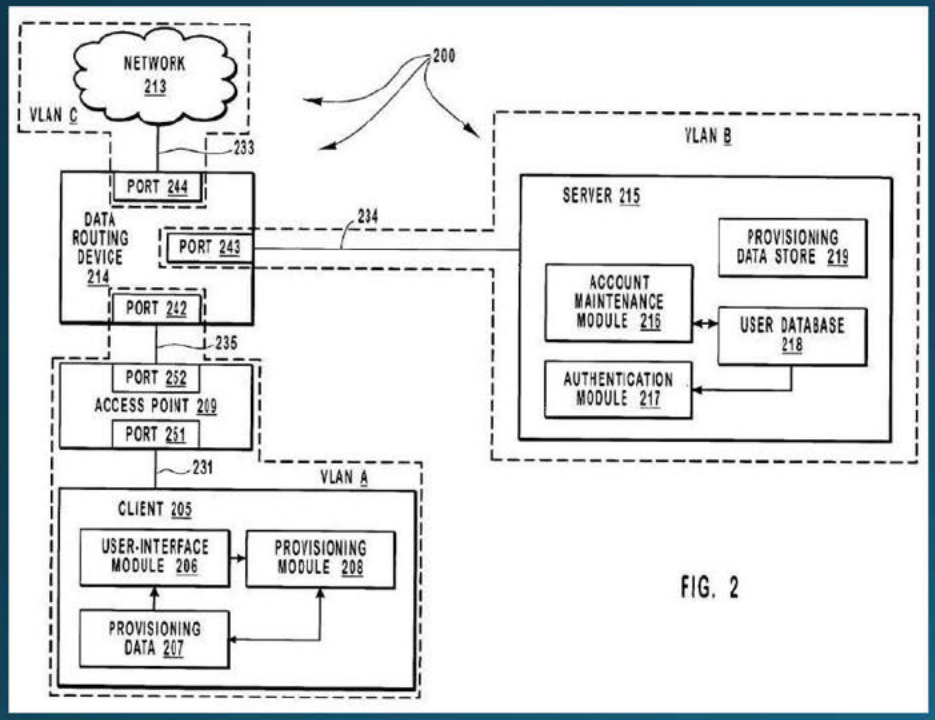


FIG. 2

[0058] In some embodiments, server **215** logically represents a Remote Authentication Dial-In User Service ("RADIUS") server. That is, although visually depicted by a single system, server **215** may include a separate Network Access Server ("NAS"), a separate authentication server, and a separate shared accounting server. The servers logi-

"Protected Network" Having "A Restricted Subset" And "A Less-Restricted Subset"

Krantz's (EX1505) Disclosure

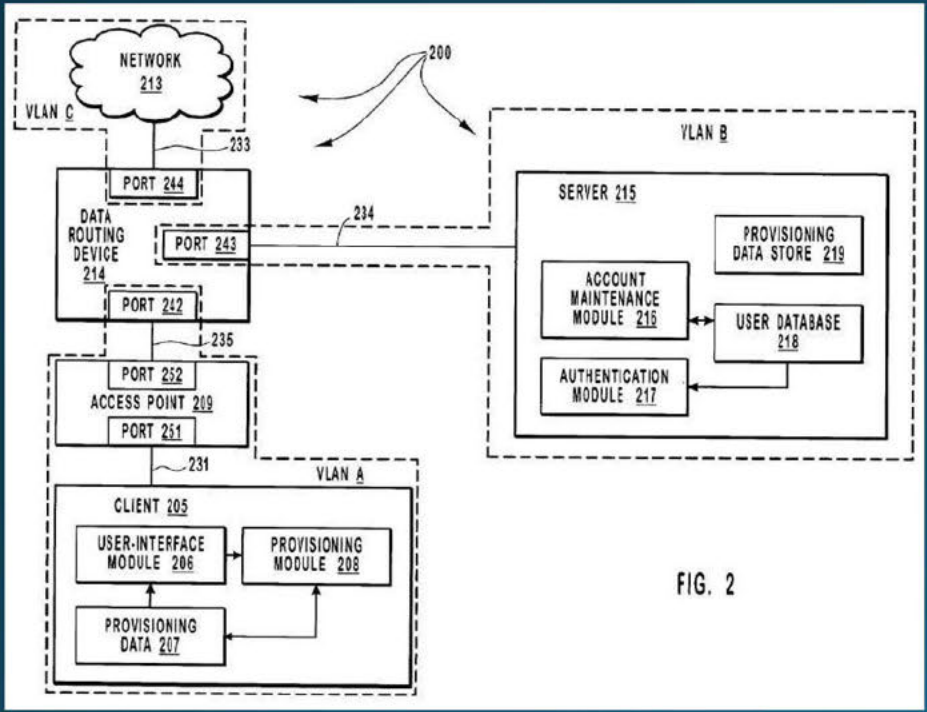


FIG. 2

[0060] As depicted in network architecture **200** data routing device **214** is connected to network **213**, server **215**, and access point **209** by corresponding logical communication links **233**, **234**, and **235** respectively. Network **213** can be virtually any type of network, such as, for example, a corporate or enterprise-wide network or the Internet. Data routing device **214** can be a device capable of grouping computer systems together in a single broadcast domain based on criteria other than physical location (e.g., a physical location on a particular side of a router). Thus, data routing device **214** can be configured to separate computer systems into different VLANs. As depicted in **FIG. 2**, data routing device **214** has been configured to separate network architecture **200** into VLANs A, B, and C. Data routing device **214** can be configured to transfer both tagged data frames and untagged data frames between the VLANs depicted in **FIG. 2**.

"Reconfiguring" & "Configuring"

'484 Patent, '460 Patent, and '645 Patent (All Challenged Claims)

'444 Patent (Claims 2-7 and 22)

'450 Patent (Claims 1-4, 7-10, 14, 22-23, 25, 27)

"Reconfiguring"/"Configuring"

'484 Patent (All Challenged Claims):

- Independent claim 1: "an access control configured to **reconfigure *the communication device*** such that data sent from the access device is received by the less-restricted subset of the protected network rather than merely a restricted subset of the protected network … the restricted subset of the protected network including the gatekeeper"

- Independent claims 28, 41, 56: "**reconfiguring *the communication port*** for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied"

- Independent claims 57: **configuring *the communication port*** to communicate data to the less-restricted subset of the protected network rather than merely the restricted subset of the protected network

'460 Patent (All Challenged Claims):

- Independent claims 1, 16: "**reconfiguring the *communication port*** for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, when the requirements of the security policy are satisfied"

"Reconfiguring"/"Configuring"

'645 Patent (All Challenged Claims):

- Independent claim 1: "configure an ***access point*** in response to approval of the device by the gatekeeper"

'444 Patent (Challenged claims 2-7 and 22)

- Dependent claim 2: The method of claim 1, wherein applying the security policy includes configuring the ***access point***.
- Independent Claim 22: "applying a security policy that includes at least one requirements pertaining to the audit data and at least one requirement pertaining to the authentication, the applying of the security policy taking place under control of the gatekeeper, where applying the security policy includes configuring the ***access point***"

'450 Patent (Challenged claims 1-4, 7-10, 14, 22-23, 25, 27)

- Independent claim 1: "configuring the ***access point*** in response to a result of applying the security policy"
- Independent Claim 22: "granting access to the less-restricted network based on satisfaction of the security policy by the updated access device, the granting of access includes configuring the ***access point*** to allow the access"

Claim Construction - Plain and Ordinary Meaning

"Configuring"

to arrange or set up something, especially a computer system or piece of equipment, for a specific purpose or in a particular way

"Reconfiguring"

to rearrange something

"Reconfiguring"/"Configuring"

What do the claims recite is configured or reconfigured?

"reconfigure the ***communication device***" ('484 Patent, claim 1; '460 Patent, claims 1 and 16)

"reconfiguring the ***communication port***" ('484 Patent, claim 28, 41, 56)

"configuring the ***communication port*** " ('484 Patent, claim 57)

"configure an ***access point***" ('645 Patent, claim 1)

"configuring the ***access point***" ('444 Patent, claim 2 and 22; '450 Patent, claims 1 and 22)

"Reconfiguring" and "Configuring"

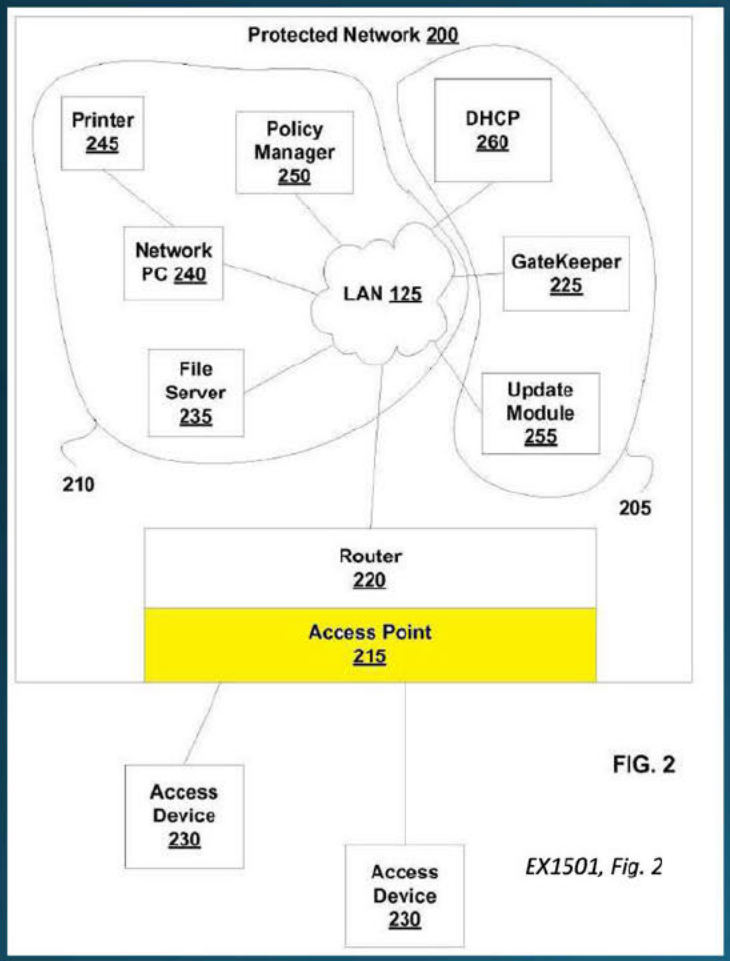


FIG. 2

EX1501, Fig. 2

FROM SUMMARY OF INVENTION

Systems and methods of the invention include a protected network physically or logically divided into a restricted subset and one or more less-restricted subsets. Requests from an access device for access to the less-restricted subset are first passed to the restricted subset. Elements (e.g., a gatekeeper) of the restricted subset are then used to apply security policies to the access device and if security policies are satisfied, the access device is granted access to a less-restricted subset of the protected network. **The passing of access requests to the restricted subset and granting of access are accomplished by configuring and reconfiguring a communication port of an access point.** After access is granted, further communication between the access device and the protected network can include access to the less restricted subset.

484 Patent, 2:48-61

"Reconfiguring" and "Configuring"

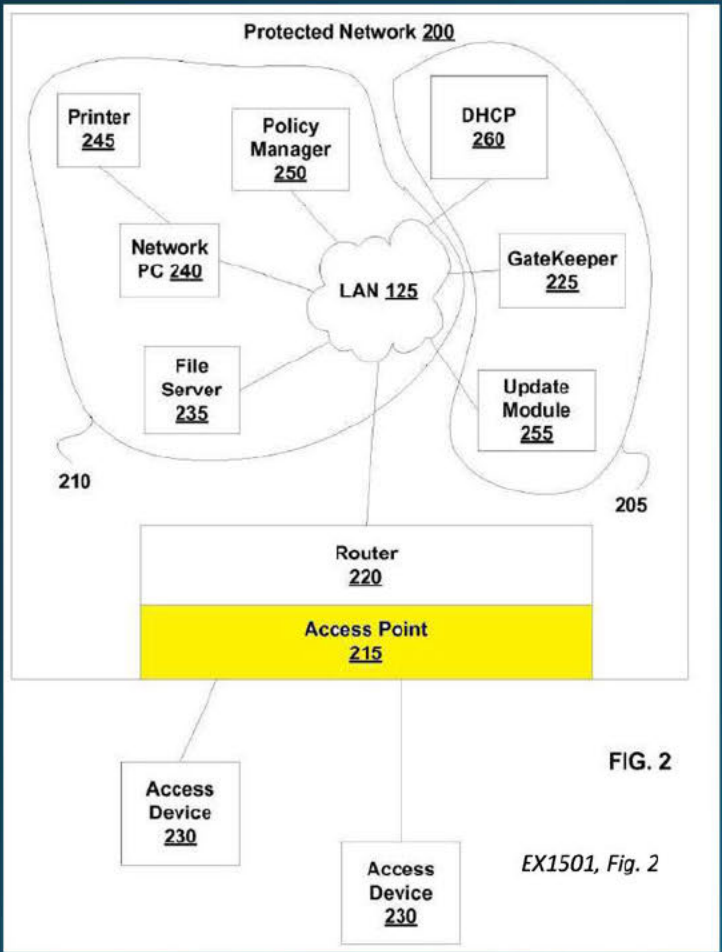


FIG. 2

EX1501, Fig. 2

FROM SUMMARY OF INVENTION

Typically, the less-restricted subset of the protected network and the restricted subset of the protected network are characterized by Virtual Local Area Networks (e.g., VLANs) defined within the access point and optionally by access control lists (ACL) of a router, firewall, or switch situated between the VLAN and the protected network. Different VLANs within the same access point, or within different access points, may be configured to characterize a plurality of restricted subsets and/or a plurality of less-restricted subsets within the protected network. **A communication port of the access point is configured such that network traffic directed at the protected network is initially passed through a restricted VLAN rather than through a less-restricted VLAN.** ... For example, the restricted VLAN allows traffic to pass to a gatekeeper configured to receive requests for access to the less-restricted VLAN, and to determine if, and to what extent, access may be allowed. **To grant access, the gatekeeper sends commands to the access point in order to reconfigure a communication port to which the access device is connected. The reconfiguration typically includes reassigning the communication port from the restricted VLAN to the less-restricted VLAN.**

484 Patent, 2:62-3:25

"Reconfiguring" and "Configuring"

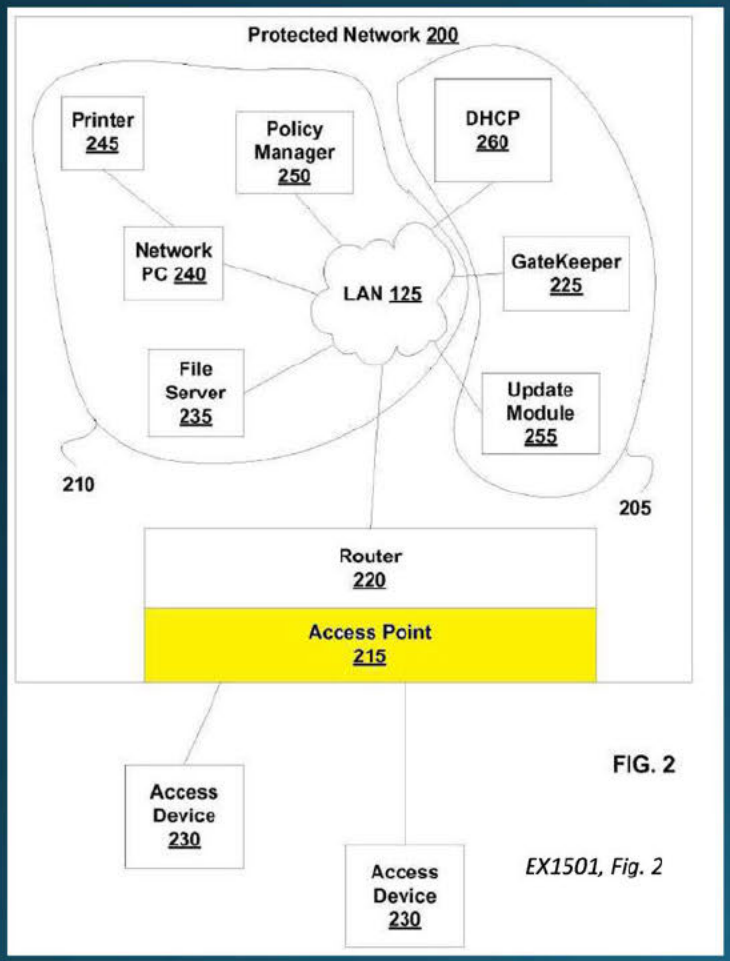


FIG. 2

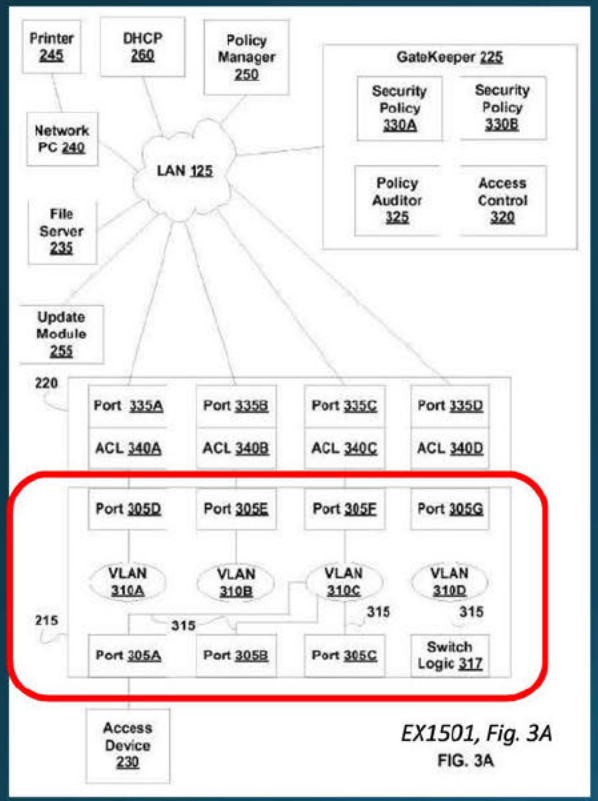
EX1501, Fig. 2

FROM DETAILED DESCRIPTION

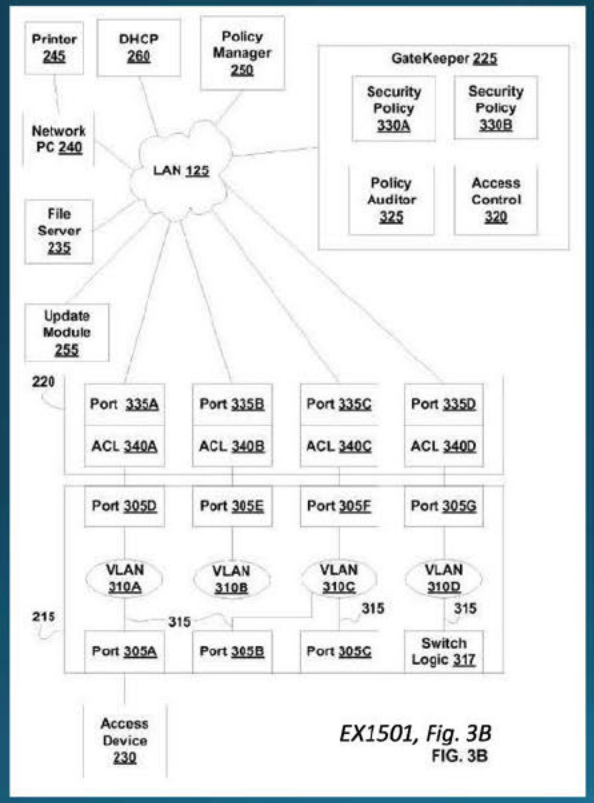
Access to a protected computing network is controlled by manipulating a communication port within an access point. When an access request is first received, the communication port is configured to pass the request to a restricted subset of a protected computing network. This restricted subset includes a gatekeeper configured to administer a security policy governing access to those parts of the protected computing network that are not part of the restricted subset. Those parts of the protected computing network that are not part of the restricted network are considered to be in a less-restricted subset. The less-restricted subset being less restricted relative to the restricted subset in terms of what elements may be included in each subset. **If the device requesting access satisfies requirements of the security policy, then the gatekeeper sends commands to the access point in order to reconfigure the communication port through which the access request was received. The communication port is reconfigured such that further communication from the access device is passed to the less-restricted subset as well as, optionally, the restricted subset.**

484 Patent, 5:29-50

"Reconfiguring" and "Configuring"



EX1501, Fig. 3A
FIG. 3A

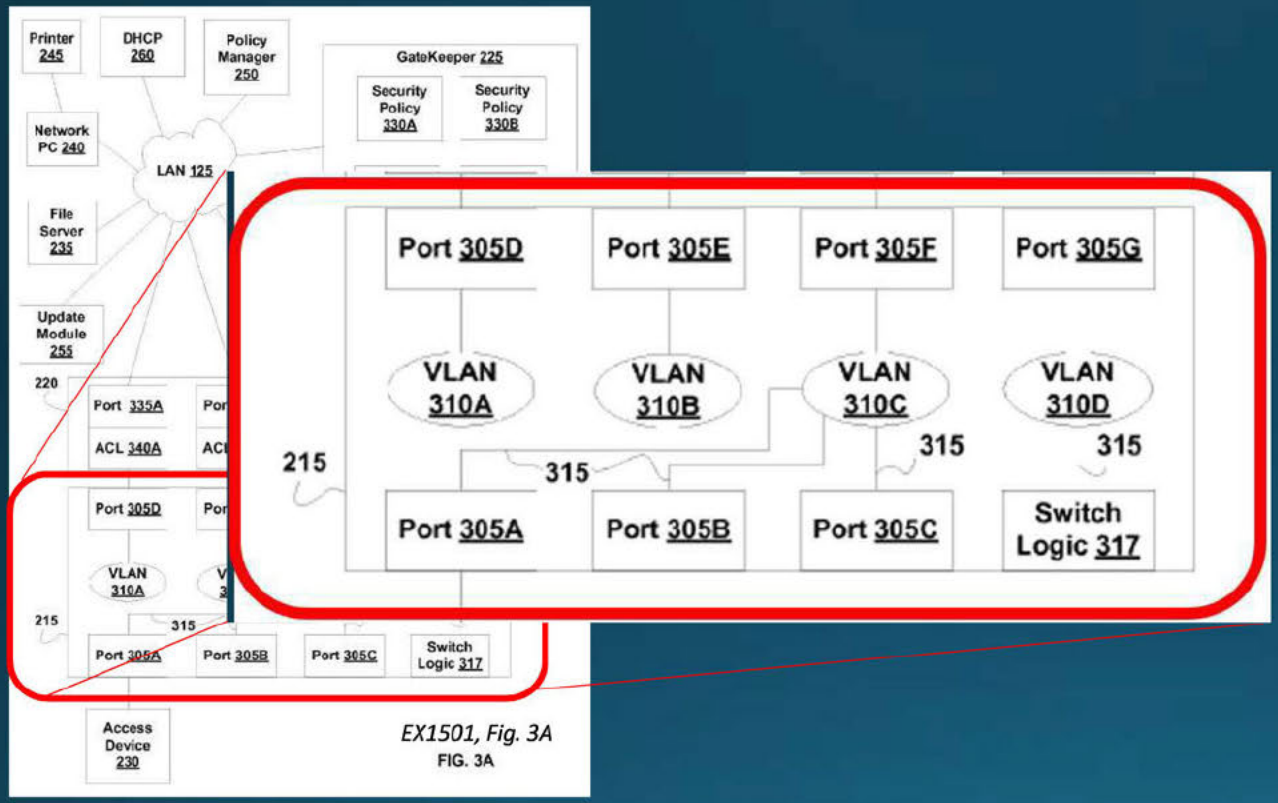


EX1501, Fig. 3B
FIG. 3B

FIG. 3A is a block diagram showing further details of Access Point 215, Router 220 and GateKeeper 225, according to various embodiments of the invention. Access Point 215 is, for example, a network switch, a wireless access point, a remote access virtual private network (VPN), secure socket layer VPN, firewall, or the like. When embodied in a network switch, **Access Point 215 includes a series of communication ports, designated Ports 305A-305G and configured for communication with devices such as Access Device 230, Router 220, Less-Restricted Subset 210 and/or Restricted Subset 205.**

484 Patent, 7:51-61

"Reconfiguring" and "Configuring"

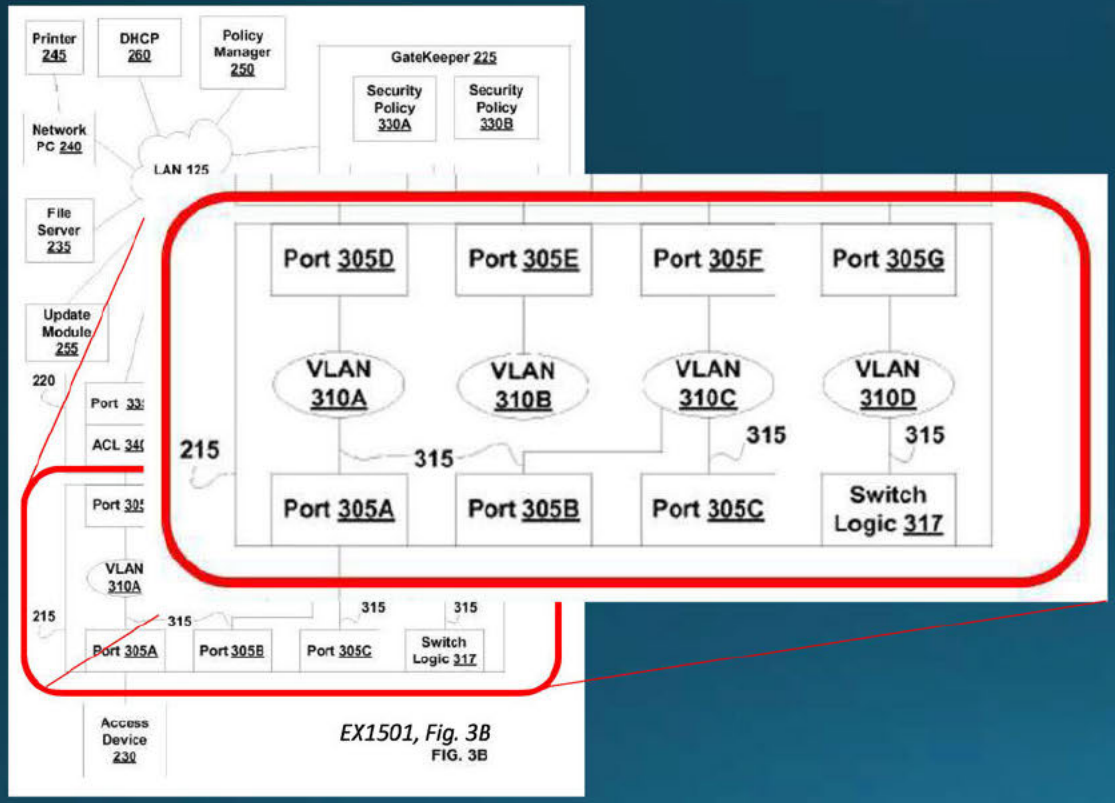


EX1501, Fig. 3A
FIG. 3A

Communication received at one member of Ports 305A-305G is directed internally to another member of Ports 305A-305G via a member of VLANs 310A-310D. VLANs 310A-310D are logical associations between members of Ports 305A-305G. Typically, any members of Ports 305A-305G that are configured to be associated with the same member of VLANs 310A-310D are in bi-directional communication with each other. These associations are illustrated in FIGS. 3A and 3B by Lines 315. **For example, with Ports 305A-305G configured as shown in FIG. 3A, communication from Access Device 230 and received at Port 305A is directed to Port 305F because Port 305A and Port 305F are both associated with VLAN 310C.**

484 Patent, 7:62-8:7

"Reconfiguring" and "Configuring"

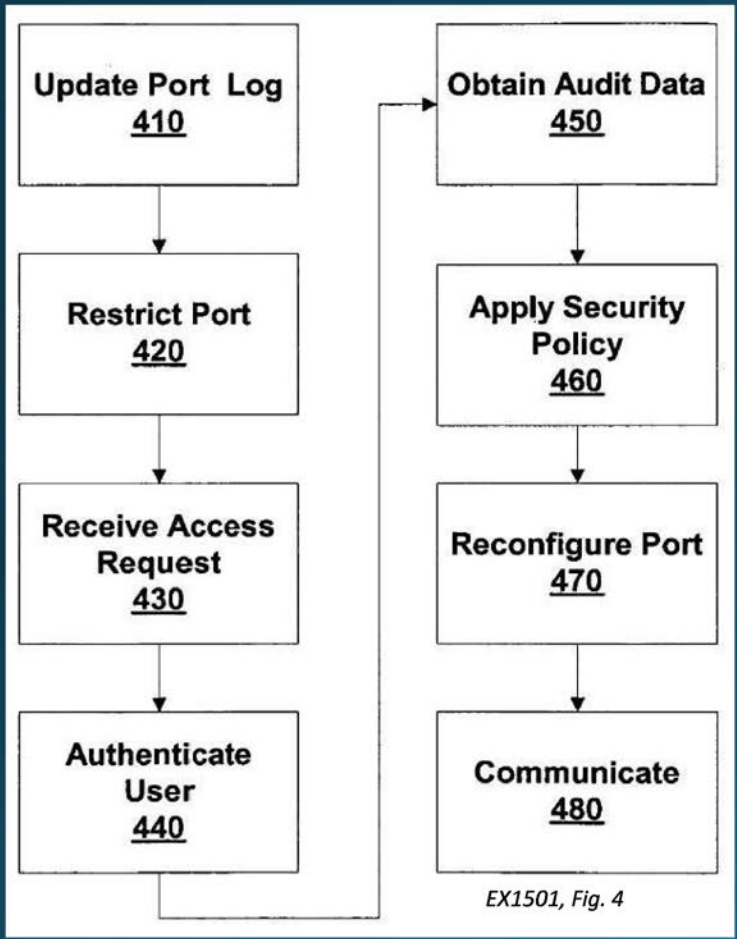


EX1501, Fig. 3B
FIG. 3B

The associations between members of Ports 305A-305G and VLANs 310A-310D are controlled by Switch Logic 317 which is accessible to other devices, for example through Port 305G. Switch Logic 317 is configured for configuring and reconfiguring members of Ports 305A-305G responsive to received commands. **For example, by receiving an appropriate command, Switch Logic 317 is configured to reconfigure Port 305A to be associated with VLAN 310A, as illustrated in FIG. 3B below. In this configuration, data received at Port 305A is directed to Port 305D via VLAN 310A, rather than to Port 305F.**

As is discussed further below, **the commands received by Switch Logic 317 may be generated by GateKeeper 225.** This communication between GateKeeper 225 and Switch Logic 317 may be accomplished using SNMP (Simple Network Management Protocol), telnet, SSH (Secure Shell), RADIUS (Remote Authentication User Dial-In Service), EAP (Extensible Authentication Protocol), or the like.

"Reconfiguring" and "Configuring"



EX1501, Fig. 4

FIG. 4 is a flowchart illustrating a method of granting access to Less-Restricted Subset 210 (FIG. 2), according to various embodiments of the invention. In these embodiments, an Update Port Log Step 410 and a Restrict Port Step 420 are used to prepare an open (unused) communication port on Access Point 215 for receiving a request for access to Less-Restricted Subset 210. This request is received from Access Device 230 in a Receive Access Request Step 430. **In response, GateKeeper 225 authenticates a user, obtains audit data, and applies a security policy in an Authenticate User Step 440, an Obtain Audit Data Step 450 and an Apply Security Policy Step 460, respectively. If the security policy is satisfied, then in a Reconfigure Port Step 470, GateKeeper 225 reconfigures the communication port of Access Point 215 to which Access Device 230 has connected. Finally, the reconfigured communication port is used to pass communication between Access Device 230 and one or more element of Less-Restricted Subset 210 in a Communicate Step 480.** Further details of these steps are discussed herein.

484 Patent, 10:26-44

"Reconfiguring" and "Configuring"

Petitioner's Reconfiguration Claim

As Krantz also describes:

> In VLAN embodiments, when a client is authorized to access resources located on the second network, **the access point may insert Tag Headers into client data to indicate to the data routing device that client data is to be transferred to the second network.**

Ex.1505, [0023]. Ex.1503, ¶123.

Krantz is therefore explaining that when configured as a "VLAN aware device," Krantz's "*communication device*" is "*reconfigur[ed]*" by "*an access control configured*" to do such reconfiguration such that "*data*" from the "*access device*" is "*is received by the less-restricted subset of the protected network rather than merely a restricted subset of the protected network*" because Access Point 209 (via Port 251) will insert VLAN Tag Headers into incoming data frames from a client **that may now access VLAN C** ("*less-restricted subset.*") Ex.1505, [0107]. Port 251 is "*reconfigur[ed]*" by Access Point 209 because it was previously tagging incoming data from client 205, as described above, with headers that enabled access to VLAN B, *i.e.*, the "*restricted subset*" only. Put another way, Access Point 209 "*the communication device*" is "*reconfigur[ed]*" because Port 251 tags incoming data for transfer to VLAN C rather than VLAN B. Ex.1503, ¶124.

In particular, Krantz discloses "[w]hen client 205 is authorized to access resources located on VLAN C, **access point 209 may enable protocols that are currently blocked for port 251 and may insert Tag Headers indicating that data from client 205 is to be transferred to VLAN C** ["*the less-restricted subset of the protected network*"]. **Server 215 can send commands to** access point 209 to cause access point 209 to enable protocols and cause access point 209 to insert appropriate Tag Headers." Ex.1505, [0107]. Ex.1503, ¶125.

Pet. 46-47

"Reconfiguring" and "Configuring"

What is a "Tag Header"

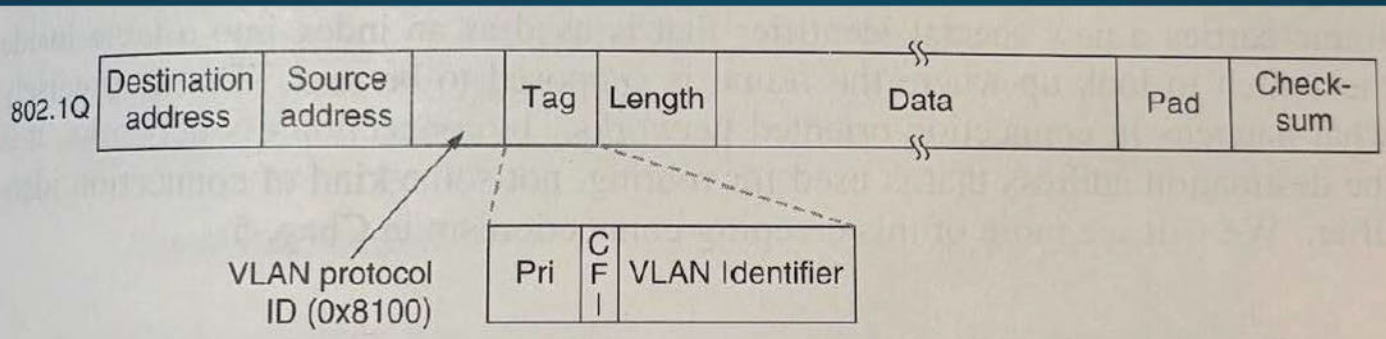


Figure 4-51. The 802.3 (legacy) and 802.1Q Ethernet frame formats.

"Reconfiguring" and "Configuring"

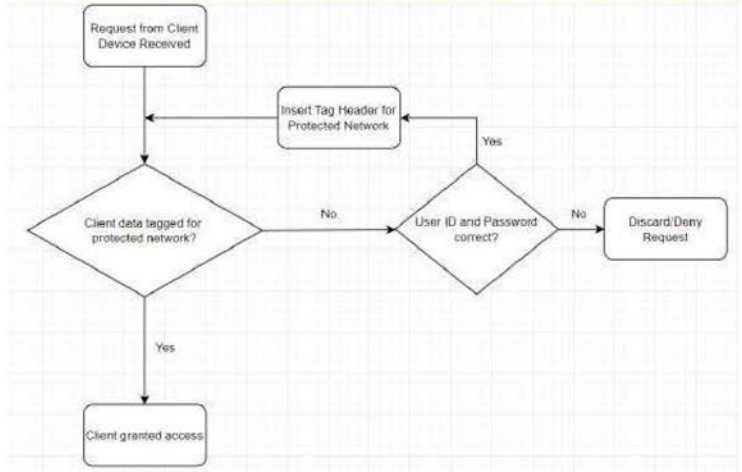
Dr. Cole states:

> 77. Petitioner's argument is incorrect. As discussed above, in enabling a network device to identify frames of different VLANs, a VLAN tag field is inserted into the data link layer encapsulation. The format of VLAN-tagged frames is defined in IEEE 802.1Q issued by the Institute of Electrical and Electronics Engineers (IEEE) in 1998. EX1507. A network device handles an incoming frame depending on whether the frame is VLAN tagged, and information about the VLAN tags, if any. A VLAN tag includes a TPID field, a priority field, a CFI, and a VLAN ID field. The VLAN ID field identifies the VLAN that the frame belongs to. The basic logic is set out below:

EX2565

"Reconfiguring" and "Configuring"

Dr. Cole states:



78. In Krantz, after a user is authenticated (user ID and password), data fields from the user's device are tagged to allow access to the Internet. The communication ports of the access point are not changed. Rather, data with a particular VLAN ID is directed to the preprogrammed VLAN based on this new tag. EX2566 at 5-8 (Tanenbaum).

EX2565

"Reconfiguring" and "Configuring"

Dr. Cole states:

> 79. When a data frame from a device is received, the VLAN aware device first checks to see if it has a VLAN tag that is in the VLAN database. If it does, the data is sent to the assigned VLAN, which in Krantz is VLAN C. If the VLAN does not have a tag the data frame is sent to where the access point is configured, i.e., pre-programmed to send untagged (or unmatched tagged) data. In Krantz, the data goes to VLAN B. If server 215 determines that data frame is from an authorized user (user ID and password) then the access point may insert a different Tag Header into the data frame to label it as corresponding to VLAN C. Essentially, this changes the label on the data. With this different Tag Header, the data routing device 214 then directs the data frame to VLAN C.

EX2565

"Reconfiguring" and "Configuring"

Dr. Cole states:

> 80. The configuration of the communication ports of the access point in Krantz is not changed. If one considers access point 209 as being the claimed "access point," the association of ports 251 and 252 remain unchanged. Even if one includes the data routing device 214 as part of the claimed "access point," there is no change to the port associations. Instead, data bearing a Tag Header assigned to VLAN B or untagged will go to VLAN B, and data bearing a Tag Header assigned to VLAN C will go to VLAN C, just as was the case before the client data was authorized. It is the data frame itself that is changed, not the communication port associations. Essentially, the Tag Header is routing information that is attached to the data from the client, and the rerouting of data occurs because of the different routing information, not because of a change to the access point itself.

EX2565

"Auditing" an Access Device

'484 Patent: Claims 1-6, 11-13, 15-19, 23-25, 39, 42

'444 Patent: All Challenged Claims

'450 Patent: Claims 22-23, 25, 27

Auditing An Access Device

'484 Patent

Claim 1. A network gatekeeper comprising: … a policy auditor configured to audit the access device using the at least one security policy, in response to a request to access the less-restricted subset of the protected network, the request being sent from the access device to the gatekeeper via a communication device

Claim 39. The method of claim 28, wherein the security policy includes an audit of the access device.

'444 Patent

Claim 1. A method for auditing a device, the method comprising:

performing an authentication using an EAP protocol from the device, the device being connected via a computer network to an access point configured to use an 802.1x protocol;

sending a request for audit data to an agent running on the device;

receiving the audit data at a gatekeeper configured to control access to a network, from the agent, the audit data pertaining to the device and having been obtained by the agent;

applying a security policy that includes at least one requirements pertaining to the audit data and at least one requirement pertaining to the authentication, the applying of the security policy taking place under control of the gatekeeper.

Auditing An Access Device

'450 Patent

22. A method of providing access over a communication network, the method comprising:

receiving at an access point a request for access via a less-restricted network, the request coming from an access device;

applying a security policy to the access device in response to the request, application of the security policy including performing an audit of the access device;

providing information to the access device to improve compliance of the access device to the security policy, in response to the audit; and

granting access to the less-restricted network based on satisfaction of the security policy by the updated access device, the granting of access includes configuring the access point to allow the access.

Auditing An Access Device

Auditing vs. Authentication

A first level of access control is achieved by requiring authentication of a user. This may be accomplished by requiring the user to enter a username and password or by reading a MAC address or other identifying information from an access device. In some systems, a network switch is programmed to grant access to a secure network only after proper authentication is achieved. Systems capable of using this approach include those using a proprietary VMPS protocol from Cisco Systems, Inc. of San Jose, Calif. or using a IEEE 802.1x standard protocol.

Reliance on mere user authentication includes several disadvantages. For example, there are no provisions to assure that an access device used by the authenticated user meets network security policies. The access device may have out-of-date virus software, may have security vulnerabilities, or may be otherwise compromised. Further, this approach requires that access points (e.g., network switches) support one of a specific set of access protocols. Because many access points do not support VMPS, 802.1x, or a similar protocol, implementation of this approach on a large preexisting network, such as a corporate network, may be prohibitively expensive.

Auditing An Access Device

Auditing vs. Authentication

In optional Authenticate User Step 440, Policy Auditor 325 authenticates the identity of Access Device 230 and/or a user of Access Device 230. This authentication may be required by a member of Security Policies 330A-330B. In various embodiments, the authentication may include receipt of a user name and password, receipt of a MAC address, reading of data stored on Access Device 230, communication with an agent executing on Access Device 230, or the like.

In optional Obtain Audit Data Step 450, Policy Auditor 325 collects further data to perform a security audit of Access Device 230 responsive to Security Policy 330A or Security Policy 330B. In some embodiments, Obtain Audit Data Step 450 includes sending system data requests to Access Device 230, Router 220, or Access Point 215. The requested system data may include, for example, operating system status (version, updates, etc.), antivirus software status, information concerning devices connected to Access Device 230, Windows registry information, MAC address, IP addresses, cookies, status of applications executing on Access Device 230, or the like.

Claim Construction - Plain and Ordinary Meaning

> Petitioner relies on Krantz's disclosure of user authentication as a teaching or suggestion to audit a device in accordance with a security policy. Petitioner first argues that Krantz teaches applying a security policy because Krantz discloses "that access to the network may be controlled by 'configuration settings,' which can include 'supported types of encryption' or 'supported types of authentication,' which can include an indication for EAP, which is short for 'Extensible Authentication Protocol.'" Pet. 32–33 (quoting Ex. 1103 ¶ 89; Ex. 1105 ¶¶ 66–67). But Krantz teaches that EAP relates to the authentication of a user through "a User-Identifier" to determine whether "a user of client 205 has an account with server 215." Ex. 1105 ¶ 71. As noted above, however, according to the '350 patent, user authentication and application of a security policy are separate processes.

IPR2024-00540, Paper 13, at 13

Auditing An Access Device

Claim Construction - Plain and Ordinary Meaning

Petitioner also argues that Krantz teaches auditing a device in accordance with a security policy because it discloses "that 'the server may authorize the client for at least partial access to the second network . . . and/or may deny access to the second network and authorize the client for at least partial . . . access to the first network.'" Pet. 33 (quoting Ex. 1105 ¶ 16). Petitioner does not explain within this argument why the mere act of authorizing or denying access to a network constitutes auditing the device in accordance with a security policy. *Id.* Moreover, Krantz teaches that the decision of whether to authorize or deny access is "[b]ased on the credentials" that the client sends to the server. Ex. 1105 ¶ 16. The record contains unopposed testimony that the term "credentials" would be understood by a person of ordinary skill in the art as "refer[ring] to username and password credentials." Ex. 2001 ¶ 58. Moreover, Krantz states that its "credentials" include a "user-identifier and password" that are "compare[d] . . . to entries in [a] user database." Ex. 1105 ¶ 76.

Thus, Petitioner has not shown sufficiently that Krantz teaches the step of auditing the device in accordance with a security policy.

IPR2024-00540, Paper 13, at 13-14

Auditing An Access Device

Petitioner's Argument – Ground 1

Krantz discloses receiving audit data from a client 205 ("*access device*"). For example, Krantz discloses that "a server has the functionality to authorize access" to a network and/or selected elements within a network after the client 205 ("*access device*") sends credentials to the server. Ex.1505, [0016], [0071]. Krantz discloses that the "server (**based at least in part on received credentials**) may authorize the client for at least partial access to the single network." Ex.1505, [0017]; *see also* [0074]-[0076], [0104], [0107]-[0109] (collectively describing techniques for requesting access in a VLAN environment). Ex.1503, ¶95.

'484 Patent (675), Pet. at 32

Auditing An Access Device

Petitioner's Argument – Ground 2

To the extent one asserts that Krantz does not disclose "*at least one security policy including requirements that must be satisfied,*" Krantz/Herrmann describe a security policy requiring antivirus software be installed on the network device, as in Herrmann. Herrmann specifically discloses that "[I]t becomes critical, therefore, **to promptly update anti-virus applications on all machines in a network**." Ex.1506, [0012]. Ex.1503, ¶88.

Herrmann explains that "a network administrator **may require all users accessing the network to implement a virus definition update (e.g., DAT file)** that is targeted at a particular virus." Ex.1506, [0071]. This may be implemented using security rules and **checking system data for connecting devices to ascertain compliance**. Ex.1506, [0068]. Ex.1503, ¶89.

'484 Patent (675), Pet. at 32

Auditing An Access Device

No Motivation to Combine

A POSITA would recognize that checking for anti-virus software as part of a security policy would merely be an additional item for server 215 to check in the process already disclosed by Krantz. Ex.1505, [Fig. 3], [0068]-[0076] (describing the steps of authenticating client devices and users). Like Krantz, Herrmann

'484 Patent (675), Pet. at 13

167. A POSITA would recognize that checking for anti-virus software ("*wherein the network gatekeeper is further configured to obtain system data from the access device*") would merely be an additional item for server 215 (i.e., the "*gatekeeper*") to check in the authentication process already disclosed by Krantz.

EX1503

Auditing An Access Device

No Motivation to Combine

137. User authentication is a relatively straightforward proposition, that requires checking a user ID and password against a database having authorized user ID's and passwords. By contrast, policy evaluation is highly complex. Security policy evaluation involves much more than simply checking user supplied information with a database. A stored security policy is applied to the device. This can include determining what software, such as operating system or anti-virus software, is running on the device and whether it has the necessary updates, e.g., patches. Instead of merely relying on the device or agent on the device to simply affirm that the device complies with the security policy, the claims require the gatekeeper on the restrict subset of the network to make this determination for itself. Whereas Herrmann pushes checking security policy compliance out to the client devices, the 484 Patent specifies that the gatekeeper makes this evaluation. The 484 Patent provides the additional benefit of reducing the possibility of spoofing by the client.

141. Accordingly, there would need to be an evaluation of not only the type of antivirus software, but an evaluation of the fact that the software is in fact running and not bypassed by the user or any other individual. To check if antivirus software is installed is a far different inquiry from checking whether it is running (i.e. "executing" per claim 13). For the NAC gatekeeper to determine whether antivirus is installed, it would check the endpoint device's ***registry key*** for indicators that the software had been installed (at some point in time). But determining that the software had been installed is no guarantee that it is ***running***. To make that determination, the NAC gatekeeper would need to check the endpoint device's memory and see whether the drivers are presently loaded. This is a more intensive analysis that just checking if the software was ever installed.

142. Accordingly, a POSITA would not be motivated to combine Krantz with Herrmann.

EX2565

Applying A Security Policy To An Access Device

‘484 Patent: Claims : 28, 38, 41-43, 53

‘460 Patent: All Challenged Claims

‘450 Patent: Claims 1-4, 7-10, 14, 16

Applying A Security Policy To An Access Device

‘484 Patent:

Claims 28 and 41:

A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device … applying a security policy to the access device, responsive to the request

‘460 Patent:

Claims 1 and 16:

A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device … applying a security policy to the access device, responsive to the request;

Applying A Security Policy To An Access Device

'450 Patent:

Claim 1. A method for applying a security policy to network devices, the method comprising:
performing an authentication of a device connected to an access point;
…
applying a security policy, the security policy including one or more requirements pertaining to the authentication and the information, the application of the security policy taking place in response to a gatekeeper,

Claim 16. A method of providing access over a communication network, the method comprising:
…
applying a security policy to the access device in response to the request, application of the security policy including performing an audit of the access device;
…
authenticating a user of the access device, wherein granting access is further based on the authentication.

Claim 22. A method of providing access over a communication network, the method comprising:
…
applying a security policy to the access device in response to the request, application of the security policy including performing an audit of the access device …

Updating The Access Device

‘484 Patent (Claims 3, 24, 38, 41-43, 53)

‘450 Patent (Claims 2, 27)

‘460 Patent (Claim 27)

‘444 Patent (Claim 5, 6, 17)

"Updating the Access Device"

'484 Patent (Claims 3, 24, 38, 41-43, 53):

- Dependent claim 3: "The network gatekeeper of claim 1, wherein the network gatekeeper is further configured to update the access device using an update module."
- Dependent claim 24: "The network gatekeeper of claim 1, wherein the network gatekeeper is configured to update the access device if requirements of the security policy are not satisfied."
- Dependent claim 38: The method of claim 28, further including updating the access device if requirements of the security policy are not satisfied.
- Independent claims 41 (and dependent claims 42-43, 53): A method of granting access to a protected network, the method comprising: … updating the access device if requirements of the security policy are not satisfied.

"Updating the Access Device"

'450 Patent (Claims 2, 27):

> Claim 2: The method of claim 1, further comprising facilitating updates to software on the device in response to applying the security policy, using the gatekeeper.
>
> Claim 27: The method of claim 22, [providing information to the access device to improve compliance of the access device to the security policy, in response to the audit] wherein the information includes a software update of software on the access device.

'460 Patent (Claim 27): The non-transitory computer readable storage medium of claim 16, wherein the program is further executable to update the access device when requirements of the security policy are not satisfied.

"Updating the Access Device"

'444 Patent (Claims 5, 6, 17, 22):

Claim 5. The method of claim 2, further comprising receiving, from the agent, updated audit data pertaining to the device after configuring the access point.

Claim 6. The method of claim 2, further comprising receiving, from the agent, updated audit data pertaining to the device while the device has access to a less-restricted subset of the network.

Claim 17. The method of claim 1, wherein the gatekeeper is configured to take part in bringing a software on the device up to date in response to applying the security policy.

22. A method for auditing a device, the method comprising:performing an authentication using an EPA protocol from the device, the device being connected to an access point configured to use an 802.1x protocol;
sending a request for audit data to an agent running on the device;
receiving the audit data at a gatekeeper configured to control access to a network, from the agent, the audit data pertaining to the device and having been obtained by the agent;
applying a security policy that includes at least one requirements pertaining to the audit data and at least one requirement pertaining to the authentication, the applying of the security policy taking place under control of the gatekeeper, where applying the security policy includes configuring the access point;
receiving, from the agent, updated audit pertaining to the device while the device has access to a less-restricted subset of the network; and
re-auditing the device in accordance to the security policy using the received updated audit data.

"Updating the Access Device"

Petitioner's Argument For Claims 3 and 24 Of The '484 Patent

Krantz explains that "the server can authorize limited access. . . such that the **client can download provisioning files** [from the "*the network gatekeeper*"] for gaining full access resources located on the second network. Ex.1505, [0032]; *see also* Ex.1505, [0056] ("Client 405 can be authorized to download provisioning files from these computer systems or modules *["is further configured to update the access device using an update module"], while being denied access to other resources located on network 413.").* Ex.1503, ¶¶154-155.

Krantz also describes "**provisioning module 208** can execute an XML document, defined in accordance with an XML configuration schema, to appropriately configure client 205 for accessing resources located on VLAN C *["update the access device."].* **Provisioning module 208** can retrieve previously downloaded XML documents, such as, for example, a configuration sub-file, from provisioning data 207," Ex.1505, [0110], in concert with Provisioning Data Store 219 *["network gatekeeper . . . using an update module"].* Ex.1505, Figure 2, [0085]. Ex.1503, ¶156.

Pet. at 59-60; see also, Pet at 64.

"Updating the Access Device"

Petitioner's Cited Krantz Disclsoures

[0032] When full access to resources located on the second network is not authorized, the server can authorize limited access to the first network or second network such that the client can download provisioning files for gaining full access resources located on the second network. In some embodiments (e.g., when the server is located on the first network), the server can authorize (at least limited) access to the first network, while restricting access to the second network. In other embodiments (e.g., when the server is located on the second network), the server can authorize limited access to the second network. Restricting and/or limiting access to a network can be implemented using a wide variety of techniques, such as, for example, Virtual Local Area Networks ("VLANs"), Internet Protocol ("IP") filtering, Virtual Private Networks ("VPNs"), or IP Security ("IPSec") protocols.

[0056] It should be further understood that techniques used to restrict access to a network work may also be used to provide limited access to a network. In some embodiments, a server on a network can provide a client with limited access to the network. For example, a server located on network **413** may implement IP filtering to provide client **405** with limited access to network **413**. Included in the limited access can be access to computer systems or modules that store provisioning files needed for gaining full access to network **413**. Client **405** can be authorized to download provisioning files from these computer systems or modules, while being denied access to other resources located on network **413**.

"Updating the Access Device"

Dr. Cole Explains "Provisioning Files" Are Unrelated To Security

A provisioning file is a configuration file that contains details about how a device or system should be set up, including information like necessary software, network settings, user access, and other parameters. Indeed, provisioning files are merely used to configure devices with the necessary settings to connect to and operate on a network. These files ensure that the device can access network services without requiring manual configuration by the end-user. EX2565, ¶165

Krantz itself verifies that "provisioning files" (i.e. "configuration files") are related to establishing and maintaining a communication link between the endpoint and the network. For example, Krantz explains, "[d]uring the registration process with the ISP, the computer system may download provisioning files for the wireless hotspot. Thus, upon connecting to the wireless hotspot, the computer system may already be appropriately configured for accessing the Internet through the wireless hotspot." Krantz, ¶112. **This relates only to connectivity, not to security**. EX2565, ¶166

"Updating the Access Device"

Petitioner's Reliance On Herrmann's "Heartbeat" Message

Similarly, Herrmann discloses continuous monitoring, including after reconfiguration. Herrmann explains: "the IGW server can direct the NAS to remove the restrictive filter **once the client has established compliance** with the required policy. When the client has taken the necessary steps to comply with the policy, **the policy server is notified by the client** ['*receiving from the agent*'] **(e.g., through an 'IA_HEARTBEAT' message, which is a periodic status message sent from the client directly to the policy server)** ['*updated audit data pertaining to the device after configuring the access point*']. If the policy server verifies that the client is indeed in compliance with the assigned policy, it sends an 'ISS_AUTH_OK' message to the IGW server to indicate that the session should be unrestricted. In response … the IGW server directs the NAS to remove the restrictive filter." Ex.1206, [0080]. Nothing in Krantz or Herrmann suggests that continuing to collect audit data would cease once a reconfiguration occurs; instead using a session timeout and/or a periodic "IA_HEARTBEAT" protocol suggests it would continue even after reconfiguring the access point. Ex.1203, ¶172.

"Updating the Access Device"

Herrmann's "Heartbeat" Message

157. A heartbeat message does not contain substantive policy data. Rather, it only carries minimal information to confirm if an access point is connected and active (i.e., proof of life). A status message does not contain substantive policy data but only carries minimal information to confirm an endpoint is connected. And this information is not used for evaluation or determining compliance with a security policy. Indeed, as the term "heartbeat" suggests, it is known in the art to be merely an indicator that the client device is still active and has not left the network. *See, e.g.*, EX2569.

EX2565, ¶157

Objective Indicia of Nonobviousness

Objective Indicia of Nonobviousness

Road Map

- InfoExpress's Invention: The CyberGatekeeper LAN ("CG LAN")
  - [redacted]
  - [redacted]
  - [redacted]
  - [redacted]

Objective Indicia of Nonobviousness

InfoExpress showed its CG LAN embodies the claims and is coextensive thereto.

Nexus is typically shown by showing: (1) a specific product "embodies the claimed features, and is coextensive with them," or (2) the objective evidence "is the direct result of the unique characteristics of the claimed invention."

Volvo Penta of the Ams., LLC v. Brunswick Corp., 81 F.4th 1202, 1210 (Fed. Cir. 2023) (cleaned up).

Objective Indicia of Nonobviousness

Coextensiveness: InfoExpress's CG LAN embodies the claims, coextensively.



EX2478 at 6 (slide presentation sent to Cisco in January 2004). See '460 Patent POR at 47-48; '444 Patent POR at 48-49: '450 Patent POR at 44-45; '484 Patent (-00675 IPR) POR at 47-48; '484 Patent (-00679 IPR) POR at 46-47; *and* '460 Patent Striegel Report, ¶ 62.

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

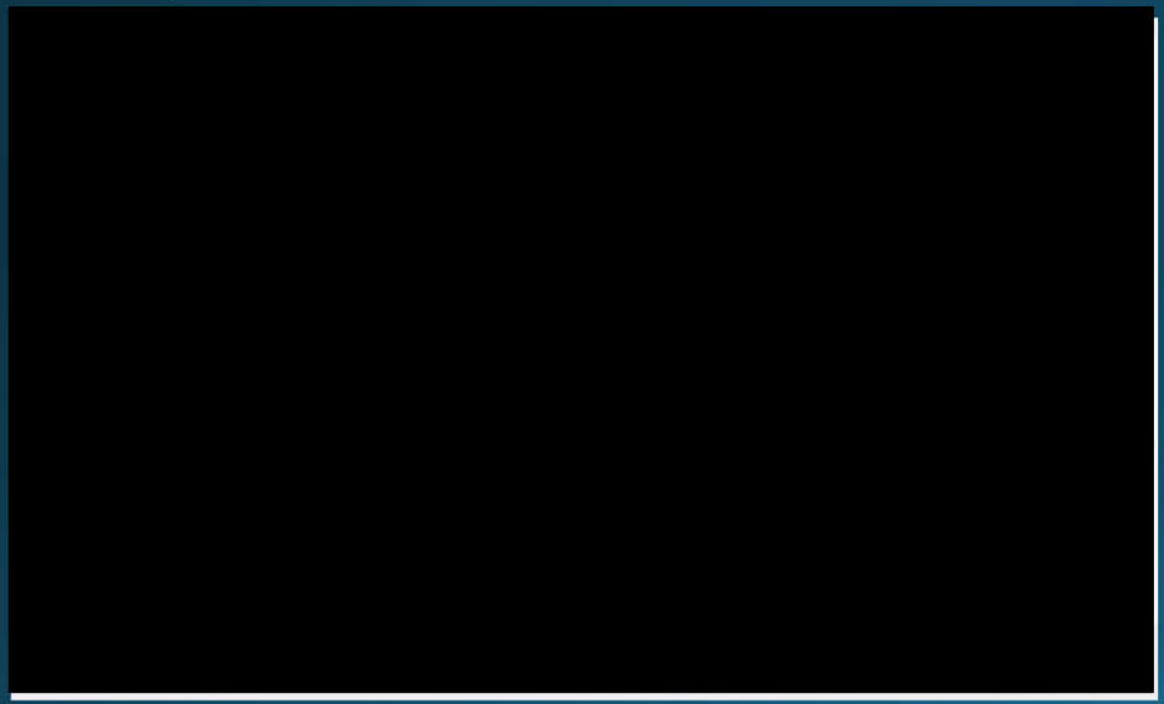
reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

'484 Patent (EX1501), 19:1-18 (claim 41).

Objective Indicia of Nonobviousness

Coextensiveness: InfoExpress's CG LAN embodies the claims, coextensively.



EX2478 at 6 (slide presentation sent to Cisco in January 2004). See '460 Patent POR at 47-48; '444 Patent POR at 48-49: '450 Patent POR at 44-45; '484 Patent (-00675 IPR) POR at 47-48; '484 Patent (-00679 IPR) POR at 46-47; *and* '460 Patent Striegel Report, ¶ 62.

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

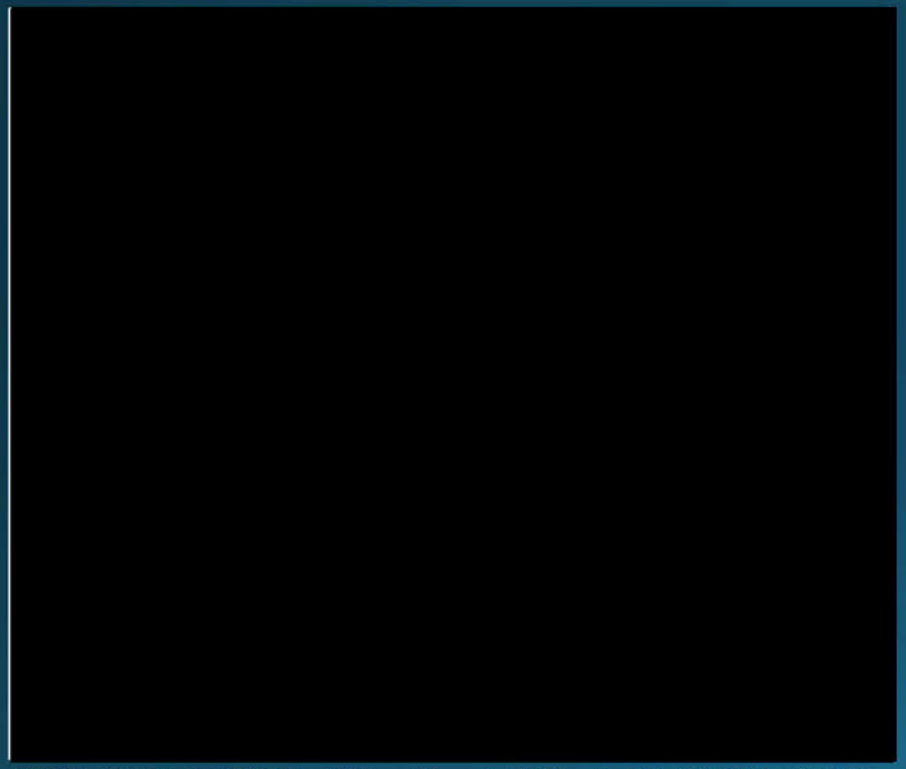
reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

'484 Patent (EX1501), 17:63–18:16 (claim 28).

Objective Indicia of Nonobviousness

InfoExpress's technical literature shows the CG LAN coextensively embodies the claims, and Striegel confirmed.



EX2545 at 5 (cited in '460 Patent Striegel Report at ¶ 44 and p.98); '460 POR at 41; '444 POR at 45, '450 POR at 38, '484 (-00675 IPR) POR at 41; '484 (-00679 IPR) POR at 41).

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

'484 Patent (EX1501), 17:63–18:16 (claim 28).

Objective Indicia of Nonobviousness

Coextensiveness: "auditing"/"applying a security policy to the access device"

[redacted]

December 2004 PowerPoint (EX2480 at 3); *see also* '460 Striegel Report, ¶¶ 65-66.

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See '460 Patent POR at 48-50, '460 Patent Sur-Reply at 14; '444 Patent POR at 49-51, '444 Patent Sur-Reply at 13; '450 Patent POR at 45-48, '450 Patent Sur-Reply at 12; '484 Patent (-00675 IPR) POR at 48-51; '484 Patent (-00675 IPR) Sur-Reply at 15; '484 Patent (-00679 IPR) POR at 47-50; '484 Patent (-00679 IPR) Sur-Reply at 15.

Objective Indicia of Nonobviousness

Coextensiveness: "auditing"/"applying a security policy to the access device"



December 2004 PowerPoint (EX2480 at 6); *see also* '460 Striegel Report, ¶¶ 65-66.

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device responsive to the request;

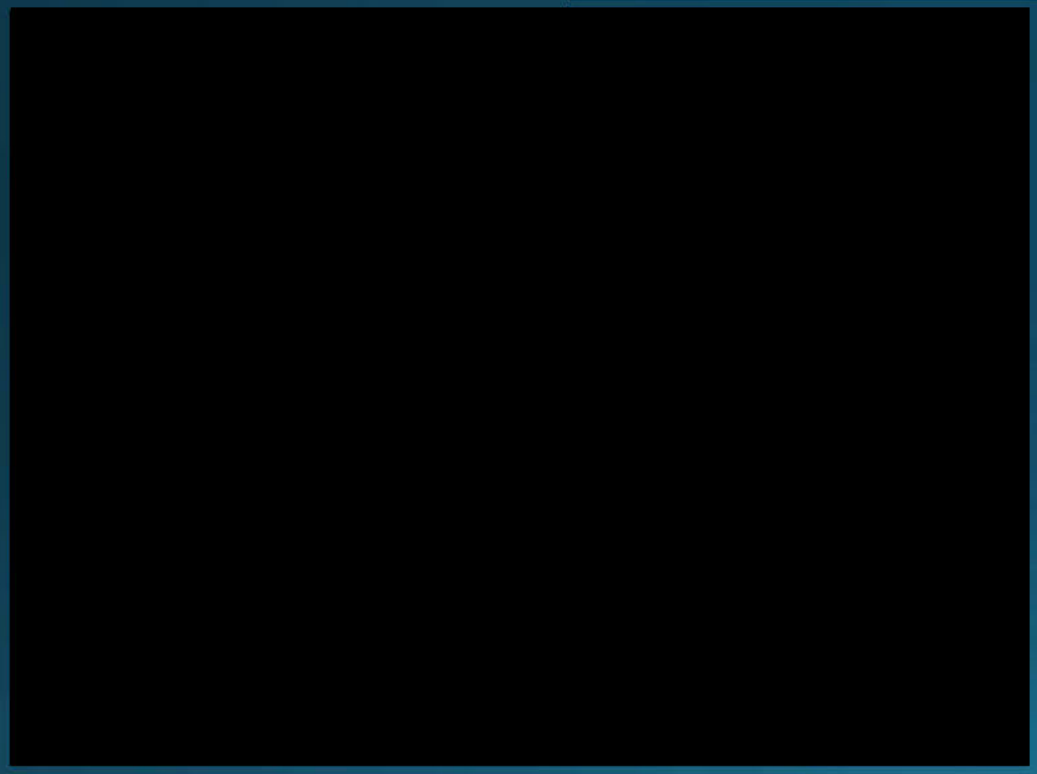
reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See '460 Patent POR at 49-50, '460 Patent Sur-Reply at 13, 14; '444 Patent POR at 51, '444 Patent Sur-Reply at 11, 13; '450 Patent POR at 47, '450 Patent Sur-Reply at 10-11, 12; '484 Patent (-00675 IPR) POR at 50; '484 Patent (-00675 IPR) Sur-Reply at 12-13, 15; '484 Patent (-00679 IPR) POR at 49; '484 Patent (-00679 IPR) Sur-Reply at 13-14, 15.

Objective Indicia of Nonobviousness

Coextensiveness: "(re)configuring."



January 2004 PowerPoint (EX2478 at 8); *see also* '460 Patent Striegel Report, ¶¶ 62-64.

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See '460 Patent POR at 48, '460 Patent Sur-Reply at 13, 14; '444 Patent POR at 49, '444 Patent Sur-Reply at 11, 12; '450 Patent POR at 44-45, '450 Patent Sur-Reply at 10, 12; '484 Patent (-00675 IPR) POR at 47-48; '484 Patent (-00675 IPR) Sur-Reply at 12-15; '484 Patent (-00679 IPR) POR at 46-47; '484 Patent (-00679 IPR) Sur-Reply at 13, 15.

Objective Indicia of Nonobviousness

Coextensiveness: "(less) restricted subset."



January 2004 PowerPoint (EX2478 at 8); *see also* '460 Patent Striegel Report, ¶¶ 62-64.

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See '460 Patent POR at 48, '460 Patent Sur-Reply at 13, 14; '444 Patent POR at 49, '444 Patent Sur-Reply at 11, 12; '450 Patent POR at 44-45, '450 Patent Sur-Reply at 10, 12; '484 Patent (-00675 IPR) POR at 47-48; '484 Patent (-00675 IPR) Sur-Reply at 12-15; '484 Patent (-00679 IPR) POR at 46-47; '484 Patent (-00679 IPR) Sur-Reply at 13, 15.

Objective Indicia of Nonobviousness

Coextensiveness: monitoring.



January 2004 PowerPoint (EX2478 at 6); *see also* '460 Patent Striegel Report, ¶¶ 62-64. *See* '460 Patent POR at 48; '444 Patent POR at 49; '450 Patent POR at 44-45; '484 Patent (-00675 IPR) POR at 47-48; '484 Patent (-00679 IPR) POR at 46-47.

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

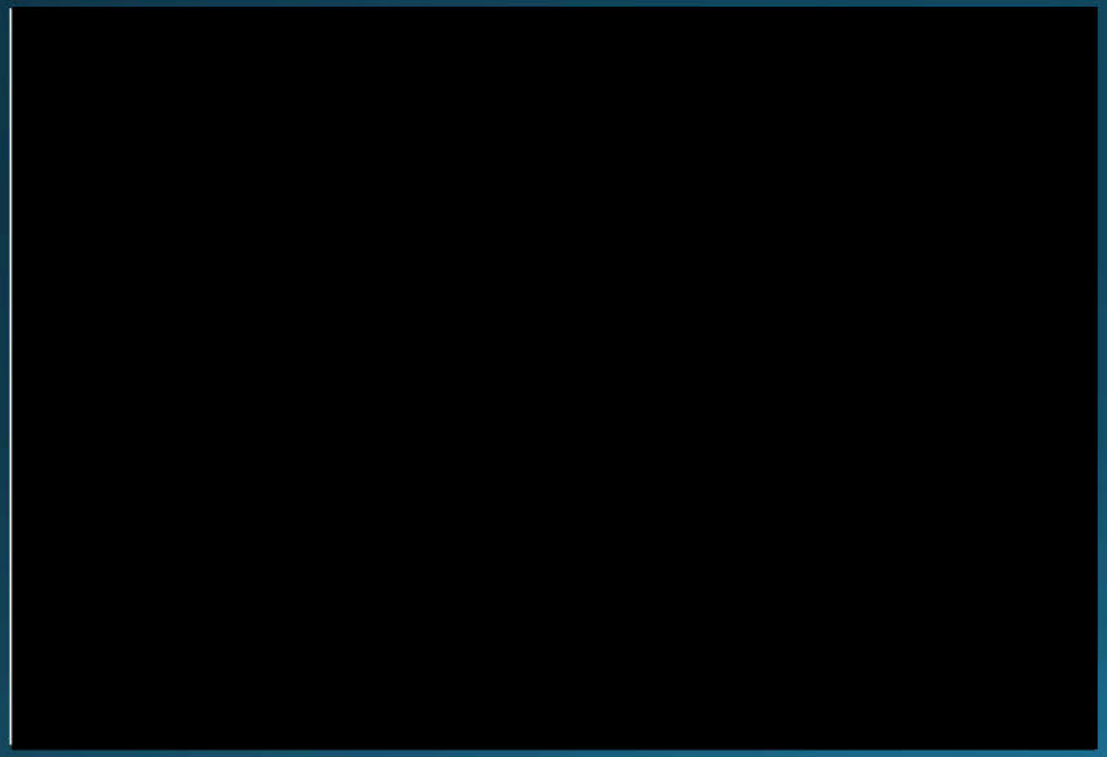
reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

'484 Patent (EX1501), 17:63–18:16 (claim 28).

Objective Indicia of Nonobviousness

Coextensiveness: agent



January 2004 PowerPoint (EX2478 at 8); *see also* '460 Patent Striegel Report, ¶¶ 62-64.

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

See '460 Patent POR at 47-48, '460 Patent Sur-Reply at 14; '444 Patent POR at 48-49, '444 Patent Sur-Reply at 12-13; '450 Patent POR at 44-45, '450 Patent Sur-Reply at 12; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 14-15; '484 Patent (-00679 IPR) POR at 46-47; '484 Patent (-00679 IPR) Sur-Reply at 15.

Objective Indicia of Nonobviousness

Coextensiveness: "updating"/remediation.



InfoExpress's Partner Solution Brief (EX2424 at 2). *See* '460 Patent POR at 51-53, '460 Patent Sur-Reply at 15; '444 Patent POR at 52-54, '444 Patent Sur-Reply at 11, 12; '450 Patent POR at 48-50, '450 Patent Sur-Reply at 11, 12; '484 Patent (-00675 IPR) POR at 51-53; '484 Patent (-00675 IPR) Sur-Reply at 13, 15; '484 Patent (-00679 IPR) POR at 50-52; '484 Patent (-00679 IPR) Sur-Reply at 13, 15)

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

Objective Indicia of Nonobviousness

InfoExpress showed nexus in its PORs by showing how its CG LAN met the claim elements.

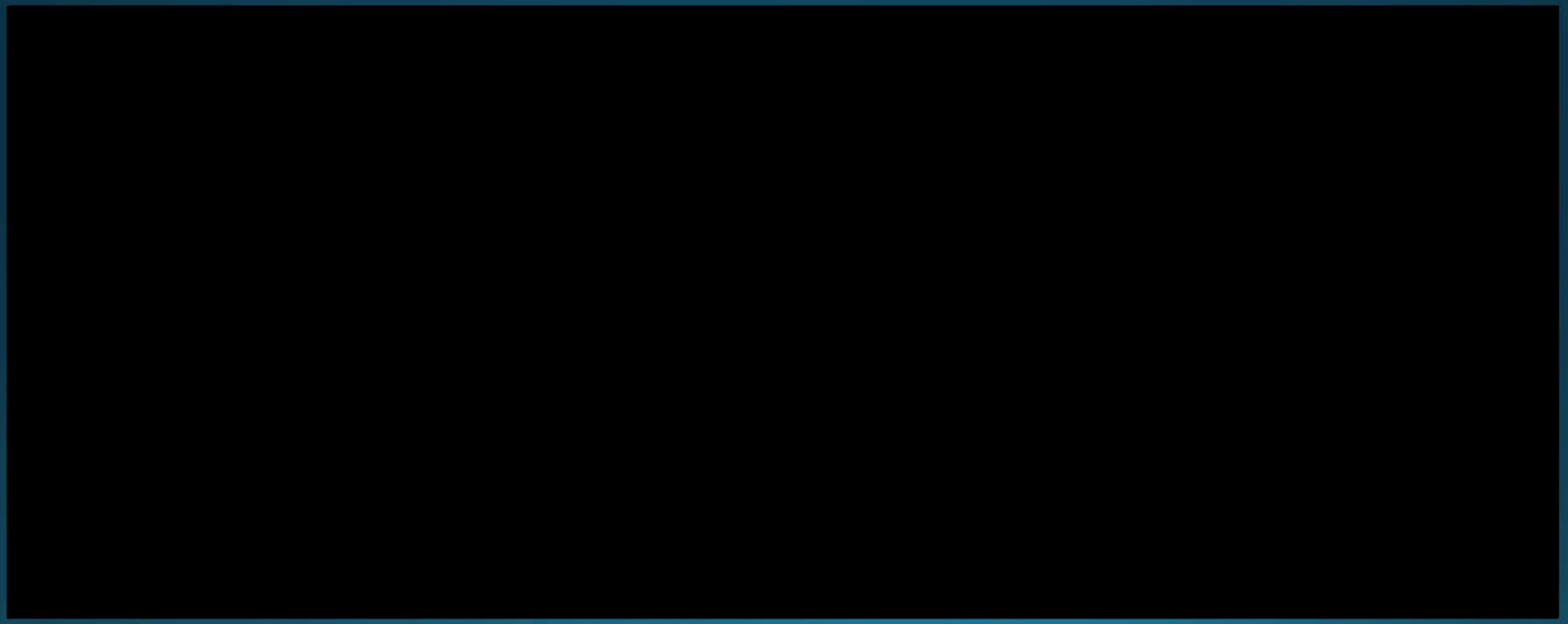


'460 POR at 48.

'460 POR at 49-50.

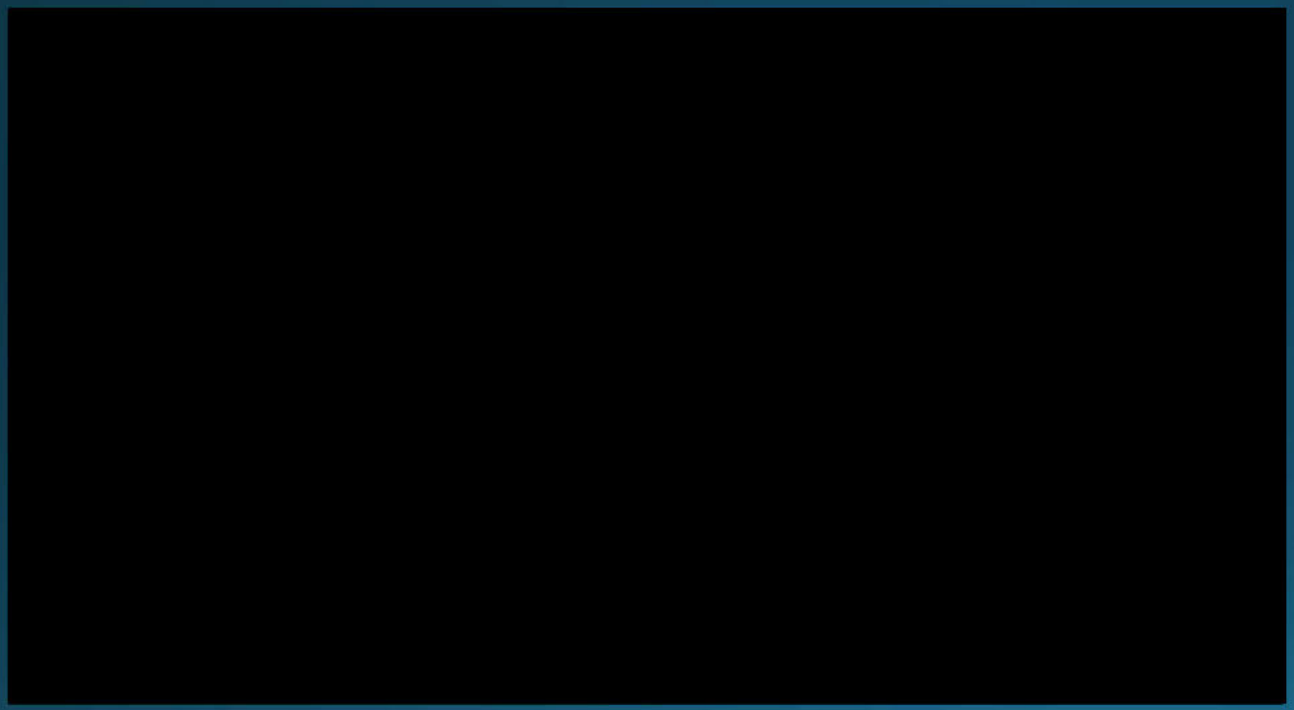
Objective Indicia of Nonobviousness

InfoExpress showed nexus in its PORs by showing how its CG LAN met the claim elements.



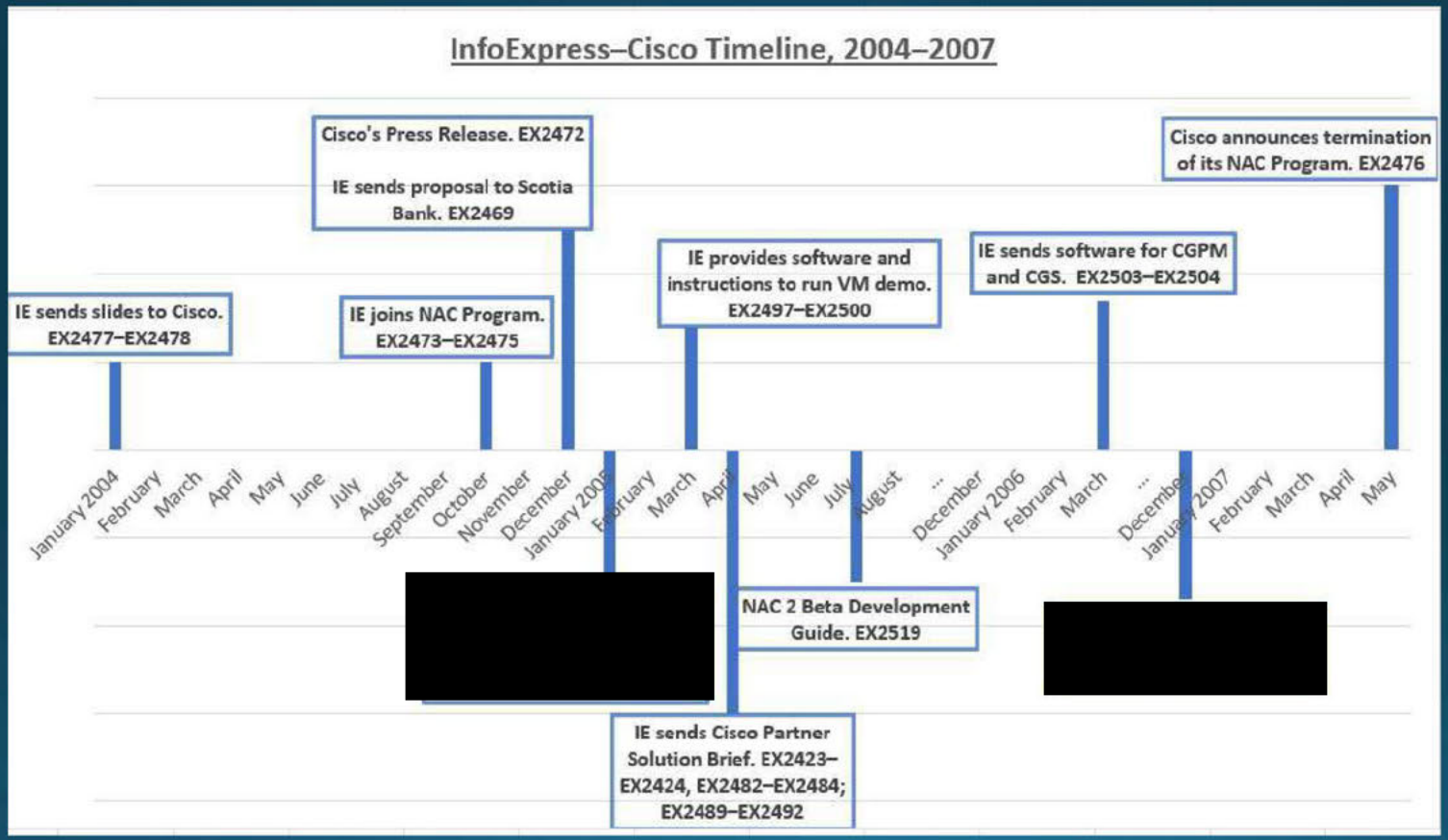
Objective Indicia of Nonobviousness

InfoExpress's marketing literature showed its patents covered the CG LAN.



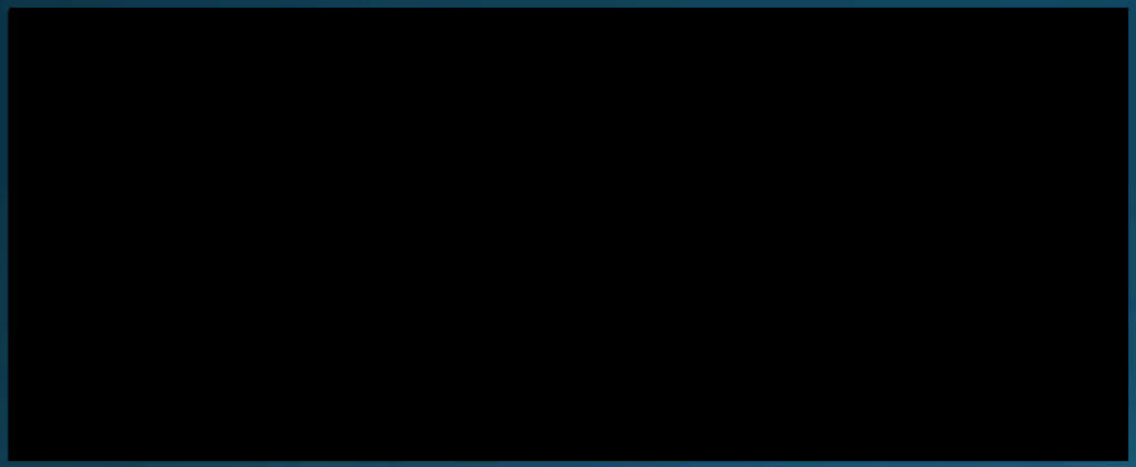
See also EX2452 at 1, EX2453 at 1, EX2454 at 1, EX2455 at 1, EX2456 at 1, EX2457 at 1, EX2459 at 1, EX2460 at 1, EX2462 at 1, EX2463 at 1, EX2464 at 1, EX2465 at 1, EX2466 at 1, EX2467 at 1, and EX24678 at 1(all of which are cited at '460 Patent POR at 40, '460 Patent Sur-Reply at 15; '444 Patent POR at 13, '444 Patent Sur-Reply at 12, 15; '450 Patent POR at 38, '450 Patent Sur-Reply at 12; '484 Patent (-00675 IPR) POR at 41; '484 Patent (-00675 IPR) Sur-Reply at 15, 17; '484 Patent (-00679 IPR) POR at 40; '484 Patent (-00679 IPR) Sur-Reply at 16; *and also* '460 Patent Striegel Report, ¶ 46 ("InfoExpress's CG LAN and CGX products, for the entire time they were offered up to present date, also embody at least the same claims of the 460 Patent[.]")

Objective Indicia of Nonobviousness



Objective Indicia of Nonobviousness

Failure of Others: Applying a security policy to the access device, updating



December 2004 Press Release (EX2472).

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See '460 Patent POR at 46; '444 Patent POR at 47; '450 Patent POR at 43; '484 Patent POR (-00675) at 46; '484 Patent POR (-00679) at 45.

Objective Indicia of Nonobviousness

Failure of others and industry praise: Applying a security policy to the access device, updating



41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

'484 Patent (EX1501), 19:1-18 (claim 41).

See 460 Patent POR at 43; 444 Patent POR at 45; 450 Patent POR at 41; 484 Patent POR (-00675) at 44; 484 Patent POR (-00679) at 43.

Objective Indicia of Nonobviousness

Failure of others and industry praise: Auditing, system data



EX2422

1. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device in response to the request;

using the gatekeeper to determine if requirements of the security policy are satisfied by the access device, and

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, when the requirements of the security policy are satisfied.

2. The method of claim 1, further comprising authenticating a user of the access device.

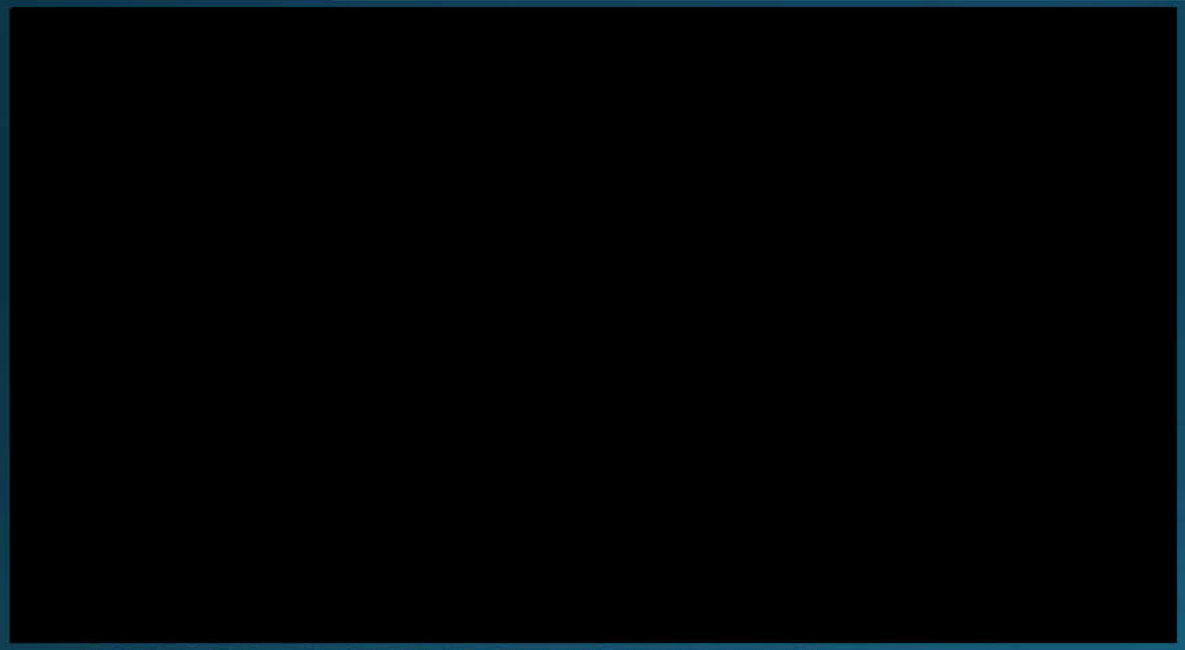
3. The method of claim 1, further comprising obtaining system data from the access device, and wherein applying the security policy includes using the system data to determine that the access device satisfies the requirements of the security policy.

'460 Patent (EX1001), claims 1–3.

See 460 Patent POR at 43; 444 Patent POR at 44; 450 Patent POR at 40; 484 Patent POR (-00675) at 43; 484 Patent POR (-00679) at 42-43.

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: Applying a security policy to the access device.



EX2471 (March 15, 2005, Todd Nakano email).

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See 460 Patent POR at 46; 444 Patent POR at 47; 450 Patent POR at 43; 484 Patent POR (-00675) at 46; 484 Patent POR (-00679) at 45.

Objective Indicia of Nonobviousness

[redacted]

EX2527

Failure of Others and Industry Praise

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

See 460 Patent POR at 45; 444 Patent POR at 47; 450 Patent POR at 43; 484 Patent POR (-00675) at 45; 484 Patent POR (-00679) at 45.

Objective Indicia of Nonobviousness

Failure of Others: Monitoring

8.2.4 Post-Admission Control

Most of the platforms lack proper post-admission Control. The architectures discussed in our thesis are based on pre-admission control and lack default capability of post-admission control. Post-admission control refers to the monitoring of devices on the network for any malicious activity (*discussed in chapter 3.2.8*). An exception is, Juniper's UAC, which includes Juniper Firewalls, which can play an important role in threat mitigation. Currently, post-admission control is achieved through software support, by integrating solutions from 3rd party vendors e.g., In Cisco's NAC, threat management is conducted by security agent software (which is a separate product), which also relies on the support from other security applications. The discussed architectures *by default* do not support post-admission control capabilities, requiring additional components.

Comparative Study of Network Access Control Technologies **(May 2005 Thesis) (EX2477 at 96).** *See* '460 Patent POR at 45; '444 Patent POR at 46; '450 Patent POR at 42; '484 Patent POR (-00675) at 45; '484 Patent POR (-00679) at 44.

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

Objective Indicia of Nonobviousness

Failure of Others: Monitoring

Shouldn't I just wait for Cisco?

There's really no need to wait because depending on what you want out of NAC, Cisco may already have it.

And if Cisco doesn't yet offer what you want, there is still no need to wait because you can get alternatives from other vendors.

Cisco has a NAC appliance that can check devices before they get network access for virus software that it is updated and turned on and whether patch levels meet policy.

That said, the device is criticized by some for what it cannot do. "Cisco remains behind many of the other vendors in this space because of the inability to perform assessment checks beyond initial connection," says Mandy Andress in her recent review of the appliance for *Network World*.

For example, the device does not perform periodic rechecks of devices once they have been admitted to the network to make sure they maintain their security posture.

The Cisco NAC Appliance does afford multiple enforcement methods, including placing the device inline with traffic where it can restrict traffic directly, having it work in tandem with 802.1X authentication or running it out of band where it controls an access switch. It can also enforce NAC for devices attaching via SSL or IPSec VPN through Cisco gear.

Tim Greene, *Burning NAC Questions* (Oct. 2005) (EX2525). *See* '460 Patent POR at 44-45; '444 Patent POR at 46; '450 Patent POR at 42; '484 Patent POR (-00675) at 45; '484 Patent POR (-00679) at 44.

28. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

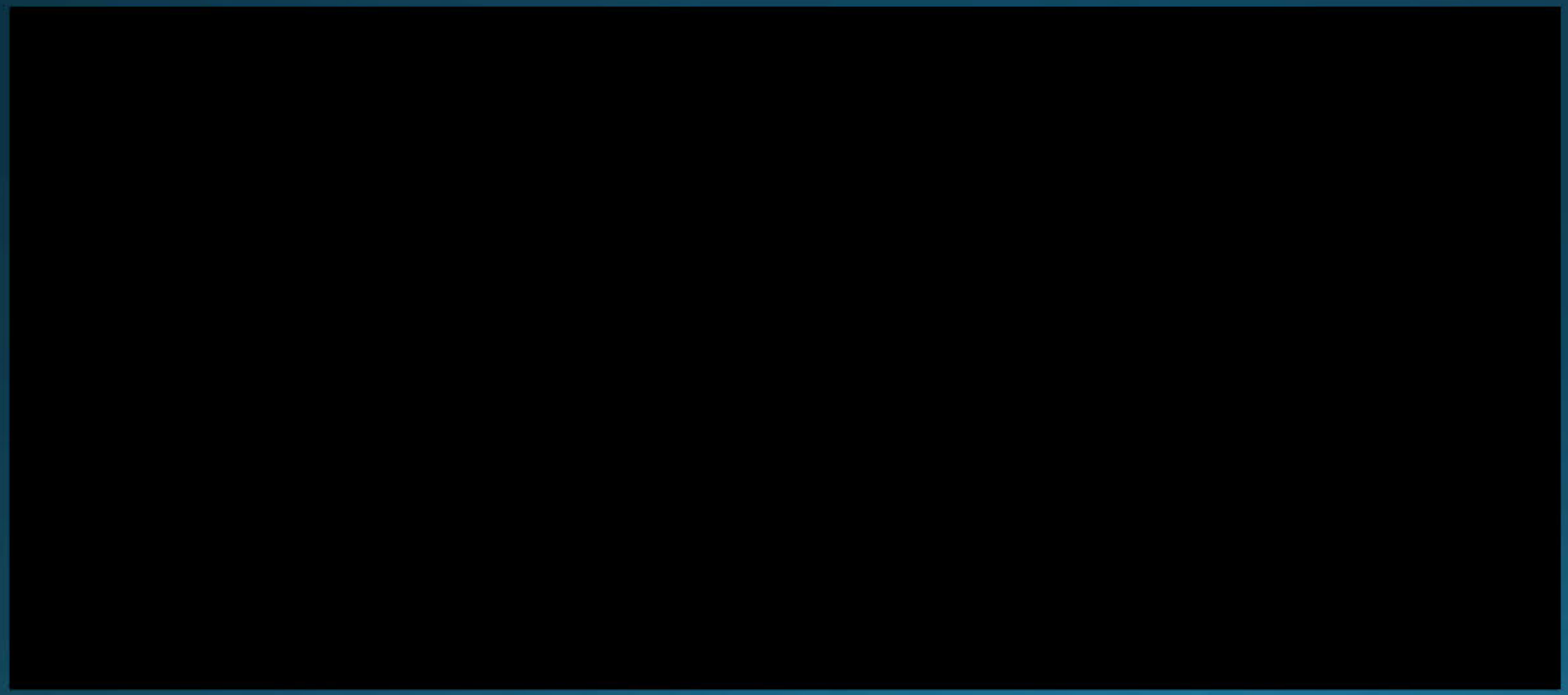
reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

Objective Indicia of Nonobviousness

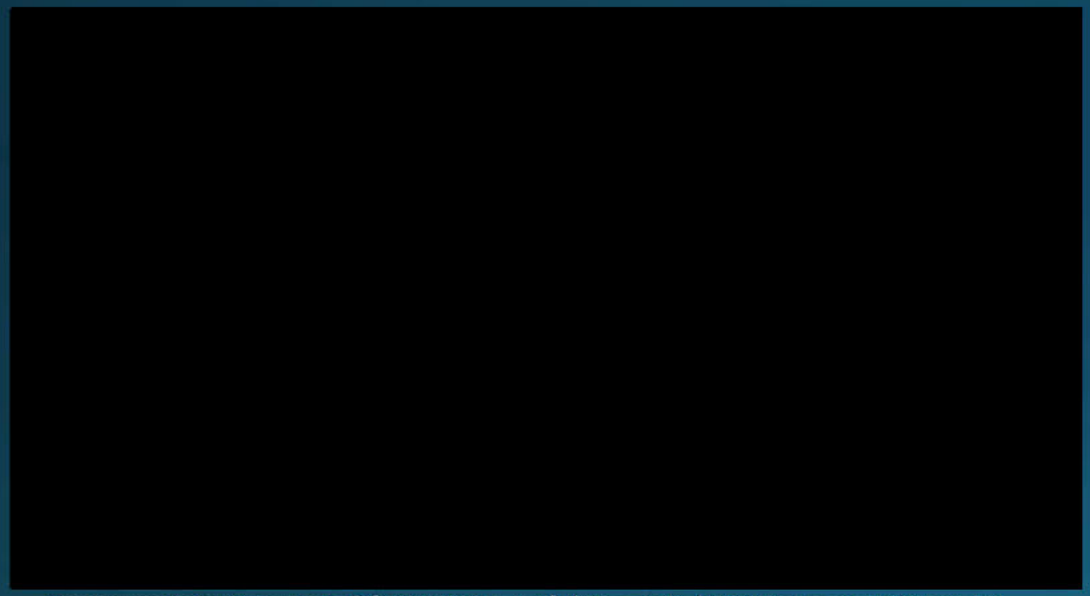
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Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: Cisco looked to CG LAN's application of security policies.



Partner Solution Brief (EX2424 at 1) (cited in '460 Patent POR at 51-53; '444 Patent POR at 52-54; '450 Patent POR at 48-50; '484 Patent (-00675 IPR) POR at 51-53; '484 Patent (-00679 IPR) POR at 50-52).

41. A method of granting access to a protected network, the method comprising:

receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: Cisco looked to CG LAN's application of security policies.



Partner Solution Brief (EX2424 at 2) (cited in '460 Patent POR at 51-53; '444 Patent POR at 52-54; '450 Patent POR at 48-50; '484 Patent (-00675 IPR) POR at 51-53; '484 Patent (-00679 IPR) POR at 50-52).

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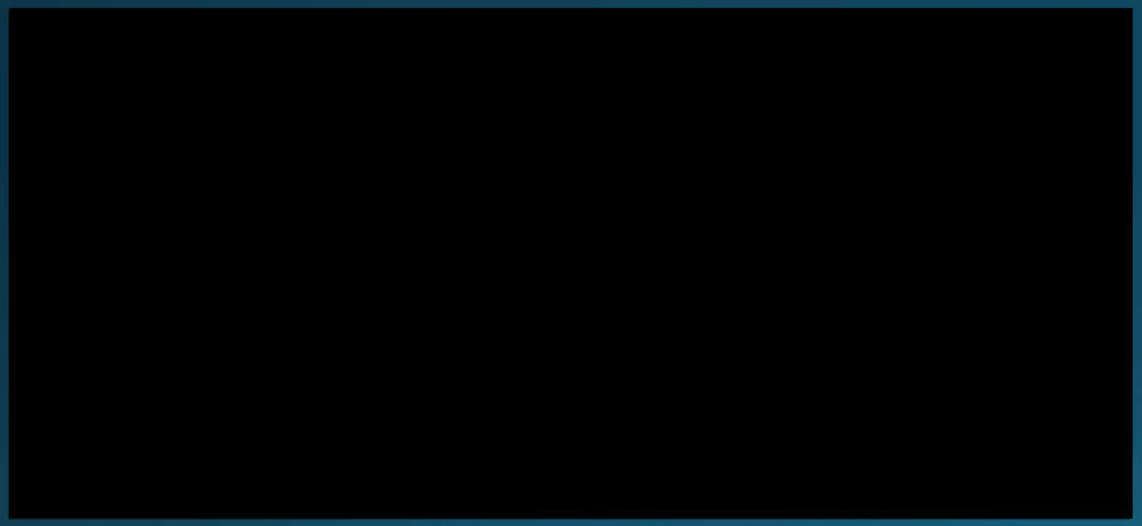
applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: Cisco looked to CG LAN's application of security policies.



Partner Solution Brief (EX2424 at 2) (cited in '460 Patent POR at 51-53; '444 Patent POR at 52-54; '450 Patent POR at 48-50; '484 Patent (-00675 IPR) POR at 51-53; '484 Patent (-00679 IPR) POR at 50-52).

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applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

updating the access device if requirements of the security policy are not satisfied.

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: The VM demo used CG LAN's auditing and monitoring.



74. [redacted]

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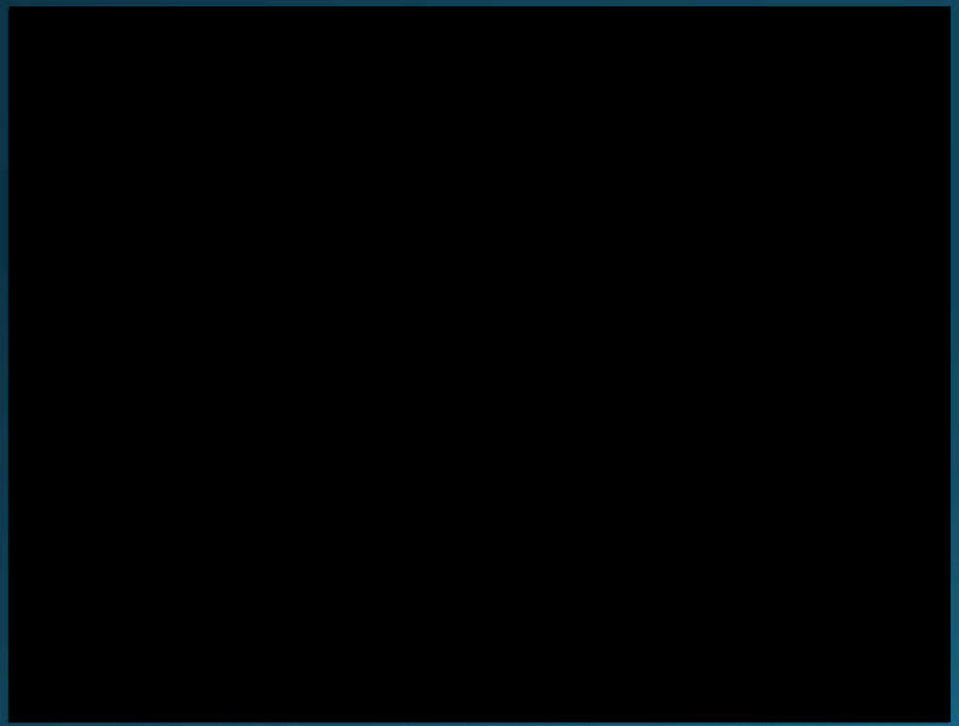
Stacey C. Lum Declaration (EX2564), ¶ 74 (cited in '460 Patent POR at 55-57; '444 Patent POR at 55-57; '450 Patent POR at 51-53; '484 Patent (-00675 IPR) POR at 54-56; '484 Patent (-00679 IPR) POR at 54-55).

[redacted]

Schematic of VM Test (EX2497).

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: The VM demo used CG LAN's auditing and monitoring.



Virtual Machine (VM) Demonstration (EX2500 at 1); *see also* EX2496–EX2501 (cited in '460 Patent POR at 55-57; '444 Patent POR at 56-58; '450 Patent POR at 52-54; '484 Patent (-00675 IPR) POR at 55-57; '484 Patent (-00679 IPR) POR at 54-56).

28. A method of granting access to a protected network, the method comprising:

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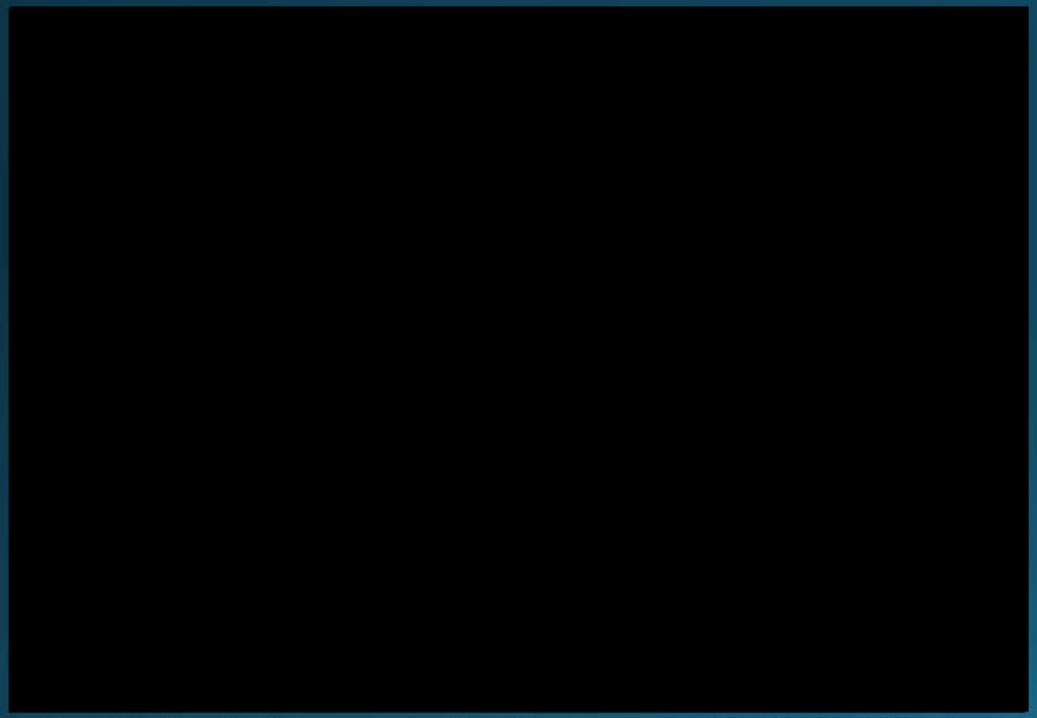
applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

Objective Indicia of Nonobviousness

Failure of Others and Industry Praise: The VM demo used CG LAN's auditing and monitoring.



Virtual Machine (VM) Demonstration (EX2500 at 2); *see also* EX2496–EX2501 (cited in '460 Patent POR at 55-57; '444 Patent POR at 56-58; '450 Patent POR at 52-54; '484 Patent (-00675 IPR) POR at 55-57; '484 Patent (-00679 IPR) POR at 54-56).

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receiving a request for access to a less-restricted subset of the protected network from an access device, the request being received through a communication port of an access point, the communication port configured for communicating between the access device and a restricted subset of the protected network, the restricted subset including a gatekeeper;

applying a security policy to the access device, responsive to the request;

reconfiguring the communication port for communicating data between the access device and the less-restricted subset of the protected network without passing the data through the gatekeeper, if requirements of the security policy are satisfied; and

communicating between the gatekeeper and an agent executing on the access device to monitor security status of the access device after reconfiguring the communication port for communicating between the access device and the less-restricted subset.

- '484 Patent, claim 1.
- "applying a security policy…" *E.g.*, '460 Patent, claim 1; '444 Patent, claims 1, 22

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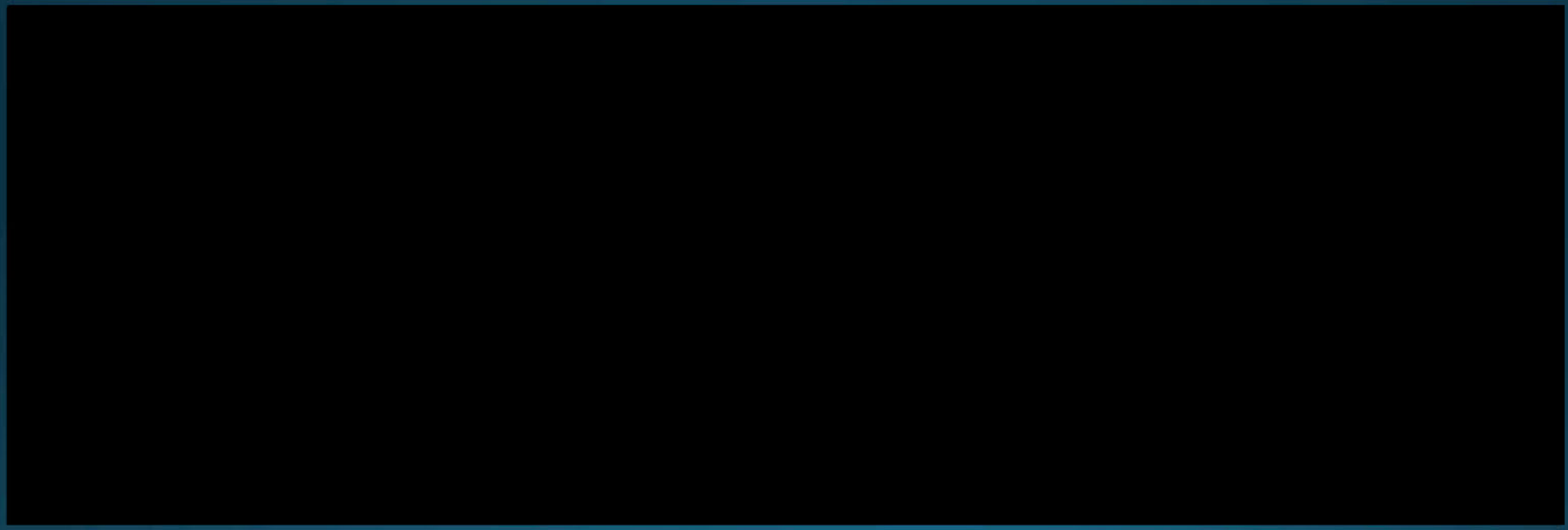
- Copying can be shown by access and similarity to a patented product. *Liqwd, Inc. v. L'Oréal USA, Inc.*, 941 F.3d 1133, 1137 (Fed. Cir. 2019) (cited in '460 Patent Sur-Reply at 17).
- **No dispute** that Cisco had access to the product itself and literature describing it.
  - January 2004 email and PowerPoint. EX2477, EX2478.
  - December 2004 Presentation. EX2479, EX2480.
  - March 2005 Solution Brief. EX2423–EX2424, EX2489–EX2492.
  - March 2005 CG LAN for VM demo. EX2497–EX2501.
  - March 2006 software and PowerPoint. EX2503, EX2504.

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EX2519 at 1 (cover) and 5.

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See '460 Patent POR at 47; '444 Patent POR at 48; '450 Patent POR at 44; '484 Patent POR (-00675) at 47; '484 Patent POR (-00679) at 46).

EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

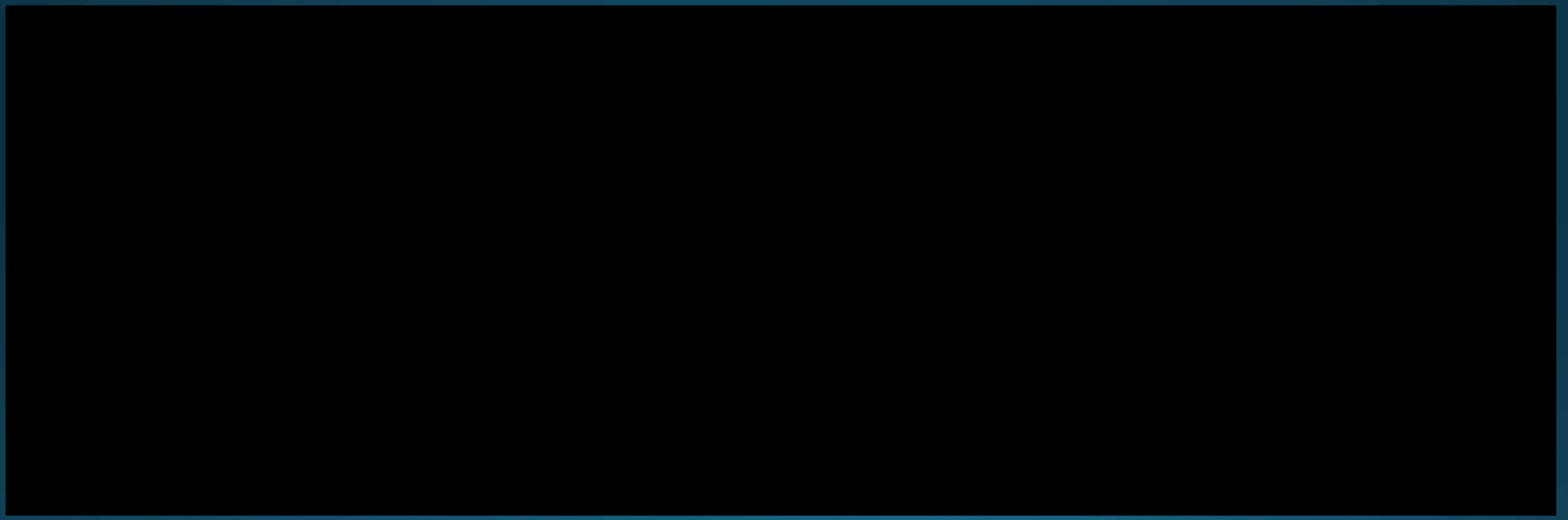
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EX2478 and EX2529 at 6. *See* '460 Patent POR at 47-48; '444 Patent POR at 48-49; '450 Patent POR at 44-45; '484 Patent POR (-00675) at 47-48; '484 Patent POR (-00679) at 46-47.

EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

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EX2478 and EX2529 at 8. *See* '460 Patent POR at 47-48; '444 Patent POR at 48-49; '450 Patent POR at 44-45; '484 Patent POR (-00675) at 47-48; '484 Patent POR (-00679) at 46-47.

EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

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EX2480 at 3. *See* '460 Patent POR at 48-49; '444 Patent POR at 49-50; '450 Patent POR at 45-46; '484 Patent POR (-00675) at 48-49; '484 Patent POR (-00679) at 47-48.

EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

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EX2480 at 6. *See* '460 Patent POR at 49-50; '444 Patent POR at 50-51; '450 Patent POR at 46-47; '484 Patent POR (-00675) at 49-50; '484 Patent POR (-00679) at 48-49.

EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

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EX2480 at 6. *See* '460 Patent POR at 49-50; '444 Patent POR at 50-51; '450 Patent POR at 46-47; '484 Patent POR (-00675) at 49-50; '484 Patent POR (-00679) at 48-49.

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EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.

EX2424 at 2.

See '460 Patent POR at 52-53; '444 Patent POR at 52-54; '450 Patent POR at 48-50; '484 Patent POR (-00675) at 51-53; '484 Patent POR (-00679) at 50-52.

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EX2519 at 113; *see also* '460 Patent Striegel Rpt., ¶¶83–84.
See '460 Patent POR at 55-56; '444 Patent POR at 56-57; '450 Patent POR at 52-53; '484 Patent POR (-00675) at 55-56; '484 Patent POR (-00679) at 53-55.

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***See also* EX2427, ¶¶ 70, 83-84 ('460 Patent); ¶¶ 69, 82-83 (other IPRs).** *See* '460 Patent POR at 55-56; '444 Patent POR at 56-57; '450 Patent POR at 52-53; '484 Patent POR (-00675) at 55-56; '484 Patent POR (-00679) at 53-55.

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***See also* EX2427, ¶ 70 ('460 Patent); ¶ 69 (other IPRs).** *See* '460 Patent POR at 55-57; '444 Patent POR at 57-58; '450 Patent POR at 53-54; '484 Patent POR (-00675) at 56-57; '484 Patent POR (-00679) at 55-56.

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Striegel Report (EX2427, ¶ 69 ('460 Patent), ¶ 68 (other IPRs).



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InfoExpress's April 2005 VM Demo Test Plan (EX2499 at 1).

[redacted]

See '460 Patent POR at 55-56; '444 Patent POR at 56-57; '450 Patent POR at 52-53; '484 Patent POR (-00675) at 55-56; '484 Patent POR (-00679) at 54-55.

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Striegel Report (EX2427, ¶ 69 ('460 Patent), ¶ 68 (other IPRs).

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July 2005 Cisco NAC 2 Beta Deployment Guide (EX2519 at 113)

[redacted]

***See also* '460 Patent Striegel Rpt., ¶¶83–84.** See '460 Patent POR at 55-56; '444 Patent POR at 56-57; '450 Patent POR at 52-53; '484 Patent POR (-00675) at 55-56; '484 Patent POR (-00679) at 54-55.

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Striegel Report (EX2427, ¶ 69 ('460 Patent), ¶ 68 (other IPRs).

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July 2005 Cisco NAC 2 Beta Deployment Guide (EX2519 at 9)

[redacted]

See '460 Patent POR at 55-56; '444 Patent POR at 56-57; '450 Patent POR at 52-53; '484 Patent POR (-00675) at 55-56; '484 Patent POR (-00679) at 54-55.

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March 2005 InfoExpress email to Cisco (EX2503)

[redacted]

EX2503; *see also* EX2427, ¶¶ 75-76 ('460 Patent); ¶¶ 74-75 (other IPRs). *See* '460 Patent POR at 57; '444 Patent POR at 58; '450 Patent POR at 54; '484 Patent POR (-00675) at 57; '484 Patent POR (-00679) at 56.



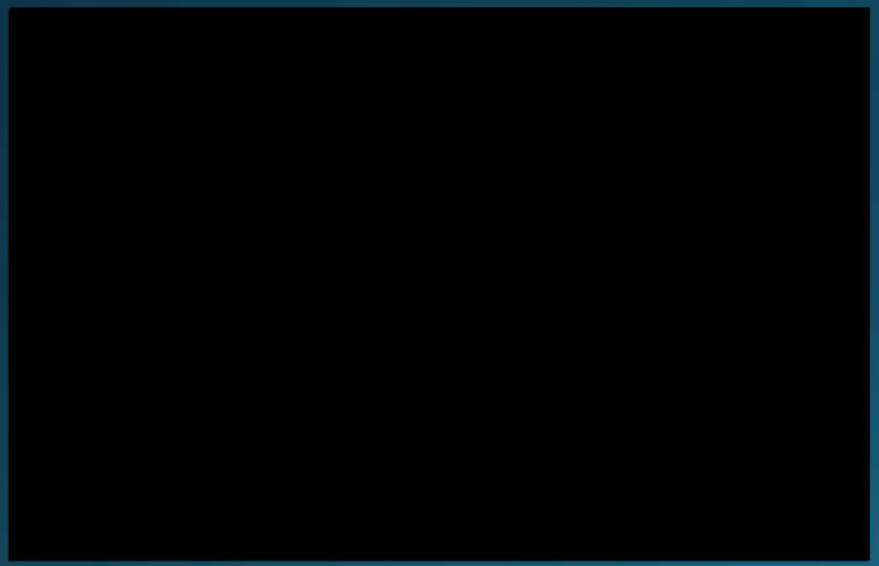
Striegel Report (EX2427, ¶ 74 ('460 Patent))

74. [redacted]

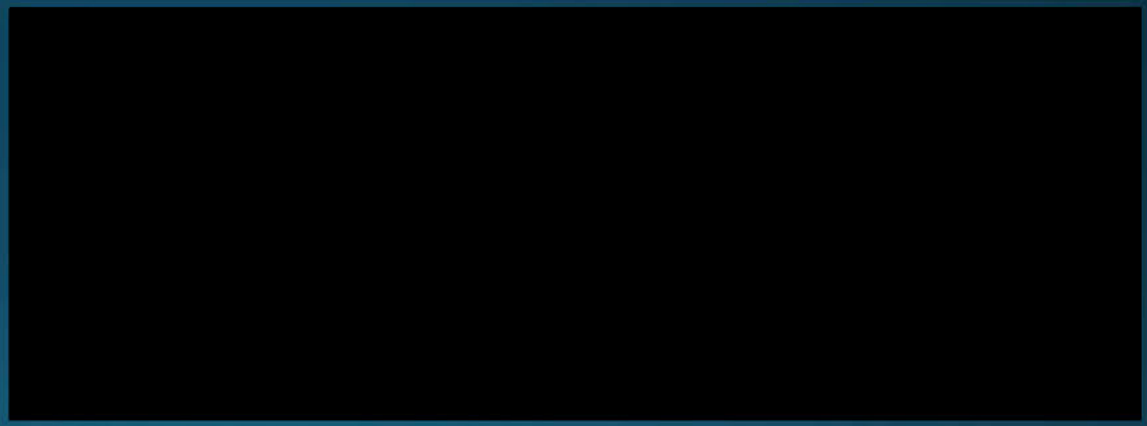
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InfoExpress's March 2006 PowerPoint (EX2504 at 15).



July 2005 Cisco NAC 2 Beta Deployment Guide (EX2519 at 141)



See also EX2427, ¶¶ 75-76, 83-84 ('460 Patent); ¶¶ 74-75, 82-83 (other IPRs). See '460 Patent POR at 59-61; '444 Patent POR at 60-62; '450 Patent POR at 56-58; '484 Patent POR (-00675) at 59-61; '484 Patent POR (-00679) at 58-60.

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InfoExpress's March 2006 PowerPoint (EX2504 at 15).

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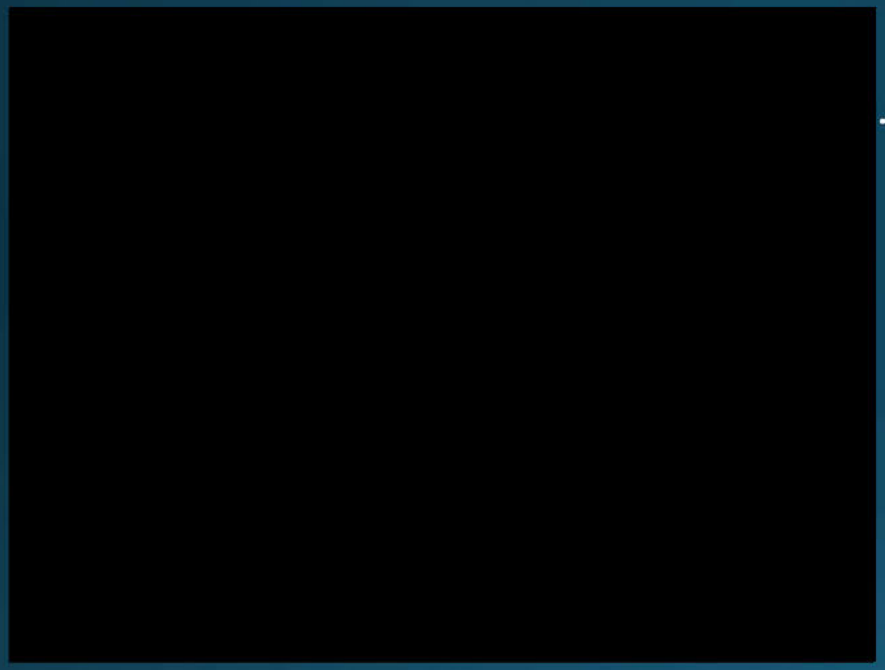


Striegel Report (EX2427, ¶ 75 ('460 Patent))

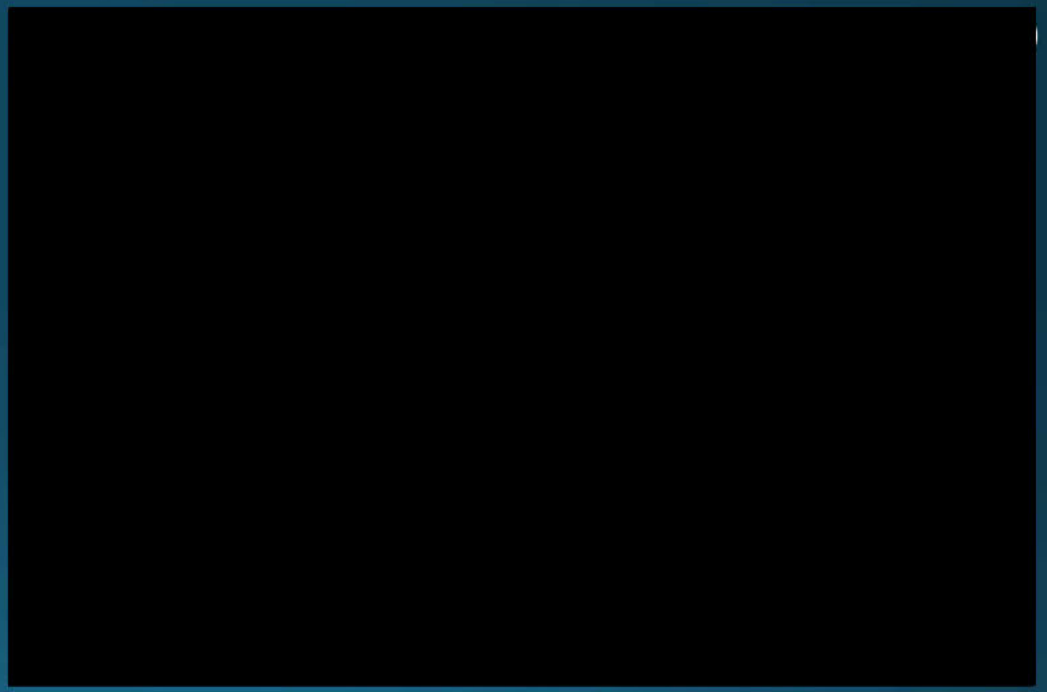
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***See also* EX2427, ¶¶ 75-77 ('460 Patent); ¶¶ 74-76 (other IPRs).**
See '460 Patent POR at 59-61; '444 Patent POR at 60-62; '450 Patent POR at 56-58; '484 Patent POR (-00675) at 59-61; '484 Patent POR (-00679) at 58-62.

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***See also* EX2427, ¶¶ 75-77 ('460 Patent); ¶¶ 74-76 (other IPRs).** *See* '460 Patent POR at 59-61; '444 Patent POR at 60-62; '450 Patent POR at 56-58; '484 Patent POR (-00675) at 59-61; '484 Patent POR (-00679) at 58-62.



***See also* '460 Patent Striegel Rpt., ¶¶83–84.**

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Cisco terminated its NAC Program in May 2007.



See '460 Patent POR at 41, 47, 61-62; '444 Patent POR at 43, 48, 62-63; '450 Patent POR at 39, 44, 59; '484 Patent POR (-00675) at 42, 46, 61-62; '484 Patent POR (-00679) at 41, 46, 60-61.

Antedating

EX2011 Shows the Inventors' Possession of a Less-Restricted Subset

Claim Language	EX2011 Disclosure
"less-restricted" subset	"trusted network"
"restricted" subset	"untrusted network"

EX2007, ¶¶28a-28b; **cited at** Cited in '460 Patent POR at 66; '450 Patent POR at 63; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00679 IPR) POR at 65.

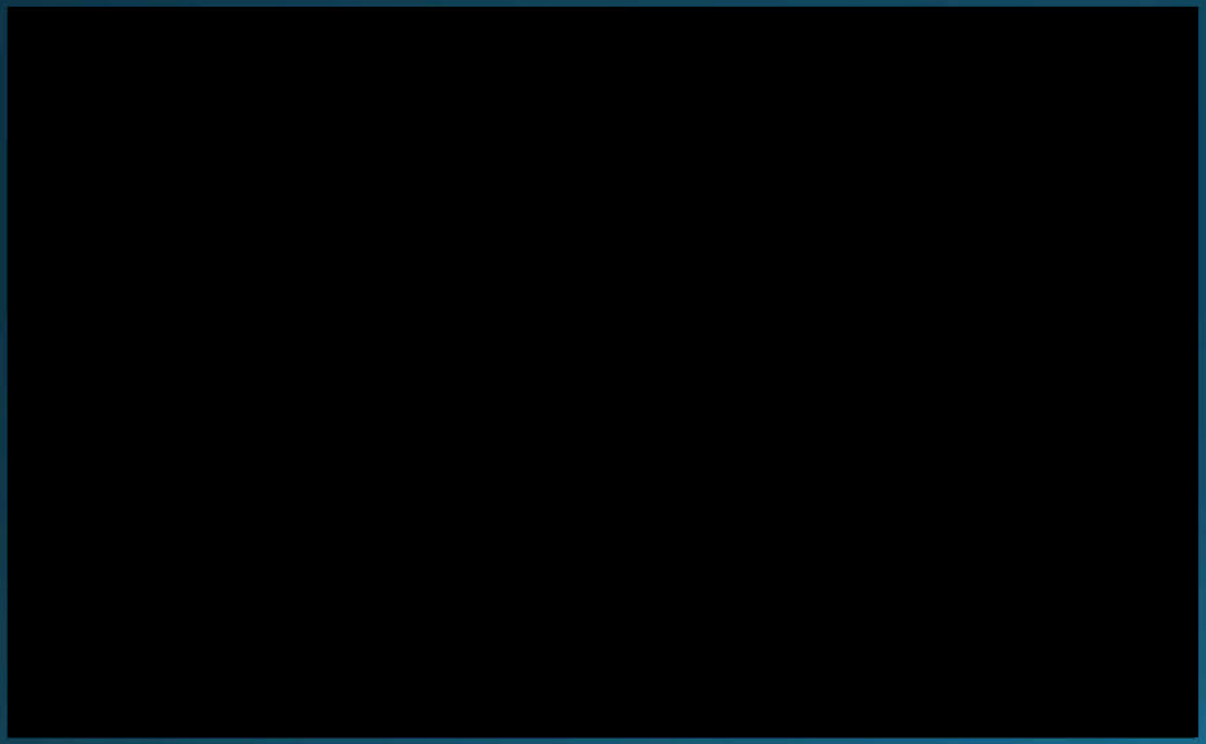
EX2011 Shows the Inventors' Possession of a Less-Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 5 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(a) (460 Patent), ¶ 33(a) (other IPRs).

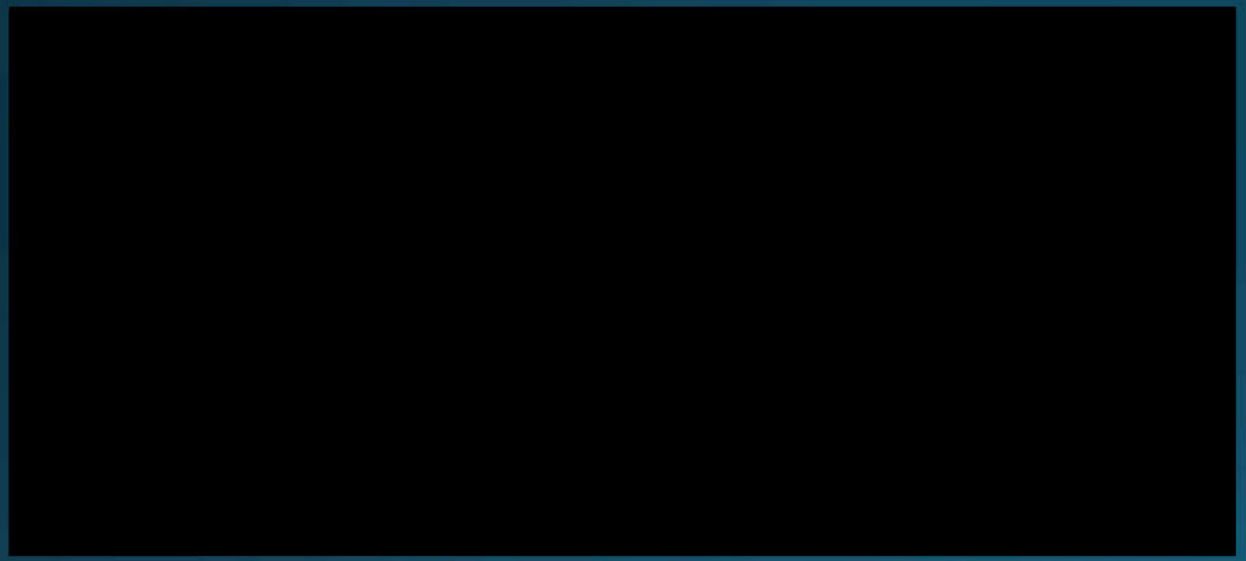
EX2011 Shows the Inventors' Possession of a Less-Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 9 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(a) (460 Patent), ¶ 33(a) (other IPRs).

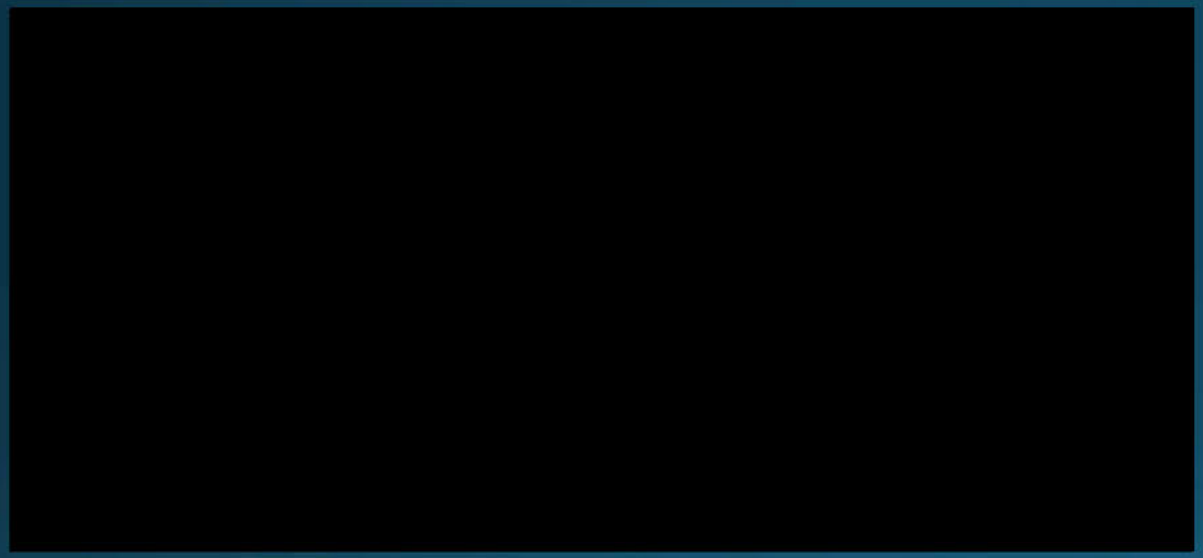
EX2011 Shows the Inventors' Possession of a Less-Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 16 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(a) (460 Patent), ¶ 33(a) (other IPRs).

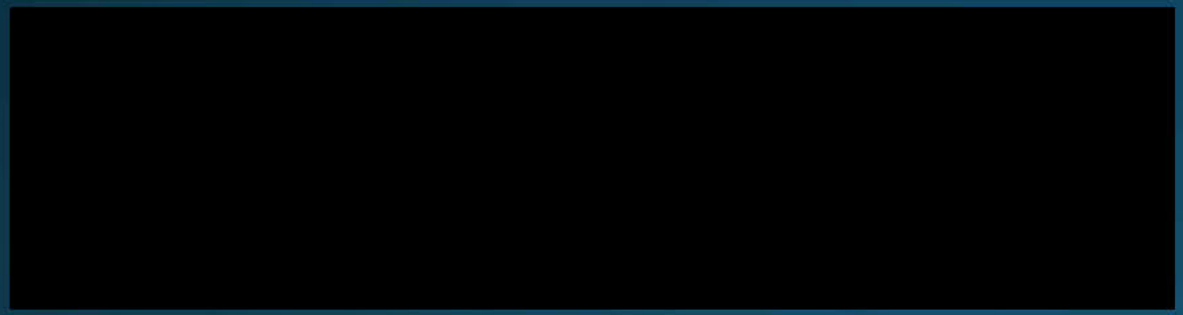
EX2011 Shows the Inventors' Possession of a Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 7 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs).

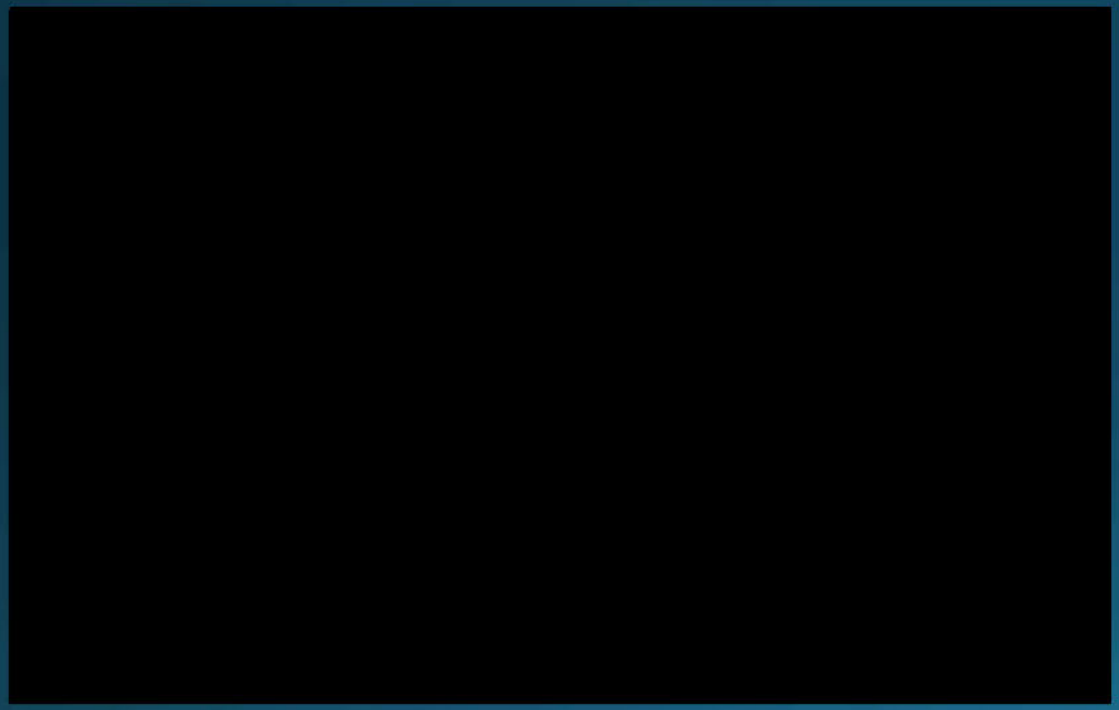
EX2011 Shows the Inventors' Possession of a Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 8 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs).

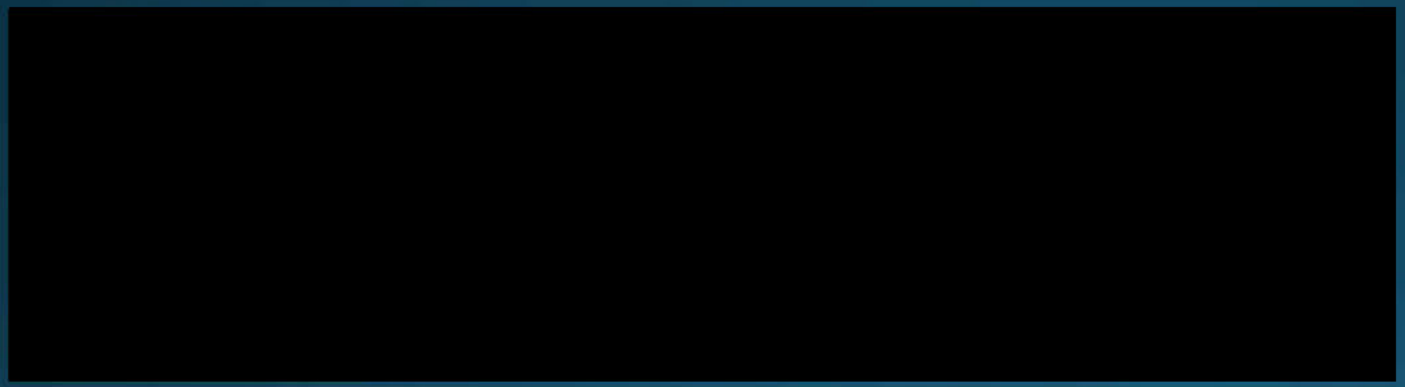
EX2011 Shows the Inventors' Possession of a Restricted Subset



See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 at 9 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs).

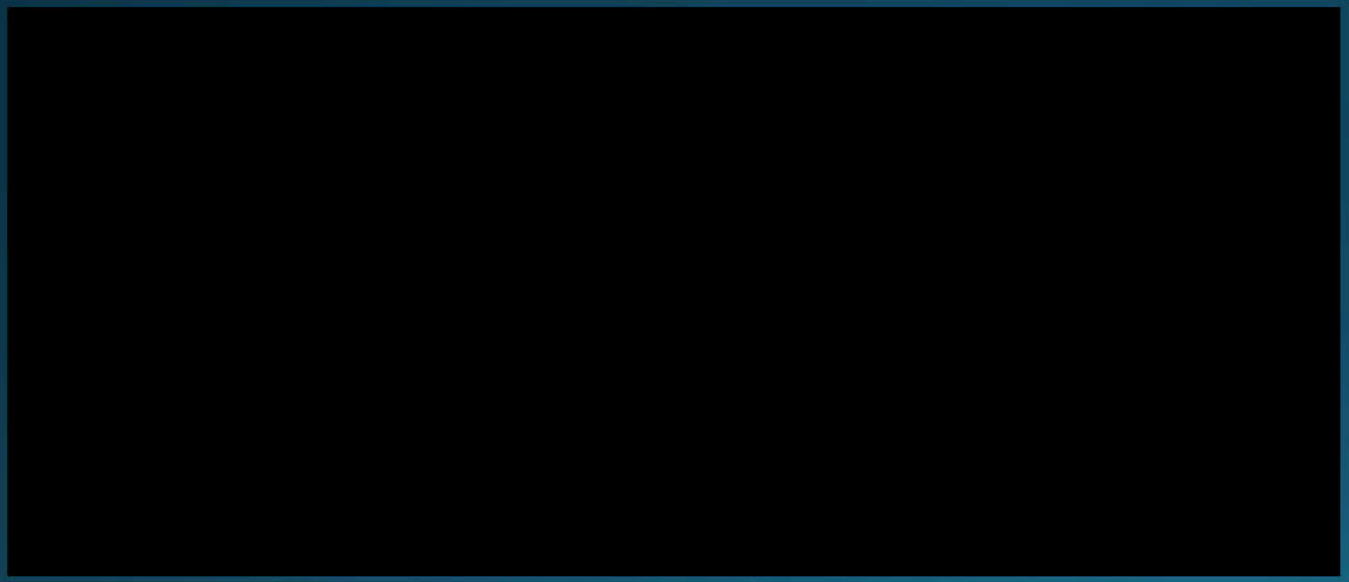
EX2011 Shows the Inventors' Possession of a Restricted Subset



EX2011 at 9 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs).

See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 Shows the Inventors' Possession of a Restricted Subset



EX2011 at 10 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs)

See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 Shows the Inventors' Possession of a Restricted Subset



EX2011 at 16 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs)

See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 Shows the Inventors' Possession of a Restricted Subset



EX2011 at 18 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs)

See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 Shows the Inventors' Possession of a Restricted Subset



EX2011 at 18 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(b) (460 Patent), ¶ 33(b) (other IPRs)

See '460 Patent POR at 66, '460 Patent Sur-Reply at 21-23; '444 Patent POR at 68, '444 Patent Sur-Reply at 19-21; '450 Patent POR at 63, '450 Patent Sur-Reply at 18-20; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 21-23; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21-23.

EX2011 Shows the Inventors' Possession of Requests for Access



EX2011 at 5 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 28(c) (460 Patent), ¶ 33(c) (other IPRs).

See '460 Patent POR at 66, '460 Patent Sur-Reply at 23-25; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 22-24; '450 Patent POR at 63, '450 Patent Sur-Reply at 21-23; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 23-25; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 24-26.

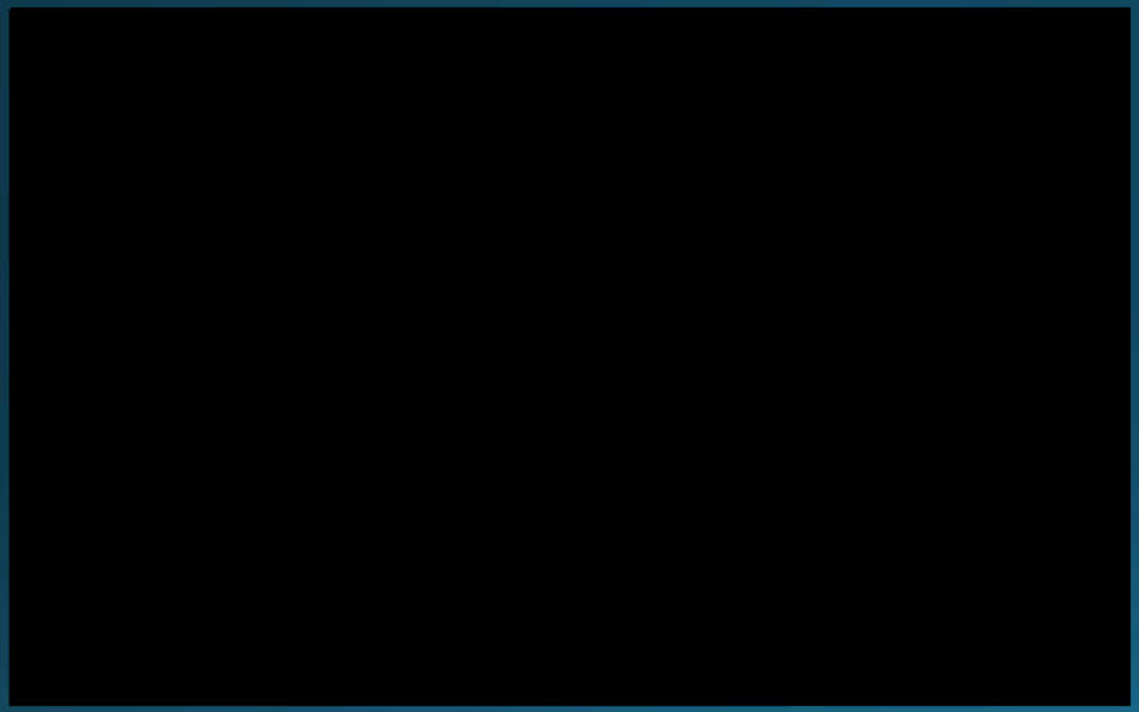
EX2011 Shows the Inventors' Possession of Switches and/or Access Points



See '460 Patent POR at 66, '460 Patent Sur-Reply at 23-25; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 22-24; '450 Patent POR at 63, '450 Patent Sur-Reply at 21-23; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 23-25; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 24-26.

EX2011 at 6 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 29(a) (460 Patent), ¶ 34(a) (other IPRs).

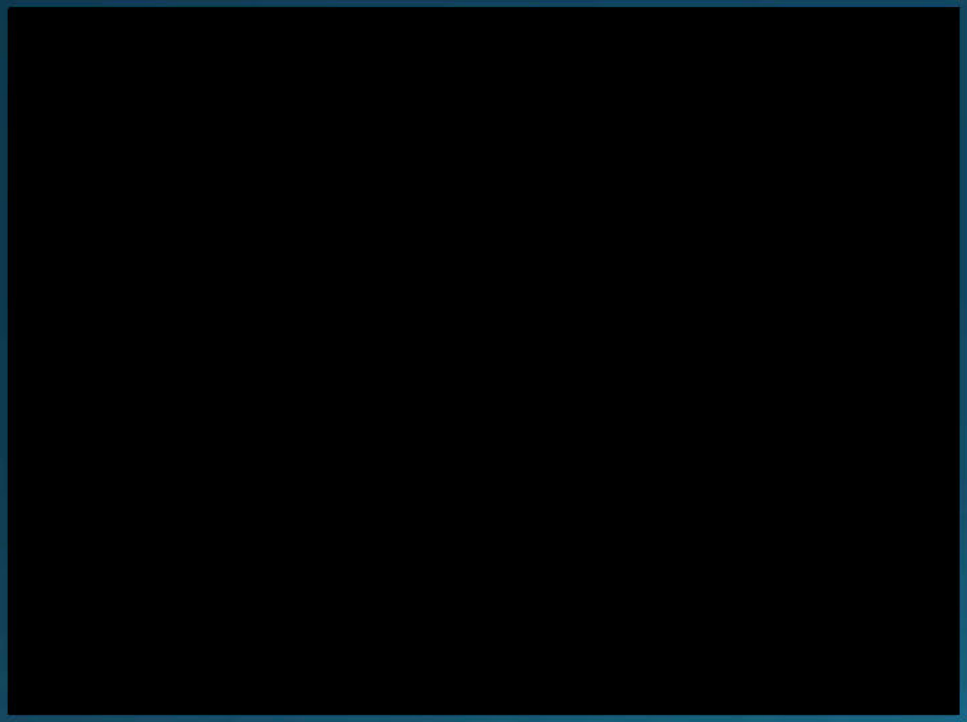
EX2011 Shows the Inventors' Possession of Switches and/or Access Points



See '460 Patent POR at 66, '460 Patent Sur-Reply at 23-25; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 22-24; '450 Patent POR at 63, '450 Patent Sur-Reply at 21-23; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 23-25; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 24-26.

EX2011 at 7 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 29(a) (460 Patent), ¶ 34(a) (other IPRs).

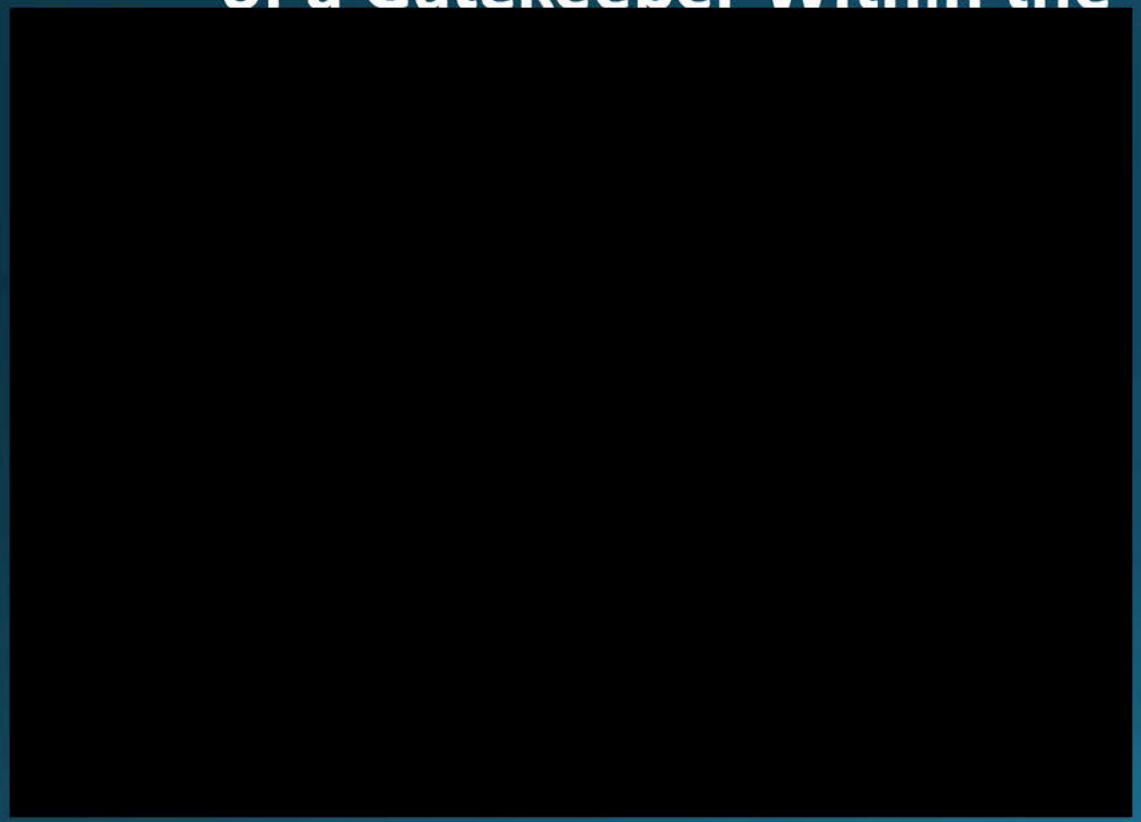
EX2011 Shows the Inventors' Possession of Switches and/or Access Points



See '460 Patent POR at 66, '460 Patent Sur-Reply at 23-25; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 22-24; '450 Patent POR at 63, '450 Patent Sur-Reply at 21-23; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 23-25; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 24-26.

EX2011 at 5 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 29(a) (460 Patent), ¶ 34(a) (other IPRs).

EX2011 Shows the Inventors' Possession of a Gatekeeper Within the "Restricted" Subset



See '460 Patent POR at 67, '460 Patent Sur-Reply at 22-23; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 20-21; '450 Patent Sur-Reply at 20; '484 Patent (-00675 IPR) POR at 67; '484 Patent (-00675 IPR) Sur-Reply at 22-23; '484 Patent (-00679 IPR) POR at 66; '484 Patent (-00679 IPR) Sur-Reply at 22-23.

EX2011 at 7 (annotated); *see also* EX2007 (Hugh Smith Report), ¶ 29(c)–(d) (460 Patent). ¶ 34(c)–(d) (other IPRs).

EX2011 Shows the Inventors' Possession of a Gatekeeper Within the "Restricted" Subset



EX2011 at 4; *see also* EX2007 (Hugh Smith Report), ¶ 29(c)–(d) (460 Patent). ¶ 34(c)–(d) (other IPRs).

See '460 Patent POR at 67, '460 Patent Sur-Reply at 22-23; '444 Patent POR at 67-68, '444 Patent Sur-Reply at 20-21; '450 Patent Sur-Reply at 20; '484 Patent (-00675 IPR) POR at 67; '484 Patent (-00675 IPR) Sur-Reply at 22-23; '484 Patent (-00679 IPR) POR at 66; '484 Patent (-00679 IPR) Sur-Reply at 22-23.

EX2011 Shows a Gatekeeper in the Restricted/Untrusted Subset



[redacted]

Hugh Smith Declaration (EX2007, ¶ 29(d) ('460 Patent), ¶ 34(d) (all other IPRs)) (cited in '460 Patent Sur-Reply at 22-23; '444 Patent Sur-Reply at 21; '450 Patent Sur-Reply at 20; '484 Patent (-00675 IPR) Sur-Reply at 22-23; '484 Patent (-00679 IPR) Sur-Reply at 23).

Hugh Smith Transcript (EX1026, 18:3–9) (cited in '460 Patent Sur-Reply at 22-23; '444 Patent Sur-Reply at 21; '450 Patent Sur-Reply at 20; '484 Patent (-00675 IPR) Sur-Reply at 23; '484 Patent (-00679 IPR) Sur-Reply at 23).

EX2011 Shows a Gatekeeper in the Restricted/Untrusted Subset



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Stacey Lum Tr. (EX1023, 25:2–25) (cited in '460 Patent Sur-Reply at 22; '444 Patent Sur-Reply at 20; '450 Patent Sur-Reply at 19; '484 Patent (-00675 IPR) Sur-Reply at 22; '484 Patent (-00679 IPR) Sur-Reply at 23.

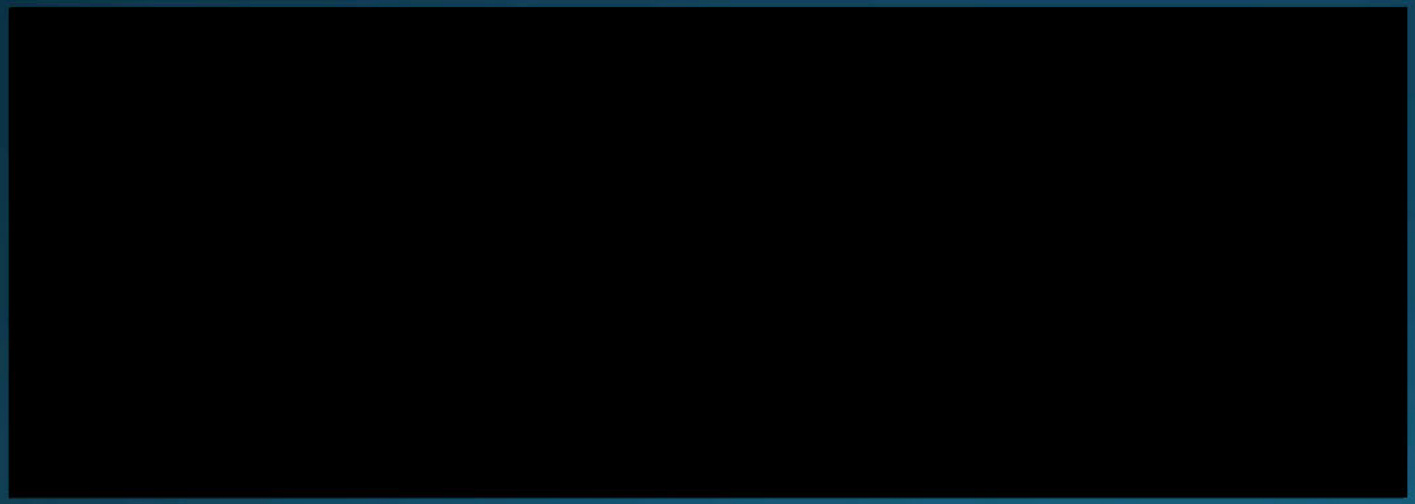
EX2011 Shows the Inventors' Possession of Applying a Security Policy/Auditing



See '460 Patent POR at 67-68; '444 Patent POR at 67-68; '450 Patent POR at 64; '484 Patent (-00675 IPR) POR at 67-68; '484 Patent (-00679 IPR) POR at 67.

EX2011 at 8; *see also* EX2007 (Hugh Smith Report), ¶35.

EX2011 Shows the Inventors' Possession of Applying a Security Policy/Auditing



See '460 Patent POR at 68; '484 Patent (-00675 IPR) POR at 68; '484 Patent (-00679 IPR) POR at 67.

EX2011 at 8; *see also* EX2007 (Hugh Smith Report), ¶35.

EX2011 Shows the Inventors' Possession of Applying a Security Policy/Auditing



See '460 Patent POR at 69; '484 Patent (-00675 IPR) POR at 69; '484 Patent (-00679 IPR) POR at 68.

EX2011 at 9; *see also* EX2007 (Hugh Smith Report), ¶35.

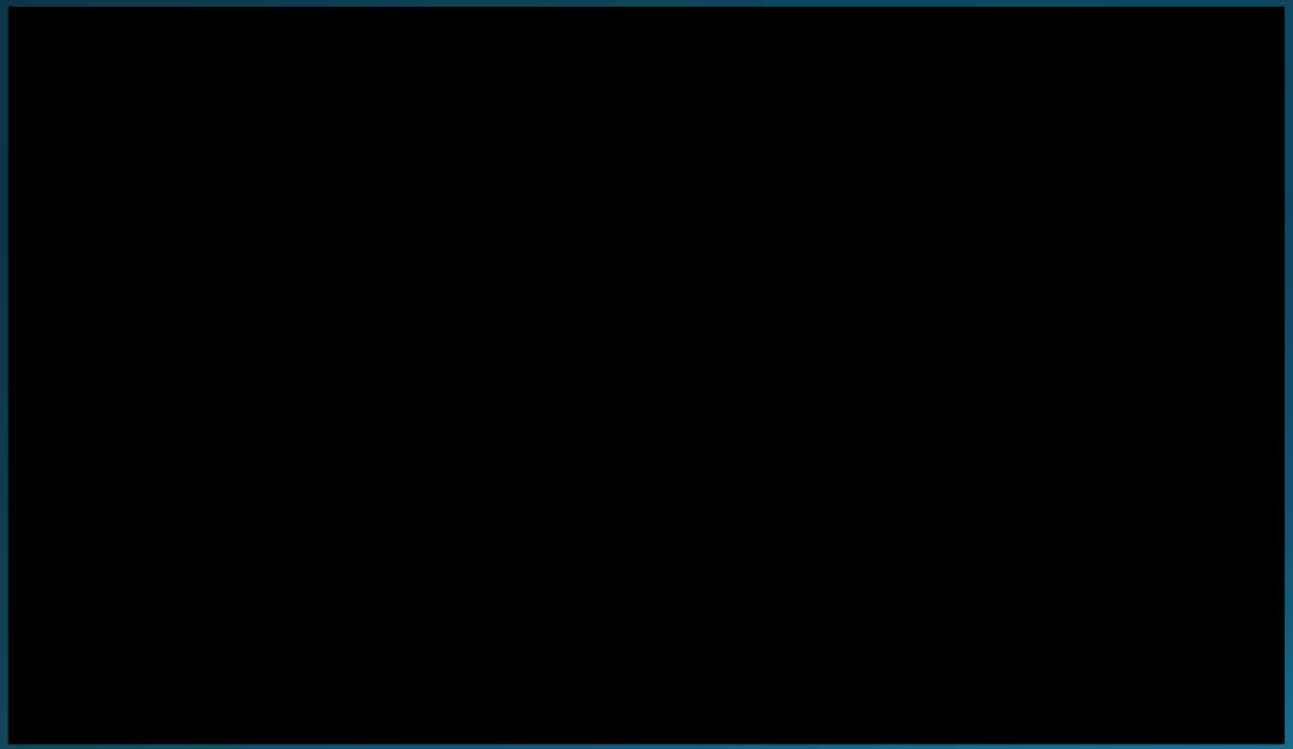
EX2011 Shows the Inventors' Possession of Reconfiguring



See '460 Patent POR at 69; '484 Patent (-00675 IPR) POR at 69; '484 Patent (-00679 IPR) POR at 68.

EX2011 at 9; *see also* EX2007 (Hugh Smith Report), ¶35(b).

EX2011 Shows Using a Single Gatekeeper to Support Multiple Switches/Access Points



EX2011 at 7 (annotated).

See '460 Patent Sur-Reply at 22, '444 Patent Sur-Reply at 20; '450 Patent Sur-Reply at 19; '484 Patent (-00675 IPR) Sur-Reply at 22; '484 Patent (-00679 IPR) Sur-Reply at 22.

EX2011 Shows Using a Single Gatekeeper to Support Multiple Switches/Access Points



See '460 Patent Sur-Reply at 22, '444 Patent Sur-Reply at 20; '450 Patent Sur-Reply at 19; '484 Patent (-00675 IPR) Sur-Reply at 22; '484 Patent (-00679 IPR) Sur-Reply at 22.

EX2011 at 11 (annotated).

EX2011 Shows Updating



See '450 Patent POR at 65; '484 Patent (-00679 IPR) POR at 69

EX2011 at 9 (annotated).

EX2011 Shows Monitoring



EX2011 at 13 (cited in '444 Patent POR at 68 (through citation to EX2009 at 41); '484 Patent (-00679 IPR) POR at 68).

Alice Lee Authored EX2011

[redacted]

EX2435 and EX2520 (cover email).

See '460 Patent POR at 66, '460 Patent Sur-Reply at 20; '444 Patent POR at 67, '444 Patent Sur-Reply at 18; '450 Patent POR at 66, '450 Patent Sur-Reply at 17; '484 Patent (-00675 IPR) POR at 66; '484 Patent (-00675 IPR) Sur-Reply at 20; '484 Patent (-00679 IPR) POR at 65; '484 Patent (-00679 IPR) Sur-Reply at 21.

Alice Lee Declaration (EX2429, ¶¶ 10–14)

Alice Lee Authored EX2011

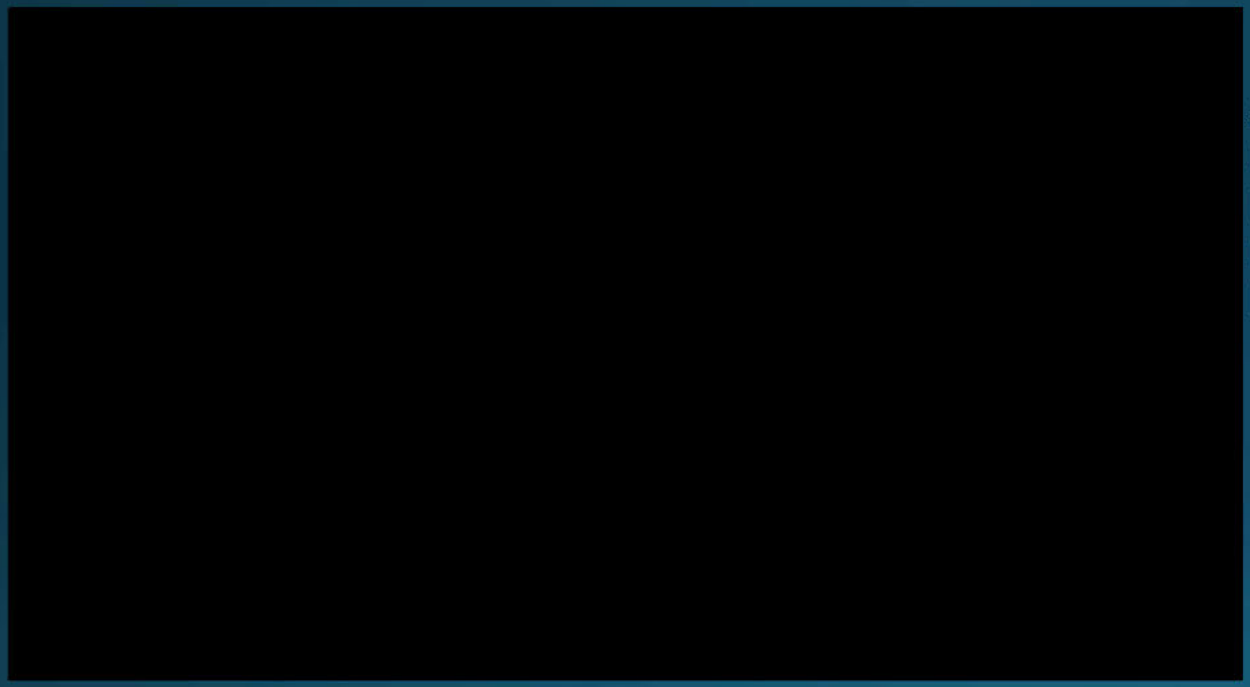
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Alice Lee Tr. (EX1025, 16:19–17:11)

[redacted]

See '460 Patent Sur-Reply at 26; '444 Patent Sur-Reply at 25; '450 Patent Sur-Reply at 23; '484 Patent (-00675 IPR) Sur-Reply at 26; '484 Patent (-00679 IPR) Sur-Reply at 26.

Cary Tsai Was Not an Inventor



See '460 Patent Sur-Reply at 26-27; '444 Patent Sur-Reply at 25; '450 Patent Sur-Reply at 24; '484 Patent (-00675 IPR) Sur-Reply at 27; '484 Patent (-00679 IPR) Sur-Reply at 27.

Cary Tsai Email (EX2017)

Cary Tsai Was Not an Inventor

[redacted]

EX2444 at 28

[redacted]

Alice Lee Tr. (EX1025, 21:1–9) (cited in '460 Patent Sur-Reply at 27; '444 Patent Sur-Reply at 26; '450 Patent Sur-Reply at 25; '484 Patent (-00675 IPR) Sur-Reply at 27; '484 Patent (-00679 IPR) Sur-Reply at 28.

Stacey Lee Did Not Disavow Invention of the CG LAN

[redacted]



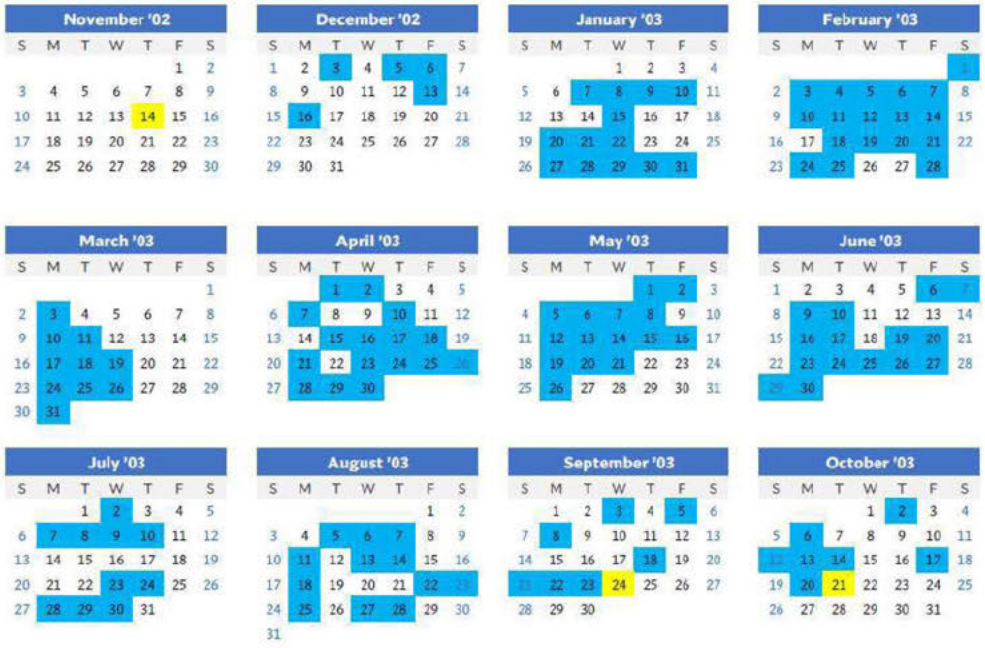
[redacted]

Email from Stacey Lum to his Counsel (EX2231) (cited in '460 Patent Sur-Reply at 27-28; '444 Patent Sur-Reply at 26-27; '450 Patent Sur-Reply at 25-26; '484 Patent (-00675 IPR) Sur-Reply at 27-28; '484 Patent (-00679 IPR) Sur-Reply at 28-29).

Stacey Lum Tr. (EX1023, 56:12–19, 58:14–16) (cited in '460 Patent Sur-Reply at 27-28; '444 Patent Sur-Reply at 26; '450 Patent Sur-Reply at 25; '484 Patent (-00675 IPR) Sur-Reply at 27-28; '484 Patent (-00679 IPR) Sur-Reply at 28).

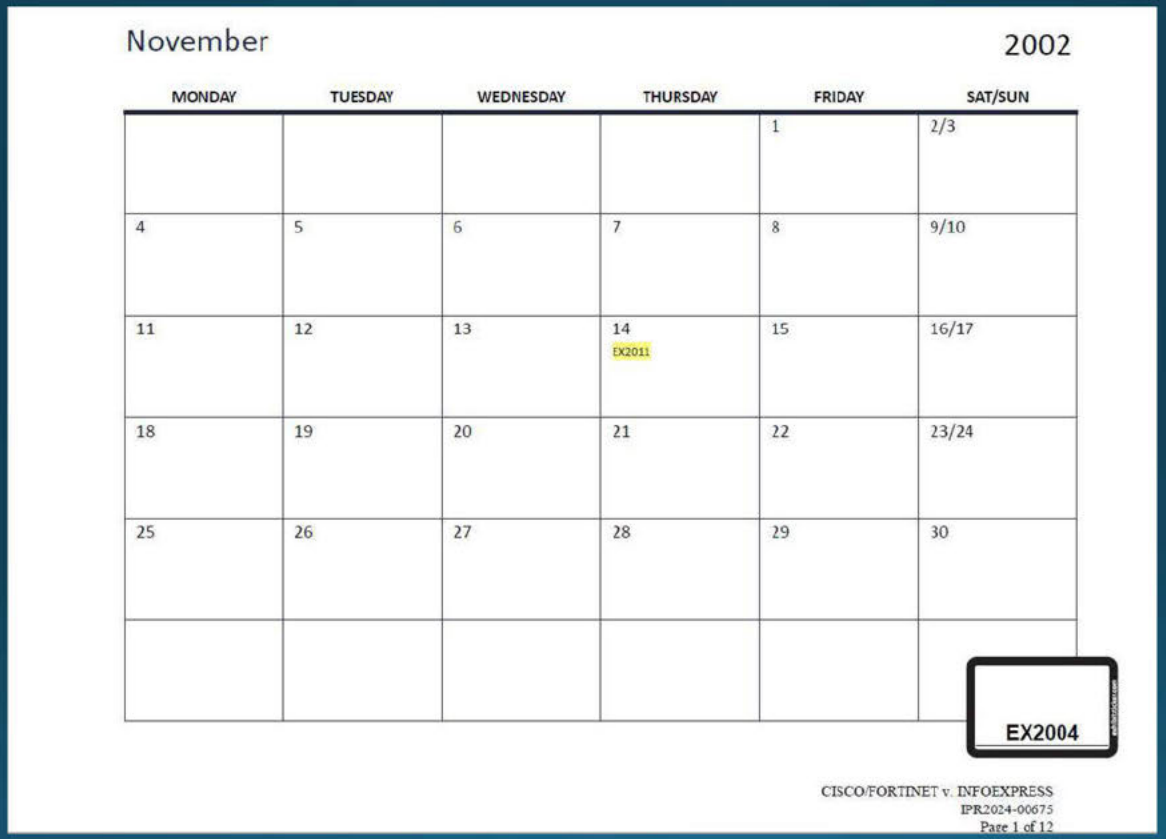
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2002 to 2003 Diligence Calendar



See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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November 2002

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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4	5	6	7	8	9/10
11	12	13	14 EX2011	15	16/17
18	19	20	21	22	23/24
25	26	27	28	29	30

EX2004

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Page 1 of 12

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent

December 2002

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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2	3 EX2025	4	5 EX2276 EX2277 EX2278	6 EX2278 EX2279	7/8
9	10	11	12	13 EX2280	14/15
16 EX2198	17	18	19	20	21/22
23	24	25	26	27	28/29
30	31				

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – December 2002

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Cited in '460 Patent POR at 71; '444 Patent POR at 70; '450 Patent POR at 67; '484 Patent (-00675 IPR) POR at 71; '484 Patent (-00679 IPR) POR at 71.

InfoExpress Was Diligent – December 2002

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Cited in '460 Patent POR at 71; '444 Patent POR at 70; '450 Patent POR at 67; '484 Patent (-00675 IPR) POR at 71; '484 Patent (-00679 IPR) POR at 71.

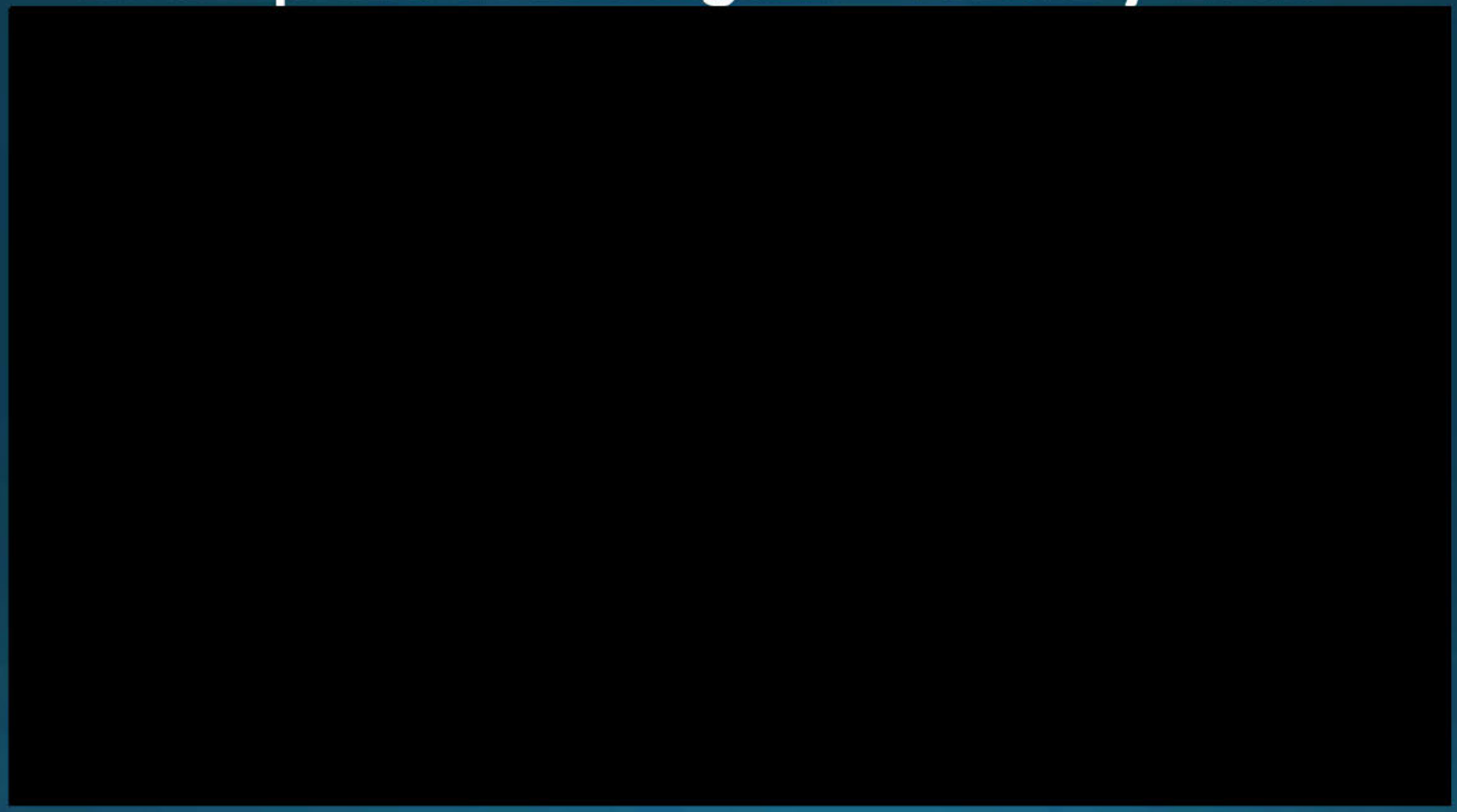
InfoExpress Was Diligent

January 2003

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13	14	15 EX2034 EX2035	16	17	18/19
20 EX2038 EX2039 EX2040	21 EX2212 EX2211	22 EX2041 EX2056 EX2281 EX2282	23	24	25/26
27 EX2057 EX2058 EX2059 EX2060	28 EX2042 EX2213	29 EX2043 EX2044 EX2045	30 EX2065 EX2066 EX2214	31 EX2067 EX2072 EX2078 EX2079 EX2080	

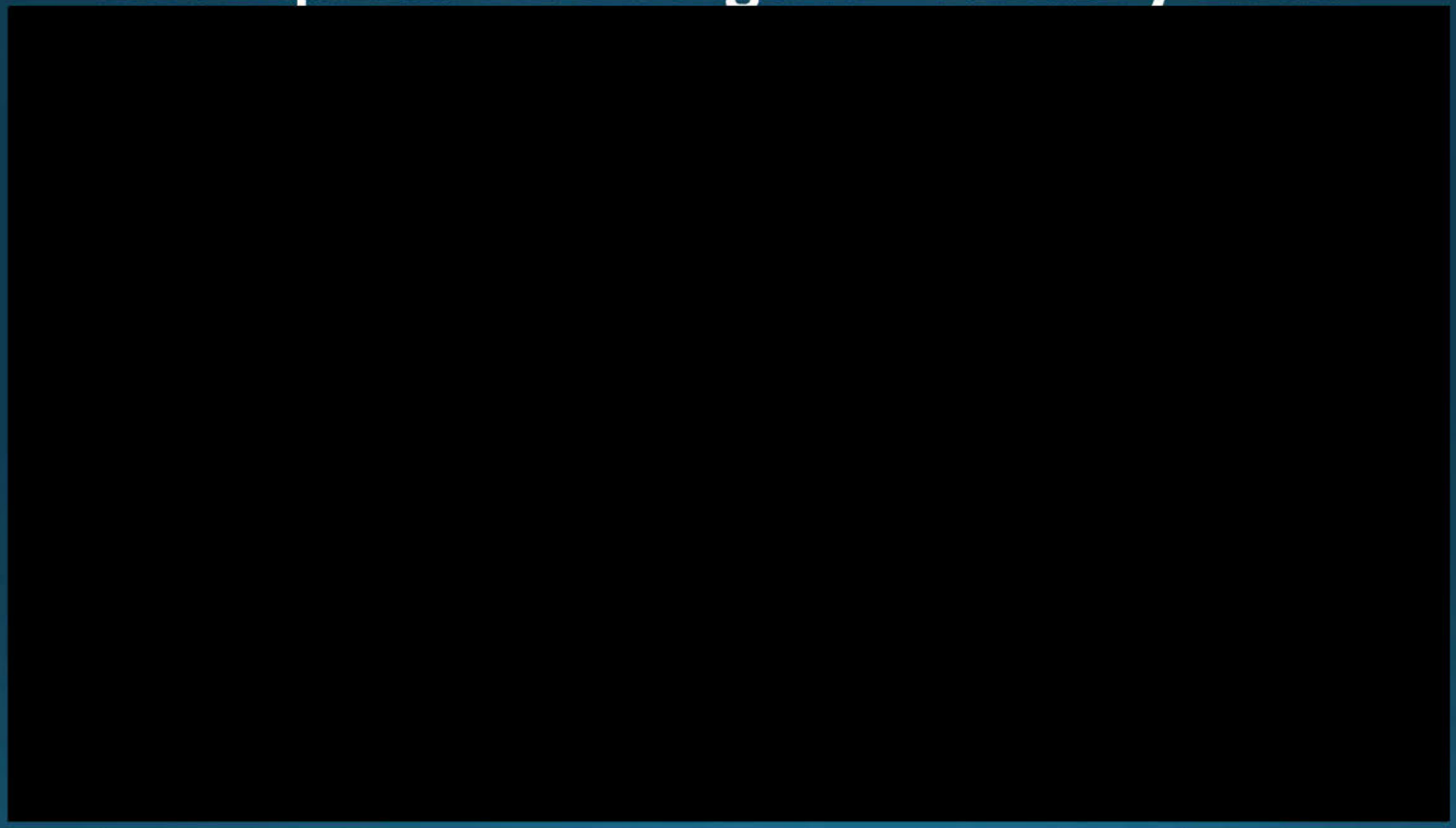
See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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Cited in '460 Patent POR at 72; '444 Patent POR at 71; '450 Patent POR at 68; '484 Patent (-00675 IPR) POR at 72; '484 Patent (-00679 IPR) POR at 72.

InfoExpress Was Diligent – January 2003



Cited in '460 Patent POR at 72; '444 Patent POR at 71; '450 Patent POR at 68; '484 Patent (-00675 IPR) POR at 72; '484 Patent (-00679 IPR) POR at 72.

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February 2003

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10 EX2075 EX2201 EX2087 EX2215 EX2088 EX2216 EX2217 EX2286	11 EX2076	12 EX2077	13 EX2064	14 EX2089 EX2090 EX2091	15/16
17	18 EX2218 EX2287 EX2288 EX2289	19 EX2092 EX2093 EX2094 EX2219	20 EX2046 EX2230 EX2095 EX2096 EX2097	21 EX2036 EX2037	22/23
24 EX2098 EX2099	25 EX2100 EX2101 EX2102 EX2103	26	27	28 EX2106 EX2107 EX2108 EX2109	

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – February 2003

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Cited in '460 Patent POR at 73; '444 Patent POR at 72; '450 Patent POR at 69; '484 Patent (-00675 IPR) POR at 73; '484 Patent (-00679 IPR) POR at 73.

InfoExpress Was Diligent – February 2003



Cited in '460 Patent POR at 74; '444 Patent POR at 73; '450 Patent POR at 70; '484 Patent (-00675 IPR) POR at 74; '484 Patent (-00679 IPR) POR at 74.

InfoExpress Was Diligent

March 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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3 EX2290 EX2294 EX2291 EX2295 EX2292 EX2293	4	5	6	7	8/9
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17 EX2113 EX2117 EX2114 EX2202 EX2115 EX2231 EX2116	18 EX2118	19 EX2119 EX2120	20	21	22/23
24 EX2121 EX2122 EX2123	25 EX2124	26 EX2125 EX2126 EX2127	27	28	29/30
31 EX2128 EX2129 EX2130					

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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Cited in '460 Patent POR at 75; '444 Patent POR at 74; '450 Patent POR at 71; '484 Patent (-00675 IPR) POR at 75; '484 Patent (-00679 IPR) POR at 75.

InfoExpress Was Diligent – March 2003

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Cited in '460 Patent POR at 75-76; '444 Patent POR at 74-75; '450 Patent POR at 71-72; '484 Patent (-00675 IPR) POR at 75-76; '484 Patent (-00679 IPR) POR at 75-76.

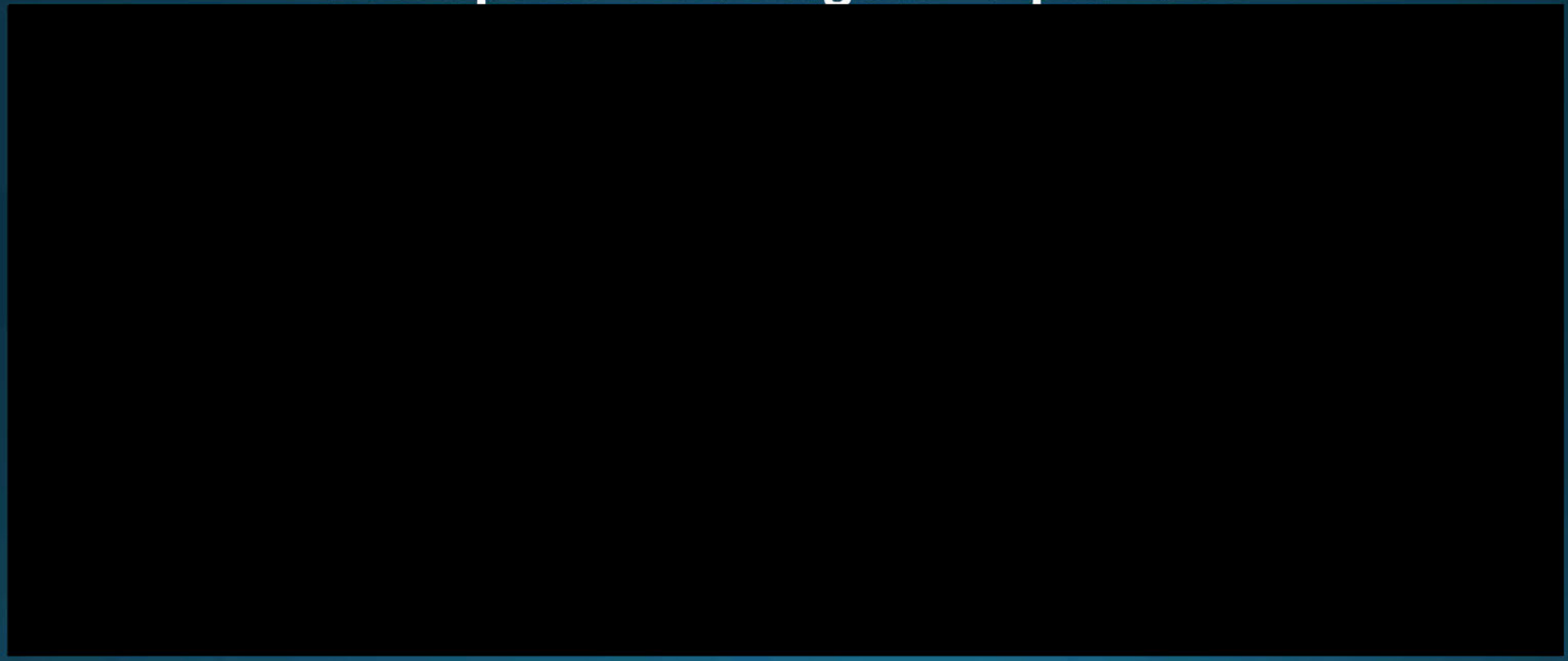
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April 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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7 EX2138 EX2139 EX2140 EX2141	8	9	10 EX2142 EX2203	11	12/13
14	15 EX2143 EX2147 EX2144 EX2149 EX2145 EX2150 EX2146	16 EX2148 EX2151 EX2152 EX2153	17 EX2154 EX2155 EX2156 EX2157	18 EX2158 EX2204	19/20
21 EX2159 EX2160 EX2161 EX2162 EX2163	22	23 EX2164	24 EX2165 EX2169 EX2166 EX2170 EX2167 EX2168	25 EX2171 EX2172 EX2173 EX2174	26/27 EX2175 EX2176
28 EX2177	29 EX2178 EX2179	30 EX2180 EX2181 EX2182 EX2183			

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – April 2003



Cited in '460 Patent POR at 76; '444 Patent POR at 75; '450 Patent POR at 72; '484 Patent (-00675 IPR) POR at 76; '484 Patent (-00679 IPR) POR at 76.

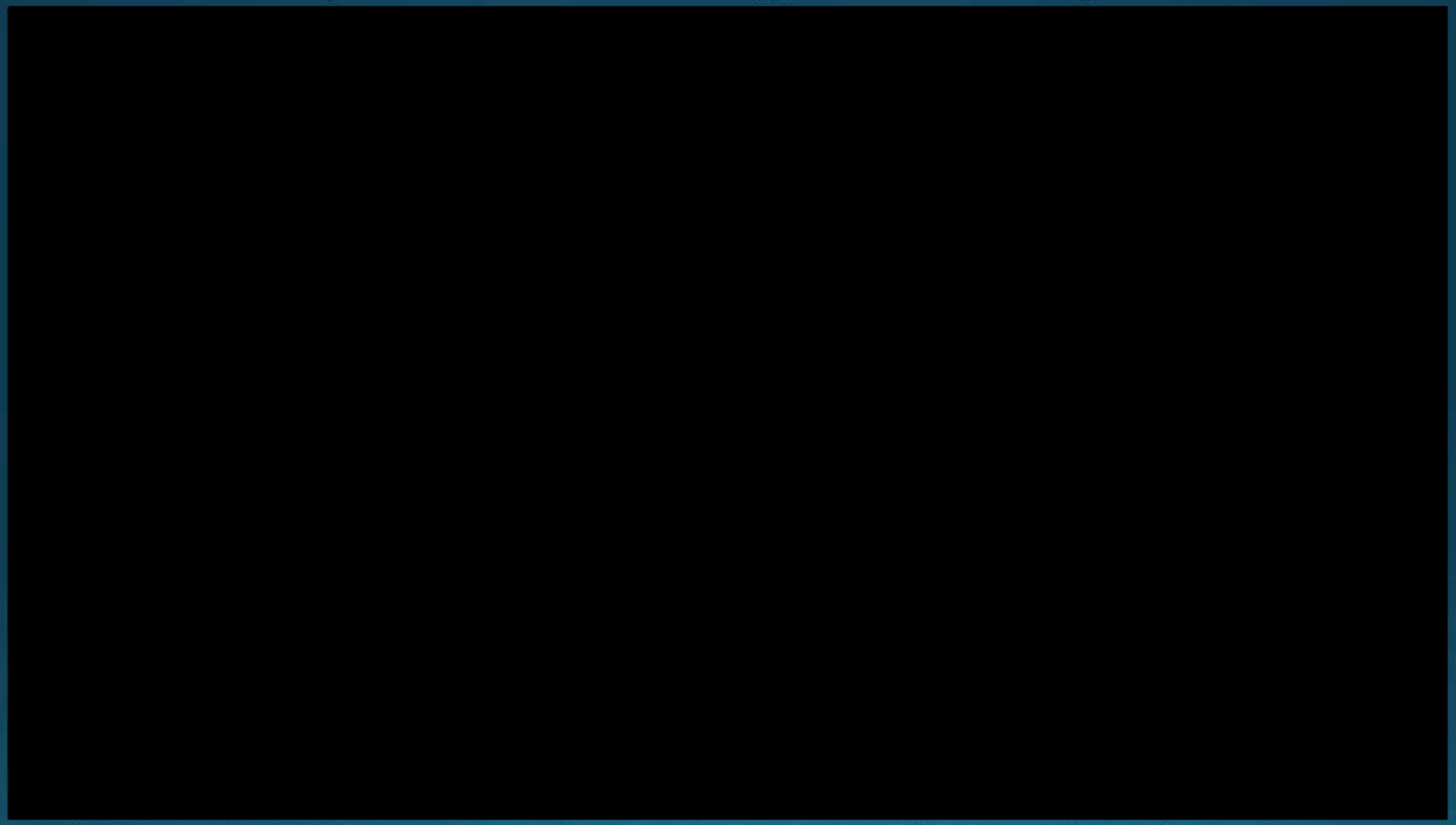
InfoExpress Was Diligent

May 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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5 EX2187 EX2188 EX2189 EX2190	6 EX2191 EX2192 EX2193	7 EX2194 EX2205 EX2206	8 EX2195 EX2196	9	10/11
12 EX2197	13 EX2343	14 EX2344	15 EX2345 EX2346	16 EX2347	17/18
19 EX2348 EX2349 EX2350 EX2351 EX2352	20 EX2353	21 EX2355	22	23	24/25
26 EX2302	27	28	29	30	31/

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – May 2003



Cited in '460 Patent POR at 77; '444 Patent POR at 75; '450 Patent POR at 73; '484 Patent (-00675 IPR) POR at 76; '484 Patent (-00679 IPR) POR at 76.

InfoExpress Was Diligent – May 2003

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Cited in '460 Patent POR at 77; '444 Patent POR at 75-76; '450 Patent POR at 73; '484 Patent (-00675 IPR) POR at 76-77; '484 Patent (-00679 IPR) POR at 76-77.

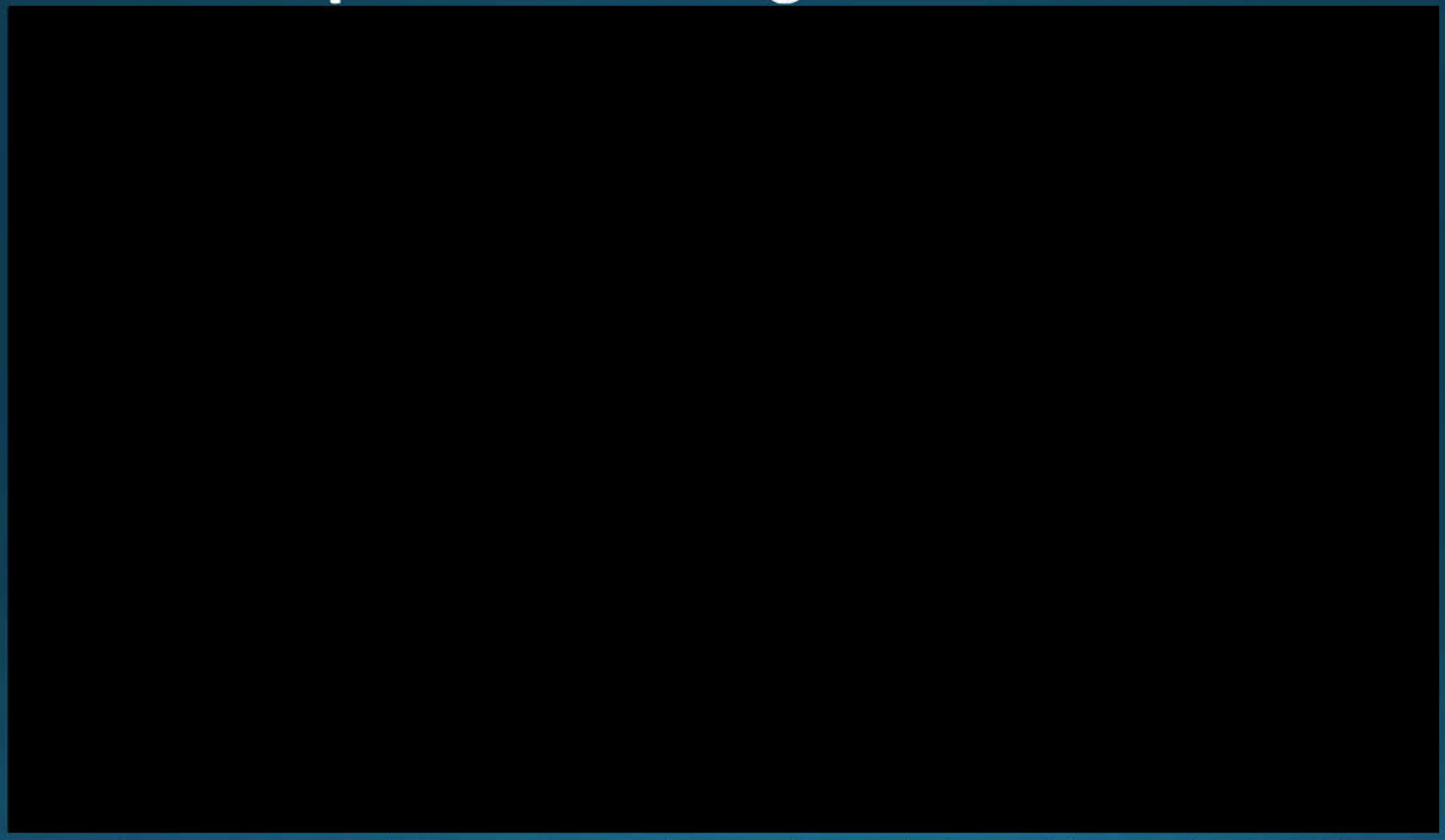
InfoExpress Was Diligent

June 2003

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9 EX2209	10 EX2356 EX2357 EX2358	11	12	13	14/15
16 EX2359 EX2362 EX2360 EX2363 EX2361 EX2364 EX2362	17 EX2365 EX2366 EX2368 EX2369	18	19 EX2370 EX2371 EX2372	20 EX2373 EX2378 EX2374 EX2379 EX2375 EX2380 EX2376 EX2381 EX2377 EX2382	21/22
23 EX2383 EX2384	24 EX2385	25 EX2386 EX2387 EX2388 EX2389	26 EX2390 EX2394 EX2391 EX2395 EX2392 EX2393	27 EX2396	28/29 EX2397
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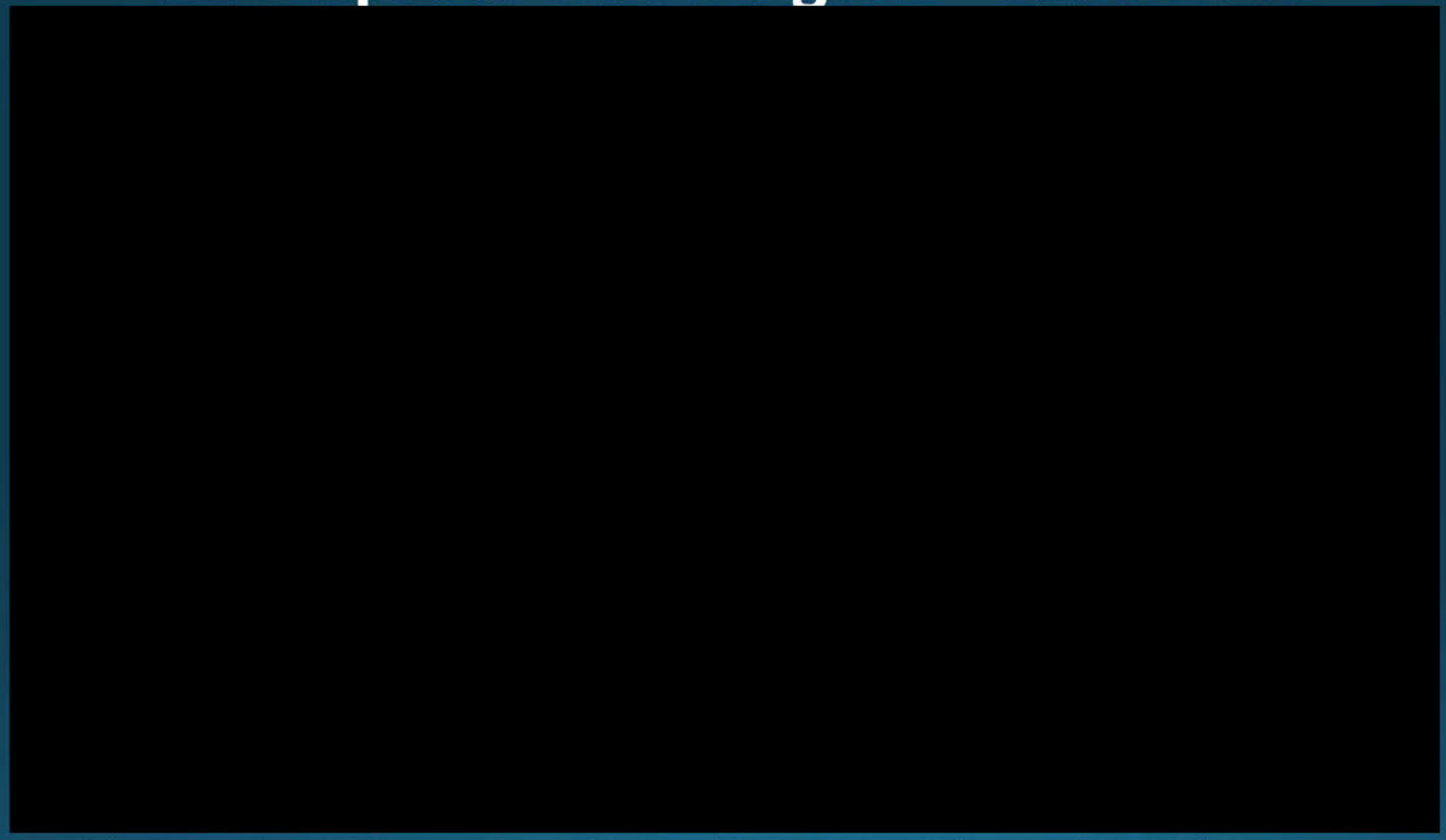
See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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Cited in '460 Patent POR at 77-78; '444 Patent POR at 76-77; '450 Patent POR at 73-74; '484 Patent (-00675 IPR) POR at 77-78; '484 Patent (-00679 IPR) POR at 77-78.

InfoExpress Was Diligent – June 2003



Cited in '460 Patent POR at 78; '444 Patent POR at 76; '450 Patent POR at 74; '484 Patent (-00675 IPR) POR at 77; '484 Patent (-00679 IPR) POR at 77.

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July 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
	1	2 EX2400 EX2401 EX2402	3	4	5/6
7 EX2403 EX2404 EX2405	8 EX2406 EX2407	9 EX2408 EX2409 EX2410	10 EX2233	11	12/13
14	15	16	17	18	19/20
21	22	23 EX2235	24 EX2236 EX2237	25	26/27
28 EX2238	29 EX2239 EX2240 EX2241	30 EX2243 EX2244 EX2245	31		

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – July 2003



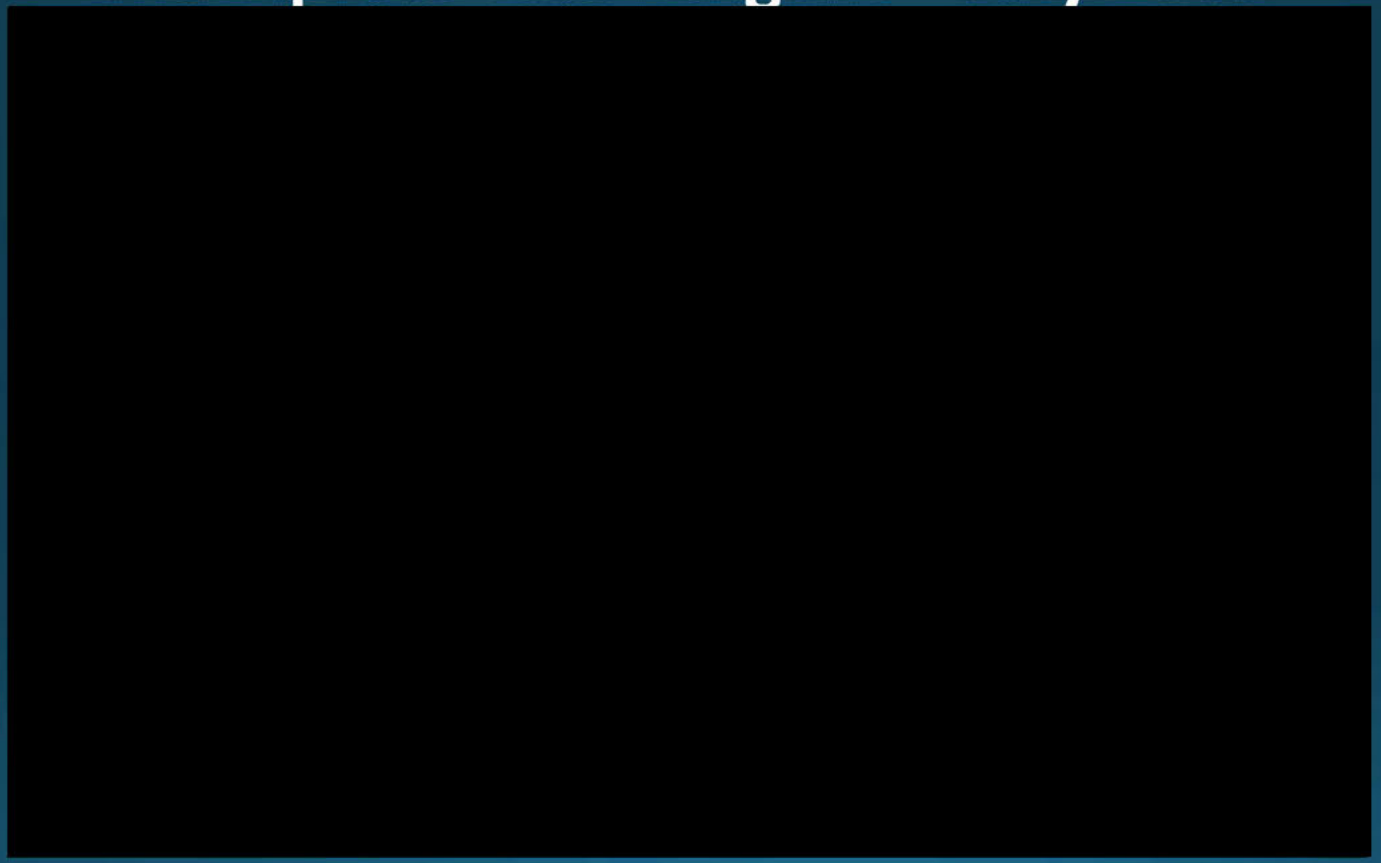
Cited in '460 Patent POR at 78-79; '444 Patent POR at 77; '450 Patent POR at 74-75; '484 Patent (-00675 IPR) POR at 78; '484 Patent (-00679 IPR) POR at 78.

InfoExpress Was Diligent – July 2003

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Cited in '460 Patent POR at 79; '444 Patent POR at 77; '450 Patent POR at 75; '484 Patent (-00675 IPR) POR at 78; '484 Patent (-00679 IPR) POR at 78.

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Cited in '460 Patent POR at 79; '444 Patent POR at 77; '450 Patent POR at 75; '484 Patent (-00675 IPR) POR at 78; '484 Patent (-00679 IPR) POR at 78.

InfoExpress Was Diligent

August 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
				1	2/3
4	5 EX2303 EX2304	6 EX2305 EX2306	7 EX2307 EX2308	8	9/10
11 EX2309 EX2310	12	13 EX2311 EX2312	14 EX2313	15	16/17
18 EX2314	19	20	21	22 EX2315 EX2316	23/24 EX2317 EX2318 EX2318
25 EX2319 EX2320 EX2321	26	27 EX2322 EX2323	28 EX2324 EX2325 EX2326	29	30/31

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – August 2003

[redacted]

Cited in '460 Patent POR at 79; '444 Patent POR at 78; '450 Patent POR at 75; '484 Patent (-00675 IPR) POR at 79; '484 Patent (-00679 IPR) POR at 79.

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Cited in '460 Patent POR at 80; '444 Patent POR at 79; '450 Patent POR at 76; '484 Patent (-00675 IPR) POR at 80; '484 Patent (-00679 IPR) POR at 80.

InfoExpress Was Diligent

September 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
1	2	3 EX2210	4	5 EX2331 EX2332	6/7
8 EX2333	9	10	11	12	13/14
15	16	17	18 EX2246	19	20/21 EX2252 EX2253
22 EX2254 EX2327 EX2228 EX2329 EX2231	23 EX2256 EX2257 EX2258 EX2259	24 US 60/505,582 FILED	25	26	27/28
29	30				

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – September 2003



Cited in '460 Patent POR at 80; '444 Patent POR at 79; '450 Patent POR at 76; '484 Patent (-00675 IPR) POR at 80; '484 Patent (-00679 IPR) POR at 80.

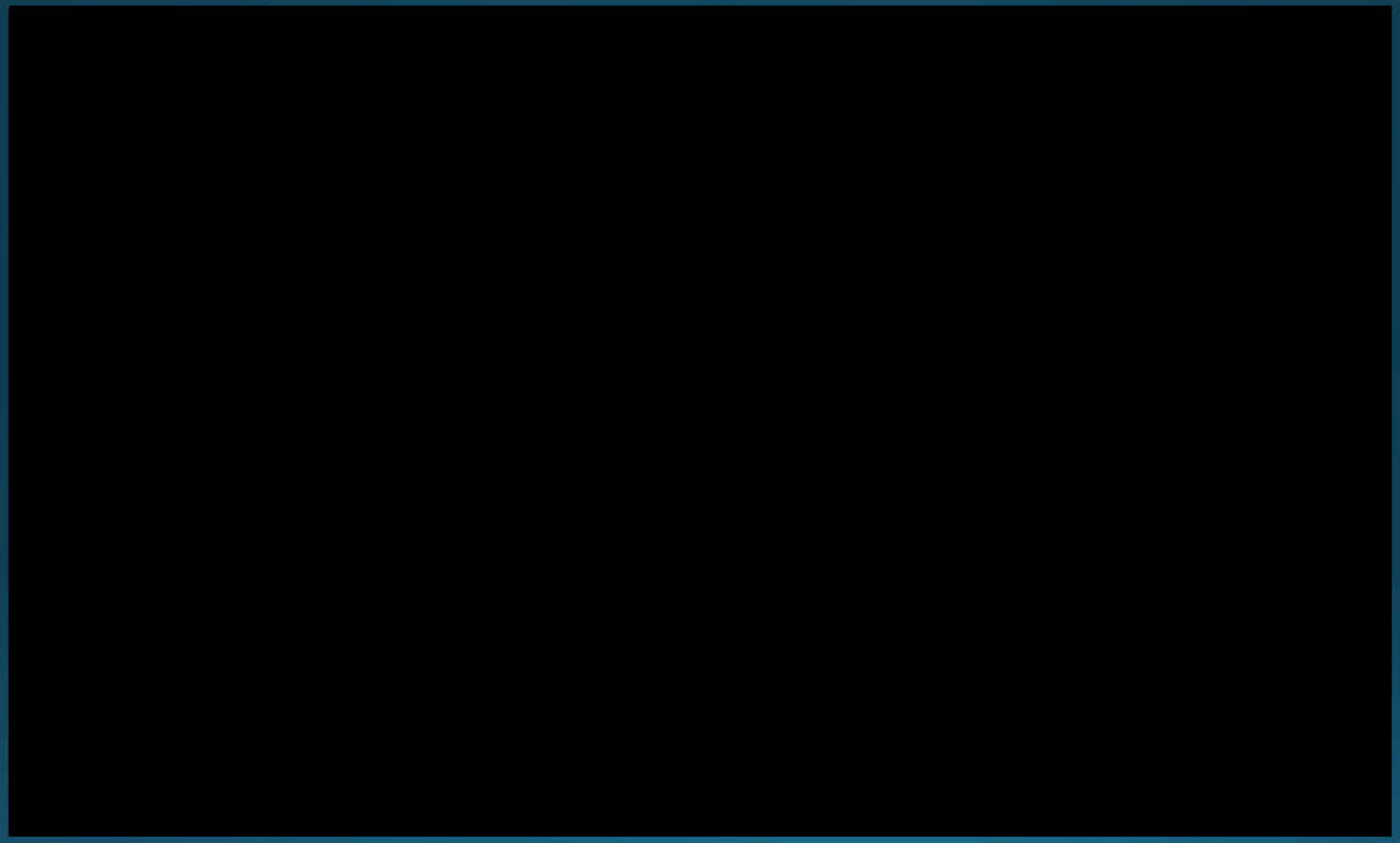
InfoExpress Was Diligent

October 2023

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
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6 EX2261	7	8	9	10	11/12 EX2262 EX2263
13 EX2264 EX2265	14 EX2334 EX2335 EX2336 EX2337	15	16	17 EX2338	18/19
20 EX2339 EX2340	21 US 60/513,080 FILED	22	23	24	25/26
27	28	29	30	31	

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

InfoExpress Was Diligent – October 2003



Cited in '460 Patent POR at 81; '444 Patent POR at 80; '450 Patent POR at 77; '484 Patent (-00675 IPR) POR at 80; '484 Patent (-00679 IPR) POR at 81.

InfoExpress Was Diligent – October 2003

[redacted]

ATTORNEY DOCKET NO. 09142.0002U1

1

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a **PROVISIONAL APPLICATION FOR PATENT** under 37 C.F.R. § 1.53(c).

	Docket Number	09142.0002U1	Type a Plus Sign (+) inside this box → → →	+

INVENTOR(s)/APPLICANT(s)

LAST NAME	FIRST NAME	MIDDLE INITIAL	RESIDENCE (City and Either State or Foreign Country)
Lum	Stacey		Los Altos, California
Lee	Alice		Saratoga, California

TITLE OF INVENTION (280 characters max)

GATEKEEPER INVENTION FOR CONTROLLING ACCESS TO A CORPORATE NETWORK USING 802.1x

CORRESPONDENCE ADDRESS

Jennifer Pearson Medlin, Esq.

23859
PATENT TRADEMARK OFFICE

STATE	Georgia	ZIP CODE	30309	COUNTRY	USA

ENCLOSED APPLICATION PARTS (*Check All That Apply*)

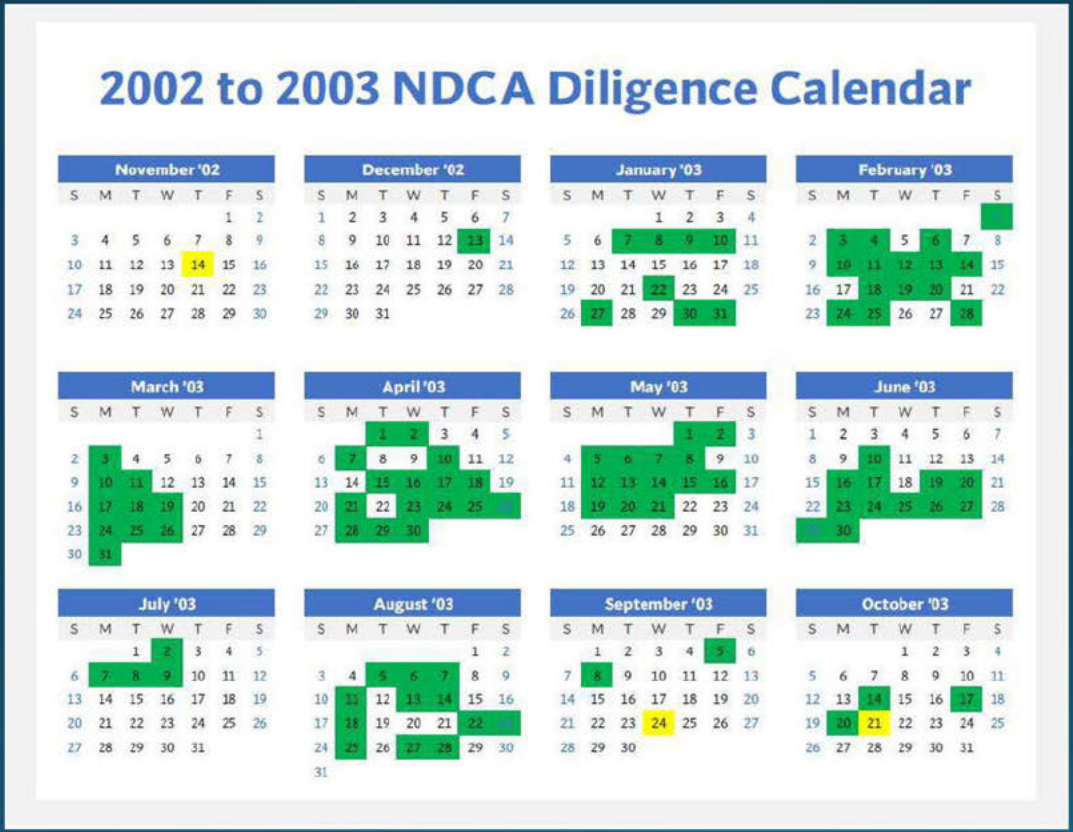
- ☐ Provisional Application Title Page — *Number of pages* [1]
- ☒ Specification, including claims and figures — *Number of pages* [12]
- ☒ Appendix — *Number of pages* [7]
- ☒ Credit Card Payment Authorization Form PTO-2038 for $80.00 for filing fee
- ☒ Other (Specify): Return Postcard

EX2006

192429

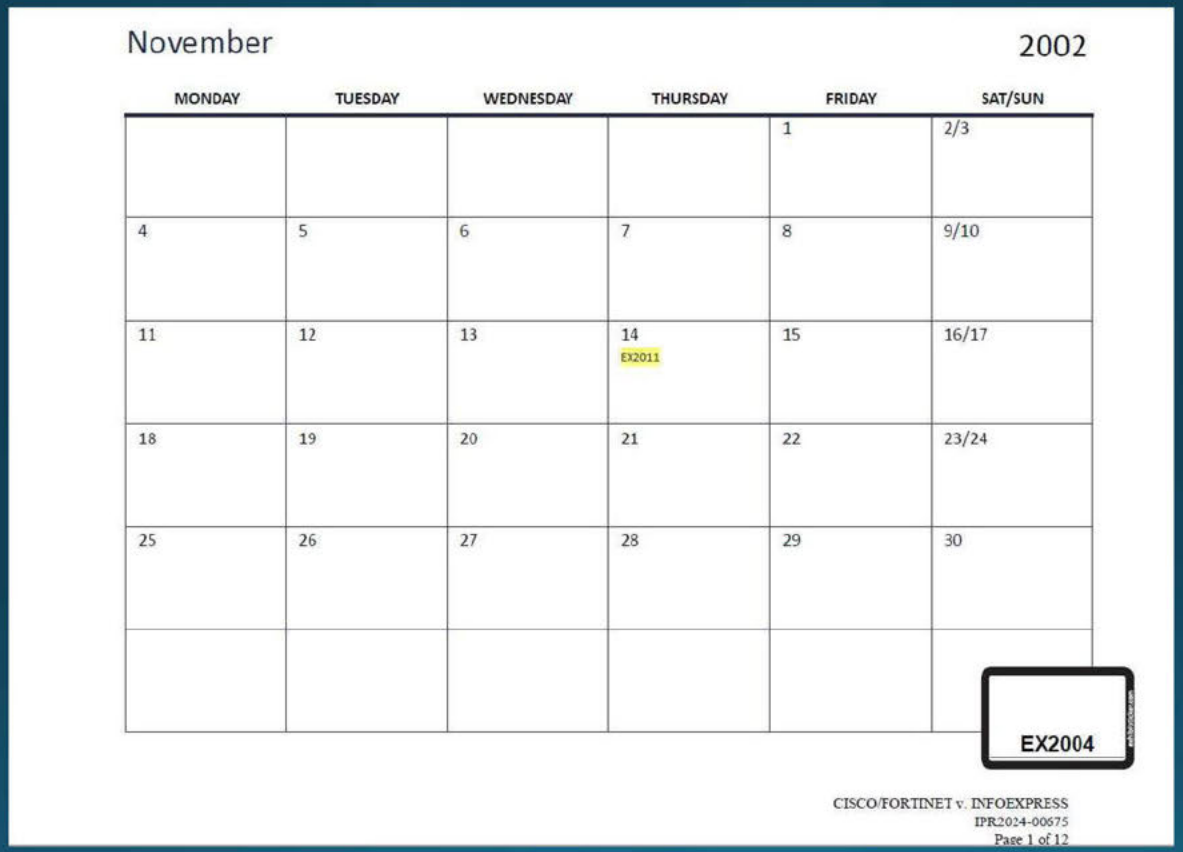
Cited in '460 Patent POR at 81; '444 Patent POR at 80; '450 Patent POR at 77; '484 Patent (-00675 IPR) POR at 80; '484 Patent (-00679 IPR) POR at 81.

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See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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November 2002

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
				1	2/3
4	5	6	7	8	9/10
11	12	13	14 EX2011	15	16/17
18	19	20	21	22	23/24
25	26	27	28	29	30

EX2004

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IPR2024-00675
Page 1 of 12

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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December 2002

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
					/1
2	3 EX2025	4	5 EX2276 EX2277 EX2278	6 EX2278 EX2279	7/8
9	10	11	12	13 EX2280	14/15
16 EX2198	17	18	19	20	21/22
23	24	25	26	27	28/29
30	31				

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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January 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
		1	2	3	4/5
6	7 EX2026 EX2048 EX2027 EX2049 EX2028 EX2050 EX2051	8 EX2029 EX2030 EX2052 EX2053	9 EX2054	10 EX2031 EX2032 EX2033 EX2055	11/12
13	14	15 EX2034 EX2035	16	17	18/19
20 EX2038 EX2039 EX2040	21 EX2212 EX2211	22 EX2041 EX2056 EX2281 EX2282	23	24	25/26
27 EX2057 EX2058 EX2059 EX2060	28 EX2042 EX2213	29 EX2043 EX2044 EX2045	30 EX2065 EX2066 EX2214	31 EX2067 EX2072 EX2078 EX2079 EX2080	

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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February 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
					1/2 EX2068 EX2059 EX2070
3 EX2061 EX2071 EX2073 EX2074 EX2284	4 EX2081 EX2085 EX2082 EX2086 EX2083 EX2084	5 EX2220 EX2224 EX2221 EX2225 EX2222 EX2223	6 EX2062 EX2227 EX2063 EX2228 EX2199 EX2285 EX2226	7 EX2229	8/9
10 EX2075 EX2201 EX2087 EX2215 EX2088 EX2216 EX2217 EX2286	11 EX2076	12 EX2077	13 EX2064	14 EX2089 EX2090 EX2091	15/16
17	18 EX2218 EX2287 EX2288 EX2289	19 EX2092 EX2093 EX2094 EX2219	20 EX2046 EX2230 EX2095 EX2096 EX2097	21 EX2036 EX2037	22/23
24 EX2098 EX2099	25 EX2100 EX2101 EX2102 EX2103	26	27	28 EX2106 EX2107 EX2108 EX2109	

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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March 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
					1/2
3 EX2290 EX2294 EX2291 EX2295 EX2292 EX2293	4	5	6	7	8/9
10 EX2296 EX2300 EX2297 EX2301 EX2298 EX2299	11 EX2110 EX2111 EX2112	12	13	14	15/16
17 EX2113 EX2117 EX2114 EX2202 EX2115 EX2231 EX2116	18 EX2118	19 EX2119 EX2120	20	21	22/23
24 EX2121 EX2122 EX2123	25 EX2124	26 EX2125 EX2126 EX2127	27	28	29/30
31 EX2128 EX2129 EX2130					

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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April 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
	1 EX2131 EX2132	2 EX2133 EX2137 EX2135 EX2232 EX2136 EX2134	3	4	5/6
7 EX2138 EX2139 EX2140 EX2141	8	9	10 EX2142 EX2203	11	12/13
14	15 EX2143 EX2147 EX2144 EX2149 EX2145 EX2150 EX2146	16 EX2148 EX2151 EX2152 EX2153	17 EX2154 EX2155 EX2156 EX2157	18 EX2158 EX2204	19/20
21 EX2159 EX2160 EX2161 EX2162 EX2163	22	23 EX2164	24 EX2165 EX2169 EX2166 EX2170 EX2167 EX2168	25 EX2171 EX2172 EX2173 EX2174	26/27 EX2175 EX2176
28 EX2177	29 EX2178 EX2179	30 EX2180 EX2181 EX2182 EX2183			

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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May 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
			1 EX2184	2 EX2185 EX2186	3/4
5 EX2187 EX2188 EX2189 EX2190	6 EX2191 EX2192 EX2193	7 EX2194 EX2205 EX2206	8 EX2195 EX2196	9	10/11
12 EX2197	13 EX2343	14 EX2344	15 EX2345 EX2346	16 EX2347	17/18
19 EX2348 EX2349 EX2350 EX2351 EX2352	20 EX2353	21 EX2355	22	23	24/25
26 EX2302	27	28	29	30	31/

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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June 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
					/1
2	3	4	5	6 EX2207	7/8 EX2208
9 EX2209	10 EX2356 EX2357 EX2358	11	12	13	14/15
16 EX2359 EX2362 EX2360 EX2363 EX2361 EX2364 EX2362	17 EX2365 EX2366 EX2368 EX2369	18	19 EX2370 EX2371 EX2372	20 EX2373 EX2378 EX2374 EX2379 EX2375 EX2380 EX2376 EX2381 EX2377 EX2382	21/22
23 EX2383 EX2384	24 EX2385	25 EX2386 EX2387 EX2388 EX2389	26 EX2390 EX2394 EX2391 EX2395 EX2392 EX2393	27 EX2396	28/29 EX2397
30 EX2398 EX2399					

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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July 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
	1	2 EX2400 EX2401 EX2402	3	4	5/6
7 EX2403 EX2404 EX2405	8 EX2406 EX2407	9 EX2408 EX2409 EX2410	10 EX2233	11	12/13
14	15	16	17	18	19/20
21	22	23 EX2235	24 EX2236 EX2237	25	26/27
28 EX2238	29 EX2239 EX2240 EX2241	30 EX2243 EX2244 EX2245	31		

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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August 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
				1	2/3
4	5 EX2303 EX2304	6 EX2305 EX2306	7 EX2307 EX2308	8	9/10
11 EX2309 EX2310	12	13 EX2311 EX2312	14 EX2313	15	16/17
18 EX2314	19	20	21	22 EX2315 EX2316	23/24 EX2317 EX2318 EX2318
25 EX2319 EX2320 EX2321	26	27 EX2322 EX2323	28 EX2324 EX2325 EX2326	29	30/31

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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September 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
1	2	3 EX2210	4	5 EX2331 EX2332	6/7
8 EX2333	9	10	11	12	13/14
15	16	17	18 EX2246	19	20/21 EX2252 EX2253
22 EX2254 EX2327 EX2228 EX2329 EX2231	23 EX2256 EX2257 EX2258 EX2259	24 US 60/505,582 FILED	25	26	27/28
29	30				

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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October 2023

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT/SUN
		1	2 EX2260	3	4/5
6 EX2261	7	8	9	10	11/12 EX2262 EX2263
13 EX2264 EX2265	14 EX2334 EX2335 EX2336 EX2337	15	16	17 EX2338	18/19
20 EX2339 EX2340	21 US 60/513,080 FILED	22	23	24	25/26
27	28	29	30	31	

See IPR2024-00539, EX2568; EX2004 in all other IPRs (cited in '460 Patent POR at 70, '460 Patent Sur-Reply at 32; '444 Patent POR at 69, '444 Patent Sur-Reply at 31; '450 Patent POR at 66, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 70; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 70; '484 Patent (-00679 IPR) Sur-Reply at 33).

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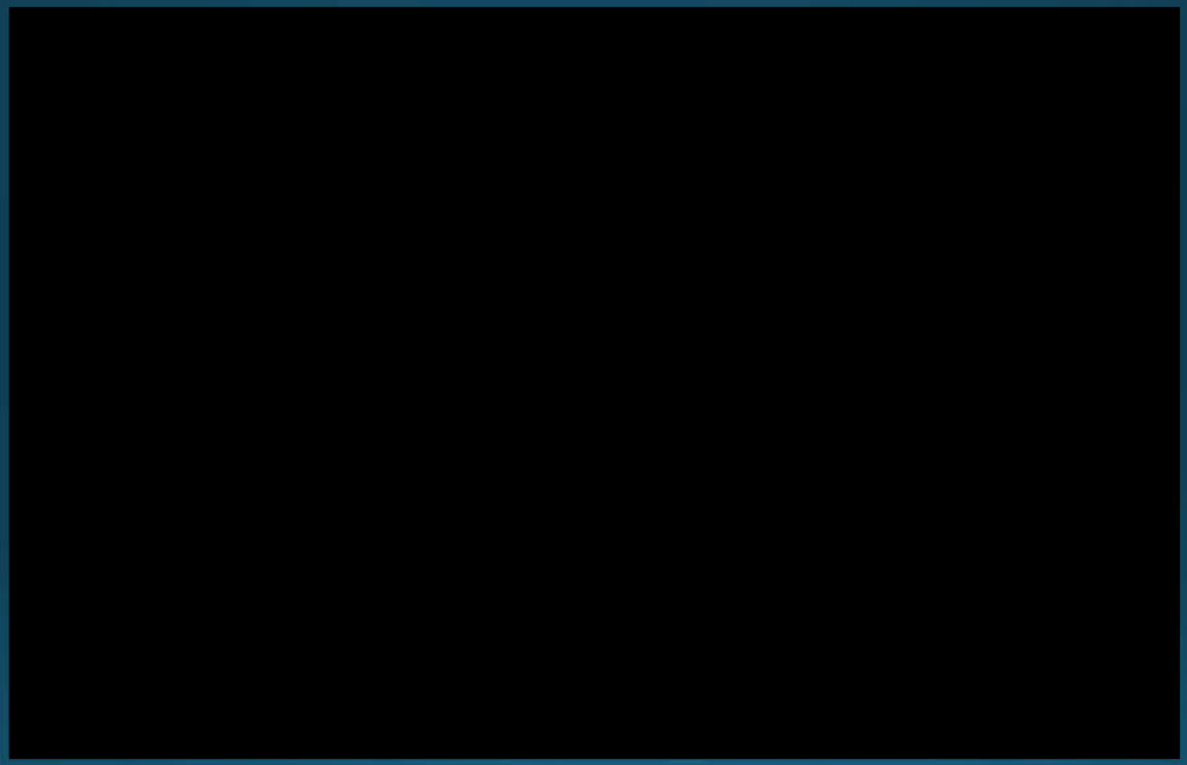
37. [redacted]

[redacted]

Supplemental Declaration of Stacey C. Lum (EX2564, ¶ 37)

See '460 Patent POR at 71-72, '460 Patent Sur-Reply at 30; '444 Patent POR at 70-71, '444 Patent Sur-Reply at 29; '450 Patent POR at 67-69, '450 Patent Sur-Reply at 28; '484 Patent (-00675 IPR) POR at 71-72; '484 Patent (-00675 IPR) Sur-Reply at 31; '484 Patent (-00679 IPR) POR at 71-72; '484 Patent (-00679 IPR) Sur-Reply at 31).

InfoExpress's NDCA Project was Independently Sufficient to Show Diligence



Correspondence with GTI regarding NDCA Project (EX2048)

See '460 Patent POR at 72, '460 Patent Sur-Reply at 31; '444 Patent POR at 71, '444 Patent Sur-Reply at 30; '450 Patent POR at 68, '450 Patent Sur-Reply at 29; '484 Patent (-00675 IPR) POR at 72; '484 Patent (-00675 IPR) Sur-Reply at 31; '484 Patent (-00679 IPR) POR at 72; '484 Patent (-00679 IPR) Sur-Reply at 32.

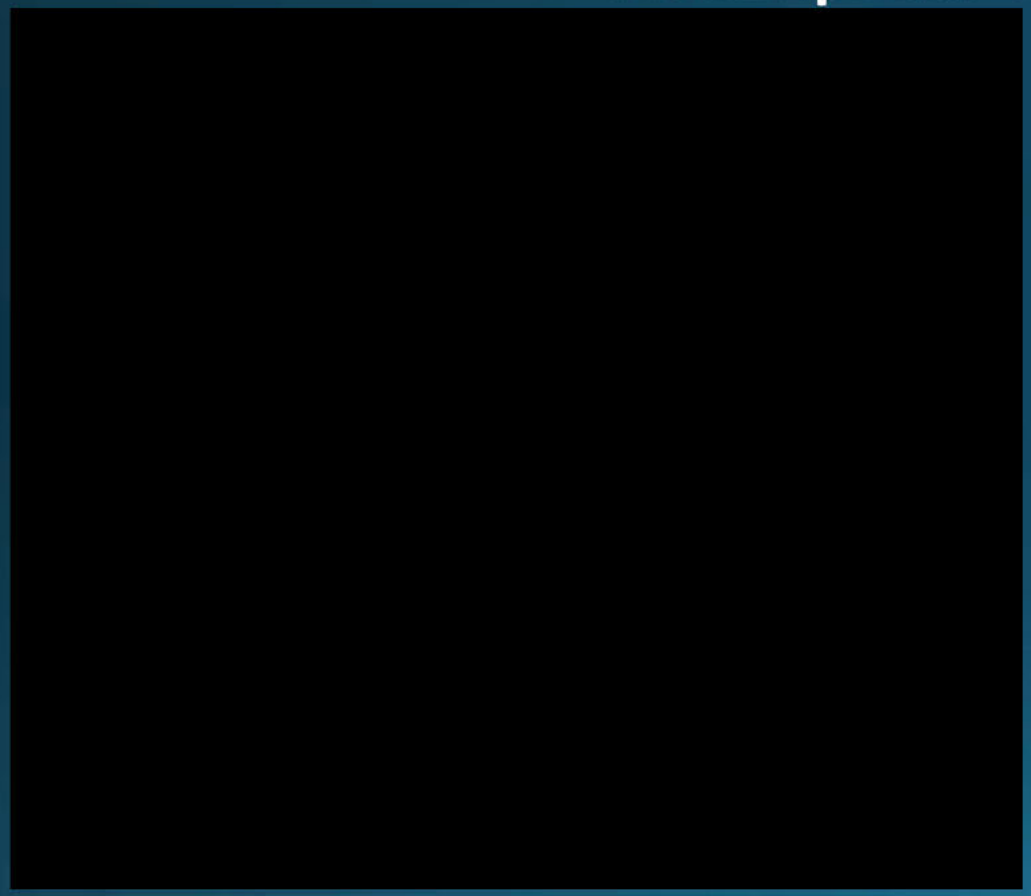
EX2022 Does Not Negate InfoExpress's Diligence



EX2022

See '460 Patent Sur-Reply at 30-31; '444 Patent Sur-Reply at 29-30; '450 Patent Sur-Reply at 28-29; '484 Patent (-00675 IPR) Sur-Reply at 30-31; '484 Patent (-00679 IPR) Sur-Reply at 31-32).

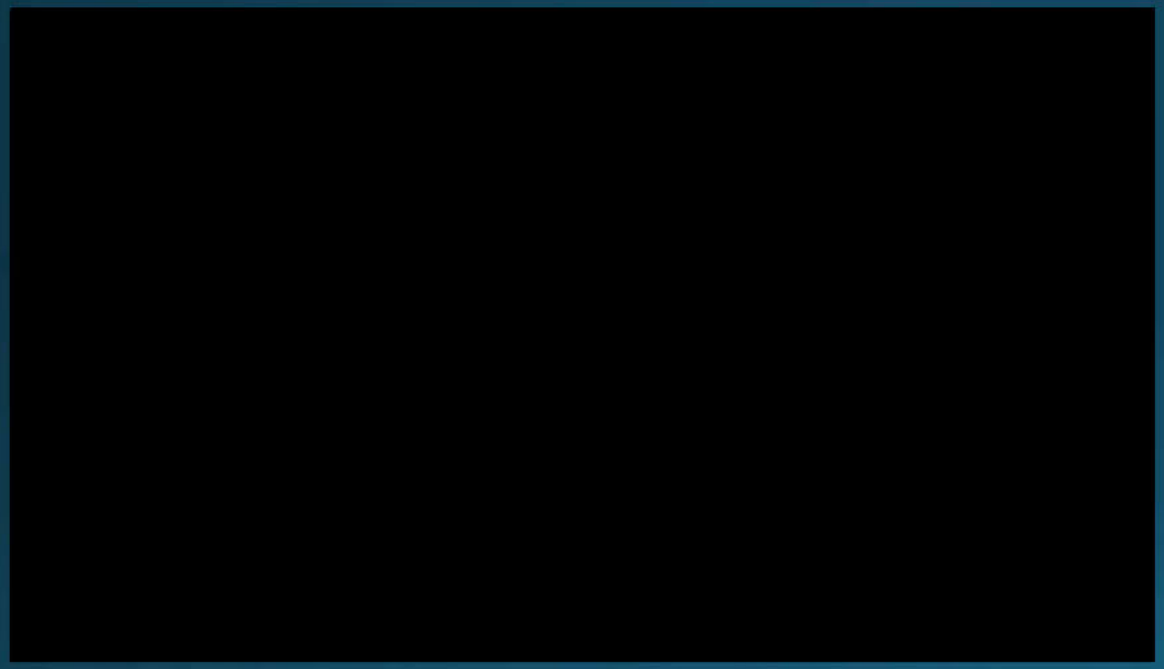
InfoExpress Was Diligent



January 30, 2003, "Simplified NDCA specification" (EX2065)

See '460 Patent POR at 72, '460 Patent Sur-Reply at 31-32; '444 Patent POR at 71, '444 Patent Sur-Reply at 30-31; '450 Patent POR at 68, '450 Patent Sur-Reply at 29-30; '484 Patent (-00675 IPR) POR at 72; '484 Patent (-00675 IPR) Sur-Reply at 31-32; '484 Patent (-00679 IPR) POR at 72; '484 Patent (-00679 IPR) Sur-Reply at 32-33).

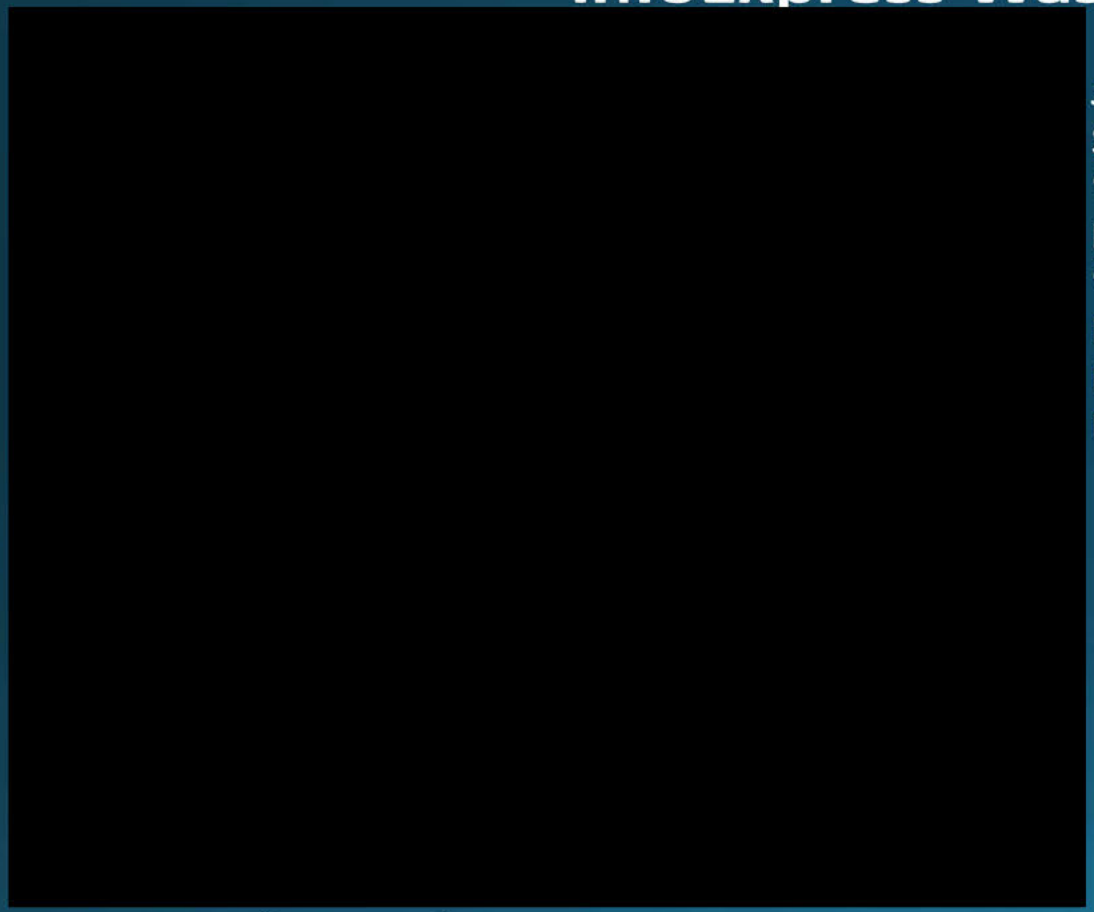
InfoExpress Was Diligent



February 14, 2003, email (EX2091)

See '460 Patent POR at 74, '460 Patent Sur-Reply at 32; '444 Patent POR at 73, '444 Patent Sur-Reply at 31; '450 Patent POR at 70, '450 Patent Sur-Reply at 30; '484 Patent (-00675 IPR) POR at 74; '484 Patent (-00675 IPR) Sur-Reply at 32; '484 Patent (-00679 IPR) POR at 74; '484 Patent (-00679 IPR) Sur-Reply at 33).

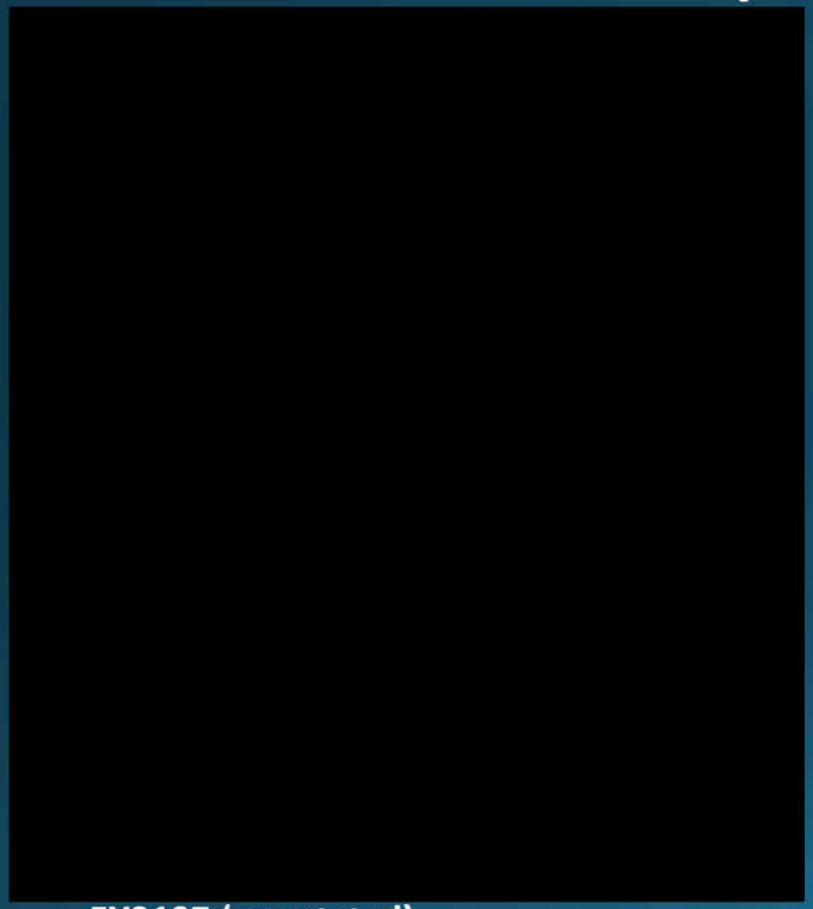
InfoExpress Was Diligent



EX2114 (annotated)

See '460 Patent POR at 75, '460 Patent Sur-Reply at 33; '444 Patent POR at 74, '444 Patent Sur-Reply at 32; '450 Patent POR at 71, '450 Patent Sur-Reply at 31; '484 Patent (-00675 IPR) POR at 75; '484 Patent (-00675 IPR) Sur-Reply at 33; '484 Patent (-00679 IPR) POR at 75; '484 Patent (-00679 IPR) Sur-Reply at 34.

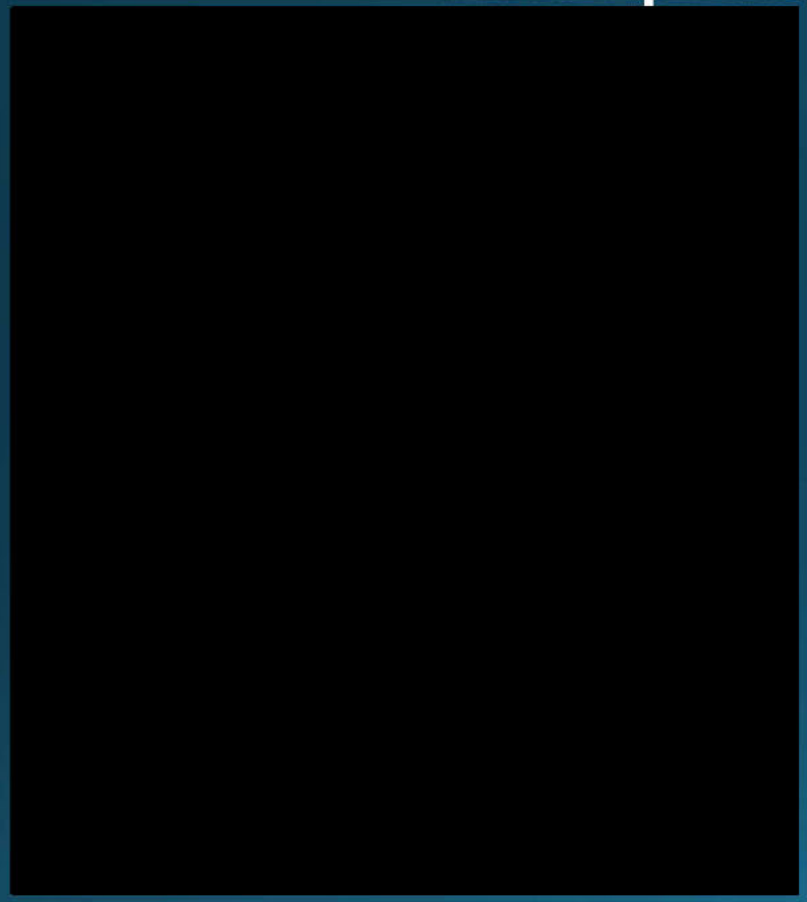
InfoExpress Was Diligent



EX2197 (annotated)

See '460 Patent POR at 77, '460 Patent Sur-Reply at 34; '444 Patent POR at 76, '444 Patent Sur-Reply at 31, 33; '450 Patent POR at 73, '450 Patent Sur-Reply at 30, 32; '484 Patent (-00675 IPR) POR at 77; '484 Patent (-00675 IPR) Sur-Reply at 32, 34; '484 Patent (-00679 IPR) POR at 77; '484 Patent (-00679 IPR) Sur-Reply at 33, 35.

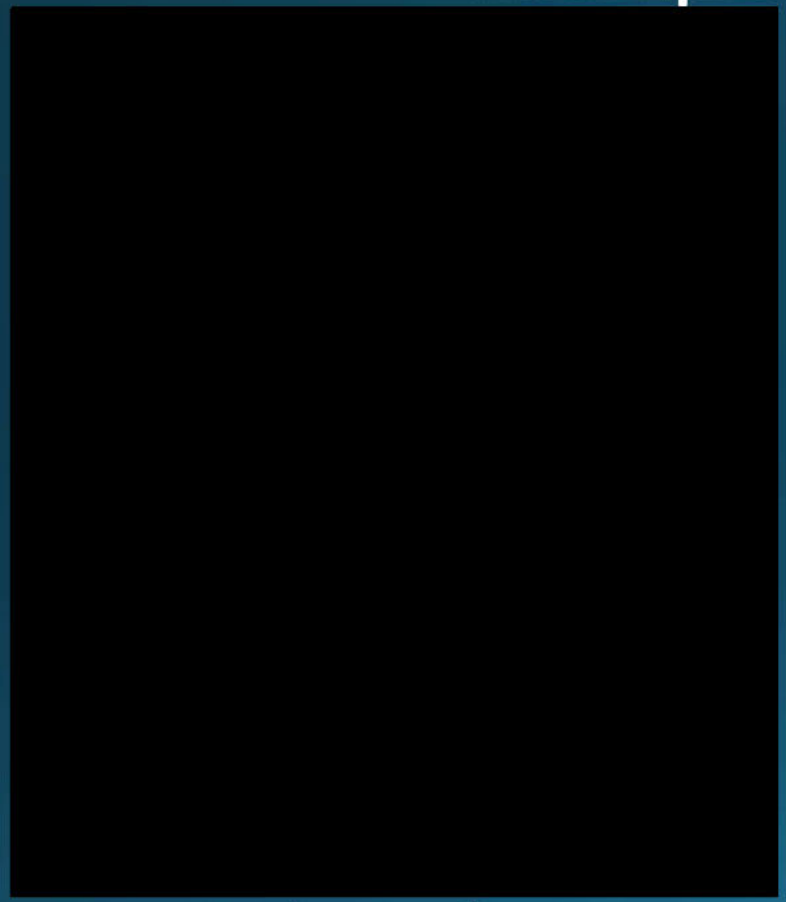
InfoExpress Was Diligent



EX2359 (annotated)

See '460 Patent POR at 77, '460 Patent Sur-Reply at 35; '444 Patent POR at 76, '444 Patent Sur-Reply at 34; '450 Patent POR at 73, '450 Patent Sur-Reply at 33; '484 Patent (-00675 IPR) POR at 77; '484 Patent (-00675 IPR) Sur-Reply at 35; '484 Patent (-00679 IPR) POR at 77; '484 Patent (-00679 IPR) Sur-Reply at 36.

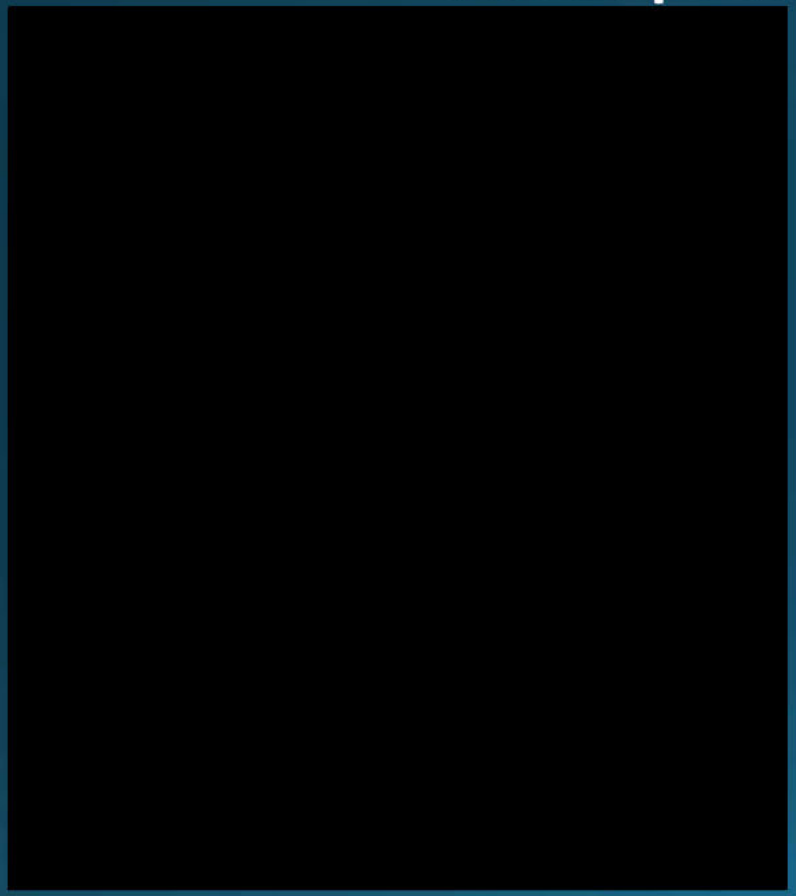
InfoExpress Was Diligent



EX2405 (annotated)

See '460 Patent POR at 78, '460 Patent Sur-Reply at 36; '444 Patent POR at 77, '444 Patent Sur-Reply at 35; '450 Patent POR at 74, '450 Patent Sur-Reply at 34; '484 Patent (-00675 IPR) POR at 78; '484 Patent (-00675 IPR) Sur-Reply at 36; '484 Patent (-00679 IPR) POR at 78; '484 Patent (-00679 IPR) Sur-Reply at 37.

InfoExpress Was Diligent



EX2303 (annotated)

See '460 Patent POR at 79, '460 Patent Sur-Reply at 37; '444 Patent POR at 78, '444 Patent Sur-Reply at 36; '450 Patent POR at 75, '450 Patent Sur-Reply at 35; '484 Patent (-00675 IPR) POR at 79; '484 Patent (-00675 IPR) Sur-Reply at 37; '484 Patent (-00679 IPR) POR at 79; '484 Patent (-00679 IPR) Sur-Reply at 38.

InfoExpress's Work With Meetinghouse Does Not Negate RTP



[redacted]

Supplemental Declaration of Stacey C. Lum (EX2564, ¶29).

See '460 Patent Sur-Reply at 38; '444 Patent Sur-Reply at 37; '450 Patent Sur-Reply at 36; '484 Patent (-00675 IPR) Sur-Reply at 38; '484 Patent (-00679 IPR) Sur-Reply at 39.

InfoExpress's Work With Meetinghouse Does Not Negate RTP

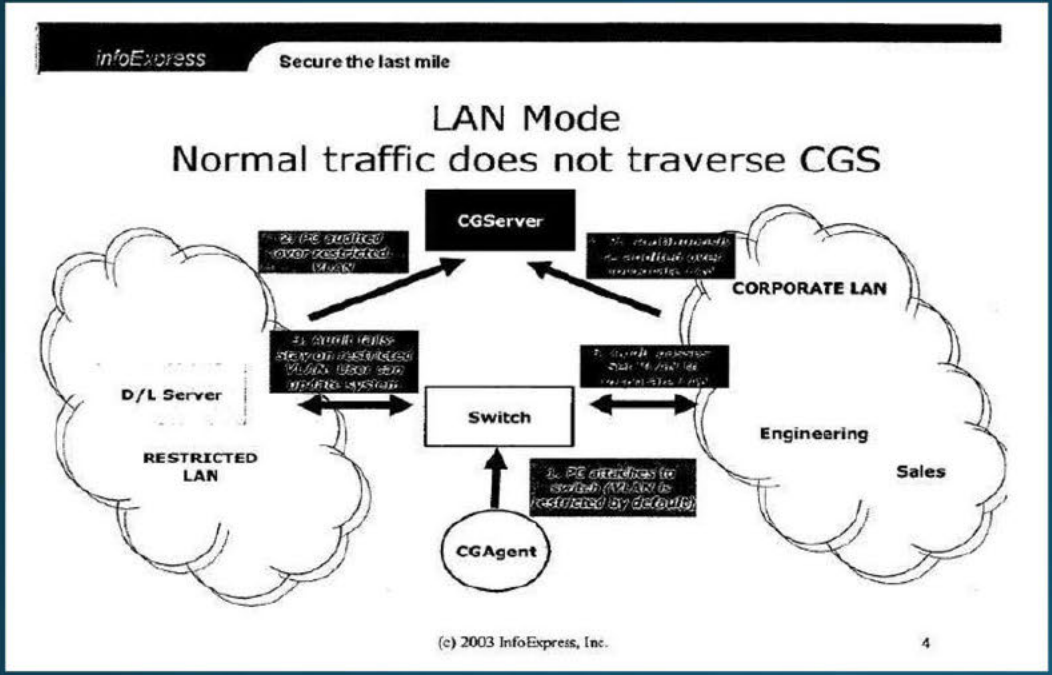


[redacted]

Stacey Lum Tr. (EX1023, 44:2-14 (discussing EX2036)).

See '460 Patent Sur-Reply at 38; '444 Patent Sur-Reply at 37; '450 Patent Sur-Reply at 36; '484 Patent (-00675 IPR) Sur-Reply at 38; '484 Patent (-00679 IPR) Sur-Reply at 39.

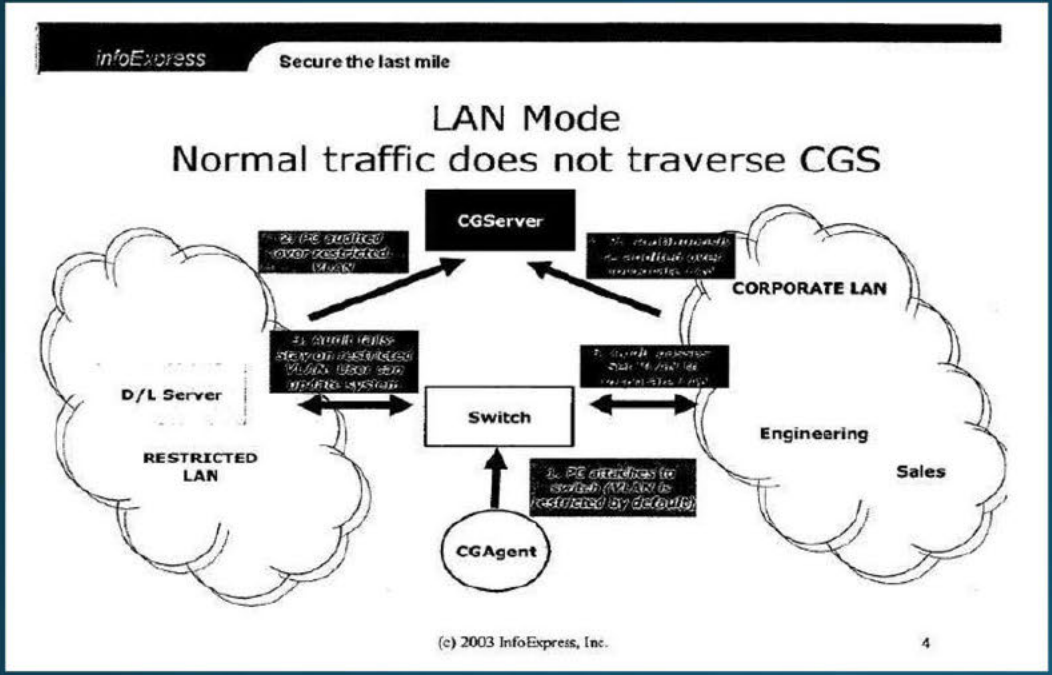
The '080 Provisional App (EX2006) Shows RTP



EX2006 at 19 discloses a protected network including a "RESTRICTED LAN" and "CORPORATE LAN" (the latter mapping to the recited "less-restricted subset"). *See also* EX2010 at 1-4.

See '460 Patent POR at 82, '460 Patent Sur-Reply at 20; '444 Patent Sur-Reply at 18; '450 Patent POR at 78, '450 Patent Sur-Reply at 18; '484 Patent (-00675 IPR) POR at 81-82; '484 Patent (-00675 IPR) Sur-Reply at 21; '484 Patent (-00679 IPR) POR at 81-82; '484 Patent (-00679 IPR) Sur-Reply at 21.

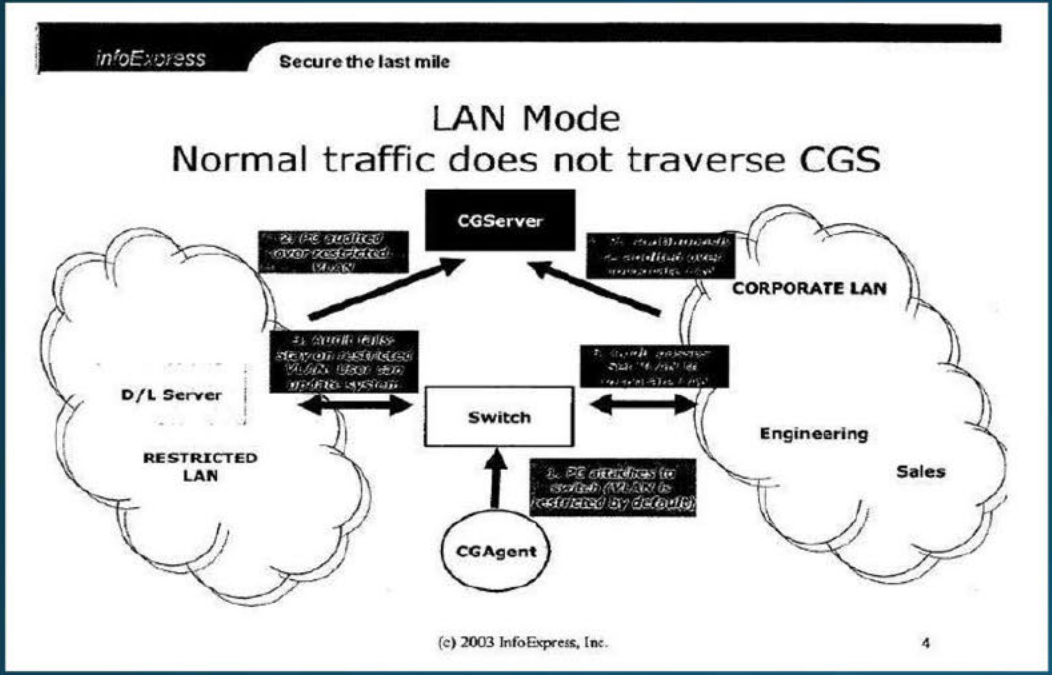
The '080 Provisional App (EX2006) Shows RTP



See '460 Patent POR at 82, '460 Patent Sur-Reply at 20; '444 Patent Sur-Reply at 18; '450 Patent POR at 78, '450 Patent Sur-Reply at 18; '484 Patent (-00675 IPR) POR at 81-82; '484 Patent (-00675 IPR) Sur-Reply at 21; '484 Patent (-00679 IPR) POR at 81-82; '484 Patent (-00679 IPR) Sur-Reply at 21.

EX2006 at 19 discloses a gatekeeper (CGServer) sitting outside of the Corporate LAN; that is, it is in the "restricted subset" and accessible before an audit passes (or on audit failure). *See also* EX2010 at 2-7.

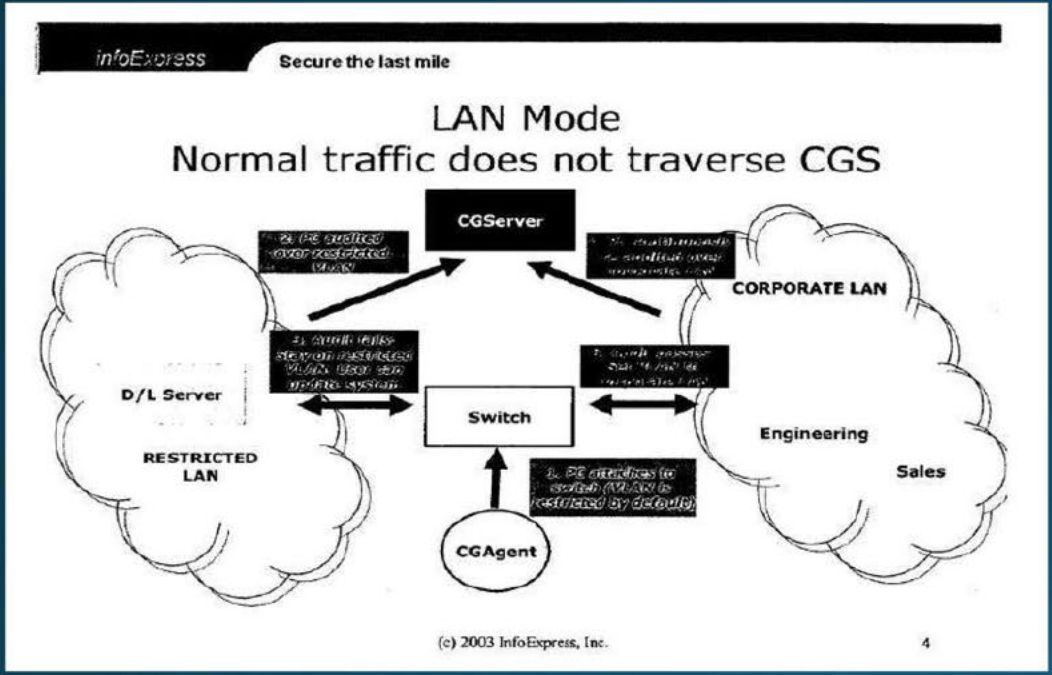
The '080 Provisional App (EX2006) Shows RTP



See '460 Patent POR at 82, '460 Patent Sur-Reply at 20; '444 Patent Sur-Reply at 18; '450 Patent POR at 78, '450 Patent Sur-Reply at 18; '484 Patent (-00675 IPR) POR at 81-82; '484 Patent (-00675 IPR) Sur-Reply at 21; '484 Patent (-00679 IPR) POR at 81-82; '484 Patent (-00679 IPR) Sur-Reply at 21.

EX2006 at 19 discloses that an access point ("AP") may be programmed to prohibit access by the PC until an audit with the software agent with the GK passes". EX2010 at 4 (citing EX2006 at 8).

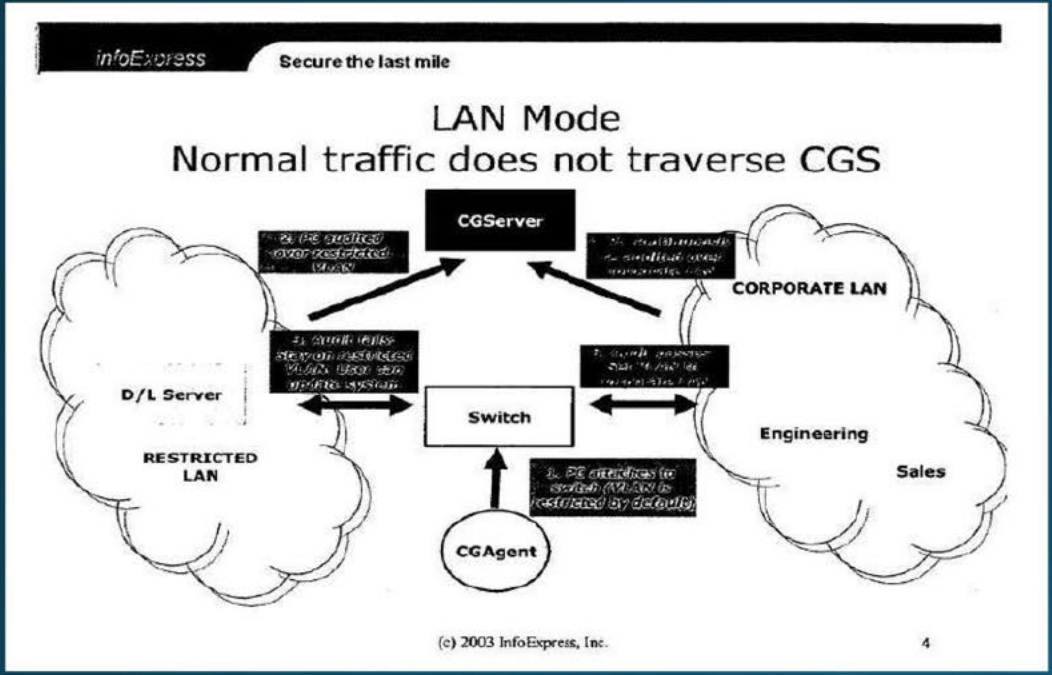
The '080 Provisional App (EX2006) Shows RTP



See '460 Patent POR at 82, '460 Patent Sur-Reply at 20; '444 Patent Sur-Reply at 18; '450 Patent POR at 78, '450 Patent Sur-Reply at 18; '484 Patent (-00675 IPR) POR at 81-82; '484 Patent (-00675 IPR) Sur-Reply at 21; '484 Patent (-00679 IPR) POR at 81-82; '484 Patent (-00679 IPR) Sur-Reply at 21.

EX2006 at 19 discloses auditing, for example, in steps 2 ("PC audited over restricted VLAN") and 3 (Audit fails[.] Stay on restricted VLAN[.] User can update system[.]"). EX2010 at 4 (citing EX2006 at 8).

The '080 Provisional App (EX2006) Shows RTP



See '460 Patent POR at 82, '460 Patent Sur-Reply at 20; '444 Patent Sur-Reply at 18; '450 Patent POR at 78, '450 Patent Sur-Reply at 18; '484 Patent (-00675 IPR) POR at 81-82; '484 Patent (-00675 IPR) Sur-Reply at 21; '484 Patent (-00679 IPR) POR at 81-82; '484 Patent (-00679 IPR) Sur-Reply at 21.

EX2006 at 19 discloses the switch being reconfigured after a successful audit so that traffic can flow to the right to the "CORPORATE LAN". It thus also shows "not 'requiring normal network traffic to traverse the [gatekeeper]'". EX2010 at 17-18.

The '080 Provisional App (EX2006) Shows RTP

If the audit indicates the client EP is in compliance, the SF returns a success response. If the VLAN for the EP is specified in the policy, then the VLAN that should be used for this EP is passed back as well.

If the GK determines that the EP has failed the audit, GK returns a failure response to SF which causes one of the following: (1) the SF returns a failure to ECL, and the corresponding port on the AP is left disabled, or (2) the SF returns a success response to the ECL but specifies that the EP should be set to a restricted VLAN where the EP has limited network access. In either case, the EP is isolated from the company network until it successfully passes an audit with the GK.

After the audit has been performed, "keep alives" and updates regarding changes to previous audit information are exchanged. Changes are reevaluated and if inconsistent with the current state, access to the network is modified appropriately by changing the VLAN used for the EP or by terminating access by the EP by communicating with the AP.

See '444 Patent POR at 81; '484 Patent (-00679 IPR) POR at 83.

EX2006 at 13-14 discloses the switch being reconfigured after a successful audit so that traffic can flow to the right to the "CORPORATE LAN". It thus also shows "not 'requiring normal network traffic to traverse the [gatekeeper]'". EX2010 at 17-18.

The '080 Provisional App (EX2006) Shows RTP

2. An EP attached to a port on the AP can be restricted from accessing the corporate network if it does not meet audit criteria. There is no need to physically insert a GK between the EP and the AP
3. The invention is highly scalable because a single GK can control many different ports and APs (i) from a different network, (ii) without a direct connection to the AP, and (iii) without requiring normal network traffic to traverse the GK.
4. If the routers used by the protected VLANs support ACLs, full or limited access to the corporate network can be provided based on the policy by setting the port to the VLAN whose router interface has the desired ACL.
5. The invention adds the ability to audit EPs that support an API where the audit filters can be inserted, without the need to change the existing authentication and encryption methods.

Details of exemplary enforcement modes of the invention are given in the attached Appendix.

See '444 Patent POR at 81; '484 Patent (-00679 IPR) POR at 83.

EX2006 at 13-14 discloses the switch being reconfigured after a successful audit so that traffic can flow to the right to the "CORPORATE LAN". It thus also shows "not 'requiring normal network traffic to traverse the [gatekeeper]'". EX2010 at 17-18.