

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC. and FORTINET, INC.,
Petitioners,

v.

INFOEXPRESS INC.,
Patent Owner.

IPR2024-00679
U.S. Patent No. 7,523,484

PATENT OWNER PRELIMINARY RESPONSE

TABLE OF CONTENTS

	<u>PAGE</u>
I. Introduction.....	1
II. The '484 Patent	1
A. Date of Invention.....	1
B. Person of Ordinary Skill in the Art (POSITA)	1
C. Overview of the '484 Patent	2
III. Claim Construction.....	6
A. “Reconfiguring” and “Configuring” the Communication Port.....	6
IV. Petitioners' References.....	10
A. Krantz	10
B. Herrmann.....	13
V. Krantz and Herrmann Fail to Render Obvious Any of the Challenged Claims	15
A. Krantz And Herrmann Lack Specifically Claimed Limitations.....	15
VI. All Grounds: Neither Reference Constitutes Prior Art	24
A. Legal Standard.....	25
B. The Inventors Conceived of the Claimed Inventions Prior to the Critical Dates of Both Krantz and Herrmann.....	27
C. The Inventors Exercised Reasonably Continuous Diligence Up and Through Constructive Reduction to Practice.	28
D. The Inventors Exercised Achieved a Constructive Reduction to Practice by the Filing of U.S. Provisional Patent Application Serial No. 60/513,080, Which Was Filed on October 21, 2003.	37
VII. Conclusion	38

TABLE OF AUTHORITIES

FEDERAL CASES

<i>ATI Techs. v. Iancu</i> , 920 F.3d 1362 (Fed. Cir. 2019)	25, 29, 37
<i>Bey v. Kollonitsch</i> , 806 F.2d 1024 (Fed. Cir. 1986)	26
<i>Globus Med., Inc. v. Depuy Synthes Prods., LLC</i> , No. IPR2015-00107 (P.T.A.B. May 1, 2015)	27
<i>LG Elecs., Inc. v. Wi-LAN Inc.</i> , No. IPR2018-00704, Paper No. 14 (P.T.A.B. Sept. 5, 2018)	24
<i>Monsanto Co. v. Mycogen Plant Sci., Inc.</i> , 261 F.3d 1356 (Fed. Cir. 2001)	25, 29
<i>Perfect Surgical Techniques, Inc. v. Olympus Am., Inc.</i> , 841 F.3d 1004 (Fed. Cir. 2016)	25, 26
<i>SAS Institute Inc. v. Iancu</i> , 138 S.Ct. 1348 (2018)	27
<i>Sequenom v. Leland Stanford Junior Univ.</i> , No. IPR2013-00390 (P.T.A.B. Nov. 25, 2014)	25
<i>Tyco Healthcare Grp. v. Ethicon Endo-Surgery, Inc.</i> , 774 F.3d 968 (Fed. Cir. 2014)	25

FEDERAL STATUTES

35 U.S.C. § 102(e)	25, 27
35 U.S.C. § 103	1
35 U.S.C. §§ 119(e) & 112, ¶ 1	37

EXHIBIT LIST

Exhibit Number	Description
2001	Declaration of Dr. Eric Cole
2002	Curriculum Vitae of Dr. Eric Cole
2003	Declaration of Stacey C. Lum
2004	Diligence Calendar
2005	U.S. Provisional App. No. 60/505,582
2006	U.S. Provisional App. No. 60/513,080
2007	Declaration of Hugh Smith, Ph.D.
2008	Curriculum Vitae of Hugh Smith, Ph.D.
2009	Conception of the '484 Patent
2010	Constructive Reduction to Practice of the '484 Patent
2011	LAN Based Policy Enforcement Engineering Specification
2012	Metadata for Exhibit 2011
2013	CyberGatekeeper Policy Manager
2014	Metadata for Exhibit 2013
2015	Internal InfoExpress Correspondence
2016	Internal InfoExpress Correspondence
2017	Internal InfoExpress Correspondence
2018	Internal InfoExpress Correspondence
2019	Internal InfoExpress Correspondence
2020	Internal InfoExpress Correspondence
2021	Internal InfoExpress Correspondence
2022	Correspondence with Globe Tech
2023	Email attachment to Exhibit 2022
2024	Internal InfoExpress Correspondence
2025	Correspondence with Meetinghouse
2026	Draft Meetinghouse Agreement
2027	Internal InfoExpress Correspondence
2028	Draft Meetinghouse Agreement
2029	Internal InfoExpress Correspondence
2030	Draft Meetinghouse Agreement
2031	Draft Meetinghouse Agreement
2032	Internal InfoExpress Correspondence
2033	Draft Meetinghouse Agreement
2034	Draft Meetinghouse Agreement
2035	Draft Meetinghouse Agreement

Exhibit Number	Description
2036	Internal InfoExpress Correspondence
2037	Draft Meetinghouse Agreement
2038	Draft Meetinghouse Agreement
2039	Internal InfoExpress Correspondence
2040	Draft Meetinghouse Agreement
2041	Draft Meetinghouse Agreement
2042	Draft Meetinghouse Agreement
2043	Draft Meetinghouse Agreement
2044	Internal InfoExpress Correspondence
2045	Draft Meetinghouse Agreement
2046	Draft Meetinghouse Agreement
2047	Internal InfoExpress Correspondence
2048	Correspondence with Globe Tech
2049	Correspondence with Globe Tech
2050	Internal InfoExpress Correspondence
2051	Correspondence with Globe Tech
2052	Correspondence with Globe Tech
2053	Correspondence with Globe Tech
2054	Correspondence with Globe Tech
2055	Correspondence with Globe Tech
2056	Draft Globe Tech Agreement
2057	Draft Globe Tech Agreement
2058	Draft Globe Tech Agreement
2059	Draft Globe Tech Agreement
2060	Draft Globe Tech Agreement
2061	Draft Globe Tech Agreement
2062	Draft Globe Tech Agreement
2063	Correspondence with Globe Tech
2064	Draft Globe Tech Agreement
2065	Correspondence with Globe Tech
2066	Network Device Configuration API Engineering Specification
2067	Correspondence with Globe Tech
2068	Correspondence with Globe Tech
2069	Network Device Configuration API Engineering Specification
2070	Network Device Configuration API Engineering Specification
2071	Correspondence with Globe Tech
2072	Network Device Configuration API Engineering Specification

Exhibit Number	Description
2073	Network Device Configuration API Engineering Specification
2074	Correspondence with Globe Tech
2075	Correspondence with Globe Tech
2076	Correspondence with Globe Tech
2077	Correspondence with Globe Tech
2078	Correspondence with Globe Tech
2079	Email attachment to Exhibit 2078
2080	Correspondence with Globe Tech
2081	Correspondence with Globe Tech
2082	Correspondence with Globe Tech
2083	Correspondence with Globe Tech
2084	Correspondence with Globe Tech
2085	Correspondence with Globe Tech
2086	Correspondence with Globe Tech
2087	Correspondence with Globe Tech
2088	Correspondence with Globe Tech
2089	Correspondence with Globe Tech
2090	Correspondence with Globe Tech
2091	Correspondence with Globe Tech
2092	Correspondence with Globe Tech
2093	Correspondence with Globe Tech
2094	Correspondence with Globe Tech
2095	Correspondence with Globe Tech
2096	Correspondence with Globe Tech
2097	Correspondence with Globe Tech
2098	Correspondence with Globe Tech
2099	Correspondence with Globe Tech
2100	Correspondence with Globe Tech
2101	Correspondence with Globe Tech
2102	Correspondence with Globe Tech
2103	Correspondence with Globe Tech
2104	Correspondence with Globe Tech
2105	Correspondence with Globe Tech
2106	Correspondence with Globe Tech
2107	Correspondence with Globe Tech
2108	Internal InfoExpress Correspondence
2109	Correspondence with Globe Tech

Exhibit Number	Description
2110	Correspondence with Globe Tech
2111	Correspondence with Globe Tech
2112	Correspondence with Globe Tech
2113	Internal InfoExpress Correspondence
2114	Correspondence with Globe Tech
2115	Email attachment to Exhibit 2114
2116	Correspondence with Globe Tech
2117	Internal InfoExpress Correspondence
2118	Correspondence with Globe Tech
2119	Correspondence with Globe Tech
2120	Correspondence with Globe Tech
2121	Correspondence with Globe Tech
2122	Correspondence with Globe Tech
2123	Correspondence with J. Ong
2124	Correspondence with Globe Tech
2125	Correspondence with Globe Tech
2126	Correspondence with Globe Tech
2127	Correspondence with Globe Tech
2128	Correspondence with Globe Tech
2129	Correspondence with Globe Tech
2130	Correspondence with Globe Tech
2131	Correspondence with Globe Tech
2132	Correspondence with Globe Tech
2133	Correspondence with Globe Tech
2134	Correspondence with Globe Tech
2135	Correspondence with Globe Tech
2136	Correspondence with Globe Tech
2137	Correspondence with Globe Tech
2138	Correspondence with Globe Tech
2139	Correspondence with Globe Tech
2140	Correspondence with Globe Tech
2141	Correspondence with Globe Tech
2142	Correspondence with Globe Tech
2143	Correspondence with Globe Tech
2144	Correspondence with Globe Tech
2145	Correspondence with Globe Tech
2146	Correspondence with Globe Tech

Exhibit Number	Description
2147	Correspondence with Globe Tech
2148	Correspondence with J. Ong
2149	Correspondence with Globe Tech
2150	Correspondence with J. Ong
2151	Correspondence with Globe Tech
2152	Correspondence with J. Ong
2153	Correspondence with Globe Tech
2154	Correspondence with Globe Tech
2155	Correspondence with Globe Tech
2156	Correspondence with Globe Tech
2157	Correspondence with Globe Tech
2158	Correspondence with Globe Tech
2159	Correspondence with Globe Tech
2160	Correspondence with Globe Tech
2161	Correspondence with J. Ong
2162	Correspondence with Globe Tech
2163	Correspondence with C. Tsai
2164	Correspondence with Globe Tech
2165	Correspondence with Globe Tech
2166	Correspondence with Globe Tech
2167	Correspondence with Globe Tech
2168	Correspondence with Globe Tech
2169	Correspondence with Globe Tech
2170	Correspondence with Globe Tech
2171	Correspondence with Globe Tech
2172	Correspondence with Globe Tech
2173	Correspondence with Globe Tech
2174	Correspondence with Globe Tech
2175	Correspondence with Globe Tech
2176	Correspondence with Globe Tech
2177	Correspondence with Globe Tech
2178	Correspondence with Globe Tech
2179	Correspondence with Globe Tech
2180	Correspondence with Globe Tech
2181	Correspondence with Globe Tech
2182	Correspondence with Globe Tech
2183	Correspondence with Globe Tech

Exhibit Number	Description
2184	Correspondence with Globe Tech
2185	Correspondence with Globe Tech
2186	Correspondence with Globe Tech
2187	Correspondence with Globe Tech
2188	Correspondence with Globe Tech
2189	Correspondence with C. Tsai
2190	Correspondence with Globe Tech
2191	Correspondence with Globe Tech
2192	Correspondence with Globe Tech
2193	Correspondence with Globe Tech
2194	Correspondence with Globe Tech
2195	Correspondence with Globe Tech
2196	Correspondence with Globe Tech
2197	Correspondence with Globe Tech
2198	Correspondence with J. Ong
2199	Correspondence with C. Tsai
2200	Correspondence with J. Ong
2201	Cisco Switch Feature Support Matrix
2202	Correspondence with M. Banin
2203	Correspondence with A. Lee
2204	Correspondence with M. Banin
2205	Correspondence with M. Banin
2206	Correspondence with M. Banin
2207	Correspondence with M. Banin
2208	Correspondence with M. Banin
2209	Correspondence with M. Banin
2210	Correspondence with M. Banin
2211	Correspondence with patent counsel
2212	Correspondence with patent counsel
2213	Correspondence with patent counsel
2214	Correspondence with patent counsel
2215	Correspondence with patent counsel
2216	Correspondence with patent counsel
2217	Correspondence with patent counsel
2218	Correspondence with patent counsel
2219	Correspondence with patent counsel
2220	Correspondence with patent counsel

Exhibit Number	Description
2221	Correspondence with patent counsel
2222	Correspondence with patent counsel
2223	Correspondence with patent counsel
2224	Correspondence with patent counsel
2225	Correspondence with patent counsel
2226	Correspondence with patent counsel
2227	Correspondence with patent counsel
2228	Correspondence with patent counsel
2229	Correspondence with patent counsel
2230	Correspondence with patent counsel
2231	Correspondence with patent counsel
2232	Correspondence with patent counsel
2233	Correspondence with patent counsel
2234	Correspondence with patent counsel
2235	Correspondence with patent counsel
2236	Correspondence with patent counsel
2237	Correspondence with patent counsel
2238	Correspondence with patent counsel
2239	Correspondence with patent counsel
2240	Correspondence with patent counsel
2241	Correspondence with patent counsel
2242	Correspondence with patent counsel
2243	Correspondence with patent counsel
2244	Correspondence with patent counsel
2245	Correspondence with patent counsel
2246	Correspondence with patent counsel
2247	Correspondence with patent counsel
2248	Correspondence with patent counsel
2249	Correspondence with patent counsel
2250	Correspondence with patent counsel
2251	Correspondence with patent counsel
2252	Correspondence with patent counsel
2253	Correspondence with patent counsel
2254	Correspondence with patent counsel
2255	Correspondence with patent counsel
2256	Correspondence with patent counsel
2257	Correspondence with patent counsel

Exhibit Number	Description
2258	Correspondence with patent counsel
2259	Correspondence with patent counsel
2260	Correspondence between S. Lum and A. Lee
2261	Correspondence between S. Lum and A. Lee
2262	Correspondence with patent counsel
2263	Correspondence with patent counsel
2264	Correspondence with patent counsel
2265	Correspondence with patent counsel
2266	Correspondence with patent counsel
2267	Correspondence with patent counsel
2268	Correspondence with patent counsel
2269	Correspondence with patent counsel
2270	Correspondence with patent counsel
2271	Correspondence with patent counsel
2272	Intentionally Left Blank
2273	Correspondence between S. Lum, J. Ong, C. Tsai and A. Lee
2274	Correspondence between S. Lum, C. Tsai and A. Lee
2275	Internal Notes
2276	Correspondence between C. Tsai, J. Ong and S. Lum
2277	Correspondence between C. Tsai, J. Ong and S. Lum
2278	Correspondence between C. Tsai, J. Ong and S. Lum
2279	Correspondence between C. Tsai, J. Ong and S. Lum
2280	Correspondence between C. Tsai and S. Lum
2281	Correspondence between T. Nakano and S. Lum
2282	Draft Meetinghouse Agreement
2283	Correspondence with Globe Tech
2284	Intentionally Left Blank
2285	Correspondence between S. Lum and corporate counsel
2286	Intentionally Left Blank
2287	Correspondence with Globe Tech
2288	Correspondence with Globe Tech
2289	Correspondence with Globe Tech
2290	Correspondence with Globe Tech
2291	Correspondence with Globe Tech
2292	Correspondence with Globe Tech
2293	Correspondence with Globe Tech
2294	Correspondence with Globe Tech

Exhibit Number	Description
2295	Correspondence with Globe Tech
2296	Correspondence with Globe Tech
2297	Correspondence with Globe Tech
2298	Correspondence between S. Lum and J. Ong
2299	Correspondence between S. Lum and J. Ong
2300	Correspondence with Globe Tech
2301	Correspondence with Globe Tech
2302	Correspondence between M. Banin and S. Lum
2303	Correspondence with Globe Tech
2304	Correspondence with Globe Tech
2305	Correspondence with Globe Tech
2306	Correspondence with Globe Tech
2307	Correspondence with Globe Tech
2308	Correspondence with Globe Tech
2309	Correspondence with Globe Tech
2310	Correspondence with Globe Tech
2311	Correspondence with Globe Tech
2312	Correspondence with Globe Tech
2313	Correspondence with Globe Tech
2314	Correspondence with Globe Tech
2315	Correspondence with Globe Tech
2316	Correspondence with Globe Tech
2317	Correspondence with Globe Tech
2318	Correspondence with Globe Tech
2319	Correspondence with Globe Tech
2320	Correspondence with Globe Tech
2321	Correspondence with Globe Tech
2322	Correspondence with Globe Tech
2323	Correspondence with Globe Tech
2324	Correspondence with Globe Tech
2325	Correspondence with Globe Tech
2326	Correspondence with Globe Tech
2327	Draft Patent Application
2328	Draft Patent Application
2329	CyberGatekeeper Enforcement Modes
2330	CyberGatekeeper Enforcement Modes
2331	Correspondence with Globe Tech

Exhibit Number	Description
2332	Correspondence with Globe Tech
2333	Correspondence with Globe Tech
2334	Correspondence with Globe Tech
2335	Correspondence with Globe Tech
2336	Correspondence with Globe Tech
2337	Correspondence with Globe Tech
2338	Correspondence with Globe Tech
2339	Correspondence with Globe Tech
2340	Internal InfoExpress Correspondence
2341	Intentionally Left Blank
2342	Internal InfoExpress Correspondence
2343	Correspondence with Globe Tech
2344	Correspondence with Globe Tech
2345	Correspondence with Globe Tech
2346	Correspondence with Globe Tech
2347	Correspondence with Globe Tech
2348	Correspondence with Globe Tech
2349	Correspondence with Globe Tech
2350	Correspondence with Globe Tech
2351	Correspondence with Globe Tech
2352	Correspondence with Globe Tech
2353	Correspondence with Globe Tech
2354	Correspondence with Globe Tech
2355	Correspondence with Globe Tech
2356	Correspondence with Globe Tech
2357	Correspondence with Globe Tech
2358	Correspondence with Globe Tech
2359	Correspondence with Globe Tech
2360	Correspondence with Globe Tech
2361	Correspondence with Globe Tech
2362	Correspondence with Globe Tech
2363	Correspondence with Globe Tech
2364	Correspondence with Globe Tech
2365	Correspondence with Globe Tech
2366	Correspondence with Globe Tech
2367	Correspondence with Globe Tech
2368	Correspondence with Globe Tech

Exhibit Number	Description
2369	Correspondence with Globe Tech
2370	Correspondence with Globe Tech
2371	Correspondence with Globe Tech
2372	Correspondence with Globe Tech
2373	Correspondence with Globe Tech
2374	Correspondence with Globe Tech
2375	Correspondence with Globe Tech
2376	Correspondence with Globe Tech
2377	Correspondence with Globe Tech
2378	Correspondence with Globe Tech
2379	Correspondence with Globe Tech
2380	Correspondence with Globe Tech
2381	Correspondence with Globe Tech
2382	Correspondence with Globe Tech
2383	Intentionally left blank
2384	Correspondence with Globe Tech
2385	Correspondence with Globe Tech
2386	Internal InfoExpress Correspondence
2387	Correspondence with Globe Tech
2388	Correspondence with Globe Tech
2389	Internal InfoExpress Correspondence
2390	Correspondence with Globe Tech
2391	Intentionally left blank
2392	Intentionally left blank
2393	Intentionally left blank
2394	Intentionally left blank
2395	Correspondence with Globe Tech
2396	Internal InfoExpress Correspondence
2397	Correspondence with Globe Tech
2398	Intentionally left blank
2399	Correspondence with Globe Tech
2400	Correspondence with Globe Tech
2401	Correspondence with Globe Tech
2402	Correspondence with Globe Tech
2403	Correspondence with Globe Tech
2404	Correspondence with Globe Tech
2405	Correspondence with Globe Tech

Exhibit Number	Description
2406	Correspondence with Globe Tech
2407	Correspondence with Globe Tech
2408	Correspondence with Globe Tech
2409	Correspondence with Globe Tech
2410	Correspondence with Globe Tech

I. Introduction

Patent Owner submits this Patent Owner Preliminary Response to the Petition related to claims 28, 38-39, 41-43, 53, 57-59, 61-63 and 65-68 (the "Challenged Claims") of U.S. Patent 7,523,484 (the '484 Patent"). Patent Owner requests the Board reject the Petition and not institute an *inter partes* review. The Ground presented and the art in the Petition fail to render any of the Challenged Claims unpatentable under 35 U.S.C. § 103 because the art fails to render obvious all of the limitations of the Challenged Claims. Moreover, the art relied on by Petitioners does not qualify as *prior* art.

II. The '484 Patent

A. Date of Invention

For the reasons discussed in section VII, the date of invention for each of the Challenged Claims is no later than December 2, 2002.

B. Person of Ordinary Skill in the Art (POSITA)

A POSITA at the time of the invention would have a working knowledge of computer network security art. A POSITA would have a bachelor's degree in computer science, computer engineering, or electrical engineering, and at least three years of experience in networking operating systems and cybersecurity, or a person with a master's degree in one of the foregoing and at least two years of experience in the aforementioned fields.

C. Overview of the '484 Patent

The '484 Patent is directed to a novel approach to controlling access to a protected network. Before Patent Owner's inventions, network security placed a "gatekeeper" directly between each client/user and the network to authenticate users/devices. EX1501, Fig. 1, 1:53-60; EX2001, ¶¶ 44-46. As the Patent further explains, access control could also include evaluation of each accessing device's hardware and software, *e.g.*, virus protection and operating systems, before the gatekeeper granted such access—thus consuming substantial network resources and creating bottlenecks. EX1501, 1:41-52.

An exemplar of prior art architecture is shown in annotated FIG. 1 of the patent.

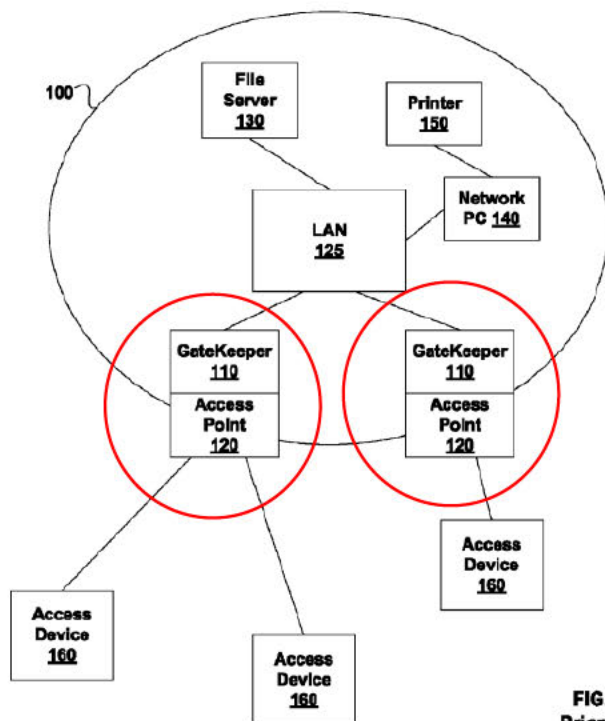
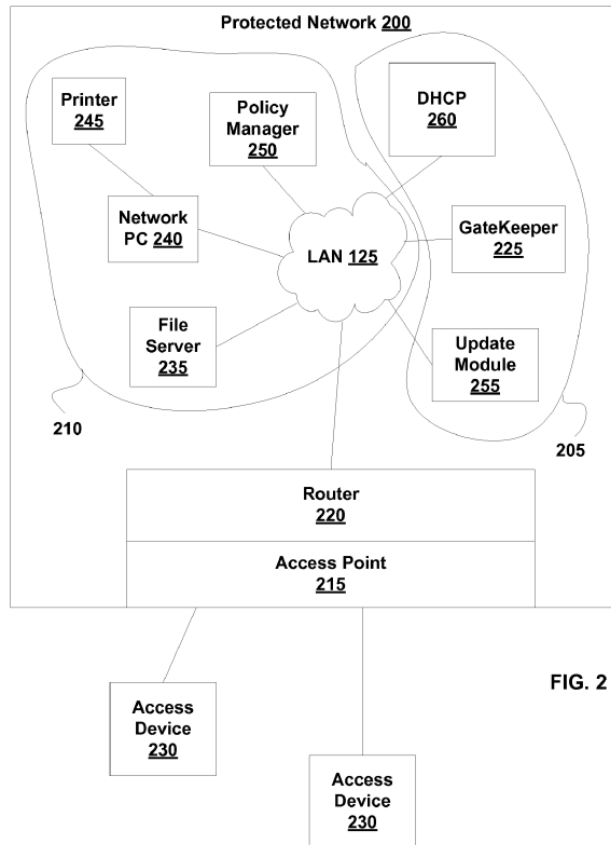


FIG. 1
Prior Art

The protected network 100 includes two Gatekeepers 110, each associated with a different instance of an Access Point 120. All devices attempting to access the protected network are required to be evaluated by a gatekeeper. With large corporate networks including many access points, the "use of one instance of GateKeeper 110 to support numerous instances of Access Device 160 is limited by bandwidth and required sophistication (e.g., cost) of GateKeeper 110." EX1501, 2:31-34. The gatekeeper then becomes a limiting bottleneck on the bandwidth of the system. *Id.*

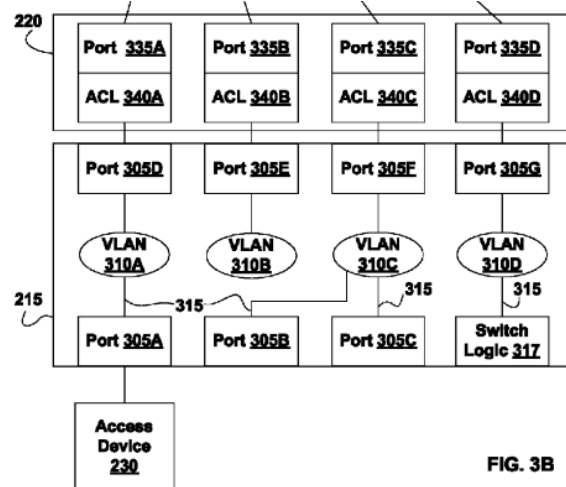
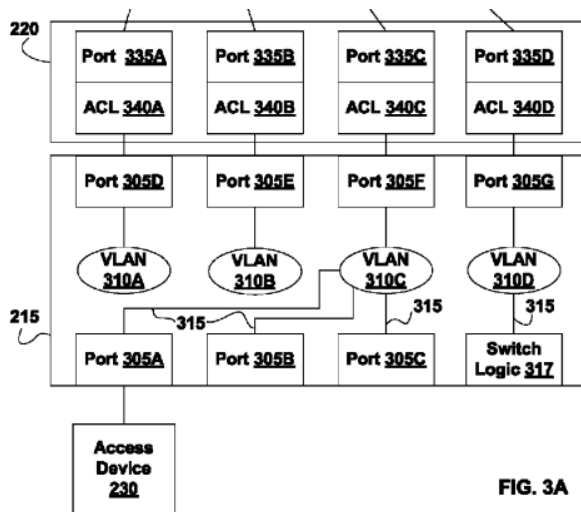
The patent addressed this previously unidentified problem with a novel and non-obvious approach relieving computer resources by configuring a communication device, such as the access point, after approval of an access device by the gatekeeper. By configuring the communication device to allow devices vetted for authentication/identity and device compliance, i.e., auditing, to access the protected network, subsequent evaluation of the user/device by the gatekeepers when the previously evaluated device is attempting to access the protected network again is obviated.

By way of example, the patent discloses a protected network that includes a restricted subset with a gatekeeper and one or more less-restricted subsets.



EX1501, Fig. 2. Before a device is granted access to a less-restricted subset 210, its request is first passed to the restricted subset (indicated as 205). EX1501, 2:52-56, 5:51-54. A gatekeeper in the restricted subset audits the device against security policies pertaining to device configurations (e.g., updated virus protection software). EX1501, 6:34-48; 7:42-45. An additional user/device authentication determination (e.g., username, password, MAC address) may also be performed. *E.g.*, EX1501, 6:41-49. In this embodiment, if the device has passed both the audit and authentication, it is allowed to access a less-restricted subset of the protected network. EX1501, 11:10-67, 12:1-43.

An improvement over the earlier approaches is that rather than require all device communications to pass through the gatekeeper, communication device's access point itself is configured in response to gatekeeper approval of the access device. The patent gives the following example of configuring the access point in response to gatekeeper approval.



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.

EX1501, 8:16-23.

By configuring the communication ports of the access point in response to gatekeeper approval of the device, data from previously approved devices passes to the less-restricted subset without passing through the gatekeeper. Thus, after access

has been granted, most network traffic does not need to pass through the gatekeeper, thereby alleviating the burden on the gatekeeper.

III. Claim Construction

Petitioners assert the claims should be given their ordinary meaning as understood by a POSITA. Pet. at 7. Petitioners avoid providing any explanation and then deviate from the ordinary meaning by way of their arguments regarding how the cited references supposedly read on the claimed limitations.

Patent Owner contends the claims should be given their ordinary meaning in the context of the intrinsic evidence, as discussed herein. Given Petitioners' deviation from terms' purported ordinary meanings, Patent Owner provides the following context for certain claim terms to properly frame the appropriate ordinary meaning.

A. “Reconfiguring” and “Configuring” the Communication Port

Each of the Challenged Claims requires configuring or reconfiguring of a communication port of an access point. In the independent Challenged Claims, this is recited as

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. EX1501, 17:55-59; *id.*, 19:12-16.

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, ***responsive to the received command***; and receiving a second communication from the access device at the communication port, ***the communication port now being configured to pass the second communication to the less-restricted subset of the protected network***. *Id.* at 20:26-33.

The claim language and the specification establish the ordinary meaning of these limitations requires reconfiguration or configuration¹ (rearranging or arranging, respectively) ***of the communication ports of a communication device***— which is different from a change to the end user device or user identification data.

Moreover, the claimed "reconfiguration" or "configuration" is also such that data from the access device passes to the less-restricted subset of the network "without passing the data through the gatekeeper." This avoidance of the gatekeeper is expressly recited in claims 28 and 41. In claim 57, it is expressly recited that the gatekeeper is part of the restricted subset of the network, and that after configuring the communication port, data is directed to the less-restricted subset of the network, which necessarily means that the gatekeeper on the restricted subset is bypassed.

The specification is consistent with this plain meaning and teaches: "[t]o 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 assigning the communication port from the restricted VLAN to

¹ Petitioners make no distinction in the Petition between "reconfiguring" and "configuring" and treat them as interchangeable. For purposes of this POPR, Patent Owner will assume the same.

the less-restricted VLAN. EX1501, 3:20-25. As discussed below, the specification exemplifies configuring the "access point" 215 involving reassigning ports.

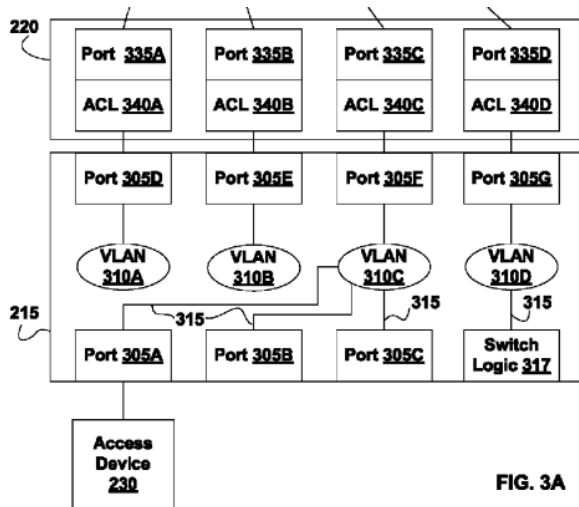


FIG. 3A

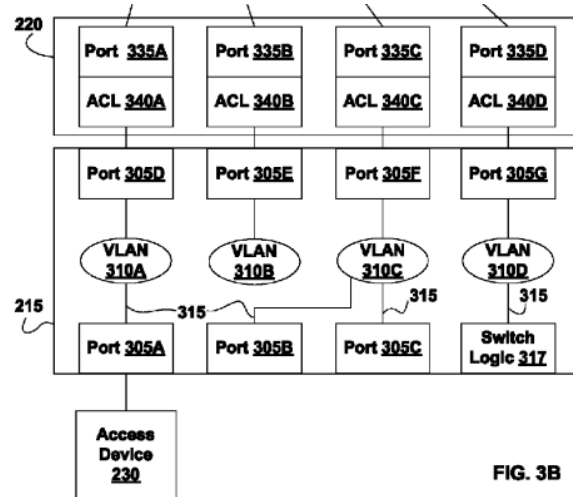


FIG. 3B

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.

EX1501, 8:16-26.

Switch Logic 317 is controlled by an Access Control 320 included in GateKeeper 225. Access Control 320 is configured to send commands to Switch Logic 317 in order to reconfigure members of Ports 305A-305G. This reconfiguration includes modifying the association of members of Ports 305A-305G with different members of VLANs 310A-310D.

Id., 9:20-25.

Access Control 320 is responsive to a Policy Auditor 325 included in GateKeeper 225. Policy Auditor 325 is configured to receive a request for access to Less-Restricted Subset 210 from Access Device 230, to determine which of Security Policy 330A or optional Security Policy 330B applies to the current request, to perform a security audit of Access Device 230 based on the appropriate member of Security Policies 330A-330B, and to notify Access Control 320 if the audit is passed. This notice typically causes Access Control 320 to reconfigure a member of Ports 305A-305G using Switch Logic 317. For example, in some embodiments, if Security Policy 330A applies and if Access Device 230 satisfies requirements of Security Policy 330A, then Policy Auditor 325 provides a notice to Access Control 320. In response, Access Control 320 sends appropriate commands to Switch Logic 317. These commands cause changes in Port 305A, such that communication from Access Device 230 is no longer blocked by ACL 340C and can now be received by elements of Less-restricted Subset 310. In alternative embodiments, Security Policies 330A-330B are stored elsewhere in Protected Network 200 accessible to Policy Auditor 325. Restricted Subset 205 optionally includes one, two, or more security policy, such as Security Policies 330A-330B.

FIG. 3B is a block diagram showing further details of Access Point 215, Router 220 and GateKeeper 225 of FIG. 2, after access has been granted to elements of Less-Restricted Subset 210, according to various embodiments of the invention. Port 305A has been reconfigured to be associated with VLAN 310A rather than VLAN 310C. Because VLAN 310A is communicatively coupled to Port 305D and Port 335A (of Router 220) via ACL 340A, any communication received at Port 305A from Access Device 230 is now subject to the filtering effects of ACL 340A rather than ACL 340C.

Id., 9:30-62.

Thus, the ordinary meaning for the "reconfiguring" or "configuring" related requirements is the communication device, such as the ports of the access point, are arranged (or rearranged) so that that data sent from the access device is received by

the less-restricted subset of the protected network without passing through the gatekeeper.

IV. Petitioners' References

Petitioners' references, Krantz and Herrmann, are not prior art to the Challenged Claims. Krantz and Herrmann are readily distinguished from the Challenged Claims, and merely illustrate examples of the earlier network security approaches improved upon by the '484 Patent.

A. Krantz

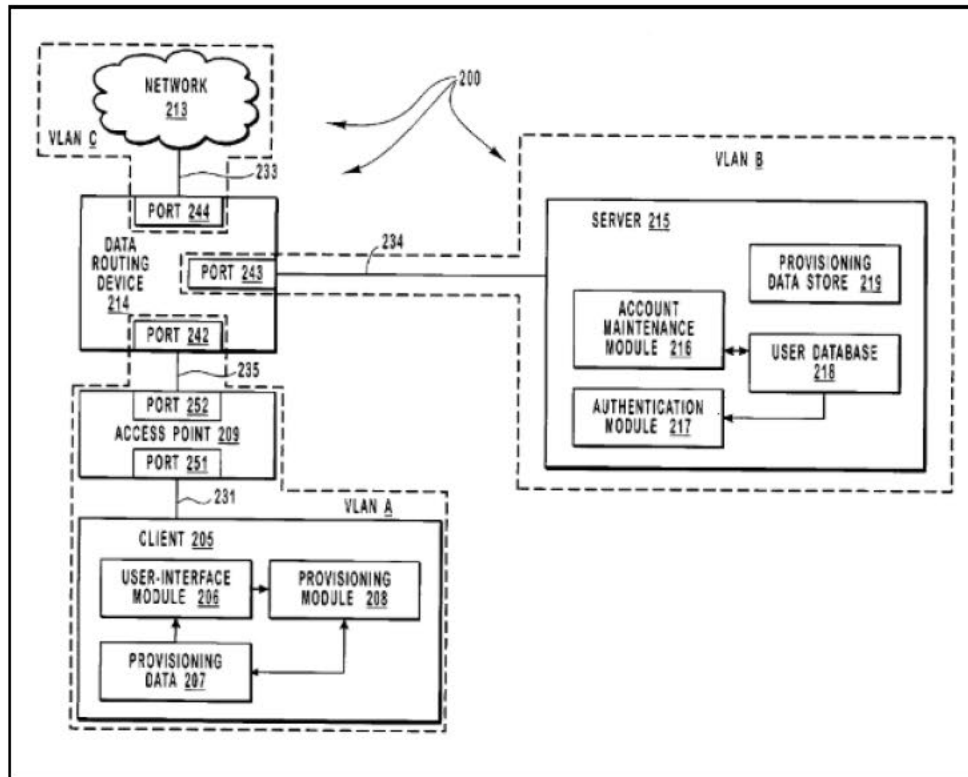
Petitioners' primary reference is U.S. Patent Publication 2004/0111520 ("Krantz"). Krantz is described as follows:

A computer system attempts to authenticate with a server to gain authorization to access a first network. It is determined by the server that the computer system is not authorized to access the first network. The computer system is given authorization to access a second network for at least the purpose of downloading files (e.g., signup and configuration files) needed to access the first network. A user-interface for receiving user-entered signup information is automatically presented at the computer system. A first schema-based document including user-entered information is transferred to the server. If the server determines that the user-entered information is appropriate, a second-schema document, which includes an indication of authorization to access the first network (e.g., a user-identifier and password), is received. A third schema-based document is executed at the computer system to compatible configure the computer system for accessing the first network.

EX1505, Abstract. Krantz discloses the concept wherein upon the failure of a computer system to **authenticate a user** to one network, the user can access a second

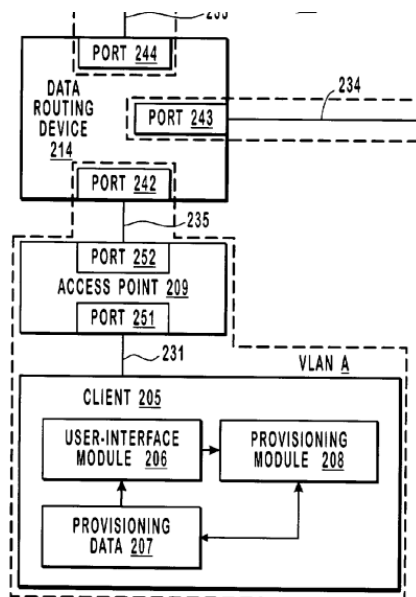
network for the limited purpose of downloading files by a server. EX2001, ¶¶47-

49. This authentication by Krantz is further explained.



A server includes the functionality to authorize clients to access a second network (e.g., the Internet). The server can be located on a first network that is separate from the second network or can be located on the second network. A client sends credentials to the server to attempt to authenticate with the server. Based on the credentials, 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 to access to the first network. The server can be a Remote Authentication Dial-In User Service ("RADIUS") server that is located on the first network. Clients can be provided partial access to the first or second network at least for the purposes of authenticating with the server and downloading provisioning files used to gain full access to the second network. Thus, computer systems that are not currently able to access resources located on the second network may be able to electronically download provisioning files for gaining access to those resources.

EX1505, [0016]. As shown, in the excerpted portion of Fig. 2 from Krantz, an access point 209 is identified and the client communicates via access point 209 through port 251. *See id.*, [0063]. The access point 209 then sends data to data routing device 214 via port 252. This data routing device directs data through either port 244 or port 243.



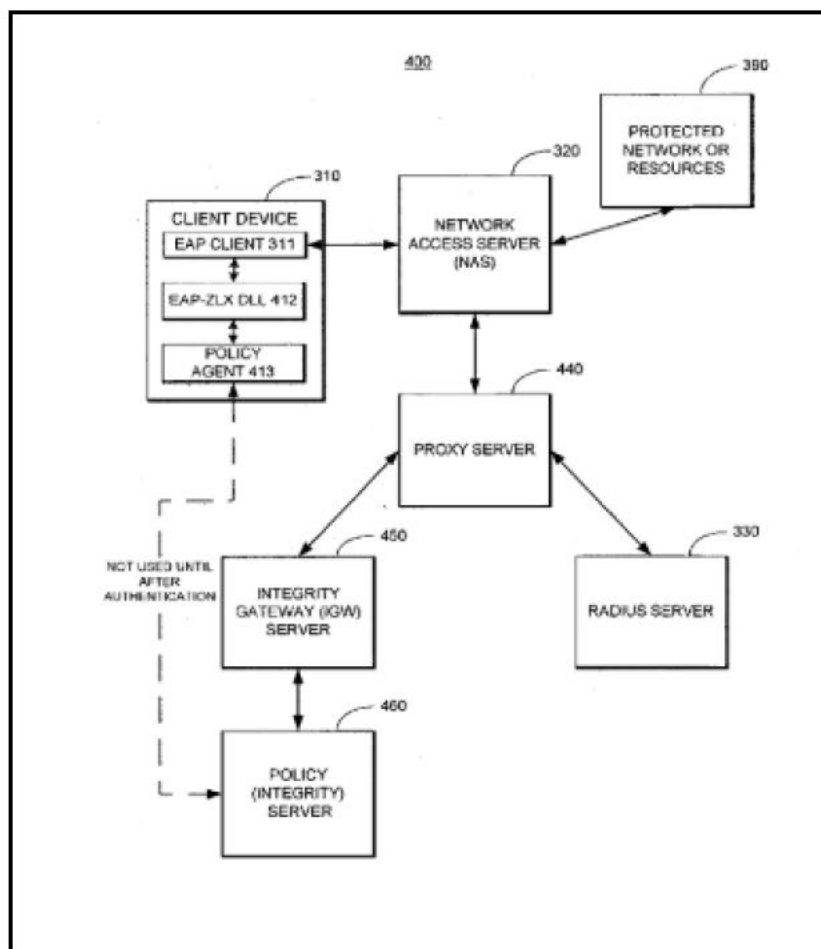
There is no teaching in Krantz of arranging the access point 209 or ports 251 and 252 of access point 209. EX2001, ¶¶ 49, 64. Indeed, Krantz does not teach arranging anything about the access point in response to anything, let alone in response to evaluating a user or device attempting to access a network. Instead, the ports 251 and 252 of the access point 209 are never arranged in response to any evaluation by a gatekeeper. EX2001, ¶¶ 59-60.

B. Herrmann

Petitioners cite to U.S. Patent Publication 2004/0107360 ("Herrmann") in Ground 2 to be used in combination with Krantz. Herrmann describes a system as follows:

A system and methodology for policy enforcement during authentication of a client device for access to a network is described. A first authentication module establishes a session with a client device requesting network access for collecting information from the client device and determining whether to authenticate the client device for access to the network based, at least in part, upon the collected information. A second authentication module participates in the session with the client device for supplemental authentication of the client device for access to the network. The supplemental authentication of the client device is based, at least in part, upon the collected information and a policy required as a condition for network access.

EX1506, Abstract. Like the prior art discussed in the '484 Patent, Herrmann utilizes servers between the client device and the protected network, and all attempts to access the protected network must first be checked for security policy compliance by at least a Network Access Server (NAS), which would create the bottleneck problems. EX2001, ¶53; *see also id.*, ¶62.



EX1506, Fig. 4, *compare id. to* EX1501, Fig. 1. In contrast to the '484 Patent, Herrmann requires all access from a client device 310 to pass through the Network Access Server 320. There is no disclosure where the client device, after being validated, is able to access the protected network without first again going through the Network Access Server. Nor, is there any teaching of configuring an access point in response to an access device having satisfied an audit.

V. Krantz and Herrmann Fail to Render Obvious Any of the Challenged Claims

Petitioners' assert invalidity of each of the Challenged Claims based on Krantz in combination with Herrmann. Key claimed limitations, however, are missing in their entirety from both Krantz and Herrmann. As such, institution must be denied.

A. Krantz And Herrmann Lack Specifically Claimed Limitations

Both Krantz and Herrmann fail to disclose at least the following limitations:

In claims 28, 38-39, 41-43, 53: "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."

In claims 57,-59, 61-63, 65-68: "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, responsive to the received command; and receiving a second communication from the access device at the communication port, the communication port now being configured to pass the second communication to the less-restricted subset of the protected network."

Each of Krantz and Herrmann, and accordingly the combination of Krantz and Herrmann, fails to disclose any reconfiguration or configuration of a communication device such that data is passed to the less-restricted subset of the protected network without passing through the gatekeeper. As discussed, this is a feature of the '484 Patent that achieved the stated purpose of alleviating computer resources, and provides an improved computer network environment.

Petitioners strain to argue that Krantz meets the above claim limitations by way of "tag header" insertion into client data. Pet. at 35-37. Adding a tag header to client data is not the claimed configuring of a communication port of an access point, because there is no configuration of the communication device. Instead, this is configuration of client data.

Petitioners assert that Krantz's "access point 209" is "the communication device." Pet. at 38. Petitioners then argue Krantz discloses the claimed reconfiguration of the communication device: "Krantz describes that '[w]hen client 205 is authorized to access resources located on VLAN C, access point 209 may enable any 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." Pet at 51-52. Petitioners also argue port 251 is "'reconfigured' by Access Point 209 because it was previously tagging incoming data from client 205 ... with headers that enabled access to VLAN B, i.e., the 'restricted subset' only. Put another way, Access Point 209 'the communication device' is 'reconfigured' because Port 251 tags incoming data for transfer to VLAN C rather than VLAN B." Pet. at 51.

Petitioners arguments fall flat. Regardless of Petitioners sleight of hand, Krantz only discloses configuration or reconfiguration of client data, not the communication device. The Patent is clear: "[t]he reconfiguration typically includes reassigning the communication port from the restricted VLAN to the less-restricted

VLAN." EX1501, 2:22-25. This means that by "reconfiguring," the same port is arranged to send data to different locations. For example, as shown in FIG. 3A, port 305A of the access point 215 sends data to VLAN 310C (as shown by line 315). In FIG. 3B, however, that same port 305A is "configured" to send data to VLAN 310A. Krantz has no reconfiguration of the communication device. Instead, Krantz's ports in access point 209 send data to the same location (e.g. port 243 to VLAN B and port 244 to VLAN C).

That Krantz only teaches modifying client information is clear.

A tagged data frame is a data frame that includes an indication, such as, for example, a Tag Header, that identifies a VLAN and/or frame classification associated with the tagged data frame. A Tag Header can be inserted into a data frame by a VLAN aware device to indicate to data routing device 214 a VLAN ID of the VLAN from which a tagged data frame was received. For example, *access point 209 can insert a Tag Header into data from client 205 to indicate to data routing device 214 that the data was received from VLAN A.* A Tag Header can also include other control information that can be used by data routing device 214 to classify a corresponding data frame. An untagged data frame is a frame that does not include a Tag Header. A port VLAN ID ("PVID") may be used to indicate a VLAN from which an untagged data frame was received. For example, untagged data frames received at port 243 may be classified as being received from VLAN B.

EX1505, [0061].

Data routing device 214 can process the inserted Tag Header and transfer the EAPOL packet onto VLAN B. Server 215 can receive the EAPOL packet, which is transferred to authentication module 217 for authentication. Alternately, access point 209 access point 209 and/or data routing device 214 may strip the 802.1X encapsulation and instead encapsulate the EAP-Response/Identity message within an EAP-RADIUS message that is transferred onto VLAN B. ... When

credentials are sent to server 215, authentication module 217 can receive the credentials (e.g., user-identifier and password) and compare the credentials to entries in user database 218. If credential information matches an entry in user database 218, the identity of a user is authenticated (i.e., server 215 believes that the user represented by the user-identifier is the user who entered the credential information). If an authenticated user of client 205 is authorized to access resources located on VLAN C (e.g., the user is up to date on payments for their account), client 205 can then be authorized to access resources located on VLAN C.

EX1505, [0073]-[0076]. It is undeniable Krantz fails to disclose *any* reconfiguration of port 251 or port 252 of access point 209, which Petitioners claim to be the "communication device." EX2001, ¶57. As such, there is no "reconfiguring" of Petitioner's contended *"communication device," namely, the access point 209.*

Further, Krantz explains that it is not the access point, but rather, the data routing device 214 which directs the traffic to VLAN B or VLAN C. EX1505, [0060]; EX2001, ¶¶56-57. Krantz discloses "data routing device 214" as a distinct component from access point 209. Even this, however, depends on configuration of the client data, not the data routing device itself.

Lastly, as a fallback, Petitioners argue it would have been obvious for one to take the access point 209 and the data routing device 214 and combine these. Pet. at 59. There are numerous flaws with such an argument. First, regardless of whether access point 209 could be combined with data routing device 214, configuring client data with tag headers is not configuring of the access point. Rather, it is only manipulating "data from client 205." EX1505 at, e.g., [0061]. As such, the different

data paths of Krantz still require the data routing device to check user identification information, namely, the tag header.

Further, Krantz expressly recites separate access point 209 and data routing device 214. Arbitrarily combining these separate and distinct components finds no support in Krantz. To the contrary, Petitioners' own cited portions of Krantz expressly teaches access point 209 and a different component data routing device 214. EX1505, [0073] ("[A]ccess point 209 and/or data routing device 214 may strip the 802.1X encapsulation and instead encapsulate the EAP-Response/Identity messages within an EAP-RADIUS message that is transferred onto VLAN B."). This teaching from Krantz further confirms that any configuration is of user identification data, not an access point as claimed, because "EAP-Response/Identity messages" expressly relate to user authentication.² Lastly, even it were possible to combine access point 209 and data routing device 214, this would not resolve the bottleneck problem with the prior art, such as Krantz. Instead, all traffic would still go through access point 209 and data routing device 214, and data routing device would make decisions on where data should go. See EX1505, [0060].

² This understanding is consistent with how a POSITA understands EAP-Response/Identity. *See*, https://techhub.hpe.com/eginfolib/networking/docs/switches/5130ei/5200-3946_security_cg/content/485048062.htm.

The '484 Patent explains configuring a communication device so data is sent to a less-restricted subset of the protected network "typically includes reassigning the communication port from the restricted VLAN to the less-restricted VLAN." EX1501, 3:22-25. Thus, there are changing pathway assignments for the ports of *the "access point."* Indeed, as discussed above (See § II(C)), a preferred configuration of an access point in response to approval of a device by the gatekeeper is described as changing the VLAN to which a port may communicate.

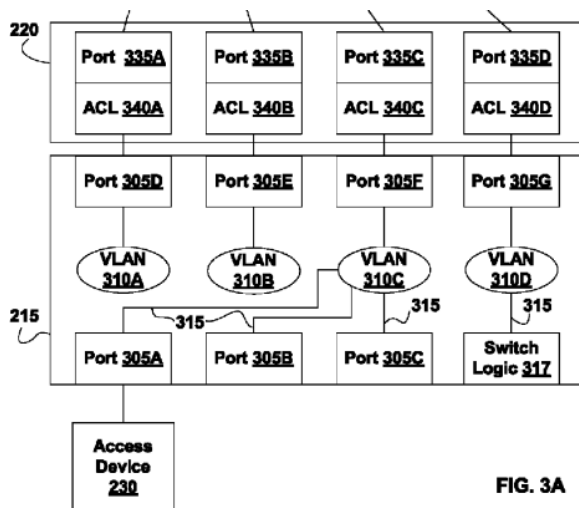


FIG. 3A

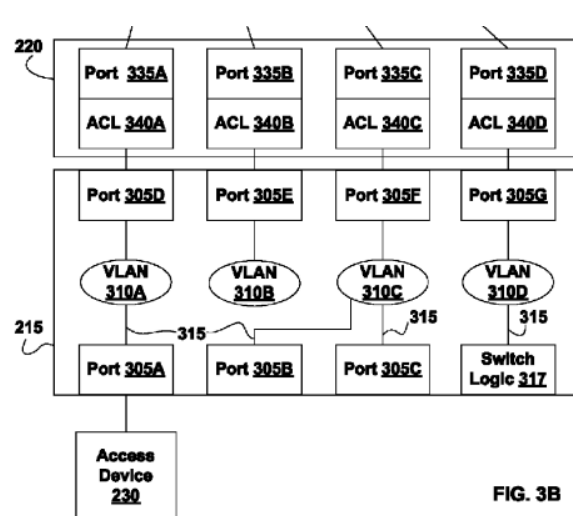


FIG. 3B

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.

EX1501, 7:62-67, 8:1-3.

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.

Id., 8:16-23.

Krantz's disclosure of "tag headers" into client data, however, is not changing the access point. It is changing client data.

Petitioners rely on Herrmann only "to the extent that one asserts that Krantz does not disclose "at least one security policy including requirements that must be satisfied." Pet. at 47. Without waiver of any contention that Krantz does not disclose "at least one security policy including requirements that must be satisfied," relevant here is that Petitioners do not rely on Herrmann for any teaching related to "configuring" or "reconfiguring."

Indeed, Herrmann does not disclose anything about "configuring" or "reconfiguring" an access point. Instead, Herrmann discloses that in every instance, data must go through the "network access server (NAS)," which Petitioners argue is a gatekeeper. Pet. at 10, 60-61. This is clear from the Figure below and accompanying discussion the Herrmann.

an EAP client 311 on the client device 310 and the RADIUS server 330 to authenticate the session as previously described. EX1506, Herrmann, ¶¶ 0062-0063.

At all times, Herrmann requires that before data is transmitted to the protected network, it must go through at least the NAS, i.e., a gatekeeper.

As such, for the reasons discussed, Krantz's failure to disclose the configuration or reconfiguration of the communication device such that after such configuration or reconfiguration data is passed to the less-restricted subset of the protected network without passing through the gatekeeper alone requires denial of institution.

Petitioners argue "a POSITA would also be motivated to modify the teachings of Krantz to include determining whether the requirements of a security policy that include checking for virus protection are satisfied as taught by Herrmann...." But Petitioners' application of Herrmann to Krantz incorrectly conflates authentication and auditing. Krantz discloses only authentication. EX2001, ¶¶48-49. Authentication, however, is distinctly different from device auditing. *Id.*, ¶¶48-53.

Moreover, Petitioners' argument that "[c]hecking for anti-virus software would merely be an additional item for server 215 ("gatekeeper") to evaluate in the authentication process already disclosed by Krantz" (Pet. at 13, 48) is misplaced. Checking for antivirus software is device auditing. This would not be part of

authentication. Regardless, there is no reconfiguring or configuring of the communication device.

Petitioners even resort to impermissible hindsight in hopes of justifying their proposed combination. Petitioners expressly rely on the '484 Patent for a supposed motivation to combine by stating that "[t]he 484 Patent itself confirms that a POSITA would recognize the need for the server/authentication module of Krantz to check for up-to-date and approved antivirus programs." Pet. at 15. In so doing, Petitioner rely on the '484 Patent to provide a roadmap for combining references, which is archetypal impermissible hindsight. *Ruiz v. AB Chance Company*, 357 F.3d 1270, 1275 (Fed. Cir. 2004).

Therefore, even if the combination of Krantz and Herrmann disclosed each of the claimed limitations of the Challenged Claims, which it does not, there would be no motivation to even make such a combination.

VII. All Grounds: Neither Reference Constitutes Prior Art

The Board has previously found antedating prior art references is sufficient grounds for denying *inter partes* review institution. *LG Elecs., Inc. v. Wi-LAN Inc.*, No. IPR2018-00704, Paper No. 14 at 20 (P.T.A.B. Sept. 5, 2018) ("[W]e determine that Patent Owner has provided sufficient evidence to antedate ZTE . . . [and therefore] Petitioner has not demonstrated a reasonable likelihood of prevailing[.]").

Neither Krantz nor Herrmann are prior art because the InfoExpress inventors conceived of the invention before the effective dates and exercised reasonably continuous diligence in reducing to the claimed inventions to practice.

A. Legal Standard

A reference is prior art only if filed before the date of "the invention by the [patent owner]." 35 U.S.C. § 102(e) (pre-AIA). *See, e.g., Sequenom v. Leland Stanford Junior Univ.*, No. IPR2013-00390, at 5 (P.T.A.B. Nov. 25, 2014).

To antedate a reference, a Patent Owner must show that there was conception prior to the critical date and "reasonably continuous diligence" throughout the critical period from just before the effective date of the prior art until reduction to practice. *E.g., ATI Techs. v. Iancu*, 920 F.3d 1362, 1369 (Fed. Cir. 2019); *Tyco Healthcare Grp. v. Ethicon Endo-Surgery, Inc.*, 774 F.3d 968, 975 (Fed. Cir. 2014).

Under the reasonably continuous diligence standard, an inventor is not required to work on reducing the invention to practice every day during the critical period, and periods of inactivity within the critical period do not automatically vanquish a claim of reasonable diligence. *ATI*, 920 F.3d at 1369; *Monsanto Co. v. Mycogen Plant Sci., Inc.*, 261 F.3d 1356, 1369 (Fed. Cir. 2001); *Perfect Surgical Techniques, Inc. v. Olympus Am., Inc.*, 841 F.3d 1004, 1009 (Fed. Cir. 2016).

Additionally, an attorney's work preparing a patent application can demonstrate diligence. *Perfect Surgical*, 841 F.3d at 1009-1012; *Bey v. Kollonitsch*, 806 F.2d 1024, 1030 (Fed. Cir. 1986).

Inventor declarations submitted to establish conception and diligence must be corroborated. *Perfect Surgical*, 841 F.3d at 1007. The "rule of reason" analysis governs whether corroboration is sufficient to establish diligence. *Id.* at 1009. "A variety of activities may corroborate an inventor's testimony of reasonable diligence, and such corroborating evidence is considered 'as a whole.'" *Id.* at 1007-08 (quoting *Brown v. Barbacid*, 436 F.3d 1376, 1380 (Fed. Cir. 2006)). The patent owner need not corroborate every contested factual issue, but instead merely needs to produce sufficient independent circumstantial evidence to support the testimony. *Perfect Surgical*, 841 F.3d at 1009.

The purpose of diligence is to show that the invention was not abandoned, set aside, or unreasonably delayed, not to "scour the patent owner's corroborating evidence in search of intervals of time where the patent owner has failed to substantiate some sort of activity." *Id.*

B. The Inventors Conceived of the Claimed Inventions Prior to the Critical Dates of Both Krantz and Herrmann.

Petitioner asserts that Krantz has an effective date of December 6, 2002 (Pet. at 7) and Herrmann has an effective date of March 13, 2003.³ *Id.* at 10. InfoExpress conceived of the claimed invention before that.

On November 14, 2002, the InfoExpress inventors had the "CyberGatekeeper LAN Based Policy Enforcement Engineering Specification" (EX2011: "LAN Engineering Specification") prepared demonstrating that the claimed inventions were conceived of at least as of that date. EX2012; EX2003 (Lum Declaration), ¶ 12. This conception is demonstrated in the claim chart mapping by Dr. Smith showing the LAN Engineering Specification mapped to the challenged claims as set forth in EX2009. EX2007.

Indeed, leading up to the November 14, 2002 LAN Engineering Specification, InfoExpress had started diligently working.

[REDACTED]

[REDACTED]

³ Herrmann's provisional date is listed as December 2, 2002. Petitioners waived any right to establish this provisional date as the §102(e) date because they failed to submit, mention, or analyze its provisional filing in the Petition. *SAS Institute Inc. v. Iancu*, 138 S.Ct. 1348, 1355 (2018) (the petition must define the boundaries of the IPR); *Globus Med., Inc. v. Depuy Synthes Prods., LLC*, No. IPR2015-00107, at *3 (P.T.A.B. May 1, 2015). Notwithstanding, the Herrmann provisional date is still later in time than the November 14, 2002 conception of the claimed inventions and thus would not be prior art regardless.

[REDACTED]

This was groundbreaking because preexisting security technologies did not include the implementation of auditing support functionality over authentication protocols such as 802.1x. Mr. Lum and the InfoExpress team diligently worked in October 2002 and November 2002 to produce the LAN Engineering Specification of November 14, 2002. EX2021; EX2056; EX2061; EX2273; EX2274; EX2275; EX2342.

C. The Inventors Exercised Reasonably Continuous Diligence Up and Through Constructive Reduction to Practice.

Before and after the November 14, 2002 LAN Engineering Specification, InfoExpress exercised reasonably continuous diligence up and through at least the filing of U.S. Patent Application No. 60/513,080 on October 21, 2003. The filing of this application constitutes constructive reduction to practice of the claimed inventions. EX2007, EX2010.

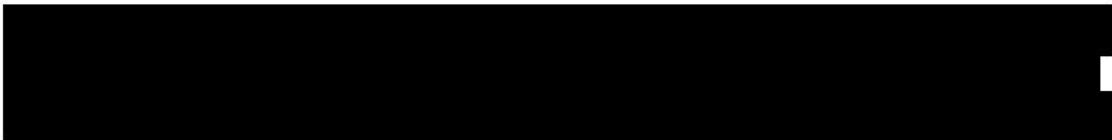
The InfoExpress inventors, employees, and team members diligently pursued reducing the claimed invention to practice from conception until constructive reduction to practice on at least October 21, 2003. This diligence is shown by substantial InfoExpress evidence including:

- i. emails (e.g., EX2015-EX2065; EX2067; EX2068; EX2071; EX2074-EX2200; EX2202-EX2271; EX2273; EX2274; EX2276-EX2283; EX2285; EX2287-EX2326; EX2331-EX2340; EX2342-EX2382; EX2384-EX2390; EX2395-EX2397; EX2399-EX2410);

- ii. technical specifications and analyses (e.g., EX2011-EX2014; EX2066; EX2069; EX2070; EX2072; EX2073; EX2201; EX2275; EX2329; EX2330);
- iii. source code (e.g., EX2113; EX2114; EX2121; EX2129; EX2138; EX2178; EX2191; EX2197; EX2206; EX2298; EX2303; EX2314; EX2339; EX2348; EX2352; EX2359; EX2364; EX2384; EX2399; EX2404; EX2405); and
- iv. the inventor declaration of InfoExpress CEO Stacey Lum (EX2003).

As further detailed in the diligence calendar submitted herewith (EX2004), InfoExpress worked consistently to reduce the claimed invention to practice. This evidence leaves no doubt that the InfoExpress inventors conceived of and diligently pursued reduction to practice during the critical period. *See ATI*, 920 F.3d at 1373 (Court finding that Patent Owner's evidence did "not point to the remotest suggestion of abandonment or setting aside" where the Patent Owner provided a calendar demonstrating that designated activity on the majority of days in the diligence period, and a declaration summarizing various documents in support of diligence); *Monsanto*, 261 F.3d at 1369 (Court finding substantial diligence evidence where the Patent Owner identified record evidence showing activity multiple times per month during the critical period, and there was no reason to doubt that the activity was relevant in reducing the invention to practice).

December 2002:

- 

[REDACTED]

[REDACTED]

[REDACTED]

- See EX2003, ¶¶6-7, 30, 33, 37, 49 (Lum Declaration).

January 2003:

- [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

o

|

|

- Mr. Lum spoke with eventual patent counsel to clear conflicts. EX2212.
- See EX2003, ¶¶6-7, 30, 33, 37, 49) (Lum Declaration).

February 2003:

•

|

|

|

|

|

|

|

○

■

■

■

■

■

■

•

- See EX2003, ¶¶ 32-33, 38, 40-43, 50-51, 56-57 (Lum Declaration).

March 2003:

•

■

[REDACTED]

- See EX2003, ¶¶44, 52, 58 (Lum Declaration)

April 2003:

- [REDACTED]

- [REDACTED]

- See EX2003, ¶¶44, 52 (Lum Declaration).

May 2003:

- [REDACTED]

- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

- See EX2003, ¶¶ 44-45, 52 (Lum Declaration).

June 2003:

- [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
- [REDACTED]

[REDACTED]

- See EX2003, ¶53 (Lum Declaration).

July 2003:

- [REDACTED]
 - | [REDACTED]
 - | [REDACTED]
 - | [REDACTED]

- See EX2003, ¶¶52, 59-61 (Lum Declaration).

August 2003

- [REDACTED]
 - | [REDACTED]
 - | [REDACTED]
 - | [REDACTED]
 - | [REDACTED]
 - | [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- See EX2003, ¶52 (Lum Declaration).

September 2003

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- See EX2003, ¶¶53, 62-63 (Lum Declaration).

October 2003

- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- See EX2003, ¶¶14, 23, 25, 64-66 (Lum Declaration).

D. The Inventors Exercised Achieved a Constructive Reduction to Practice by the Filing of U.S. Provisional Patent Application Serial No. 60/513,080, Which Was Filed on October 21, 2003

As set forth in EX2010 and discussed by Prof. Smith (EX2007), the '080 Provisional provides written description support for the Challenged Claims in accordance with pre-A.I.A. 35 U.S.C. §§ 119(e) & 112, ¶ 1.

The evidence discussed above demonstrates diligence on the part of the inventors towards reducing the claimed invention to practice. *ATI*, 920 F.3d at 1374.

VI. Conclusion

For these reasons, Patent Owner respectfully requests the Board reject the Petition and not institute an *inter partes* review of the Challenged Claims.

Respectfully submitted,

Dated: July 25, 2024 Mailing address for all correspondence: Saul Ewing LLP Centre Square West 1500 Market Street, 38th Floor Philadelphia, PA 19102-2186	<u>/s/ Brian R. Michalek</u> Brian R. Michalek (Reg. No. 65,816) Saul Ewing LLP 161 North Clark Street, Suite 4200 Chicago, IL 60601 Tel: (312) 876-7151 brian.michalek@saull.com Joseph M. Kuo (Reg. No. 38,943) Saul Ewing LLP 161 North Clark Street, Suite 4200 Chicago, IL 60601 Tel: (312) 876-7151 joseph.kuo@saull.com Brian Landry (Reg. No. 62,074) Saul Ewing LLP 131 Dartmouth Street, Suite 501 Boston, MA 02116 Tel: (617) 912-0969 Brian.Landry@saull.com Counsel for Patent Owner
---	---

Certification of Word Count Under 37 C.F.R. § 42.6(d)

The undersigned hereby certifies that the foregoing complies with the type-volume limitation in 37 C.F.R. § 42.24(b)(1). According to the word-processing system's word count, the document contains 13,819 words, excluding the parts of the brief exempted by 37 C.F.R § 42.24(b).

Date: July 25, 2024

/Brian R. Landry/
Reg. No. 62,074

Certification of Service Under 37 C.F.R. § 42.6(e)(4)

The undersigned hereby certifies that the foregoing was served in its entirety by filing through the Patent Trial and Appeal Board P-TACTS, as well as providing a courtesy copy via e-mail to the attorneys of record.

Date: July 25, 2024

/Brian R. Landry/
Reg. No. 62,074