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LINKSMART WIRELESS TECHNOLOGY, LLC

**UNITED STATES DISTRICT COURT  
CENTRAL DISTRICT OF CALIFORNIA**

LINKSMART WIRELESS  
TECHNOLOGY, LLC

*Plaintiff,*

*v.*

PANASONIC AVIONICS CORP.

*Defendant.*

**COMPLAINT FOR PATENT  
INFRINGEMENT**

**DEMAND FOR JURY TRIAL**

1 **Complaint**

2 1. Plaintiff Linksmart Wireless Technology, LLC (“Linksmart” or  
3 “Plaintiff”), files this Complaint against Defendant Panasonic Avionics, Inc.  
4 (“Panasonic Avionics” or “Panasonic” or “Defendant”), and alleges as follows:

5 **Nature of the Action**

6 2. This is a civil action for patent infringement arising under the patent  
7 laws of the United States, Title 35, United States Code, including 35 U.S.C. §§ 271  
8 *et seq.* and 281-285.

9 3. On June 27, 2017, the U.S. Patent and Trademark Office duly and  
10 legally issued U.S. Reissued Patent No. RE46,459 (the “’459 patent” or “Asserted  
11 Patent”), entitled “User specific automatic data redirection system,” to Koichiro  
12 Ikudome and Moon Tai Yeung as the named inventors after full and fair  
13 examination. A true and correct copy of the ’459 patent is attached hereto as Exhibit  
14 A and incorporated herein by reference.

15 4. Panasonic Avionics has infringed and continues to infringe one or more  
16 claims of the Asserted Patent.

17 **The Parties**

18 5. Linksmart was founded by Koichuru (“Ko”) Ikudome, who along with  
19 co-inventor Moon Tai Yeung, created the innovation claimed by the ’459 patent.

20 6. In 1996, Mr. Ikudome, after over a decade of IT industry and business  
21 experience in Japan and the United States, founded and became the CEO of Auric  
22 Web Systems, Inc. (later renamed AuriQ Systems, Inc.). Mr. Ikudome and Mr.  
23 Yeung, Auric’s Director of Technology, developed innovative and fundamental  
24 technologies for users and Internet service providers (ISPs) to enable access to  
25 information and commerce on the then-nascent Internet and World Wide Web.

26 7. Among Auric’s significant product innovations was the “WEBGate  
27 card.” Auric created the WEBGate card as a prepaid long-distance Internet access  
28 card with a pre-determined time limit. Like a prepaid phone card, the Auric’s

1 innovative WEBGate card allowed Internet access from anywhere in the United  
2 States without paying a long-distance phone bill or looking up local access numbers  
3 when users were away from their home or office. As Auric further developed the  
4 technology needed to make WEBGate work, Auric also developed other innovative  
5 products to enable electronic commerce on the Internet, such as EC Gateway, which  
6 combined an access control system at an ISP system with a CGI module to add  
7 customizable graphical buttons to a merchant's homepage to allow customers to  
8 make purchases more easily and add value to Internet services.

9 8. While Auric's Internet access products received substantial interest and  
10 found some customers, the dot-com crash intervened and directly damaged the  
11 potential customers for this product. Auric was thus forced to seek out new business  
12 directions, ultimately resulting in AuriQ Systems' present-day business focused on  
13 data analytics. Mr. Ikudome subsequently formed Linksmart as a way to continue to  
14 derive value from the intellectual property of his and Auric's innovative  
15 technological contributions, including the Asserted Patent. Many companies have  
16 directly benefitted from the licensed use of Linksmart's patented technology in the  
17 products and services they provide to their customers. Panasonic Avionics, however,  
18 has taken advantage of Linksmart's patented technology, selling products and  
19 services that practice the '459 patent, in wanton disregard of Linksmart's exclusive  
20 property rights.

21 9. Plaintiff Linksmart is a limited liability company organized and  
22 existing under the laws of State of California with its principal place of business at  
23 199 S. Los Robles, Suite 440, Pasadena, California 91101.

24 10. Defendant Panasonic Avionics is a corporation organized and existing  
25 under the laws of the State of Delaware. Panasonic Avionics has its headquarters in  
26 Chicago, Illinois, and it maintains corporate offices in the State of California, which  
27 are located at 19900 MacArthur Blvd., Irvine, California 92612.

28 ///

**Jurisdiction**

11. Subject matter jurisdiction is conferred on this Court pursuant to 28 U.S.C. §§ 1381 and 1338(a).

12. Defendant Panasonic Avionics is subject to this Court's personal jurisdiction because it has a regular and established place of business in this District, at its corporate offices located at 19900 MacArthur Blvd., Irvine, California 92612. Panasonic Avionics is also subject to this Court's personal jurisdiction because Panasonic Avionics has committed and induced acts of patent infringement and has regularly and systematically conducted and solicited business in this District by and through at least its development, use, and testing of products and services, sales and offers for sale of products and services, and other contractual arrangements with customers and third parties using such Panasonic Avionics products and services located in and/or doing business in this District.

**Venue**

13. As set forth above, Panasonic Avionics has a regular and established place of business in the Southern Division of the Central District of California. Further, Panasonic Avionics has committed acts of infringement in this District, including, making, developing, testing, distributing, advertising, operating, selling, offering for sale, using, inducing the use thereof, and/or supporting products or services that fall within one or more claims of the Asserted Patent. Accordingly, venue to adjudicate whether the Asserted Patent is infringed is appropriate in the Central District of California pursuant to 28 U.S.C. §§ 1391 and 1400(b).

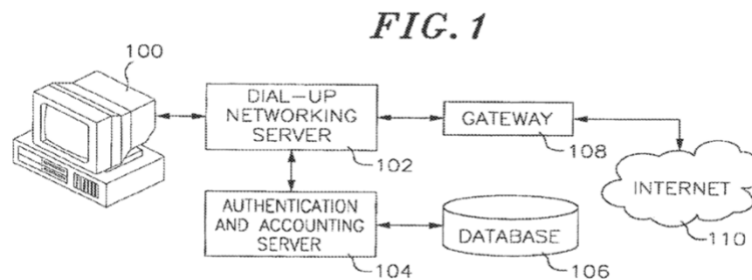
**Linksmart's Patented Invention**

14. The '459 patent is directed to a system for Internet access in a server that dynamically redirects users, i.e., a "redirection server," based on rules that are dynamically and automatically modified by the redirection server itself based on a function of factors that may include, among others, time, user input, data transmitted to the user, or the Internet location accessed by the user.

15. The innovative technology underlying the '459 patent is described in "User Specific Automatic Web Redirection System," a technical innovation report co-authored by Mr. Ikudome and Mr. Yeung. This report was filed as U.S. Provisional Pat. App. No. 60/084,014 (the "'014 app."), which is attached hereto as Exhibit B and is incorporated herein by reference. The '459 patent claims priority to this provisional application, and its disclosure is incorporated fully in the '459 patent's disclosure by reference.

16. The automatic redirection system described in the '459 patent provides a novel architecture for Internet access. At the time of the invention, it was conventionally understood that the World Wide Web was inherently a "passive system," in which the "user must supply the exact destination, a Web site, before the desired information can be retrieved." *See* '014 app. at 4. When a user was connected to the Internet, and the user requested a particular location on the Internet, the user was sent to that requested location. Ikudome and Yeung developed an innovative automatic redirection system that could provide a more flexible way to mediate a user's access to the Internet.

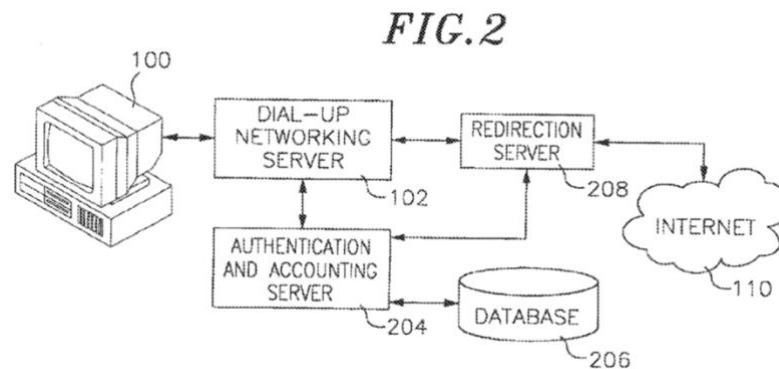
17. Figure 1 of the '459 patent shows an ISP environment for Internet access in the absence of redirection:



18. In such a conventional ISP environment, a user accesses the Internet by connecting to the ISP, at which point networking software at the user end and the ISP begin "negotiating." The ISP authenticates a user's login information, typically from a database. Once authentication is successful, a network connection is

established through the Internet gateway at the ISP. A commercial ISP may also send an accounting request to bill the user for the access.

19. Figure 2 of the '459 patent shows the role of a redirection server, as



provided by the '459 patent, in the ISP environment:

20. In one embodiment described in the '459 patent, a redirection server runs on the gateway to the Internet. Once the user is connected to the ISP in this case, the user's requests to the Internet first go to the redirection server. There, the redirection server can filter the requests based on a rule set to either the location requested by the user, or some other location based on rule sets programmed in the redirection server. By way of example, rule sets could be programmed such that a user would need to access a location, e.g., a page with advertising, before being able to freely surf the Web. *See, e.g., '459 pat. at 7:10-13.* As another example, a rule set could require a user to access a questionnaire before accessing the Internet. *See '459 pat. at 8:9-14.*

21. Another embodiment described in the '459 patent further provides that the redirection server is configured to be able to automatically modify the rule sets dynamically. For example, if a questionnaire provided by an external server is filled out, the rule set can be changed so that the user no longer needs to access the questionnaire to gain access to the Internet. *See '459 pat. at 14-18.* As another example of the redirection server automatically modifying the rule set if a user has obtained access to the Internet through paid access for a limited time, the user's

1 Internet access could be disabled once that time has been exceeded. *See* '459 pat. at  
2 7:65-8:2.

3 22. The unconventional features of the embodiments described by the '459  
4 patent provided improvements to and solved problems associated with redirection  
5 methods and systems that existed at the time of the invention, as described in the  
6 '459 patent's disclosure. *See id.* at 1:48-3:3.

7 23. In the prior art, redirection was conventionally performed by html code  
8 on a web page that a user would need to manually access after the user has already  
9 gained access to the Internet. The '459 patent, however, describes embodiments that  
10 allow redirection to occur at the Internet gateway or before the user can access to  
11 remote web servers. *See id.* at 2:6-11.

12 24. Another way in which redirection could be implemented in the prior art  
13 was packet filtering at the Internet Protocol (IP) layer, for example, through a  
14 firewall device or firewall at the Internet router. Information about an IP packet  
15 being sent through a network could be used to allow filtering of the packet to  
16 different network locations. However, while packet filtering, e.g., at a firewall, could  
17 be controlled locally by a network administrator, it was a static technology, in which  
18 the rule set could only be changed by manually reprogramming the packet filtering  
19 device. '459 pat. at 2:29-36.

20 25. The '459 patent also describes prior methods in which packet filter  
21 devices were used with proxy systems to control access to the Internet. In such a  
22 method, a packet filter or firewall can prevent web access requests with the exception  
23 of traffic coming from a proxy server. The way that proxy servers worked was that  
24 a terminal had to be allowed access to a proxy server through which to send web  
25 requests. The proxy server was programmed with a list of blocked or allowed  
26 addresses, and requests to addresses were blocked or allowed according to that list.  
27 As the '459 patent describes, such systems were limited in that they could only block  
28 or allow specific terminals or sets of terminals' access to remote sites, and the rules

1 for access were static and needed to be reprogrammed, i.e., by some external server,  
2 in order to change which locations specific terminals could access. *See* '459 pat. at  
3 2:65-3:3.

4 26. The '459 patent issued from U.S. Patent App. No. 14/691,246. The file  
5 history of the application from which the patent issued is available from the United  
6 States Patent and Trademark Office, including electronically through the Office's  
7 Public Patent Application Information Retrieval (PAIR) website, and is in  
8 incorporated by reference herein.

9 27. The '459 patent, therefore, provides an advantageous technological  
10 solution to the problem of mediating user access to the Internet through a redirection  
11 server which can automatically modify rule sets for redirection dynamically while  
12 connected to a user through a network connection. Among the benefits of the '459  
13 patent's novel redirection system solution is that (1) redirection is automatic, i.e., a  
14 user does not need to request a particular external address; it can be reconfigured for  
15 specific users or categories of users; (2) the system can be easily installed and  
16 configured by the ISP and it is resilient to potential failures; and (3) the system can  
17 dynamically reconfigure the rule set controlling the user's access to the Internet,  
18 such as by a function of time or user or external inputs while the user is connected.  
19 *See, e.g.*, '014 app. at 8; *see also* the '459 patent.

## 20 Cause of Action

### 21 Infringement of the Linksmart Patent

22 28. The foregoing paragraphs are incorporated by reference as if fully set  
23 forth herein.

24 29. Panasonic Avionics is unlawfully using Linksmart's patented  
25 technology. Panasonic Avionics relies on technology covered by the Asserted Patent  
26 to enable its core service, for example by providing Internet access to passengers  
27 traveling on board aircraft.  
28

1           30. Panasonic Avionics has used, made, offered for sale, and/or sold  
 2 Internet access systems for use in aviation operations, and elsewhere, that infringed  
 3 the Asserted Patent, or induce or contribute to the infringement of the Asserted  
 4 Patent.

5           31. Panasonic Avionics has directly infringed and will continue to infringe,  
 6 directly and indirectly, through induced and/or contributory infringement, one or  
 7 more claims of the '459 patent, including at least claim 91, among other claims, by  
 8 making, using, selling, offering for sale, or importing in this District and elsewhere  
 9 into the United States systems and/or methods covered by one or more claims of the  
 10 '459 patent including, but not limited to the software and platform that Panasonic  
 11 Avionics has developed for airline passengers to access ISP services for aviation  
 12 operations (the "Accused System"). Further discovery may reveal additional  
 13 infringing products, devices, systems and/or methods.

14           32. By way of example only, the Accused System infringes an exemplary  
 15 claim of the '459 patent, claim 91, as in the following description, which Linksmart  
 16 provides without the benefit of information about the Accused System obtained  
 17 through discovery. Claim 91 claims a system, such as the Accused System,  
 18 comprising:

- 19           a. *a redirection server programmed with a user's rule set*  
 20 *correlated to a temporarily assigned network address.* Panasonic  
 21 Avionics, for example, provides a Global Communications  
 22 Service (GCS) project, which extends its inflight entertainment  
 23 and communications (IFEC) offerings to provide internet  
 24 connectivity for aircraft passengers. *See, e.g., "Global*  
 25 *Communications Services,"* [https://www.panasonic.aero/](https://www.panasonic.aero/inflight-connectivity/global-communications-services/)  
 26 [inflight-connectivity/global-communications-services/](https://www.panasonic.aero/inflight-connectivity/global-communications-services/). By way  
 27 of further example, Panasonic's eXConnect product provides  
 28 "global inflight broadband connectivity" through "the

company's global Ku-band aeronautical network. . . . This connectivity service enables passengers to access the Internet, compose and send email, log onto their favorite social media sites, or even watch Panasonic's eXTV global television service." *See, e.g., "eXConnect,"* <https://www.panasonic.aero/inflight-connectivity/global-communications-services/broadband-connectivity/>. Panasonic's eXConnect broadband connectivity allows Internet access, for example, extending the IFEC services that are provided by server hardware that Panasonic Avionics provides as part of its system. When a user accesses Panasonic Avionics' network through the internet server, the user does so through a temporarily assigned network address. A rule set programmed in the redirection server initially forces and redirects the user's web browser to the Panasonic Avionics inflight Wi-Fi service portal, through which a user may gain Internet access.

- b. *wherein the rule set contains at least one of a plurality of functions used to control data passing between the user and a public network.* The server that provides the passenger's gateway to the Internet from on board the aircraft is configured to be able to redirect users to the Panasonic Avionics portal regardless of the Internet address that the user requests.
- c. *wherein the redirection server is configured to automatically modify at least a portion of the rule set while the rule set is correlated to the temporarily assigned network address.* For example, upon a passenger's payment or other login authentication by the server on board the aircraft, the server modifies its rule set to allow that passenger access to the Internet.

d. *wherein the redirection server is configured to modify at least a portion of the rule set as a function of some combination of time, data transmitted to or from the user, or location the user accesses.* For example, upon payment or authentication of a passenger's credentials, i.e., use of a pre-determined pass or login that provides access, a portion of the rule set is modified by providing the user with Internet access for a limited amount of time (e.g., 30 minutes), while the rule set is correlated to the temporarily assigned network address given to the user.

e. *wherein the redirection server is configured to modify at least a portion of the rule set as a function of time while the rule set is correlated to the temporarily assigned network address.* For example, upon payment for a limited time of Internet use, a portion of the rule set is modified by providing the user with Internet access for a limited amount of time (e.g., 30 minutes), while the rule set is correlated to the temporarily assigned network address given to the user.

33. Panasonic Avionics indirectly infringes the '459 patent, under 35 U.S.C. § 271(b), by actively inducing direct infringement by others (e.g., Panasonic Avionics' customers who use, sell, or offer for sale Panasonic Avionics Internet access systems). For example, others who directly infringe the '459 patent include resellers and aircraft manufacturers who install Panasonic Avionics Internet access systems, such as Panasonic's Global Communication Services, in aircraft that they sell, offer to sell, and import; and developers, customers, and end-users, such as commercial aviation services who purchase, operate, and/or install Panasonic Avionics Internet access systems in this District and elsewhere in the United States. By at least the filing date and/or service date of this Complaint, Panasonic Avionics had knowledge of the '459 patent and that its actions resulted in direct infringement

1 of the '459 patent. Panasonic Avionics also knew or was willfully blind that its  
2 actions would induce direct infringement by others and intended that its actions  
3 would do so.

4 34. Through Panasonic Avionics' affirmative acts of making, selling,  
5 using, distributing and/or otherwise making available the Accused System; causing  
6 others to make, sell, use, distribute, and/or make available the Accused System;  
7 and/or providing instructions, documentation, service and support, and/or other  
8 information directed to customers, end-users, installers, and resellers regarding using  
9 the Accused System in the way Panasonic Avionics intends, including service and  
10 support directed to installation and the operation of Panasonic Avionics' inflight  
11 Internet access, e.g. through its Global Connection Services and eXConnect  
12 products, Panasonic Avionics' customers, installers, and/or end-users make, use,  
13 sell, and/or offer to sell systems in the way that Panasonic Avionics intends in their  
14 normal and customary way to directly infringe the '459 patent. On information and  
15 belief, Panasonic Avionics has performed and continues to perform these affirmative  
16 acts, with knowledge of the '459 patent and with knowledge or willful blindness that  
17 the induced acts directly infringe the '459 patent.

18 35. By way of additional example, Panasonic Avionics' corporate website  
19 describes extensive support for airline customers, including support for configuring  
20 the portal through which passengers access the Internet to provide for different kinds  
21 of services for passengers. *See, e.g.,* "An Airline Business Platform,"  
22 <https://www.panasonic.aero/inflight-systems/x-series/> ("X Series is designed as a  
23 business solution that not only connects the cabin environment to an immersive  
24 passenger experience, but also helps airlines engage passengers in their unique brand  
25 while enabling higher revenue generation. Each system can be seamlessly combined  
26 with broadband connectivity to deliver high value services such as targeted  
27 advertising, concierge services, communications, social networking, streaming live  
28

1 television, phone services, and real-time commerce with airline partners such as  
2 boutiques, restaurants, tours & travel, hotels, rental cars, and events.”)

3 36. By way of additional example, the Panasonic Avionics Portal Brochure  
4 describes how airlines can “[w]ork with Panasonic Avionics to design a brand-  
5 immersive inflight portal, with various options for customization as well as support  
6 for multiple languages and currencies used by your passengers around the globe. . .  
7 . Airlines can choose Panasonic Avionics’ standard portal design that comes with  
8 industry-leading services or select from a list of add-on applications and services to  
9 enhance the portal and create a unique, connected experience for passengers.” *Id.* at  
10 4. Panasonic Avionics also provides airline customers with payment systems and  
11 account management for inflight Internet access. *See id.* at 8. Panasonic Avionics  
12 further states in the brochure, “We can also integrate our connectivity systems with  
13 an airline-developed portal.” *Id.* at 17.

14 37. In accordance with 35 U.S.C. § 287, Panasonic Avionics has had  
15 knowledge of the Asserted Patent at least as of the filing date of this Complaint  
16 and/or the date this Complaint was served.

17 38. Despite Panasonic Avionics’ knowledge of the Asserted Patent and its  
18 infringing activities, Panasonic Avionics continues to make, use, market, offer for  
19 sale, and/or sell in the United States systems that infringe the Asserted Patent.  
20 Panasonic Avionics has continued to infringe in wanton disregard of Linksmart’s  
21 patent rights.

22 39. Panasonic Avionics’ continued infringement of the Asserted Patent has  
23 damaged and will continue to damage Linksmart.

#### 24 **Damages**

25 40. The foregoing paragraphs are incorporated by reference as if fully set  
26 forth herein.

27 41. As a result of Panasonic Avionics’ acts of infringement, Linksmart has  
28 suffered actual and consequential damages; however, Linksmart does not yet know

1 the full extent of the infringement. The extent of Panasonic Avionics' infringement  
 2 and damages suffered by Linksmart cannot be ascertained except through discovery  
 3 and special accounting. To the fullest extent permitted by law, Linksmart seeks  
 4 recovery of damages at least for reasonable royalties, unjust enrichment, and benefits  
 5 received by Panasonic Avionics as a result of infringing the patents-in-suit.  
 6 Linksmart further seeks any other damages to which Linksmart is entitled under law  
 7 or in equity.

### 8 **Irreparable Harm to Linksmart**

9 42. The foregoing paragraphs are incorporated by reference as if fully set  
 10 forth herein.

11 43. Linksmart has been irreparably harmed by Panasonic Avionics' acts of  
 12 infringement. Linksmart will continue to be irreparably harmed unless and until  
 13 Panasonic Avionics' acts of infringement are enjoined by this Court. Linksmart has  
 14 no adequate remedy at law to redress Panasonic Avionics' continuing acts of  
 15 infringement. The hardships that would be imposed upon Panasonic Avionics are  
 16 less than those faced by Linksmart should an injunction not issue. Furthermore, the  
 17 public interest would be served by issuance of an injunction.

### 18 **Attorneys' Fees**

19 44. Panasonic Avionics' infringement of the Asserted Patent is exceptional,  
 20 and Linksmart is entitled to recover reasonable and necessary attorneys' fees under  
 21 applicable law.

### 22 **Prayer for Relief**

23 **WHEREFORE**, Linksmart respectfully requests that this Court enter  
 24 judgment in its favor and grant the following relief:

- 25 a. A judgment that Panasonic Avionics directly and/or indirectly infringes  
 26 the '459 patent;
- 27 b. An Order enjoining, permanently, Panasonic Avionics and its  
 28 respective officers, directors, agents, partners, servants, employees,

- attorneys, licensees, successors, and assigns, and those in active concert or participation with any of them, from engaging in infringing activities with respect to the '459 patent;
- c. A judgment that Panasonic Avionics' infringement has been willful and that Panasonic Avionics' continued infringement of the '459 patent is willful;
  - d. A ruling that this case is exception and awarding Linksmart its reasonable attorneys' fees under 35 U.S.C. § 285;
  - e. A judgment and order requiring Panasonic Avionics to pay Linksmart damages in an amount adequate to compensate Linksmart for Panasonic Avionics' infringement, but in no event less than a reasonable royalty under 35 U.S.C. § 284, including supplemental damages for any continuing post-verdict infringement up until entry of judgment, with an accounting, as needed, as well as treble damages for willful infringement under 35 U.S.C. § 284;
  - f. Award enhanced damages pursuant to 35 U.S.C. § 284;
  - g. A judgment and order requiring Panasonic Avionics to pay Linksmart's costs of this action (including all disbursements);
  - h. An order for an accounting of damages;
  - i. A judgment and order requiring Panasonic Avionics to pay pre-judgment and post-judgment interest to the full extent allowed under the law; and
  - j. Award such other and further relief as the Court may deem just and proper under the circumstances.

### **Demand for Jury Trial**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff Linksmart Wireless Technology, LLC demands trial by jury on all issues so triable.

RUSS, AUGUST & KABAT

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Respectfully submitted,

Dated: April 20, 2018

RUSS AUGUST & KABAT

By: /s/ Benjamin T. Wang

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LINKSMART WIRELESS

TECHNOLOGY, LLC