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LINKSMART WIRELESS TECHNOLOGY, LLC

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

LINKSMART WIRELESS
TECHNOLOGY, LLC

Plaintiff,

v.

DELTA AIR LINES, INC.

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 Delta Air Lines, Inc. (“Delta” or
4 “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. Delta has infringed and continues to infringe one or more claims of the
16 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. Delta, however, has taken
18 advantage of Linksmart's patented technology, selling products and services that
19 practice the '459 patent, in wanton disregard of Linksmart's exclusive property
20 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 Delta is a corporation organized and existing under the laws
25 of the State of Delaware.

26 **Jurisdiction**

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

12. Defendant Delta is subject to this Court’s personal jurisdiction because it has a regular and established place of business in this District, with its ground operations and other permanent business operations located at Los Angeles International Airport, Sky Way, Los Angeles, California.¹ Delta is also subject to this Court’s personal jurisdiction because Delta 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 sales and offers for sale of its products and services, including wireless Internet products and services, and other contractual arrangements with customers and third parties using such Delta products and services located in and/or doing business in this District.

Venue

13. As set forth above, Delta has a regular and established place of business in the Central District of California. In particular, for example, Delta maintains ground operations and other permanent business operations at Los Angeles International Airport, Terminal 6, which is located in this District at 600 World Way, Los Angeles, California, and at Delta Cargo’s facility located at 5721 West Imperial Highway, Los Angeles, California. Further, Delta has committed acts of infringement in this District, including, developing, testing, distributing, advertising, operating, selling, offering for sale, using 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).

¹ See, e.g., “Rebuilding Our Home At LAX,” https://www.delta.com/content/www/en_US/traveling-with-us/where-we-fly/destinations/featured-locations/lax-new-terminal.html (“Delta is building a new, state-of-the-art home at Los Angeles International Airport. Our \$1.9 billion investment will bring you a world-class experience from our convenient location at Terminals 2 and 3.”).

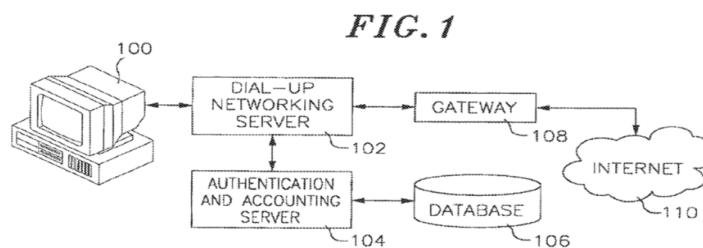
Linksmart's Patented Invention

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.

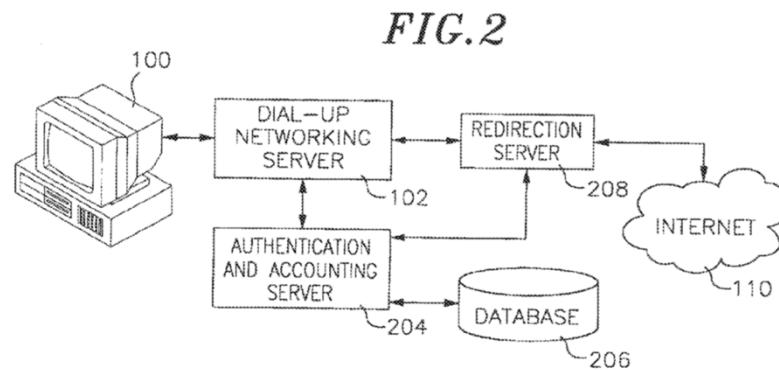
16. The automatic redirection system described in the '459 patent provides a novel architecture for Internet access. At the time of the invention, it was conventionally understood that the World Wide Web was inherently a "passive system," in which the "user must supply the exact destination, a Web site, 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

1 out, the rule set can be changed so that the user no longer needs to access the
2 questionnaire to gain access to the Internet. *See* '459 pat. at 14-18. As another
3 example of the redirection server automatically modifying the rule set if a user has
4 obtained access to the Internet through paid access for a limited time, the user's
5 Internet access could be disabled once that time has been exceeded. *See* '459 pat. at
6 7:65-8:2.

7 22. The unconventional features of the embodiments described by the '459
8 patent provided improvements to and solved problems associated with redirection
9 methods and systems that existed at the time of the invention, as described in the
10 '459 patent's disclosure. *See id.* at 1:48-3:3.

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

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

24 25. The '459 patent also describes prior methods in which packet filter
25 devices were used with proxy systems to control access to the Internet. In such a
26 method, a packet filter or firewall can prevent web access requests with the exception
27 of traffic coming from a proxy server. The way that proxy servers worked was that
28 a terminal had to be allowed access to a proxy server through which to send web

1 requests. The proxy server was programmed with a list of blocked or allowed
2 addresses, and requests to addresses were blocked or allowed according to that list.
3 As the '459 patent describes, such systems were limited in that they could only block
4 or allow specific terminals or sets of terminals' access to remote sites, and the rules
5 for access were static and needed to be reprogrammed, i.e., by some external server,
6 in order to change which locations specific terminals could access. *See* '459 pat. at
7 2:65-3:3.

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

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

24 **Cause of Action**

25 **Infringement of the Linksmart Patent**

26 28. The foregoing paragraphs are incorporated by reference as if fully set
27 forth herein.
28

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

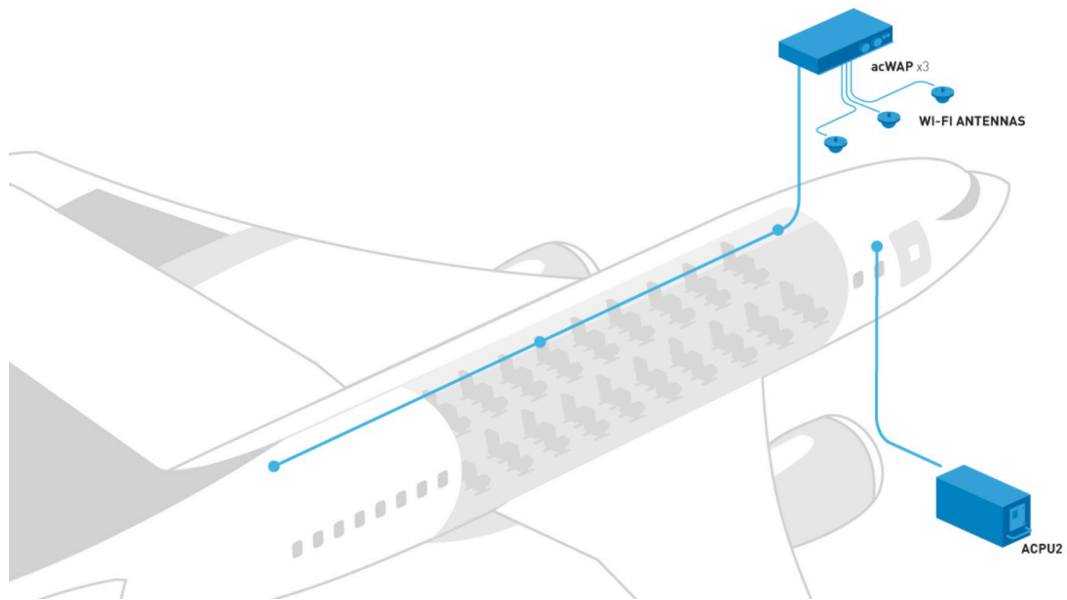
30. Delta has used, made, offered for sale, and/or sold Internet access systems for use in aviation operations, and elsewhere, that infringed the Asserted Patent, or induce or contribute to the infringement of the Asserted Patent.

31. Delta has directly infringed and will continue to infringe, directly and indirectly through induced infringement, one or more claims of the '459 patent, including at least claim 91, among other claims, by making, using, selling, offering for sale, or importing in this District and elsewhere into the United States systems and/or methods covered by one or more claims of the '459 patent including, but not limited to the system that it has installed in its aircraft that uses Gogo technology for Delta's passengers to access ISP services for aviation operations (the "Accused System"). Further discovery may reveal additional infringing products, devices, systems and/or methods.

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

- a. *a redirection server programmed with a user's rule set correlated to a temporarily assigned network address.* Delta has a system that employs Gogo technology to enable Delta's aircraft passengers to access the Internet. *See, e.g., "In-Flight Wi-Fi,"* https://www.delta.com/content/www/en_US/traveling-with-us/onboard-services/delta-studio/in-flight-wi-fi.html. As an illustration of Delta's Accused System, Gogo's corporate website describes hardware components onboard aircraft that are

connected to Gogo's communication network. As shown below, Gogo shows that aircraft are equipped with "ACPU-2," described as a "[n]ext-generation onboard server unit that uploads and downloads data to the aircraft both inflight and on the ground. See "In-Cabin Network Hardware for inflight connectivity and entertainment," <https://www.gogoair.com/commercial/in-cabin-network>.



When a user accesses Gogo's network through the 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 Gogo inflight wi-fi service portal, i.e., the "Gogo Portal." See, e.g., "Passenger Services," <https://www.gogoair.com/commercial/passenger-services/>. ("The Gogo Portal is the interface providing passengers access to the Internet and other inflight entertainment options on board.").

- b. *wherein the rule set contains at least one of a plurality of functions used to control data passing between the user and a*

1 *public network.* The server that provides the passenger's gateway
 2 to the Internet from on board the aircraft is configured to be able
 3 to redirect the passenger to the Gogo Portal regardless of which
 4 Internet address the passenger requests.

5 c. *wherein the redirection server is configured to automatically*
 6 *modify at least a portion of the rule set while the rule set is*
 7 *correlated to the temporarily assigned network address.* For
 8 example, upon a passenger's payment or other login
 9 authentication by the server on board the aircraft, the server
 10 modifies its rule set to allow that passenger access to the Internet.
 11 By way of another example, "Gogo's digital ad server displays
 12 advertisements within the portal, and ads can even be tailored to
 13 certain routes, devices, and targeted audiences." *See also* "Gogo
 14 Portal Brochure" at 12, *available for download at*
 15 [https://www.gogoair.com/learning-center/gogo-portal-](https://www.gogoair.com/learning-center/gogo-portal-brochure/?download=true)
 16 [brochure/?download=true.](https://www.gogoair.com/learning-center/gogo-portal-brochure/?download=true)

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

26 e. *wherein the redirection server is configured to modify at least a*
 27 *portion of the rule set as a function of time while the rule set is*
 28 *correlated to the temporarily assigned network address.* For

1 example, upon payment for a limited time of Internet use, a
2 portion of the rule set is modified by providing the user with
3 Internet access for a limited amount of time (e.g., 30 minutes),
4 while the rule set is correlated to the temporarily assigned
5 network address given to the user.

6 33. Delta indirectly infringes the '459 patent, under 35 U.S.C. § 271(b), by
7 actively inducing direct infringement by others, for example, Delta passengers who
8 use the Accused System provided by Delta for Internet Access following Delta's
9 instructions on how to access the Wi-Fi network. By at least the filing date and/or
10 service date of this Complaint, Delta had knowledge of the '459 patent and that its
11 actions resulted in direct infringement of the '459 patent. Delta also knew or was
12 willfully blind that its actions would induce direct infringement by others and
13 intended that its actions would do so.

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

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

21 36. Delta's continued infringement of the Asserted Patent has damaged and
22 will continue to damage Linksmart.

23 **Damages**

24 37. The foregoing paragraphs are incorporated by reference as if fully set
25 forth herein.

26 38. As a result of Delta's acts of infringement, Linksmart has suffered
27 actual and consequential damages; however, Linksmart does not yet know the full
28 extent of the infringement. The extent of Delta's infringement and damages suffered

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

6 **Irreparable Harm to Linksmart**

7 39. The foregoing paragraphs are incorporated by reference as if fully set
8 forth herein.

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

15 **Attorneys' Fees**

16 41. Delta's infringement of the Asserted Patent is exceptional, and
17 Linksmart is entitled to recover reasonable and necessary attorneys' fees under
18 applicable law.

19 **Prayer for Relief**

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

- 22 a. A judgment that Delta directly and/or indirectly infringes the '459
23 patent;
- 24 b. An Order enjoining, permanently, Delta and its respective officers,
25 directors, agents, partners, servants, employees, attorneys, licensees,
26 successors, and assigns, and those in active concert or participation with
27 any of them, from engaging in infringing activities with respect to the
28 '459 patent;

- c. A judgment that Delta's infringement has been willful and that Delta's 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 Delta to pay Linksmart damages in an amount adequate to compensate Linksmart for Delta's 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 Delta 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 Delta 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

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