

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

MAGNACROSS LLC,

Plaintiff,

v.

DASAN ZHONE SOLUTIONS INC.,

Defendant.

C.A. NO. 1:17-cv-1683 JFB-SRF

JURY TRIAL DEMANDED

**FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT
AGAINST DASAN ZHONE SOLUTIONS INC.**

Plaintiff Magnacross LLC files this First Amended Complaint for Patent Infringement against Dasan Zhone Solutions Inc. pursuant to Rule 15(a)(1)(B), Fed.R.Civ.P., and would respectfully show the Court as follows:

I. THE PARTIES

1. Plaintiff Magnacross LLC (“Magnacross” or “Plaintiff”) is a Texas limited liability company with its principal place of business at 5900 South Lake Forest Drive, Suite 300, McKinney, Texas 75070.

2. On information and belief, Defendant Dasan Zhone Solutions Inc. (“Defendant”) is a corporation organized and existing under the laws of Delaware, with a place of business at 7195 Oakport Street, Oakland, CA 94621. Defendant has a registered agent at The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801.

II. JURISDICTION AND VENUE

3. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has subject matter jurisdiction of such action under 28 U.S.C. §§ 1331 and 1338(a).

4. On information and belief, Defendant is subject to this Court's specific and general personal jurisdiction, pursuant to due process and the Delaware Long-Arm Statute, due at least to its business in this forum, including at least a portion of the infringements alleged herein. Furthermore, Defendant is subject to this Court's specific and general personal jurisdiction because Defendant is a Delaware corporation.

5. Without limitation, on information and belief, within this state, Defendant has used the patented inventions thereby committing, and continuing to commit, acts of patent infringement alleged herein. In addition, on information and belief, Defendant has derived revenues from its infringing acts occurring within Delaware. Further, on information and belief, Defendant is subject to the Court's general jurisdiction, including from regularly doing or soliciting business, engaging in other persistent courses of conduct, and deriving substantial revenue from goods and services provided to persons or entities in Delaware. Further, on information and belief, Defendant is subject to the Court's personal jurisdiction at least due to its sale of products and/or services within Delaware. Defendant has committed such purposeful acts and/or transactions in Delaware such that it reasonably should know and expect that it could be haled into this Court as a consequence of such activity.

6. Venue is proper in this district under 28 U.S.C. § 1400(b). On information and belief, Defendant is incorporated in Delaware. On information and belief, from and within this District Defendant has committed at least a portion of the infringements at issue in this case.

7. For these reasons, personal jurisdiction exists and venue is proper in this Court under 28 U.S.C. § 1400(b).

III. COUNT I
(PATENT INFRINGEMENT OF UNITED STATES PATENT NO. 6,917,304)

8. Plaintiff incorporates the above paragraphs herein by reference.

9. On July 12, 2005, United States Patent No. 6,917,304 (“the ‘304 Patent”) was duly and legally issued by the United States Patent and Trademark Office. The ‘304 Patent is titled “Wireless Mutlplex [*sic*] Data Transmission System.” The PCT application leading to the ‘304 Patent was filed on April 3, 1998. A true and correct copy of the ‘304 Patent is attached hereto as Exhibit A and incorporated herein by reference.

10. Magnacross is the assignee of all right, title and interest in the ‘304 patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the ‘304 Patent. Accordingly, Magnacross possesses the exclusive right and standing to prosecute the present action for infringement of the ‘304 Patent by Defendant.

11. The invention in the ‘304 Patent relates to methods and apparatuses for the wireless transmission of data through a communications channel from at least two local data sensors to a data processor. (Ex. A at col. 1:4-7). Prior to the filing of the initial application in 1997, the inventors of the ‘304 patent recognized that there were problems with the efficiency of transmitting data from sensors to data processors. (Ex. A at col. 1:4-7; col. 2:5-13). Conventional methods usually had data transmitted from data sensors to the data processors using cables that put limitations on the convenience and operations of the equipment. (*Id.* at col. 1:37-40). Attempts were made to achieve wireless transmission from the data sensors to data processors; however, these attempts had shortcomings. One main issue with the conventional wireless transmission systems is they resulted in inefficient bandwidth utilization. (*Id.* at col. 1:50 – 2:1). For example, in a system in which there are sensors that require high data transmission rates and sensors that require lower data transmission rates, a conventional system

would set aside the same amount of bandwidth for both types of sensors necessarily resulting in overutilization or underutilization of bandwidth requirements. (*See id.*).

12. The inventors therefore created a method and system by which data sensors with substantially different data rates required for data transmission would have the data transmitted over an asymmetrically divided communication channel such that the data from the sensors is allocated to ones or groups of the sub-channels based on the data carrying capacities of the sub-channels. (*See id.* at col. 7:30-45; col. 8:20-35). For example, a data sensor with higher data rate requirements was assigned a sub-channel or group of sub-channels with a higher data rate capacity and a data sensor with lower data rate requirements was assigned a sub-channel with a lower data rate capacity. (*E.g., see id.* at col. 5:22-26).

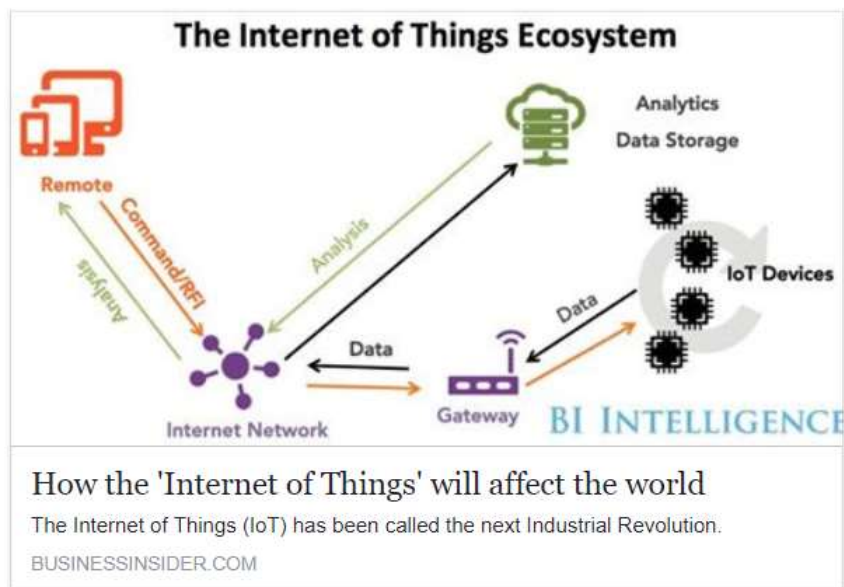
13. **Direct Infringement.** Upon information and belief, Defendant has been directly infringing at least claim 12 of the '304 patent in Delaware, and elsewhere in the United States, by actions comprising making, using, selling, and/or offering for sale an apparatus for wireless transmission of data in digital and/or analog format through a communications channel from at least two local data sensors to a data processing means, including without limitation Defendant's Zhone 6718-W1, 6728-W1, 6729-W1, 6748-W1, 6768-W1 and 6618-W1 VDSL2/ADSL2+ Wireless Gateways ("Accused Instrumentality").

14. On information and belief, the Accused Instrumentality is an apparatus for wireless transmission of data in digital format through a communications channel, for example, the 2.4 GHz channel, between approximately 2.4 GHz and 2.5 GHz. On information and belief, data sensors, such as data sensors that use the IEEE 802.11b/g and IEEE 802.11n wireless specifications to transmit over a wireless local area network, are capable of being and are wirelessly connected to the Accused Instrumentality to transmit data through the communication

channel to a data processing means. (e.g., <http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=550>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=555>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=557>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=559>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=552>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=1880> (describing connecting the Accused Instrumentalities with sensor devices (e.g., tablets and smart phones) over 802.11b/g/n specifications);
<http://dasanzhone.com/solutions/broadband-access/>;
https://www.facebook.com/pg/DASANZhoneSolutions/posts/?ref=page_internal (Facebook posts by Dasan Zhone on Oct. 9, 2017, Oct. 20, 2017, September 15, 2017, and July 25, 2017, on the Internet of Things (which is a network of connected devices embedded with sensors that enables the devices to exchange data))). For example, Dasan Zhone posted on its Facebook page a link to an article about connecting to wi-fi data sensors (such as smoke detectors, water leak detectors, thermostats, and webcams) to wi-fi gateways, such as the accused instrumentalities. (https://www.facebook.com/pg/DASANZhoneSolutions/posts/?ref=page_internal (Facebook posts by Dasan Zhone on September 15, 2017, referring customers to an article about the Internet of Things market (<http://www.sandiegouniontribune.com/sd-me-connected-home-20170423-story.html>))). As another example, Dasan Zhone posted on its Facebook page a diagram showing devices with sensors (IoT Devices) sending data to wi-fi gateways, such as the Accused Instrumentalities:

DZS **DASAN Zhone Solutions**
July 25, 2017 · 🌐

A new report from [Business Insider](#) predicts there will be nearly \$6 trillion spent on #IoT solutions over the next five years and businesses will be the top adopter of IoT solutions. Read more key points from the report here: <http://read.bi/2pYTz5D>



(https://www.facebook.com/pg/DASANZhoneSolutions/posts/?ref=page_internal at July 25, 2017).

15. Upon information and belief, the Accused Instrumentality has a multiplexer adapted to divide the communications channel into sub-channels and has a transmitter to transmit data through the sub-channels. For example, upon information and belief, the Accused Instrumentality divides the 2.4 GHz channel into multiple sub-channels through which data can be transmitted. The multiplexer is adapted to divide the communications channel asymmetrically such that the data carrying capacities of the sub-channels are unequal. For example, the data carrying capacity for channels of the Accused Instrumentality using the 802.11b/g specification is unequal to the data carrying capacity for channels using the 802.11n.

16. On information and belief, the Accused Instrumentality has a controller that allocates data from the local data sensors to ones or groups of the communications sub-channels in accordance with the substantially different data rate requirements of the local sensors. For example, the data sensors that use the 802.11b/g specification can have a substantially different data rate requirement than data sensors using the 802.11n specification and the data from the data sensors are allocated to the channels for the appropriate specification.

17. On information and belief, Defendant infringes claim 12 through making, using (including through testing and demonstrations), selling, and/or offering for sale products, including the Accused Instrumentality, that are used with 802.11b/g and 802.11n wireless sensors.

18. Upon information and belief, Defendant has been and now is also directly infringing at least claim 1 of the '304 patent in the State of Texas, in this District, and elsewhere in the United States, by performing a method of wireless transmission of data in digital format through a communications channel from at least two data sensors to a data processing means including without limitation transmitting data from at least two data sensors to a data processing means using Defendant's wireless routers, including the Accused Instrumentalities. Magnacross incorporates by reference paragraphs 14-17. For example, upon information and belief, Defendant has used and is using the Accused Instrumentality to provide a communications channel, for example, the 2.4 GHz channel, between approximately 2.4 GHz and 2.5 GHz, and divide the 2.4 GHz channel into multiple sub-channels through which data from data sensors is transmitted. Upon information and belief, Defendant has used and is using the Accused Instrumentality to divide the communications channel asymmetrically such that the data carrying capacities of the sub-channels are unequal. For example, Defendant has used and is using the

Accused Instrumentality to divide the communications channels into 802.11b/g and 802.11n configurations, which have unequal data carry capacities. Upon information and belief, Defendant has used and is using data sensors that have substantially different data transmission rates for data transmission to the Accused Instrumentality. (*E.g., supra*, ¶14). Upon information and belief, Defendant also has used and is using the Accused Instrumentality to allocate data from the local data sensors to ones or groups of sub-channels in accordance with the data carrying capacities of the sub-channels. (*E.g., supra*, ¶¶14-15). For example, on information and belief, Defendant has used and is using systems that use the Accused Instrumentality with sensors that transmit wirelessly by Wi-Fi to a wireless gateway using the 802.11b/g specification, and that transmit wirelessly by Wi-Fi to a wireless gateway using the 802.11n specification. (*Id.*).

19. **Indirect Infringement.** On information and belief, Defendant has been and now is indirectly infringing by way of inducing infringement of at least claim 12 of the '304 patent in the State of Delaware, in this District, and elsewhere in the United States, by providing to customers Defendant's Accused Instrumentalities for the wireless transmission of data through a communications channel from local data sensors to a data processing means, as described above. (*e.g.*, <http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=550>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=555>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=557>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=559>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=552>;
<http://dasanzhone.com/wp-content/themes/dzs/admin-datasheet.php?id=1880> (describing connecting the Accused Instrumentalities with sensor devices (*e.g.*, tablets and smart phones)

over 802.11b/g/n specifications); <http://dasanzhone.com/solutions/broadband-access/>; https://www.facebook.com/pg/DASANZhoneSolutions/posts/?ref=page_internal (Facebook posts by Dasan Zhone on Oct. 9, 2017, Oct. 20, 2017, September 15, 2017, and July 25, 2017 on the Internet of Things (which is a network of connected devices embedded with sensors that enables the devices to exchange data))). For example, Dasan Zhone posted on its Facebook page a link to an article about connecting to wi-fi data sensors (such as smoke detectors, water leak detectors, thermostats, and webcams) to wi-fi gateways, such as the accused instrumentality. (https://www.facebook.com/pg/DASANZhoneSolutions/posts/?ref=page_internal (Facebook posts by Dasan Zhone on September 15, 2017, referring customers to an article about the Internet of Things market (<http://www.sandiegouniontribune.com/sd-me-connected-home-20170423-story.html>))). Defendant is a direct and indirect infringer, and its customers using the Accused Instrumentalities are direct infringers. Upon information and belief, Defendant had actual knowledge of the '304 patent the infringing activity since at least November 21, 2017, when it was served with the original Complaint in this action and has known of its infringement since at least that date.

20. Upon information and belief, since becoming aware of the '304 patent, Defendant is and has been committing the act of inducing infringement by specifically intending to induce infringement by providing the Accused Instrumentalities to its customers and by aiding and abetting its use in a manner known to infringe by Defendant, as described in the Original Complaint. Defendant encourages customers to use the Accused Instrumentalities for conducting the directly infringing use and advertises the directly infringing use by customers despite knowing of the infringing use. For example, Defendant advertises the use of the accused instrumentality with devices with data sensors in a manner that infringes the claims of the '304

patent. (*E.g., supra* ¶14). On information and belief, Defendant knew or should have known that through its acts it was and is inducing infringement of the '304 patent since it became aware of the infringement at least as of the date of the service of the Original Complaint.

21. Plaintiff has been damaged as a result of Defendant's infringing conduct. Defendant is thus liable to Plaintiff for damages in an amount that adequately compensates Plaintiff for such Defendant's infringement of the '304 patent, *i.e.*, in an amount that by law cannot be less than would constitute a reasonable royalty for the use of the patented technology, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

22. On information and belief, Defendant will continue its infringement of one or more claims of the '304 patent unless enjoined by the Court. Each and all of the Defendant's infringing conduct thus causes Plaintiff irreparable harm and will continue to cause such harm without the issuance of an injunction.

23. On information and belief, Defendant has had at least constructive notice of the '304 patent by operation of law, and there are no marking requirements that have not been complied with.

IV. JURY DEMAND

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

V. PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grant Plaintiff the following relief:

- a. Judgment that one or more claims of United States Patent No. 6,917,304 have been infringed, either literally and/or under the doctrine of equivalents, by Defendant;

- b. Judgment that Defendant account for and pay to Plaintiff all damages to and costs incurred by Plaintiff because of Defendant's infringing activities and other conduct complained of herein;
- c. That Plaintiff be granted pre-judgment and post-judgment interest on the damages caused by Defendant's infringing activities and other conduct complained of herein;
- d. That Defendant be permanently enjoined from any further activity or conduct that infringes one or more claims of United States Patent No. 6,917,304; and
- e. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

February 2, 2018

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Attorneys for Plaintiff Magnacross LLC

CERTIFICATE OF SERVICE

I hereby certify that on February 2, 2018, I electronically filed the above document(s) with the Clerk of Court using CM/ECF which will send electronic notification of such filing(s) to all registered counsel.

/s/ Stamatios Stamoulis
Stamatios Stamoulis #4606