

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

OROSTREAM LLC,	§	
	§	
Plaintiff,	§	Case No. 4:18-cv-1433
v.	§	
	§	PATENT CASE
DPI, INC. DBA AMPED WIRELESS,	§	
	§	
Defendant.	§	JURY TRIAL DEMANDED

ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Orostream LLC files this Original Complaint for Patent Infringement against DPI, Inc. dba Amped Wireless, and would respectfully show the Court as follows:

I. THE PARTIES

1. Plaintiff Orostream LLC (“Orostream” or “Plaintiff”) is a Texas limited liability company with its principal place of business at 3401 Custer Road, Suite 125-B, Plano, Texas 75023.

2. On information and belief, defendant DPI Inc. dba Amped Wireless (“Defendant”) is a corporation organized and existing under the laws of the State of Missouri, with its place of business at 900 N. 23rd Street, St. Louis, MO 63106. Defendant has a registered agent in Missouri: Paul Green, 900 N. 23rd Street, St. Louis, MO 63106.

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 Missouri 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 Missouri corporation and has a place of business in Missouri.

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 Missouri. 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 Missouri. 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 Missouri and having a place of business in Missouri. Defendant has committed such purposeful acts and/or transactions in Missouri 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 Missouri and has a place of business in Missouri. 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. 5,768,508)

8. Plaintiff incorporates the above paragraphs herein by reference.

9. On June 16, 1998, United States Patent No. 5,768,508 (“the ‘508 Patent”) was duly and legally issued by the United States Patent and Trademark Office. The ‘508 Patent is titled “Computer Network System and Method for Efficient Information Transfer.” The application leading to the ‘508 Patent was filed on April 11, 1997. The expiration date of the ‘508 patent was April 11, 2017. Pursuant to 35 U.S.C. §286, Orostream may seek damages for infringement up to 6 years prior to the filing of the complaint. A true and correct copy of the ‘508 Patent is attached hereto as Exhibit A and incorporated herein by reference.

10. Orostream is the assignee of all right, title and interest in the ‘508 patent, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the ‘508 Patent. Accordingly, Plaintiff possesses the exclusive right and standing to prosecute the present action for infringement of the ‘508 Patent by Defendant.

11. The ‘508 patent has been cited as prior art during the prosecution history of over 100 subsequently-issued United States patents, including patents assigned to IBM, Intel, Facebook, Gateway, Hitachi, Microsoft, Nokia, Oracle, and Veritas Software.

12. **Direct Infringement.** Upon information and belief, Defendant has been directly infringing at least claim 26 of the ‘508 patent in the State of Missouri and elsewhere in the United States, by using Wi-Fi routers that prioritize Internet traffic, including Amped Wireless High Power AC1750 Wi-Fi Access Point/Router APR175P (“Accused Instrumentality”), to perform a method of connecting an information provider and a user node of a computer network, performed by a master program. The Accused Instrumentality registers the user node (*e.g.*, an Internet enabled user device such as a laptop, mobile phone) at a master node (*e.g.*, the Accused Instrumentality). The user node (*e.g.*, an Internet enabled user device such as a laptop, mobile

phone) registers with the Accused Instrumentality by connecting (wired or wirelessly) with the Accused Instrumentalities (with or without using a password).

Dashboard: Connected Devices

View the details of certain devices connected to the Access Point.

Since this menu may constantly change as devices connect and disconnect from the network, a page refresh option is available to automatically update the data at set intervals.

Connected devices are separated by those connected to the 2.4GHz Wi-Fi networks or 5.0GHz Wi-Fi networks. If the current operational mode is Router mode, this page will also show those devices that are connected to the router and have been provided an IP address assignment from the DHCP server of the router.

The screenshot shows a router dashboard with the following sections:

- Refresh Data:** Includes options for 'Auto Refresh All Data' (5 seconds, 1 second, Never) and a 'Manually Refresh Data' button.
- 2.4GHz Wi-Fi Connected Devices:** A table with columns: #, SSID, MAC address, Tx, Rx, Signal (%), Connected Time, Idle Time, Vendor. It shows 'No connected devices'.
- 5GHz Wi-Fi Connected Devices:** A table with the same columns as the 2.4GHz section. It also shows 'No connected devices'.
- Router DHCP Client List:** A table with columns: #, IP Address, Name, MAC Address, Expiry Time. It shows 'Not Available'.

(See, e.g., https://www.ampedwireless.com/media/docs/usersguide/APR175P_UsersGuide.pdf).

13. The Accused Instrumentality performs receiving, through the master node (e.g., the Accused Instrumentality), a node ID (e.g., MAC address) from the user node (e.g., an Internet enabled user device such as a laptop, mobile phone). (See, e.g., *id.*). A MAC (Media Access Control) address is a unique alpha-numeric identifier used to distinguish a device from others on a network. (See, e.g., *id.*; [https://technet.microsoft.com/en-us/library/cc757419\(v=ws.10\).aspx](https://technet.microsoft.com/en-us/library/cc757419(v=ws.10).aspx)).

14. The Accused Instrumentality accesses a master database for profile information corresponding to the node ID. For example, the Accused Instrumentality accesses an internal table or a database for data to be appropriately transmitted to a particular user device that made the request for the data. The internal table or database is accessed for profile information, for example, a DHCP lease table is maintained in the Accused Instrumentality which stores profile information available to the Accused Instrumentality such as a MAC address, IP address, or Lease period corresponding to a user device. The Accused Instrumentality forms the internal

table/database with the available profile information corresponding to the node ID, such as the MAC address.

DHCP Client Range: The range of IP addresses provided by the DHCP server is defined by this field. You can limit how many IP addresses are used in your network by setting a smaller or larger range.

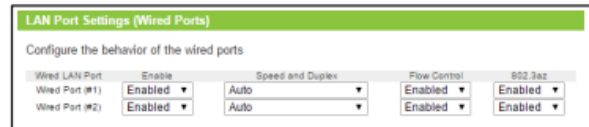
DHCP Lease Time: The amount of time each device is given a specific IP is decided by the DHCP lease time. After the Lease Time expires, the DHCP server will assign another IP address to the device.

Set Static DHCP: This allows specific devices to be given a specific IP address each time the device connects to the network. The DHCP server will always assign the same IP address to the same device. This feature is often used for shared devices such as network printers or servers.

Auto DHCP Server: The Auto-DHCP Server feature automatically manages the IP addresses within your network. When connected to a network that has a DHCP server enabled, the Access Point/Router will automatically obtain an IP from the network's DHCP server and disable the DHCP server on the Access Point / Router to avoid any IP assignment conflicts. For users that are not familiar with how this works, it is recommended to leave Auto-DHCP server enabled on this page.

Local Network (LAN): LAN Port Settings

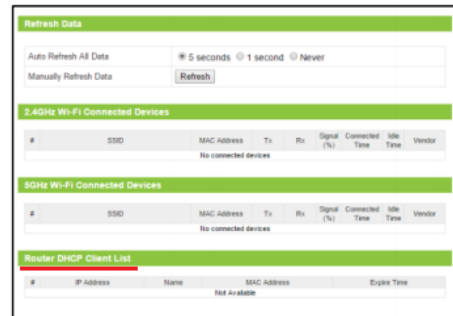
Configure settings for your Access Point's two wired local network ports.



Dashboard: Connected Devices

View the details of certain devices connected to the Access Point. Since this menu may constantly change as devices connect and disconnect from the network, a page refresh option is available to automatically update the data at set intervals.

Connected devices are separated by those connected to the 2.4GHz Wi-Fi networks or 5.0GHz Wi-Fi networks. If the current operational mode is Router mode, this page will also show those devices that are connected to the router and have been provided an IP address assignment from the DHCP server of the router.



MAC Address Filtering

MAC Address Filtering allows you to deny access or allow access to specific users connecting to the network. Each networking device has a unique address called a MAC address (a 12 digit hex number). By inputting the MAC address into the field, you can define whether that device is allowed into your network or not allowed. A MAC Address may sometimes be referred to as a Physical Address. Most networking devices have their MAC Address located on a label on the actual device.

For Windows computers with internal networking adapters, the MAC Address can be found by viewing the Network Connection Details of the network adapter. The MAC Address will be listed as the Physical Address.

Be sure to enter the MAC Address without any symbols. For example, a MAC Address of 78-DD-78-AA-78-BB would be entered as 78DD78AA78BB.

Note: Each Wi-Fi Network (WLAN/SSID) must also have MAC Filters selected as Additional Authentication methods in order for MAC Filtering to work. This can be configured here: Wi-Fi Settings > 2.4GHz or 5.0GHz Wi-Fi Settings > Security.

(See, e.g., https://www.ampedwireless.com/media/docs/usersguide/APR175P_UsersGuide.pdf).



15. The Accused Instrumentality transmits to the user node (e.g., an Internet enabled user device such as a laptop, mobile phone), through the master node (e.g., the Accused Instrumentality), a target information reference (e.g., address information for accessing a web page of a file categorized in low priority group that a user requested) corresponding to the accessed profile information (e.g., requested content is tied to the IP address of the particular user device that requested it). The target information reference (e.g., address information identifying a server or computer that a user will need to obtain information from in order to access a web page or an FTP file) is a pointer to target information to be delivered to the user node (e.g., a user-set low priority data packet to an Internet enabled user device such as a laptop, mobile phone, etc.) while transferring non-target information without additional communication delay (e.g., higher priority applications such as audio/video less than a certain user specified latency, which the Accused Instrumentality gives a higher priority class) will be prioritized.

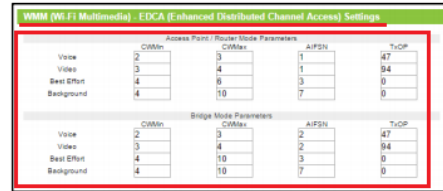
16. For example, the Accused Instrumentality will receive address information pointing to the server or computers delivering content (*e.g.*, data packets sent from other servers or computers will contain the IP address of the server/computer in the data packet's header). These data packets are forwarded to the appropriate device (which requested access to the Internet information) based upon a destination IP address belonging to a particular device (corresponding to the accessed profile information for the particular device that requested access to the Internet information, or the device seeking to receive data from a particular Internet address) that is also within the header. The Accused Instrumentality will reference its routing table in order to forward data packets to an addressed device accordingly.

17. Furthermore, the Accused Instrumentality has QOS settings that allow prioritization of certain Internet traffic while allowing other traffic to continue. For example, a file download (*e.g.*, target information such as background data packets such as FTP that are in low priority group) will be delivered to the user device while transferring non-target information without additional communication delay (*e.g.*, voice/video (in high priority group) is prioritized and transferred without delay). The Accused Instrumentality can classify particular wireless data packets as network traffic that is less sensitive (*e.g.*, target information) and place a lower priority on the transfer of target information (*e.g.*, background data packets such as FTP) so as not to delay the continued transfer of non-target information (*e.g.* foreground activity such as voice/video/VOIP Phone access)).

WMM / QoS

WMM, also known as Wi-Fi Multimedia, prioritizes multimedia (audio, video and voice) data going over Wi-Fi to ensure that they receive the needed bandwidth to perform undeterred.

Using QoS, also known as Quality of Service) WMM prioritizes data packets in the following order: Voice, Video, Best Effort, and Background. The details for each are:



WMM (Wi-Fi Multimedia) EDCA (Enhanced Distributed Channel Access) Settings				
Access Point: Router Mode Parameters				
Traffic Type	CWMin	CWMax	AIFS	TXOP
Voice	2	3	1	47
Video	3	4	1	34
Best Effort	4	6	3	0
Background	4	10	7	0

Bridge Mode Parameters				
Traffic Type	CWMin	CWMax	AIFS	TXOP
Voice	2	3	2	47
Video	3	4	2	34
Best Effort	4	10	3	0
Background	4	10	7	0

Voice – Includes Voice over IP and audio streaming media packets

Video – Any streaming video

Best Effort – General Internet applications

Background – Low priority Internet applications, such as FTP

If you are an advanced user, the values for each of these prioritizations can be further adjusted and optimized. This is not recommended if you do not understand WMM and its technicalities.

(e.g., https://www.ampedwireless.com/media/docs/usersguide/APR175P_UsersGuide.pdf).

18. Plaintiff has been damaged because 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 '508 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.

19. On information and belief, Defendant has had at least constructive notice of the '508 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. 5,768,508 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; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

August 28, 2018

Respectfully Submitted,

OF COUNSEL:

David R. Bennett

(Application for Pro Hac Vice to be filed)

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