

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MICROSOFT CORPORATION,  
Petitioner

v.

SANDPIPER CDN, LLC,  
Patent Owner

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Case IPR2026-00095  
U.S. Patent No. 8,478,903

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**RESPONSE TO DIRECTOR REQUEST FOR INFORMATION**

***Mail Stop "PATENT BOARD"***  
Patent Trial and Appeal Board  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

In an email sent March 3, 2026, the Director requested “*Patent Owner shall submit a paper identifying any art and/or contentions raised or identified by Comcast in the parallel proceeding in relation to the validity of U.S. Patent No. 8,478,903, to the extent that information is available. The paper shall be filed no later than Thursday, March 5, 2026, and shall not include any additional arguments.*” The authorization did not extend to filing any exhibits or documents aside from this Paper. If the Director would like copies of any of the invalidity contentions or documents below, Patent Owner will file those requested documents.

As previously disclosed, U.S. Patent No. 8,478,903 is at issue in pending district court proceeding *Sandpiper v. Comcast*, No. 2:24-cv-00886-JRG-RSP. Invalidity contentions were served on March 28, 2025, listing the following references:

- Fisher, Spinning the Web, Springer-Verlag New York, Inc. (1996);
- Ricart, Apache Server, Sams.net Publishing (1996) (“Ricart”);
- U.S. Patent No. 5,377,323 entitled “Apparatus and Method for a Federated Naming System Which Can Resolve a Composite Name Composed of Names From Any Number of Disparate Naming Systems,” to Vasudevan (Dec. 27, 1994);
- U.S. Patent No. 5,511,208 entitled “Locating Resources in Computer Networks Having Cache Server Nodes,” to Boyles (Apr. 23, 1996);
- S. Ramanathan and P. Rangan, “Architectures for Personalized

- Multimedia” IEEE Multimedia, 37-46 (Spring 1994);
- Canadian Patent Application No. 2,228,607 entitled “System and Method for Delivery of Video Data Over a Computer Network,” to Kenner et al. (Jun. 7, 1995);
  - U.S. Patent No. 6,003,030 entitled “System and Method for Optimized Storage and Retrieval of Data on a Distributed Computer Network,” to Kenner (Dec. 14, 1999) (“Kenner ’030”);
  - U.S. Patent No. 5,657,390 entitled “Secure Socket Layer Application Program Apparatus and Method,” to Elgamal (Aug. 12, 1997);
  - U.S. Patent No. 6,061,349 entitled “System and Method for Implementing Multiple IP Addresses on Multiple Ports,” to Coile (May 9, 2020);
  - U.S. Patent No. 6,647,422 entitled “Web Server Employing Multi-Homed, Modular Framework,” to Wesinger (Nov. 11, 2003);
  - U.S. Patent Application Publication No. 2006/0015627 entitled, “Multi-homed Web Server,” to Wesinger, JR et al. (Jan. 19, 2006) (“Wesinger”);
  - U.S. Patent Application Publication No. 2006/0047833 entitled “Multi-Homed Web Server,” to Wesinger, JR (Mar. 2, 2006);
  - Bradley, “Impact of the Internet and Online Services on Business Research Methods,” Massachusetts Institute of Technology (June 1996);
  - U.S. Patent No. 5,774,660 entitled “World-Wide-Web Server with Delayed Resource-Binding for Resource-Based Load Balancing on a Distributed Resource Multi-Node Network,” to Brendel (Jun. 30, 1998) (“Brendel”);
  - U.S. Patent No. 5,991,306 entitled “Pull Based, Intelligent Caching System and Method for Delivering Data Over a Network,” to Burns

- (Nov. 23, 1999);
- U.S. Patent No. 6,078,955 entitled “Method for Controlling a Computer System Including a Plurality of Computers and a Network Processed as a User Resource,” to Konno (Jun. 20, 2000) (“Konno”);
  - U.S. Patent No. 5,787,470 entitled “Inter-Cache Protocol for Improved Web Performance,” to DeSimone (Jul. 28, 1998);
  - U.S. Patent No. 5,968,119 entitled, “Method of Accessing Information of an SNA Host Computer From a Client Computer Using a Specific Terminal Emulation,” to Stedman et al. (Oct. 19, 1999) (“Stedman”);
  - U.S. Patent No. 6,098,096 entitled “Method and Apparatus for Dynamic Cache Preloading Across a Network,” to Tsirigotis (Aug. 1, 2000) (“Tsirigotis”);
  - U.S. Patent No. 6,185,619 entitled “Method and Apparatus for Balancing the Process Load on Network Servers According to Network and Serve Based Policies,” to Joffe (Feb. 6, 2001);
  - International Patent Application Publication No. No. 97/31490 entitled “Method of Accessing a Target Entity Over a Communications Network,” to Low et al. (Dec. 11, 1996);
  - U.S. Patent No. 6,052,718 entitled “Replica Routing,” to Gifford (Apr. 18, 2000);
  - Vahdat et al., “WebOS: Software Support for Scalable Web Services,” University of California – Berkeley;
  - U.S. Patent No. 6,370,571 entitled “System and method for Delivering High-Performance Online Multimedia Services,” to Medin, Jr. (Apr. 9, 2002) (“Medin”);
  - U.S. Patent No. 6,470,389 entitled “Hosting a Network Service on a

- Cluster of Servicers Using a Single-Address Image,” to Chung (Oct. 22, 2022) (“Chung”);
- U.S. Patent No. 6,412,004 entitled “Metaserver for a Multimedia Distribution Network,” to Chen (Jun. 25, 2002);
  - Baentsch et al., “Enhancing the Web’s Infrastructure from Caching to Replication,” IEEE Internet Computing;
  - U.S. Patent No. 6,167,438 entitled “Method and System for Distributed Caching, Prefetching and Replication,” to Yates (Dec. 26, 2000) (“Yates”);
  - U.S. Patent No. 6,112,239 entitled, “System and Method for Server-side Optimization of Data Delivery on a Distributed Computer Network,” to Kenner et al. (Aug. 29, 2000) (“Kenner ’239”);
  - U.S. Provisional Patent Application No. 60/054,687 entitled “Content-Aware Flow Switching,” to Nair et al. (Aug. 1, 1997);
  - U.S. Patent No. 6,006,264 entitled “Method and System for Directing a Flow Between a Client and a Server,” to Colby (Dec. 21, 1999);
  - U.S. Provisional Patent Application No. 60/064,105 entitled “Means for Automatically Configuring File Service Proxy Caches and Name Redirection Services,” to Lister (Filed Oct. 30, 1997);
  - Chawla and Bettati, “Replicating IP Services,” Technical Report 97-008, Texas A&M University (Sept. 1997);
  - U.S. Patent No. 6,167,446 entitled “Automatically Configuring Network-name-services,” to Lister (Dec. 26, 2000);
  - U.S. Patent No. 6,119,170 entitled “Method and Apparatus for TCP/IP Multihoming on a Host System Configured with Multiple Independent Transport Provider Systems,” to Schoffelman (Sep. 12, 2000);

- International Patent Application Publication No. 98/17039 entitled “Internet Communication System,” to Lindbo et al. (Apr. 23, 1998); and
- Miller and Hollingsworth, “Using Content- Derived Names for Caching and Software Distribution,” University of Maryland.

The March 28, 2025 invalidity contentions also listed the following systems:

- Akamai CDN — Akamai Technologies, Inc.;
- Apache — The Apache Software Foundation;
- Mirror-Image — Mirror Image Internet, Inc.;
- InterVU — InterVU, Inc.;
- CacheFlow — Broadcom Inc.;
- Resonate Central Dispatch — Resonate, Inc.; and
- Network Dispatcher — International Business Machines Corp.

The March 28, 2025 invalidity contentions were also accompanied by the following invalidity claim charts:

- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 5,774,660 (“Brendel ’660”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,470,389 (“Chung ’389”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,003,030 (“Kenner ’030”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,112,239 (“Kenner ’239”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,078,955 (“Konno ’955”);

- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,370,571 (“Medin, Jr. ’571”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over Ricart, Apache Server, Sams.net Publishing (“Ricart 1996”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,119,170 (“Schoffelman ’170”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 5,968,119 (“Stedman ’119”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,098,096 (“Tsirigotis ’096”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent Application Publication No. 2006/0015627 (“Wesinger ’627”); and
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,167,438 (“Yates ’438”).

First Supplemental Disclosures were served on July 21, 2025 and Second Supplemental Disclosures were served on September 12, 2025 (collectively “Supplemental Disclosures”), which added the following references:

- Ronald J. Vetter et. al, Mosaic and the World-Wide Web, Computer, vol. 27, no. 10, pp. 49-57, Oct. 1994;
- U.S. Patent No. 6,181,867 entitled “Video Storage and Retrieval System,” to Kenner et al. (June 7, 1995) (“Kenner ’867”);
- Bestavros, A., “Demand-Based Document Dissemination To Reduce Traffic And Balance Load In Distributed Information Systems,” Seventh IEEE Symposium on Parallel and Distributed Processing, 338-345 (October 1995);

- International Patent Application Publication No. WO 96/41285 entitled “System and Method for Delivery of Video Data Over a Computer Network,” to Kenner et al. (Dec. 19, 1996) (“Kenner ’285”);
- European Patent Pub. No. EP 0753836 entitled “A Three-Dimensional Virtual Reality Space Sharing Method and System,” to Rekimoto et al. (Jan. 15, 1997);
- U.S. Patent No. 6,038,610 entitled “Storage of Sitemaps at Server Sites for Holding Information Regarding Content,” to Belfiore et al. (Mar. 14, 2000);
- U.S. Patent No. 6,138,162 entitled “Method and Apparatus for Configuring a Client to Redirect Requests to a Caching Proxy Server based on a Category ID with the Request,” to Pistriotto et al. (Oct. 24, 2000);
- U.S. Patent No. 6,108,673 entitled “System for Creating a Form from a Template that Includes Replication Block,” to Brandt et al. (Aug. 22, 2000);
- U.S. Patent No. 5,933,849 entitled “Scalable Distributed Caching System and Method,” to Srbljic et al. (Aug. 3, 1999);
- U.S. Patent No. 6,243,760 entitled “Information Dissemination System with Central and Distributed Caches,” to Armbruster et. al. (Jun. 5, 2001);
- U.S. Patent No. 5,991,809 entitled, “Web Serving System that Coordinates Multiple Servers to Optimize File Transfers,” to Kriegsman (Nov. 23, 1999);
- U.S. Patent No. 5,933,832 entitled “Retrieval System for Frequently Updated Data Distributed on Network,” to Suzuoka et al. (Aug. 3, 1999)

- International Patent Application Publication No. WO 98/17039 entitled “Internet Communication System,” to Lindbo et al. (Apr. 23, 1998);
- U.S. Patent No. 2001/0052024 entitled “Affinity-Based Router and Routing Method,” to Devarakonda et al. (Dec. 13, 2001);
- U.S. Patent No. 6,424,992 entitled “Affinity-Based Router and Routing Method,” to Devarakonda et al. (Jul. 23, 2002);
- U.S. Patent No. 6,330,602 entitled “Scaleable Web Server and Method of Efficiently Managing Multiple Servers,” to Law et al. (Dec. 11, 2001);
- U.S. Patent No. 6,360,262 entitled “Mapping Web Server Objects to TCP/IP Ports,” to Guenther et al. (Mar. 19, 2002);
- U.S. Patent No. 5,870,546 entitled “Method and Apparatus for Redirection of Server External Hyper-Link Reference,” to Kirst (Feb. 9, 1999); and
- U.S. Patent No. 6,185,598 entitled “Optimized Network Resource Location,” to Farber et al. (Feb. 6, 2001).

The Supplemental Disclosures also added the following systems:

- Wingate - Microsoft Corp.;
- FireSite Web Accelerator — ClearWay; and
- Microsoft Proxy Server — Microsoft Corp.

The Supplemental Disclosures were also accompanied by the following invalidity claim charts:

- Invalidity Chart for U.S. Patent No. 8,478,903 over Bestavros (“Bestavros 1995”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No.

- 5,511,208 (“Boyles ’208”);
- Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 5,787,470 (“DeSimone ’470”); and
  - Invalidity Chart for U.S. Patent No. 8,478,903 over U.S. Patent No. 6,181,867 (“Kenner ’867”).

Comcast’s Final Election of Asserted Prior Art was served on February 27, 2026. Comcast elected the following prior art references:

- U.S. Patent No. 6,181,867 entitled, “Video storage and retrieval system,” to Kenner et al. (“Kenner ’867”);
- U.S. Patent No. 6,112,239 entitled, “System and method for server-side optimization of data delivery on a distributed computer network,” to Kenner et al. (“Kenner ’239”);
- PCT International Patent Pub. No. WO 1996041285 entitled, “System and method for delivery of video data over a computer network,” to Kenner et al. (“Kenner ’285”);
- U.S. Patent No. 5,774,660 entitled, “World-Wide-Web Server with Delayed Resource-Binding for Resource-Based Load Balancing on A Distributed Resource Multi-Node Network” to Brendel et al. (“Brendel”);
- Kenner ’239 in view of U.S. Application No. 08/762,266 entitled, “Method of accessing information of an SNA host computer from a client computer using a specific terminal emulation,” to Stedman et al. (“Stedman”); and
- Kenner ’239 in view of Kenner ’867.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jason D. Eisenberg/

Jason D. Eisenberg  
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*Attorney for Patent Owner Sandpiper CDN, LLC*

Date: March 5, 2026

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**CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e))**

I certify that the above-captioned **RESPONSE TO DIRECTOR  
REQUEST FOR INFORMATION** was served in its entirety on March 5, 2026,  
upon the following parties via electronic mail:

Jessica Kaiser (Lead Counsel) [kaiser-ptab@perkinscoie.com](mailto:kaiser-ptab@perkinscoie.com)  
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Respectfully submitted,

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Date: March 5, 2026

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